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2026 Country Report - the Netherlands

Accompanying the document

Recommendation for a COUNCIL RECOMMENDATION

on the economic, social, employment, structural and budgetary polices of the Netherlands

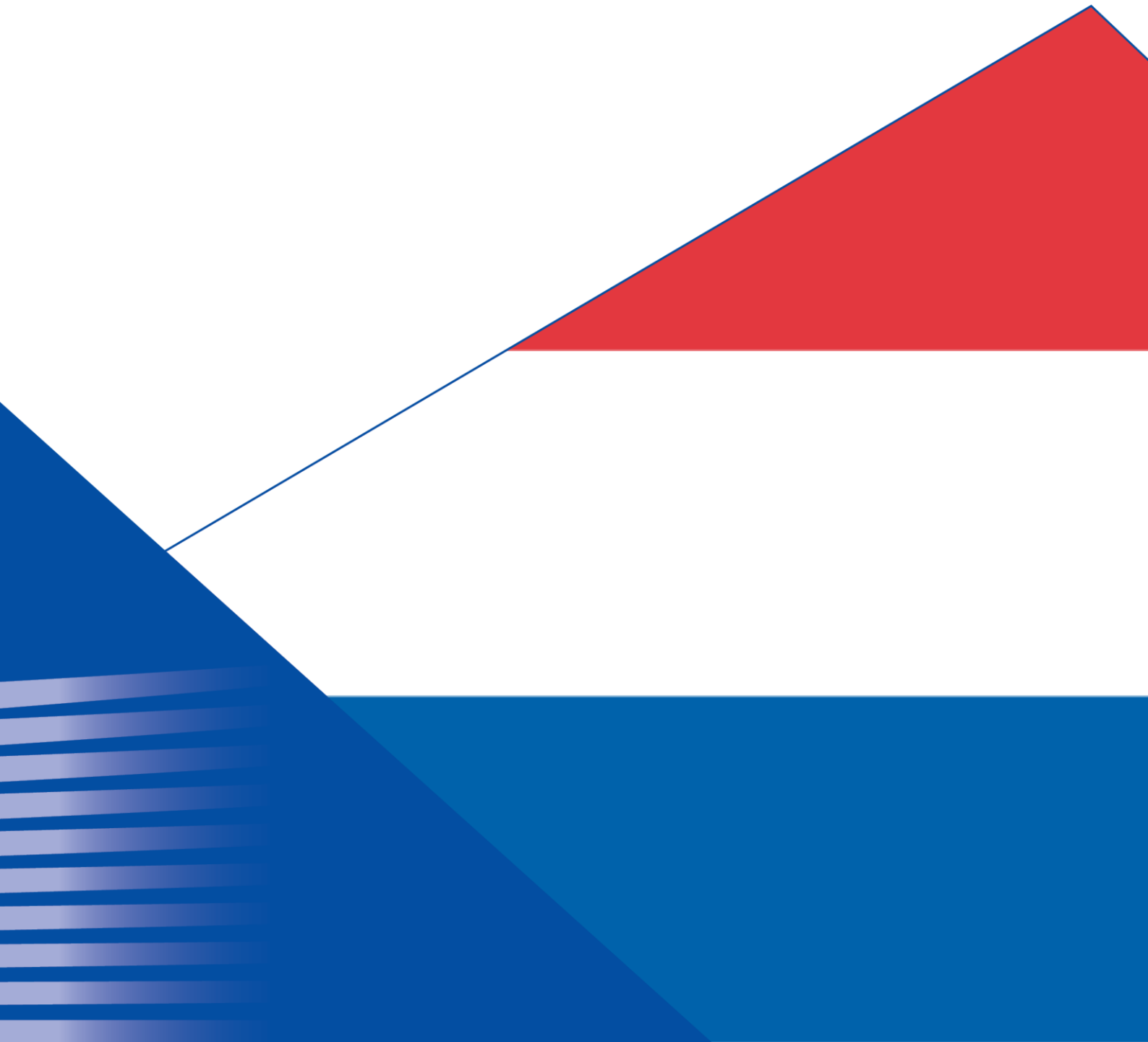
{COM(2026) 219 final}

European Commission

Economic and Financial Affairs

Netherlands

2026 Country Report



ECONOMIC DEVELOPMENTS AND KEY POLICY CHALLENGES

Lower growth amid global uncertainties

The Dutch economy grew by 1.8% in 2025, surpassing earlier forecasts. This solid growth was supported by strong domestic demand, driven in particular by high government spending on healthcare and rising wages. Goods exports remained resilient despite global headwinds, including the impact of US tariffs. However, investment levels stayed subdued.

Inflation is surging again due to soaring energy prices. The recent crisis in the Middle East has driven up energy prices. With Dutch inflation already above the EU average at 3% in 2025, fuelled by services and food prices, the energy market disruptions are expected to push up inflation to 3.2% in 2026.

The rising cost of energy is likely to rein in household spending and investment, dampening future economic growth. Although wage growth remains strong, household spending is projected to increase only limitedly, while investments may be further postponed amid lingering global uncertainty. Meanwhile, high labour costs and surging energy prices will undermine the competitiveness of Dutch exports amid low-productivity growth. An ambitious public investment agenda particularly in the areas of defence, the green transition and housing, partially offsets the weakness of investment in the private sector. Against this backdrop, GDP growth is forecast to reach 1.0% in 2026 and 1.1% in 2027.

Dutch public finances remain sound but ageing-related costs continue to be a risk in the medium to long term. The government deficit in 2025 stood at 1.6% of GDP and is expected to rise to 2.5% in 2026 and 1.9% in 2027. Government debt rose to 44.4% of GDP in 2025 and is expected to increase to 46.9% in 2026 and remain broadly stable at 47.0% in 2027. In the longer term, costs linked to the ageing population are expected to lead to a significant increase in spending on pensions, health and long-term care (see Annex 2). As a share of GDP, spending on long-term care in the Netherlands is the highest in the EU. It is expected to increase by 1.5% of GDP by 2050, raising potential concerns about long-term fiscal sustainability (see Section 4). Climate change has an increasing impact on long-term public finances ([1]).

Long-standing macroeconomic imbalances remain

The Netherlands has been facing vulnerabilities relating to a large current account surplus and high household debt and house prices. The Commission undertook an in-depth review of the Dutch economy as part of the Macroeconomic Imbalance Procedure earlier in 2026 ([2])**.** That review highlighted that the current account surplus remains elevated, despite some recent falls, but it is a structural feature of the economy, as the Netherlands host a large number of multinational enterprises. House prices increased further amid structural challenges to supply. The household debt-to-GDP decreased

([1]) See European Commission (2026), Debt Sustainability Monitor 2025 - Economy and Finance, Institutional Paper No 332,

([2]) SWD(2026) 140 final; European Economy Institutional Paper 337, May 2026.

marginally in 2025 after more significant declines in previous years and is expected to remain elevated as borrowing edges up. Policy actions have been recently taken but overall progress has been limited.

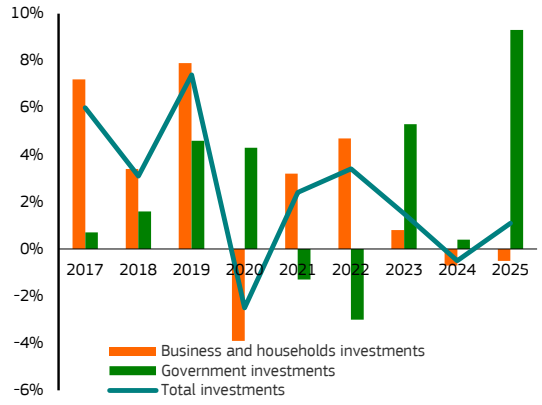
The current account surplus stands at around 8% of GDP and is expected to remain high, driven by a substantial trade surplus in goods and services. From a savings-investment perspective, this surplus reflects excess savings in the Dutch economy that are largely driven by the corporate sector. The main contributors are Dutch multinationals and small and medium-sized enterprises. The former receives profits from their worldwide operations and largely use them to reinvest in their foreign affiliates, increasing retained earnings held in the Netherlands. Still, even after accounting for these factors there is a substantial savings surplus. Addressing domestic investment needs could contribute to closing the savings-investment gap. Removing the bottlenecks that hold up further investments could stimulate stronger investment growth and reduce the surplus. Domestic demand dynamics have been relatively strong in the Netherlands. Consumption growth, and, to a lesser extent, in investment has outperformed the rest of the euro area since 2021. This has helped narrow the surplus, although the effect is mitigated by the impact of the corporate sector on the surplus.

Household debt and house prices remain high. The high level of debt stems primarily from high rates of mortgage-financed homeownership and substantial loans. The household debt-to-GDP ratio decreased only marginally, from 93.3% in 2024 to 92.8% in 2025, remaining the highest in the EU but significantly below its peak of 125% in 2010. The high debt levels make households more vulnerable to economic downturns, particularly in the context of an overvalued housing market. However, the immediate risks appear contained as a result of strict rules governing the debt service-to-income ratio keeping payment delays low.

Unlocking investments to maintain a highly competitive economy

The Netherlands is one of the EU's most productive and competitive economies, but productivity growth has lagged that of its European peers. In 2025, the country ranked seventh in the EU in terms of labour productivity ([3]), but growth over the last decade has been relatively weak compared to peers such as Denmark, Germany and Sweden. A major reason for this underperformance has been the gradual phase-out and shutdown of gas extraction from the Groningen field (due to seismic risks), which had a particularly high productivity rate. Most other provinces also perform poorly with a real productivity growth below the EU average (see Annex 18). Structural weaknesses including overall low investments, a high level of flexible employment and an inefficient allocation of scarce labour resources to relatively low-productivity sectors are also likely to have weighed on overall productivity growth.

Graph 1.1: **Growth in fixed investments**



Source: CBS

Government instability, global economic uncertainties and structural domestic bottlenecks are holding back investments that are essential to future growth. Investments in fixed assets - such as infrastructure, machinery and buildings - have been on a downwards trend (see Graph 1.1).

([3]) The Conference Board (2026).

Private-sector investment growth even turned negative in 2024 and 2025, but thanks to a public investment agenda - particularly in defence, energy and housing - overall annual investment growth was positive. In addition to the global uncertainties, to which an open economy like the Netherlands is particularly exposed, private-sector investment has been dampened by domestic factors, including political instability and frequently changing government policies. Several structural bottlenecks have yet to be tackled as they are additional constraints on overall investment. These include electricity grid congestion, permitting constraints related to excessive nitrogen deposition, labour and skills shortages, and access to finance for start-ups and scale-ups. Taken together, these factors risk holding back the investments needed to underpin future productivity and competitiveness, as well as the green and digital transitions and housing construction.

Tackling housing shortages and supporting the private rental market to narrow the divide in the Dutch housing market

The Dutch housing market poses serious challenges for a large and vulnerable minority. There is a structural divide between 'insiders' – social renters and particularly homeowners - and 'outsiders' – many private renters and those struggling to access housing. Owner-occupiers benefit from fiscal advantages, including lower mortgage interest and low imputed rent taxation (see Section 2). This drives up house prices and have enabled many homeowners to profit from a decade of strongly rising house prices. Social renters, predominantly low- and mid-income households, benefit from paying below-market rents. By contrast, many private renters and people looking for housing (outsiders) receive less public support than the insiders. They typically face higher rents and less availability, including long waiting lists for social housing. This disparity is visible in that 43.9% of Dutch private renters are overburdened by housing costs - defined as spending more than 40% of disposable income on housing - far exceeding the EU average for tenants at market rate (19.2%) ([4]). It also results in low rate of residential mobility as, for example, higher-income households continue living in social housing, while older residents continue living in family-sized homes. To reduce inequalities in the housing market, reducing distortions in the tax system, potential measures include a gradual phase-out of the mortgage interest deduction (see Section 2), and tighter income-linked rent policies for higher-income social tenants (see Annex 16).

Recent rental regulations have led to a sell-off of private rental property. The Netherlands received a country-specific recommendation (CSR) in 2025 highlighting concerns regarding the attractiveness of investment in the private rental sector. The focus was primarily on the extension of rent caps to the mid-range private rental sector in 2024 ([5]). While this measure provided relief for some tenants, together with higher interest rates and tax changes, it has led to an increase in sales of private rental properties to the owner-occupier market. Two years later, on 1 January 2026, around 16 000 fewer private rental properties were available on an already tight market. This marked a change since 2020-2023, during which an average of about 36 000 dwellings per year were added to the private rental stock. The Netherlands reduced the transfer tax from 10.4% to 8% on non-primary residence dwellings ([6]). This is expected to support a limited expansion of the private rental sector. In addition, it would be preferable to make investments more attractive by recalibrating rent controls to ensure that regulated rents better align with property valuations in the rental market, while avoiding a return to excessive

([4]) This indicator should be read together with the tenure structure (homeowner, tenants), that may differ across country and regions.

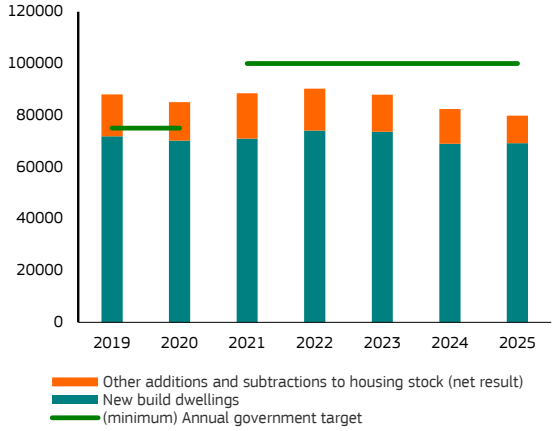
([5]) Further rent regulations introduced in recent years include a ban on buy-to-let properties in specific neighbourhoods (2022), providing greater protection to renters (Wet goed verhuurschap, 2023), and making fixed-term rental contracts the norm (2024).

([6]) Terugdringen woningnood topprioriteit | Nieuwsbericht | Rijksoverheid.nl

rents. This could also help increase overall housing constructions (see below).

Tackling the housing shortage would ease availability and affordability challenges. The Netherlands received a CSR in 2025 to remove obstacles to the construction of new homes. The housing shortage was projected to exceed 400 000 homes in 2025 ([7]). The number of new homes added to the housing stock has been decreasing since 2022 (see Graph 1.2), which will reduce the housing supply in 2027. The shortage is most acute in the Randstad (West Netherlands), where population density is high and there are several rapidly growing medium-sized cities such as Eindhoven, and other parts of Brabant, due to increasing population numbers in these regions.

Graph 1.2: **Additional homes per year (compared with the government target)**



(1) In 2019-2020, the government target was between 75 000 and 100 000 additional homes
Source: CBS

The related legislative measures are still in progress, but they need to be implemented. The government sent a bill to Parliament on a Housing Management Enhancement Act (*Wet versterking regie volkshuisvesting*), which is also included in the Dutch recovery and resilience plan (RRP), to address the complex planning and permitting processes by parallel instead of sequential planning and by shortening appeal periods. In addition, preparations are ongoing of a first package of amendments to simplify the building regulation to reduce construction costs. The government made EUR 3 billion available until 2030 to support municipalities in the construction of affordable homes (*Realisatiestimulans* and *Woningbouwimpuls*).

To reach the national target of 100 000 new homes per year, the Netherlands could pursue a more active land policy. This could include amending zoning laws to enable an increase in construction and a zoning tax on land surpluses, with the proceeds used to finance the necessary supporting infrastructure. At the same time, modest increases in social housing construction remain insufficient to meet strong and persistent demand. Tackling the constraints to scaling up construction by enabling housing associations, including through improving their financial position, could help alleviate affordability pressures (see Annex 16).

Structural bottlenecks also restrict the housing supply. There are other bottlenecks that also curb the supply of new homes, which were covered by CSRs in 2025. They include labour shortages, also in the construction sector (see Section 4), and challenges related to the green transition, such as construction permit restrictions related to excessive nitrogen deposition and lack of grid capacity to connect new dwellings to the electricity grid (see Section 3).

The lack and high cost of housing also has broader implications for the country's competitiveness. It can aggravate labour shortages by hindering internal labour mobility. In certain regions (Randstad) it could make it more difficult for companies to attract foreign talent (who are often more reliant on the private rental market) and increases labour costs as firms need to offer higher salaries to offset the high cost of living. The government aims to tackle this problem under

([7]) Based on European Commission and JRC calculations and forecast. For details, see Balouktsi et al. (2026), Housing investment needs in the EU, JRC Technical Report 144419.

initiatives such as Project Beethoven for Brainport Eindhoven (see Annex 18).

Action is ongoing to tackle the economic security challenges

The Netherlands faces persistent challenges due to relatively high energy prices and dependence on critical raw materials from outside the EU. Electricity and gas prices are already among the highest in the EU in nominal terms, but the country's reliance on fossil fuels for electricity generation makes it also vulnerable to severe price spikes during peak-demand hours when gas-fuelled plants need to ramp up production significantly. To this end, fast decarbonisation of the economy and enhancing electricity trading over existing cross-border infrastructure remains crucial. The Netherlands has already drastically reduced its reliance on Russian gas, replacing supplies mostly by imports from Norway and the United States. It also imports significant oil supplies from within Europe, including Norway and the United Kingdom (see Annex 9). At the same time, the Dutch manufacturing sector, although smaller than the EU average (12.8% of GDP against 17.3% of GDP in 2024), is heavily dependent on critical raw materials imports needed for the green and digital transitions. As the EU's largest importer of critical raw materials from non-EU sources, the Netherlands imported unprocessed critical raw materials worth EUR 17 billion in 2024 (7.4 billion without transit), leaving it exposed to any supply chain disruptions. To mitigate these risks, it has set up a Task Force on Strategic Dependencies to identify and address high-risk, strategic dependencies (see Annex 5).

EU funding instruments provide considerable resources to Netherlands. They support investments and structural reforms to increase competitiveness, environmental sustainability, skills, social fairness and security, while helping to address challenges identified in the CSRs. Key instruments include the Recovery and Resilience Facility (see Box 2) and Cohesion policy funds (see Box 3). In addition, the Common Agricultural Policy (CAP) provides Netherlands with an EU contribution of EUR 4.7 billion under the CAP strategic plan for 2023-2027 ([8]). A further EUR 558.7 million are available under the Asylum, Migration and Integration Fund (AMIF), together with the Border Management and Visa Instrument (BMVI) and the Internal Security Fund (ISF). Other EU programmes also support competitiveness in Netherlands, for instance through open calls under Horizon Europe and the Connecting Europe Facility.

([8]) An overview of the Netherlands 's formally approved strategy to implement the EU's common agricultural policy nationally can be found at https://agriculture.ec.europa.eu/cap-my-country/cap-strategic-plans/netherlands_en.

Box 1:

UN Sustainable Development Goals (SDGs)

The Netherlands performs well across most SDGs related to macroeconomic stability (SDGs 8 and 17) and productivity (SDGs 4, 8 and 9), achieving results that are above or comparable to the EU average.

The Netherlands also performs well on most SDGs related to fairness (SDGs 3, 4 and 5), outperforming the EU average in most indicators related to health, education, gender equality, and decent work and growth.

However, in terms of environmental sustainability, the Netherlands still lags behind the EU average on several goals (SDGs 7, 11, 13, 14 and 15). This underscores the need for further progress to increase the share of affordable and clean energy, reduce net greenhouse gas emissions and reduce the high levels of agricultural emissions.

Box 2:

Key achievements of the recovery and resilience plan

The recovery and resilience plan (RRP) of the Netherlands has a total budget of **EUR 5.44 billion**, corresponding to **0.51% of GDP** ([9]). The plan aims to support reforms and investments contributing to the green and digital transitions, strengthen economic resilience and address the long-standing structural challenges identified in the European Semester.

As of 22 May 2026, the Netherlands has received EUR 3 billion (around 56.4% of the total budget) following the satisfactory fulfilment of 74 milestones and targets. Implementation has progressed steadily, with a growing number of reforms and investments already complete and tangible results achieved on the ground.

The Netherlands is one of the largest recipients of spillover effects from other Member States' plans across the EU. Spillover effects, estimated at EUR 8.8 billion, account for more than two thirds of the total impact ([10]).

Highlights and impact of the plan

- **Energy.** Through the entry into force of the Energy Law, the Netherlands has integrated the Gas Law and the Electricity Law into a single legal framework, focusing on data management, optimising government action in key energy projects, updating regulations for grid operators, empowering electricity users as market participants and increasing consumer protection. At the same time, the Netherlands improved the energy efficiency of homes by providing subsidies to households by providing support for over 600 000 energy savings projects.
- **Digital innovation.** To accelerate the development and application of quantum technology, attract and retain talent and stimulate the creation and growth of new companies in the field, the Netherlands supported the implementation of the Quantum Delta NL programme. This included the establishment of a pre-seed facility for quantum start-ups and the development of a Quantum NL R&D network to strengthen research collaboration, innovation and commercialisation in quantum technologies, as well as related investments such as PhD scholarships and nanolab infrastructure.
- **Labour market.** The Netherlands provided career advice to around 68 000 individuals, skills training to 119 000 individuals, and 21 tailor-made sectoral pathways to support the labour market profile and employability of individuals during and after the COVID-19 crisis.
- **Pensions.** Through the entry into force of the law reforming the second pillar of the pension system, the Netherlands has made the Dutch pension system better suited to a changing labour market, improving intergenerational fairness, transparency and shock resilience.

([9]) Share of country RRP over its nominal GDP in 2023.

([10]) For a more detailed analysis of the economic impact of the RRF in the Netherlands, see Discussion Paper 232 (2025) Economic Impact of the Recovery and Resilience Facility in the Netherlands - Economy and Finance.

Box 3: Contribution of cohesion policy funds

EU cohesion policy funding is supporting the Netherlands' efforts to boost competitiveness, environmental sustainability, skills and social fairness. In the 2021-2027 programming period, EU cohesion policy funds ([11]) are providing EUR 1.54 billion (amounting to EUR 3.5 billion paired with national co-financing) to the Netherlands. The value of selected projects exceeds 100% of the total allocation as of March 2026.

- **Innovation, business environment and productivity.** EUR 1.1 billion is allocated to research and innovation, SMEs competitiveness and to the regions most affected by the transition away from carbon-intensive activities. Around 8 200 firms have already seen their projects approved.

- **Decarbonisation, energy affordability and sustainability.** EUR 761 million is dedicated to clean transition projects. These investments are expected to create approximately 35 MW in additional renewable energy production capacity, ready for upscaling. Selected projects will contribute to the recycling of almost 500 000 tonnes of waste per year for circular reuse as raw material. Projects under the Just Transition Fund will contribute to the expansion of classroom capacity for more than 7 000 people with new or modernised education facilities.

- **Skills, quality jobs and social fairness.** EUR 413 million are allocated under the European Social Fund+, with a strong focus on helping vulnerable individuals access sustainable employment. This funding aims to improve recipients' access to the labour market, promotes active inclusion and supports lifelong learning and skills development, including in ways that help meet labour shortages and support the green and digital transitions. The funding also supports social innovation to foster equal opportunities and gender equality, alongside providing material and food assistance to the most deprived, including children.

The mid-term review ([12]) reinforced the link between cohesion policy and emerging strategic priorities, reallocating EUR 75 million. EUR 60 million of the reallocated funding will strengthen competitiveness (under the STEP initiative) by providing support for digital technologies and deep tech innovation, clean and resource-efficient technologies, and biotechnologies. The mid-term review will also support an increase in defence innovation (EUR 15 million), with a focus on dual-use capabilities. In addition to cohesion policy funding, the Netherlands will be allocated up to EUR 720 million under the Social Climate Fund over 2026-2032 to help mitigate the social impact of the new emissions trading system (ETS2) and support vulnerable households and small businesses.

([11]) European Regional Development Fund, European Social Fund+, Cohesion Fund and Just Transition Fund.

([12]) The mid-term review is carried out halfway through the 2021-2027 programming period. It is a formal assessment process required under Article 18 of the Common Provisions Regulation that aims to assess the implementation of programmes and, where necessary, propose adjustments to improve their performance, ensure their relevance in light of new and emerging needs and maintain consistency with other EU policies.

INNOVATION, BUSINESS ENVIRONMENT AND PRODUCTIVITY

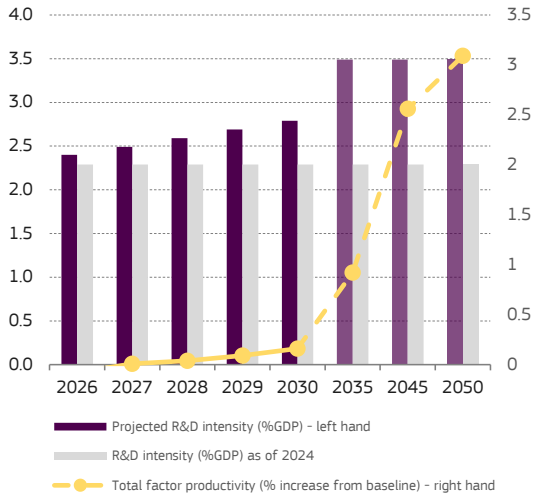
In 2025, the Netherlands received country-specific recommendations (CSRs) to increase the level of public and private R&D intensity in key strategic sectors, to address the funding gap for late-stage start-ups and scale-ups, and to align the taxation of different types of income from wealth. On R&D, it has announced numerous measures that cumulatively are expected to reach 3% of GDP invested in R&D by 2030. This will include R&D investment in start-ups and scale-ups, but implementation is at an early stage (see Annex 1). In addition to the areas covered in the previous CSRs, a challenge is that innovation and productivity growth appear increasingly concentrated in large incumbent firms. Lastly, the Dutch tax system still contains distortions.

Boosting R&D intensity

Public R&D intensity remains below the EU average (at 0.67% GDP vs 0.72%) and private R&D intensity lags behind other (non-EU) innovation leaders. The Dutch innovation ecosystems can draw on strong research and innovation conditions, but R&D intensity is below the strongest performing countries in the EU (Sweden, Denmark and Finland) and below countries outside the EU, such as the US. R&D intensity risks further decelerating (see Annex 4). Closing the gap with the EU target to invest 3% of GDP would require investing EUR 7-12 billion in R&D until 2030, mainly from the private sector ([13]).

The potential gains from increasing R&D investment are modelled in QUEST simulations. They indicate that increasing R&D intensity from current levels to 2.8% by 2030 and to 3.5% by 2035 could lead to a gradual but significant rise in total factor productivity by 0.9% after 10 years and by over 3% in the long run (Graph 2.1). These outcomes assume policy shifts of a magnitude that is large by historical standards.

Graph 2.1: **Estimated gains in total factor productivity from R&D intensity**



Source: QUEST simulation.
Notes: policy support to innovation is modelled as subsidies to private R&D investment, such as R&D tax credits and wage subsidies.

Policy measures to increase R&D intensity have yet to be implemented. In 2025, the Netherlands received a CSR to increase public and private R&D intensity in key strategic sectors. The Dutch government announced the action plan on 3% R&D investment by 2030, including policy initiatives such as creating a National Agency for Disruptive Innovation, revising the industrial policy in sectors like semiconductors or biotech, and developing regional innovation clusters under the national technology

([13]) Wennink report (2025) https://www.rapportwennink.nl/.

strategy ([14]). It would be essential to align these initiatives to avoid fragmented policy action.

Narrowing the productivity gap

Innovation activity is increasingly concentrated in a few firms in the Netherlands. It is highly concentrated in large, established firms, with the top three companies accounting for a quarter of all R&D investment in 2023. Young and small companies invest only to a limited extent in innovation ([15]). This is reflected in the regional concentration of productivity growth in the areas of North Holland and North Brabant (see Annex 18). As a result, productivity growth is mostly driven by incumbent firms, and differences between firms in the same sector are increasing ([16]). Initiatives such as extending the scope of the WBSO R&D tax deduction scheme ([17]) and simplifying it can incentivise new and small firms to engage in R&D and drive productivity growth (Graph 2.1). The national technology strategy can promote regional industrial ecosystems and their links with research institutions. Action to support companies in Groningen and North Drenthe have started through the Economic Agenda Start-up Capital Fund ([18]) and EU-supported Future Tech Ventures ([19]). However, the initiatives adopted so far remain limited.

There is still scope for productivity growth through digitalisation of SMEs. Despite a comparatively high level of digitalisation among Dutch SMEs, there is a significant gap between small and large firms in the uptake of advanced technologies like AI (36 percentage points) and cloud computing (23 percentage points) (see Annex 4). There are initiatives in the Netherlands to support SME digitalisation and automation, including investments under the recovery and resilience plan such as *AI Learning communities*. Further action to address these challenges could include a mix of fiscal and non-fiscal measures, including digital adoption vouchers and grants, tax incentives for investing in advanced technologies and tailored training to boost digital skills in SMEs. In parallel, reducing the complexity and fragmentation of existing schemes, through better coordination between funding agencies, would help lower administrative burdens and ensure that smaller firms can more easily access and benefit from public instruments. Additional advisory support could help SMEs scale up, integrate digital tools into core processes, collaborate with larger companies and connect with research institutions to help narrow the innovation gap with larger firms.

Closing the funding gap faced by start-ups and scale-ups

The funding gap faced by start-ups and scale-ups remains a challenge, as outlined in the 2025 CSR, with additional signs of structural bottlenecks in early-stage capital. Despite having access to a deep venture capital market, some Dutch start-ups and scale-ups face difficulties in accessing funding. In particular, start-ups can face funding constraints at pre-seed stage and later struggle to reach scale-up status ([20]). A lack of late-stage venture capital can lead some Dutch innovative companies to seek financing or relocate abroad ([21]). This limits the Netherlands' structural capacity to develop

([14]) Action plan on 3% R&D investment by 2030.

([15]) TNO (2025) R&D Top 50 2025.

([16]) CPB (2025): Process of creative destruction weakens in the Netherlands | CPB Website.

([17]) The *Wet Bevordering Speur en Ontwikkelingswerk*, 'WBSO' is a tax deduction scheme for companies and self-employed that conduct R&D activities. Its latest evaluation concludes that micro and small businesses (of up to 49 people) receive limited support due to low scope for tax deduction and complex administrative requirements.

([18]) EUR 60 miljoen voor innovatieve bedrijven in Noord-Nederland | Nieuwsbericht | Rijksoverheid.nl.

([19]) https://futuretechventures.nl/about/.

([20]) State of Dutch Tech Report 2025 - Techleap.

([21]) EIB (2024), The scale-up gap: Financial market constraints holding back innovative firms in the European Union.

start-ups into large market players ([22]). **Public support for start-ups and scale-ups has so far comprised relatively limited financial resources.** Public financial support for startups and emerging scale-ups in the Netherlands is provided through the Regional Development Agencies (ROMs), Invest-NL, and financing schemes such as the SEED Capital scheme. However, this is not sufficient to bridge the financing gap for scale-ups, especially for funding rounds exceeding EUR 10-50 million. The announcement of the creation of a National Investment Institution (NII), as an enhanced national promotional bank with a focus on start-ups and scale-ups, could help channel funding by ensuring predictability and avoiding fragmented policy action ([23]). It can also help attract institutional investors such as domestic pension funds, which are the largest in the euro area. The NII is expected to become operational in 2028.

In addition to the areas covered in previous CSRs, companies have limited options to exit their investment on public markets, which can make the ecosystem more reliant on external capital. The low number of initial public offerings (IPOs), at only 1.2% of all *exit transactions* since 2019, lead Dutch scale-ups to seek acquisition or remain private. This may inflate the need for higher volumes of funding, therefore exacerbating the funding gap problem at late-stage commercialisation.

Reducing distortions in the tax system

Tax expenditure in the Netherlands is substantial in scale and generates significant distortions across the economy. This was the subject of a 2025 CSR. The Dutch Ministry of Finance reports 125 different tax expenditure schemes, for example targeting entrepreneurs, homeowners or VAT rates, that are estimated to result in foregone revenue of EUR 167 billion in 2025, equivalent to over 40% of total government tax revenue and 15.6% of GDP. In addition to generating distortions in the economy, these exceptions render the tax system unnecessarily complex for people, businesses and the tax administration alike ([24]).

Economically significant distortions concentrated in home ownership and pension tax relief reduce the efficiency of capital allocation. Mortgage interest deductions and low imputed rent taxation together create a strong fiscal bias towards debt-financed home ownership, contributing to high levels of household indebtedness. These schemes impair the functioning of the housing market, increase wealth inequality between owners and renters, and distort residential choices (see Section 1). Pension tax relief is one of the largest tax expenditures overall, allowing tax-deductible contributions up to a high threshold of annual income and tax-free accrual, with taxation deferred until benefits are withdrawn. Wealthy individuals can also hold their wealth in closely held firms, a structure (called 'Box 2') which allows them to reduce and/or postpone tax payments. The uneven tax treatment of different asset classes relative to investment in bonds and stocks can also give rise to tax arbitrage. This could partly explain the high concentration of household wealth held in illiquid forms, which may amplify the severity of economic downturns and reduce the overall efficiency of capital allocation.

Entrepreneurship-related tax expenditure can be ineffective and fall short of providing incentives for innovation. Schemes such as the SME profit exemption (*MKB-winstvrijstelling*) and the reduced corporate income tax rate are assessed as poorly targeted. They incentivise the legal status of being an entrepreneur rather than underlying economic activities such as innovation or investment, which generate positive spillovers for society ([25]).

([22]) TNO (2025) Een blik onder de motorkap.

([23]) Action plan on 3% R&D investment by 2030.

([24]) Ministry of Finance (2025). Kansen voor lagere tarieven en beter beleid.

([25]) Ibid.

Savings and investments are also taxed differently in different settings. Incomes from savings and investments by households are taxed at assumed rates of returns (called 'Box 3'). The system of assumed returns can amplify economic cycles if assumed rates do not track actual outcomes. The government has taken steps to move to a capital growth tax as of 2028 that would tax income from assets as well as their appreciation in value.

Similarly, the reduced VAT rate structure is assessed as an untargeted and inefficient policy. Originally brought in to ease the tax burden on lower-income households, over time the Netherlands has extended the 9% reduced rate to a wide range of goods and services with varying policy rationales, including passenger transport, labour-intensive services and cultural goods. Evaluations ([26]) show that the policy fails to meet its purpose of redistributing wealth. The top 50% of households by income benefit approximately twice as much from reduced rates as the bottom 50%.

([26]) See footnote 11.

DECARBONISATION, ENERGY AFFORDABILITY AND SUSTAINABILITY

In 2025, the Netherlands received country-specific recommendations (CSRs) to reduce the overall reliance on fossil fuels, decrease electricity grid congestion and address excessive nitrogen deposition and the deteriorating water quality. Although the Netherlands has made progress on certain aspects, for example by adopting regulatory solutions to alleviate grid congestion, additional measures are required (see Annex 1). The structural and legal challenges the country faces in achieving climate neutrality and the interim targets for 2030 on reducing greenhouse gases have increased. This is due to persistent shortfalls in reducing domestic emissions and the 'Bonaire' judgment in which the Dutch state was ordered to adopt emission reduction targets covering the entire economy ([27]) ([28]). Meeting these targets requires accelerated action on industrial decarbonisation.

Roll-out of renewable energy

The Netherlands remains heavily reliant on fossil fuels. Only limited progress was made on the 2025 CSRs to reduce overall reliance on fossil fuels by accelerating the roll-out of renewables. The installed capacity of solar photovoltaics has increased by 4% since 2024, but the installed capacity for wind energy stalled at 11.8 GW in 2025, compared to 11.7 GW in 2024 (see Annex 9). The total renewable energy share in the Netherlands continues to remain below the trajectories mandated by the Revised Renewable Energy Directive (RED) (see Annex 9). Overall, fossil fuels accounted for 82.6% of the total energy mix, comprising oil at 42.3%, natural gas at 34.1%, and coal at 6.2%, while renewables and biofuels contributed 15.08% (see Annex 9).

Additional action is required to boost the roll-out of renewables. The main bottlenecks for renewable energy development in the Netherlands are grid congestion, high network tariffs, volatile electricity prices, a lack of electricity demand from industry, increased costs in offshore wind supply chains and delayed hydrogen infrastructure development. The development of offshore wind capacity in particular stalled, with no bids submitted for the tender for the offshore wind park Nederwiek I-A in 2025. To ensure further deployment of offshore wind, it is important that investments in the sector remain sufficiently attractive. The CfD scheme announced in the 2026-2030 coalition agreement could help to this end ([29]).

Industrial decarbonisation

The Netherlands has made progress in reducing its per capita emissions in manufacturing, reducing by approximately 40% between 2019 and 2023. Despite this progress, per capita emissions in manufacturing remain above the EU average (see Annex 8). The Netherlands has developed a range of policies that aim to decarbonise its industrial sector, including tailor-made agreements and support schemes.

([27]) ECLI:NL:RBDHA:2026:1344, Rechtbank Den Haag, C/09/659832 / HA ZA 24-53.

([28]) While the Dutch government is appealing the Hague District Court ruling, the 'provisionally enforceable' status (uitvoerbaar bij voorraad) ensures that compliance remains mandatory during the appeal procedure, unless a suspension is granted. For more information, see this link.

([29]) For more information, see here.

The 2026-2030 coalition agreement announced the continuation of tailor-made agreements and the phase out of financial incentives for fossil fuels. However, the coalition agreement also announced the abolishment of the CO_2 levy, a levy introduced as an incentive for large emitters to decarbonise. It is expected that the abolishment of the CO_2 levy will lead to higher emissions by 2030 than the level in the base scenario ([30]). Further action is therefore needed to achieve the desired reduction in industrial greenhouse gas emissions, to support the transition of industrial regions with high greenhouse gas emissions (see Annex 19) and to increase demand for low-carbon products.

Energy efficiency

The 2025 CSRs also highlighted the need to improve energy efficiency, particularly in buildings. Increasing energy efficiency can help tackle both energy affordability and grid congestion.

Final energy consumption decreased only in the residential sector, by 21% between 2019 and 2024, mostly driven by energy savings through behavioural measures, policies and building renovations. Overall, final energy consumption (FEC) in 2024 rose by 2.1% compared with 2023 to 41.7 Mtoe, reversing the declining trend since 2019 (see Annex 9). To increase energy efficiency, the Netherlands could, for example, scale up building renovations, expand renewable district heating and accelerate the shift to electric transport. The 2026-2030 coalition agreement announced a 'National Insulation Initiative' and a reform to improve rental properties with poor energy labels by phasing out rental properties with energy labels E-G.

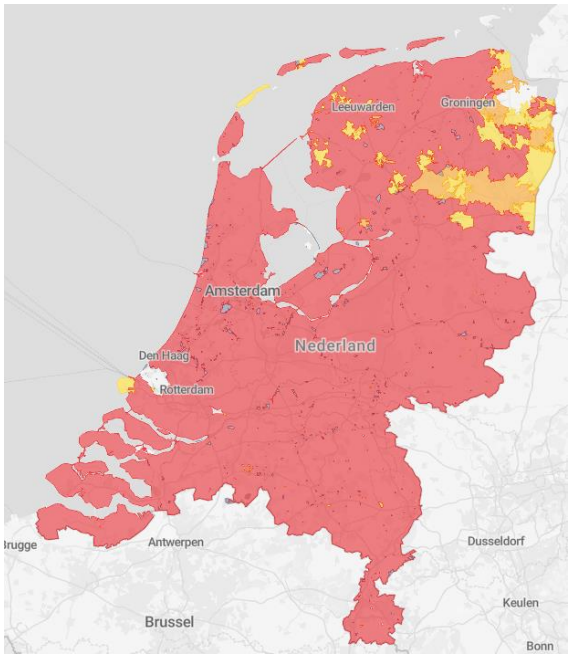
Alleviating energy grid congestion

Electricity grid congestion remains a major challenge in the Netherlands, as highlighted in the 2025 CSRs. Congestion occurs at both transmission and distribution network level and are a major obstacle to the integration of renewable energy sources. Grid congestion prevents new connections, for example connecting new photovoltaic installations to the grid. This discourages renewable energy production that requires grid access, limiting the Netherlands' ability to meet its greenhouse gas emissions reduction targets and clean energy ambitions (see Annex 9). Grid congestion is costly, partly due to the need for redispatching. Congestion poses a risk to the security of supply, slows the transition to electric transport, hampers the construction of new premises and constrains business expansion. This has a knock-on effect on the Netherlands' competitiveness. Around 14 000 users are on a waiting list for grid connection at distribution level, and at transmission level there is declining interest in large-scale projects ([31]).

([30]) Notitie CO2-heffing industrie.Toelichting ten behoeve van de overlegtafel CO2-heffing industrie.

([31]) Actualisatie voortgang Landelijk Actieprogramma Netcongestie 2025.

Map 1: **Capacity map of the Netherlands, March 2026 (offtake of electricity from the grid)**



Source: https://capaciteitskaart.netbeheernederland.nl/

The Netherlands is taking major steps to help alleviate grid congestion through a combination of investment in the grid and regulatory initiatives. In April 2025, the Dutch government announced a set of legislative reforms and investments to accelerate expansion of the transmission grid. The Dutch transmission system operator continues to significantly increase investments to modernise and expand the transmission grid. Despite these initiatives, grid congestion is expected to remain a major challenge in the short to medium term. To speed up permitting procedures for grid projects, the 2026-2030 coalition agreement announced a 'crisis act on grid congestion'. In addition to speeding up permitting, it is important to accelerate initiatives to incentivise flexible grid use for consumers and industry, including local solutions, as highlighted in the Commission guidance on efficient and timely grid connections ([32]). Improving electricity trading using existing cross-border infrastructure remains a challenge. It would therefore be beneficial to work with neighbouring countries to maximise cross-zonal electricity trading.

Energy prices

Electricity and particularly gas prices in the Netherlands are relatively high compared to the EU average. Household prices for gas decreased in the first half of 2025 but remained significantly above the EU average. Household prices for electricity also decreased, remaining below the EU average. For industry, both gas and electricity prices were above the EU average in 2025. High energy prices make the business environment less attractive. To ensure a level playing field with neighbouring Member States, the Netherlands would benefit from action to tackle the high energy prices. This includes reviewing network tariffs as the Netherlands has relatively high transmission and distribution tariffs compared with the EU average, supporting the further roll-out of renewable energy sources and increasing flexibility. Addressing energy prices calls for a comprehensive approach that considers the interplay between energy prices, taxation, energy consumption and grid congestion, taking into account the need to minimise the fiscal impact of such reforms and preserve the price incentive to save energy (see Annex 9). Initiatives designed to make dwellings more energy-efficient, as announced in the 2026-2030 coalition agreement, can help lower energy bills for households. Since the outbreak of the war in the Middle East in February 2026, the Netherlands adopted a number of fiscal policy measures to mitigate the impact of high energy prices on households and firms. These include a temporary emergency energy fund for 2026 and 2027 to support the most vulnerable households with high energy bills during the next winter, a permanent increase of the tax-free travel allowance, and temporary reductions of the motor vehicle tax rate for delivery vans and trucks for 2026.

([32]) Commission Notice – Guidance on efficient and timely grid connections, OJ C, C/2025/6703, 19.12.2025.

Addressing nitrogen, water and agricultural sustainability challenges

Excessive nitrogen deposition continues to affect both the environment and the wider economy, as highlighted in the 2025 CSRs. Nitrogen deposition, primarily from agriculture, remains a critical cause of nature deterioration, leading to eutrophication and acidification of soil and water bodies. The nitrogen overload in the Netherlands also continues to seriously restrict permitting for economic activities that emit nitrogen, such as housing and infrastructure. This could potentially cost the country economic losses of EUR 4-21.5 billion between 2024 and 2030 ([33]). Moreover, the derogation granted to the Netherlands under the Nitrates Directive expired on 31 December 2025, tightening manure application requirements (see Annex 10). The Netherlands has taken some steps to tackle these challenges by compensating livestock farmers for the voluntary closure of their farms (buy-out schemes). In addition, the 'Nature programme' measure under the Dutch recovery and resilience plan contributes to nature restoration in nitrogen-sensitive areas. However, the impact of these measures remains limited. The 2026-2030 coalition agreement allocates EUR 20 billion until 2035 to planned measures to reduce nitrogen pollution, including binding company-specific emission reduction targets, area-specific measures around vulnerable Natura 2000 sites and further buy-out schemes for livestock farms. Yet, implementation of concrete measures is still required.

The deterioration of water quality remains a major concern, as emphasised in the 2025 CSRs. Many Dutch water bodies still fail to comply with the Water Framework Directive and progress towards the 2027 targets is not on track. Almost no surface water bodies currently achieve good ecological status. The main pressures include population density, land-use changes and intensive agriculture (see Annex 10). However, no substantial measures have been adopted. The Netherlands is currently preparing its 8th nitrates action programme, which aims to tackle challenges related to poor water quality. Further measures are needed to improve the status of both surface and ground water bodies, in particular on the use of fertilisers and pesticides.

Limited progress has been made in taking further action on sustainable agriculture, as the sector remains a major source of greenhouse gas emissions. The Netherlands is still not on track to reduce its emissions from agriculture. The sector is projected to generate greenhouse gas emissions of 21.9 Mt CO_2-eq compared with the national sectoral 2030 emissions reduction target of 17.9 Mt CO_2-eq. Organic farming also remains limited in scale, covering only a small share of agricultural land compared with the EU average (see Annex 10). Further policy action would be needed, including measures to help farmers transition to sustainable farming practices.

([33]) https://www.rijksoverheid.nl/documenten/kamerstukken/2025/07/02/eindrapport-onderzoek-economische-effecten-stikstofproblematiek.

SKILLS, QUALITY JOBS AND SOCIAL FAIRNESS

In 2025, the Netherlands received country-specific recommendations (CSRs) to reduce labour market segmentation, address labour and skills shortages, improve education outcomes and address expenditure in long-term care. Since then, several measures have been adopted to improve labour market functioning, strengthen skills development and enhance the attractiveness of the teaching profession. However, progress has been limited with major aspects of the reform agenda still pending. In addition, challenges related to the working and living conditions of mobile and migrant workers have become increasingly evident, raising concerns about job quality for some groups of workers and about downward pressure on labour standards. In the long-term care and healthcare sectors, the Netherlands faces rising costs, persistent workforce shortages and socio-economic disparities.

Persistent labour and skills shortages are a drag on economic growth

Overall, the Dutch labour market records strong performance, but labour and skills shortages remain a key challenge. The 2025 CSRs called for comprehensive measures to tackle the labour shortages. Although labour market tightness has eased somewhat, shortages remain widespread and continue to constrain companies' capacity to expand production. The job vacancy rate is among the highest in the EU, with shortages particularly pronounced in sectors such as construction, healthcare, ICT, professional, scientific and technical services (e.g. engineering), and accommodation and food services (see Annex 11). Structural factors continue to underpin these pressures, as demographic ageing and slowing labour supply growth are expected to limit workforce expansion. A significant share of recent employment growth has occurred in relatively low-wage and low-productivity sectors. Although as a whole, adult learning participation in the Netherlands remains high, participation remains uneven across the workforce (see Annex 13). Adults with low levels of qualifications, workers in temporary or flexible employment, people with a migrant background and people outside the labour force have a significantly lower participation rate in training, limiting the ability of lifelong learning to support labour market mobility and tackle the skills shortages.

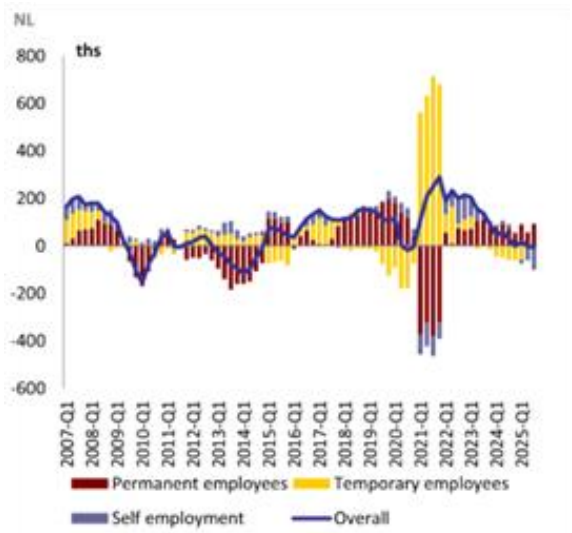
Some measures have been taken to tackle these shortages, but the reach of upskilling and reskilling measures remains limited among groups less integrated in the labour market. Policy action has focused on improving labour market matching, supporting skills development and helping specific groups join the labour market, including refugees and asylum seekers. Up- and reskilling initiatives receive support under the Netherlands' RRP via sectoral development paths and training programmes for the unemployed. In addition, there is a training subsidy programme for SMEs and regional labour market centres have been set up to improve coordination between employers and jobseekers. However, targeted outreach to vulnerable groups remains overall limited, and participation in training continues to be closely linked to labour market position and employment status. As a result, people with low skills, people in non-standard employment and people with a migrant background are still less likely to apply for upskilling opportunities. Further action to step up targeted labour market measures and improve access to training could help mobilise untapped labour potential. Measures to promote better work-life balance and quality of work, for example by improving access to

affordable childcare, may help increase the number of hours worked – particularly among women, who have one of the highest rates of part-time employment in the EU. It may also help increase labour supply in sectors facing persistent shortages. Overall, there has been limited progress in tackling the labour and skills shortages.

Labour market segmentation remains a structural challenge

Labour market segmentation (the division of the labour market into different categories of workers with different levels of job security and/or access to social and other benefits) is still a structural feature of the Dutch labour market. The 2025 CSR called for measures to reduce the incentives to use flexible and temporary contracts, but the prevalence of flexible employment arrangements remains high. Temporary and flexible contracts and self-employment still account for a significant share of employment. However, the number of self-employed people declined slightly in 2025 following recent reforms (see Graph 4.1), contributing to a segmented labour market with differing levels of job security and social protection. Workers in flexible forms of employment are more often employed in low-skilled and lower-productivity sectors and tend to receive less employer-provided training, which may weigh on skills development and labour mobility. At the same time, flexible employment is more common among young people, people with a migrant background and workers with lower levels of skills. This compounds the risk of in-work poverty and weaker labour market attachment for some groups.

Graph 4.1: **Employment by type (permanent, temporary, self-employed), year-on-year changes**



(1) Total employment (thousand), people aged 20-64, year-on-year change based on non-seasonally adjusted data.
Source: Eurostat, LFS [lfsq_egaps, lfsq_etgaed].

The Netherlands has taken several measures to tackle labour market segmentation, but some key aspects remain pending. Reforms under the RRP include a gradual reduction of the tax deduction for the self-employed and the lifting of the tax administration's enforcement moratorium on bogus self-employment, with the aim of reducing the incentive for self-employment without employees. Legislation clarifying employment relationships and introducing the legal presumption of employment has evolved: a proposed bill has been partially withdrawn, with the government instead working on a broader initiative providing market guidance to distinguish between self-employed people and employees, drawing on recent case law, while advancing with the part of the law introducing the legal presumption of employment for workers earning less than a certain hourly threshold. The plan to introduce mandatory disability insurance for the self-employed, designed to reduce gaps in social protection coverage and create a more level playing field between employees and the self-employed, has faced repeated delays and is unlikely to have an effective application before 2030, despite having been submitted to Parliament in March 2026. Additional legislative proposals seek to

strengthen job security in flexible employment, including by abolishing zero-hours contracts, bringing in more predictable contract arrangements and improving safeguards for temporary agency workers. Nevertheless, disparities in employment conditions and access to social protection across different forms of employment remain a structural feature of the Dutch labour market. This may continue to affect job quality, training investment and labour market mobility (Annexes 11 and 12).

Reliance on mobile labour in low-wage sectors poses risks to job quality and productivity

Job quality challenges persist for mobile and migrant workers, particularly in labour-intensive sectors that rely on flexible employment arrangements. EU mobile and migrant workers are overrepresented in sectors such as logistics, meat processing and horticulture, where employment is often organised through temporary work agencies and characterised by high levels of contract instability and low wages. In 2024, the share of workers on limited-duration contracts was significantly higher among mobile EU workers and migrant workers than among nationals. In-work poverty rates were markedly higher, particularly for non-EU nationals. These patterns reflect persistent risks of precarious working and living conditions for these workers, including limited job security, greater exposure to occupational risks and dependence on employer-provided housing. Beyond the social implications, these dynamics also have broader macroeconomic effects, with jobs and resources shifting to lower-productivity sectors, thereby hampering productivity growth and competitiveness.

The government has taken a first step to strengthen oversight in the temporary work agency sector. It has adopted legislation introducing a mandatory licensing system, due to enter into force in 2027. Since potential loopholes have been flagged ahead of implementation, further policy efforts will be needed to address this challenge. Stronger enforcement of labour standards and of the quality of employer-provided housing, improved registration of workers and clearer accountability across subcontracting chains would help improve job quality and reduce workers' dependence on employers or intermediaries, while ensuring fair competition between firms. Reducing the incentives (e.g. sectoral subsidies, tax advantages or low pricing of external costs) for business models that rely on very low labour costs would also help prevent distortions in labour allocation and a weakening of productivity growth (Annexes 11 and 12).

The decline in basic skills and low STEM participation are risks to the country's future competitiveness

The decline in basic skills poses a risk to the competitiveness of the economy and to labour market outcomes, as pointed out in the 2025 CSRs. The share of students achieving below-average PISA scores almost doubled between 2012 and 2022 in mathematics and in science, and increased by 2.5 times in reading. Most Dutch students perform at low levels on digital skills, and the disparities with their parents' education are among the widest in the EU ([34]). Equity of education remains a challenge. The share of top performers in mathematics is almost twice as high as the EU average, but nearly half of foreign-born students underachieve in mathematics, with the underachievement rate lower (37.9%) among Dutch-born students with foreign-born parents**.** Contrary to most EU regions, in the Netherlands students from rural areas achieve higher PISA 2022 scores than their urban peers and rank among the highest of all EU rural areas (see Annex 18). The interim evaluation of the 'Masterplan for basic skills' adopted in 2022 to assess its impact on student performance is planned for

([34]) 2023 International Computer and Information Literacy Study.

the end of the school year 2025–2026. The impact of the *Ontwikkelkracht* programme, which aims to improve the quality of education by helping schools use evidence-based practices and research, remains limited, despite support from the recovery and resilience plan for improving basic skills and teaching quality. Implementation of the revised curricula, planned for 2026, remains at an early stage. While keeping the focus on effective implementation of the adopted measures, the Netherlands could strengthen targeted support for underperforming schools, foreign-born students and students with a migrant background, to raise the level of basic skills and decrease inequity in education.

Teacher shortages have eased but are still significant. Shortages of qualified teachers and school leaders undermine education quality. The Netherlands has taken several measures to tackle teacher shortages, including salary increases, measures to help workers join the teaching profession from other sectors and the establishment of educational regions to improve coordination. To make the profession more attractive and help retain teachers, the Netherlands could improve career progression, flexible working and better working conditions, including lowering the administrative burden for teachers and more diversified career paths.

The share of pupils in vocational education and training and tertiary students enrolled in science, technology, engineering and maths (STEM) programmes is low. The Netherlands received a CSR in 2025 to boost participation in STEM programmes. Women and migrant students are still underrepresented in STEM subjects, and specialisation in ICT is limited (see Annex 13). Despite strong overall rates of participation in higher education, there are structural constraints across the stages of STEM education, from secondary to tertiary level, resulting in persistent shortages of technical and digital skills needed for the economy to be competitive and innovative.

Vocational education and training (VET) supports strong performance on the school-to-work transition. However, VET makes a limited contribution to overcoming the STEM shortages in the Netherlands due to the relatively low share of students enrolled in STEM-oriented VET programmes (see Annex 13). Several initiatives are being implemented to tackle the low participation rate in STEM (e.g. *Techkwadraat*, *Sterk Techniekonderwijs*, *Worden wie je bent, Vrouwen in Techniek*), but the impact remains limited due to the magnitude of the skills shortages. To improve the rate of enrolment in STEM programmes in higher education, further policy action could be taken to increase targeted educational support and career guidance in secondary education, in particular by focusing on education and career counselling, and overcoming gender stereotypes in career choices. Improving the retention rates in STEM programmes, especially among women, requires stronger academic support for students facing educational gaps, and initiatives to promote well-being in tertiary education and increase the visibility of female role-models in STEM careers.

Ensuring the sustainability of care systems is a growing challenge

The long-term care system faces significant challenges due to demographic pressure and a delivery model that is skewed to residential care. Overall spending on long-term care in the Netherlands reached 3.8% of GDP in 2022, the highest in the EU ([35]). It is projected to increase to 5.7% of GDP by 2070. Despite the implementation of a major reform of the long-term care system in 2015, the proportion of spending on and users of residential care is still relatively high. This is partly due to co-payments not being aligned across different types of long-term care benefits. Action to tackle this mismatch and to invest in home-based and community-based care could help manage long-term care needs in a cost-effective manner. The coalition agreement of the current government contains measures to

([35]) .2024 Ageing Report – country fiche Netherlands.

achieve structural savings of about 0.2% of GDP. However, most measures are at an early stage of design or negotiation. Their impact on cost containment and the shift towards home-based care is not yet clear. While the policy direction is consistent with the goal to improve cost-effectiveness, so far progress on the 2025 CSR appears to be limited.

Persistent structural shortages continue to increase workload pressures and job strain in long-term care and healthcare. Hospitals struggle to manage gaps in the nursing workforce with the shortages particularly acute in nursing homes and home care services (see Annex 15). The rise in part-time employment, demanding working conditions and difficulties in recruiting and retaining staff limit the systems' capacity. These challenges raise concerns for access to quality care and for continuity of care.

Investing in measures to promote health, prevent disease and tackle inequalities between socio-economic groups is key. In the Netherlands, inequalities persist between socio-economic groups across most lifestyle risk factors (tobacco smoking, dietary risks, alcohol consumption and low physical activity) and in terms of participation in prevention programmes (see Annex 15). There are also income-related imbalances in access to prevention programmes and healthcare services, which are particularly acute among people with lower levels of education and with mental healthcare needs. Tackling these challenges is critical to reduce the strain on the healthcare and long-term care systems.

KEY FINDINGS

The Netherlands would benefit from taking action in the following areas that were **covered by previous country-specific recommendations**:

- **increasing access to and the affordability of housing** by simplifying planning and permitting procedures, and construction rules for housing development, making more land available for construction, recalibrating regulated rents in the private rental market and strengthening income-linked rent policies for higher-income social tenants;

- **reducing distortions in the tax system** by phasing out tax expenditure schemes, in particular the mortgage interest deductibility, and by decreasing the ability to delay and/or reduce tax payments by holding assets in closely held companies (Box 2);

- **increasing R&D intensity** by for example targeting public support to investment in areas key to the country's competitiveness and supporting regional innovation ecosystems;

- **improving access to finance** for start-ups and scale-ups, and providing long-term, predictable public support;

- **reducing overall reliance on (imported) fossil fuels** by accelerating the roll-out of renewable energy, improving energy efficiency and decarbonising industry;

- **decreasing electricity grid congestion** by accelerating grid investment projects, incentivising flexible grid use and by maximising cross-zonal electricity trading using existing cross-border infrastructure;

- **tackling the issues of excessive nitrogen deposits and deteriorating water quality** by supporting sustainable agriculture;

- **reducing labour market segmentation** by swiftly adopting and implementing a mandatory disability insurance for self-employed persons, and strengthening job security in flexible employment;

- **tackling labour shortages** by tapping into underused labour potential, by promoting job quality for mobile and migrant workers while reducing reliance on low-wage, labour-intensive activities and by encouraging workers to move to high-productivity sectors and sectors that tackle societal challenges;

- **promoting skills development and tackling skills shortages** by continuing targeted and tailored active labour market policies and increasing access to upskilling and reskilling schemes for specific groups of people who are less integrated in the labour market;

- **improving the level of basic skills** by tackling teacher shortages and providing tailored support to disadvantaged schools;

- **boosting rates of enrolment and retention in tertiary and vocational education programmes** in science, technology, engineering and maths subjects by providing stronger academic support and guidance and by promoting these subjects to women

and students with a migrant background;

- **ensuring the fiscal sustainability of the long-term care system** by allocating benefits efficiently, aligning co-payments in the different care settings, increasing investment in prevention and facilitating community-based services.

In **other areas**, the Netherlands would benefit from:

- **supporting SMEs to innovate and adopt new technologies** by combining a mix of fiscal and non-fiscal measures, such as targeted vouchers and grants, tax incentives for advanced technologies and tailored digital skills training programmes, while reducing the complexity and fragmentation of existing schemes, to ease access and lower administrative burden for smaller companies.

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Table A1.1: **2025 CSR implementation and Commission assessment**

The Netherlands faces challenges in a wide range of policy areas, as identified in the country-specific recommendations (CSRs). The Netherlands was recommended, among other things, to support the availability and affordability of housing; to boost R&D and innovation, including better access to finance for start-ups and scale-ups; accelerate the green transition by expanding renewables, improving energy efficiency, and addressing grid congestion as well as addressing excessive nitrogen deposition and the deterioration of water quality; and reduce labour market segmentation, tackle labour and skills shortages, improve basic skills, and increase STEM participation.

The Commission has assessed the degree of implementation of the 2025 CSRs considering the policy action taken by the Netherlands to date*. To do so, the Commission has taken into account the information provided by The Netherlands in its Annual Progress Report as well as other information sources. This annex provides summary information on the policy actions taken or planned by the Netherlands for each CSR. More detailed information on these actions is included in the relevant chapters and other annexes of the report.

**CSR 2 is not assessed in CeSaR. RRP implementation is monitored through the assessment of RRP payment requests and analysis of the bi-annual reporting on the achievement of the milestones and targets, to be reflected in the country reports. Progress with the cohesion policy is monitored in the context of the Cohesion Policy of the European Union.*

Recommendation text	**Main measures adopted or implemented** *By 30 April 2026*	**Preparatory steps/ credibly announced measures** *By 30 April 2026*	**Assessm. of progress**
1.1 Reinforce overall defence and security spending and readiness while ensuring debt sustainability in line with the European Council conclusions of 6 March 2025.	Total general government defence expenditure in 2026 is projected at 1.9% of GDP, corresponding to an increase of 0.3 percentage points compared to 2024. The government has announced additional efforts to increase defence spending from 2027 to reach 2.7% of GDP in 2030.	Total general government defence expenditure in 2027 is projected at 2% of GDP, corresponding to an increase of 0.4 ppt. compared to 2024.	Substantial progress
1.2 Ensure that net expenditure respects the path recommended by the Council on 21 January 2025.	Annual and cumulated deviations in 2025, vis-à-vis the Council Recommendation of 21 January 2026, amounted to 1.5% of GDP and 1.0% of GDP, respectively. In April 2026, the Netherlands has submitted a revised medium-term plan, covering the period 2026-2030. The adoption by the Council of a new net expenditure path would lead to a resetting of the preventive arm control account. The annual deviation in 2026, vis-à-vis the net expenditure path included in the revised plan, is projected at 0.1% of GDP.		Limited progress
1.3 Align the taxation of different types of income from wealth, among others to reduce incentives for debt-financed homeownership.	Speed up the phase out of the deduction for no or a low mortgage debt (Wet Hillen) (small measure)	Adoption of reform 'Actual return box 3 law' by 2nd chamber of parliament. Effective application foreseen for 1 January 2028.	Limited progress
1.4 Remove obstacles for the construction of new dwellings by simplifying planning and permitting procedures.	*Realisatiestimulans*: EUR 2.5 billion until 2029 to municipalities for newly constructed affordable dwellings *Woningbouwimpuls*: EUR 515 million until 2029 for CSR projects with a public funding deficit	Housing Management Enhancement Act: The act aims to streamline the planning process, permit issuance, and legal procedures. Amendments to the building regulation: it simplifies the building regulation, thereby reducing construction costs.	Some progress

(Continued on the next page)

Table (continued)

Recommendation text	**Main measures adopted or implemented** *By 30 April 2026*	**Preparatory steps/ credibly announced measures** *By 30 April 2026*	**Assessm. of progress**
1.5 Support the development of an affordable private rental sector, including by making investments in the sector more attractive.	Reduction in transfer tax on non-primary residence dwellings (small measure)		Limited progress
1.6 Address the expected increase in age-related expenditure in long-term care (LTC) by making the system more cost-effective, including by allocating benefits more efficiently.	Action plan based on various players in the LTC system to reduce administrative burden on employees and simplify provision of care. No implementation of changes to the structure of the LTC system.	Envisaged reform to rebalance system towards home-based care in coalition agreement.	Some progress
3.1 Enhance public and private R&D intensity by targeting support to investments in key strategic technologies.	No progress in implementation, but actions outlined in the 3% GDP Action Plan, as well as the plans for the National Technology Strategy, are fully in line with the CSR.	Creation of a National Agency for Disruptive Innovation (NADI) to support high-risk R&D projects and promote collaboration between SMEs, large firms and research institutions. Implementation of the National Technology Strategy on 10 key technologies R&D tax credits accessible for start-ups	Limited progress
3.2 Address the funding gap for late-stage start-ups and scale-ups by leveraging available financing tools and providing incentives to attract institutional investors	Very limited implementation. Invest-NL (National Promotional Bank): • EUR 250 m Blended Finance for start-ups/scale-ups • Fund-to-fund instrument to attract institutional investors	Reinforcement of Invest-NL (National Promotional Bank) with additional funding and a new mandate: focus on loans and equity on start-ups and scale-ups R&D tax credits accessible for start-ups	Limited progress
4.1 Reduce overall reliance on fossil fuels	Law on the ban on the use of coal for electricity production. Support schemes for the electrification of the transport sector, including SEPP and AanZET (RRP).	State participation in Carbon Capture and Storage (CCS) and Carbon Capture and Utilisation (CCU).	Limited progress
4.2 by accelerating the roll-out of renewables and improving energy efficiency, particularly in buildings.	Support schemes for renewables / energy efficiency, including SDE++ and ISDE (for dwellings, in the RRP), National Heat Fund (loans for renovations), SVVE (for associations of homeowners). State participation in district heating projects.	Contract for Difference (CfD) scheme for offshore wind. Continuation of SDE++ Phase out of labels E, F and G for rental dwellings.	Some progress
4.3 Decrease electricity grid congestion by increasing the capacity of the transmission and distribution grid, implementing flexibility solutions, maximising cross-zonal trade, and further	Energy Act enabling more flexible grid use and energy sharing	Grid Congestion Crisis Act Implementation of revised of Transmission System Operator (TSO) working procedures Grid expansion designated as	Some progress

(Continued on the next page)

Table (continued)

Recommendation text	**Main measures adopted or implemented** *By 30 April 2026*	**Preparatory steps/ credibly announced measures** *By 30 April 2026*	**Assessm. of progress**
simplifying permitting procedures.		Overriding Public Interest	
4.4 Implement structural measures to address excessive nitrogen deposition and the deterioration of water quality effectively, especially by making further efforts for sustainable agriculture.	Voluntary termination schemes for livestock farms	Sector-specific nitrogen emission reduction targets Area-specific measures around vulnerable Natura 2000 areas Termination and extensification schemes for livestock farms	Limited progress
5.1 Adopt and implement measures to reduce incentives to use flexible or temporary contracts.	Law to tackle abuses at employment agencies. Effective application 1 Jan 2027.	Law providing more security to flex workers	Limited progress
5.2 Implement comprehensive measures to address labour and skills shortages, including by tapping into underused labour potential, by strengthening upskilling and reskilling opportunities for all through targeted and tailored active labour market policies, and by encouraging mobility to high-productivity sectors and sectors related to societal challenges.	Facilitation of childcare, functional regional work centres for job seekers and employed, sectoral development pathways established	Lifelong learning in shortage sectors and for flexible contracts, fulltime bonus, pilot to attract foreign workers, free childcare	Limited progress
5.3 Improve basic skills, including by addressing teacher shortages and tailored support to disadvantaged schools	Masterplan for basic skills, curriculum reform, Teacher strategy, Ontwikkelkracht (school improvement), subsidies for priority schools.	Address learning deficiencies at an early age, professional development of teachers, less admin burden for teachers, facilitate career switch to become teacher, even higher priority to reading, writing and math in curriculum	Some progress
5.4 Boost participation in STEM programmes by targeted educational support and career advice, especially for women and students with a migrant background.	National reinforcement microchip talent plan, Action Plan Green and Digital Jobs	Lifelong learning for shortage sectors, schools are required to address gender and migration background in attracting more STEM students	Limited progress

Source: The Netherlands' reporting and Commission assessment

This annex discusses selected topics in public finance and developments in fiscal-structural country-specific recommendations (CSRs) addressed to the Netherlands in July 2025. These CSRs include a call to strengthen defence spending and readiness while implementing a fiscal strategy in line with the Council Recommendation of 21 January 2025. The Netherlands also received recommendations to: (i) align its taxation of different types of incomes from wealth; (ii) reduce incentives for debt-financed home ownership; (iii) remove obstacles for the construction of new dwellings; (iv) support the development of the private rental sector; and (v) address the expected increase in ageing-related expenditure in long-term care.

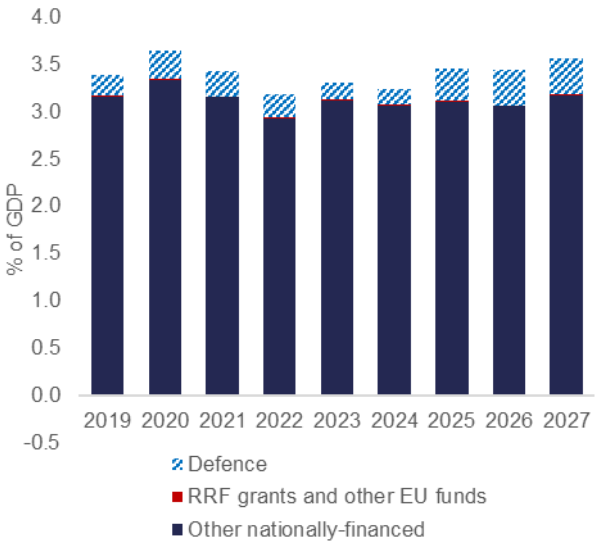
On 21 January 2025, the Council adopted the Recommendation setting the net expenditure path for the Netherlands ([36]). The recommendation sets a fiscal adjustment over four years ([37]). The Netherlands has submitted a revised medium-term plan, covering the period 2026-2030. The endorsement by the Council of a new net expenditure path would lead to a resetting of the preventive arm control account (see Annex 1).

Developments in the government deficit, debt and public expenditure

At the end of 2025, the government deficit of the Netherlands amounted to 1.6% of GDP and the government debt-to-GDP ratio amounted to 44.4% ([38]). Based on the Commission Spring 2026 Forecast, the Netherlands' government deficit is projected to increase to 2.5 % of GDP in 2026 and 1.9 % of GDP in 2027. The increase of the deficit in 2026 mainly reflects the temporary effect of a reform of the military pension system that requires a transfer of approximately 0.7% of GDP from the government to a private pension fund. The debt-to-GDP ratio to increase to 46.9% by the end of 2026 and to remain broadly stable at 47.0% by the end of 2027. The increase government debt in 2026 mainly reflects loans to TenneT, the electricity transmission system operator of the Netherlands, and to EBN, the state energy company.

Moderately rising public investment is improving the quality of expenditure in the Netherlands. Although the pandemic led to some cuts in public investment, those cuts bottomed out in 2022, and public investment has been increasing moderately since then. Public investment is now expected to reach 3.5% in 2026, up from 3.4% in 2019. Public investment is also set to further increase in 2027, driven by greater investment in defence. The Netherlands is projected to spend more on nationally financed investment in 2027 than it did before the COVID-19 pandemic.

Graph A2.1: **Public investment evolution and composition (% of GDP)**



Source: Spring Forecast.

The type of expenditure that has a greater impact on GDP had remained broadly stable over three decades, but it started increasing again since 2022. Zooming in on the composition

([36]) OJ C, C/2025/648, ELI: Council Recommendation of 21 January 2025 setting the net expenditure path of the Netherlands.

([37]) Compliance by the Netherlands with the maximum growth rates of net expenditure recommended by the Council is assessed in COM(2026)200.

([38]) Figures underpinning fiscal surveillance (net expenditure growth) are provided in the Fiscal Statistical Tables SWD(2026)200 providing background data relevant for the assessment of the budgetary policies of the Member States.

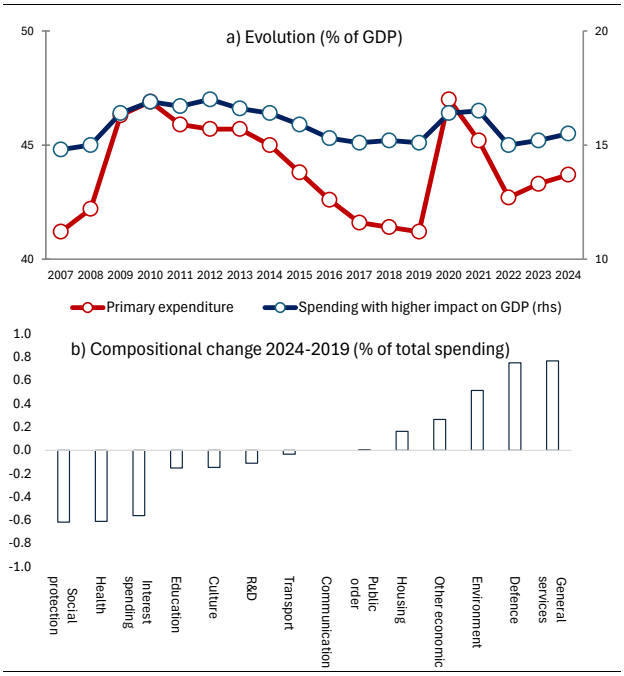
of spending, social protection accounted for the largest share of total expenditure (37%), followed by health and education (each above 10% of total spending) in 2024. Since 2019, public expenditure on general public services and defence has increased strongly, with the rise in defence spending reflecting recent security developments (See Graph A2.3). Spending on housing, environment and other economic affairs ([39]) has risen more modestly since 2019. By contrast, spending on R&D, transport, education and health expenditure has declined. This trend deserves attention, as these three categories are generally considered growth-friendly spending categories. In particular, the decline in education spending is especially concerning given the recent drop in educational performance in the Netherlands (See Annex 13 for further details).

Tax revenues as a share of GDP in the Netherlands are in line with the EU average. In 2025, total Dutch tax revenues expressed as a percentage of GDP (including compulsory social contributions) amounted to 38.8% compared with an EU average of 39.9%. Total tax revenues are projected to fall to 39.1% of GDP in 2026 and 40.0 % of GDP in 2027 according to the Spring 2026 Forecast. Although the tax mix in the Netherlands is relatively diversified, some tax types that are considered less detrimental to growth (such as recurrent property taxes) yield tax revenue as a percentage of GDP that is below the EU average (0.6% of GDP vs EU average of 0.9% of GDP) (see Annex 3).

The costs of ageing

Total ageing-related spending in the Netherlands is projected to rise by about 2 pps of GDP between now and 2040, to around 23% of GDP, with an additional 1.5 pp. increase between 2040 and 2070 (see Table A1.1). This overall increase is the result of a projected rise in expenditure on long-term care, pensions and healthcare. Public healthcare expenditure is projected to be 5.8% of GDP in 2025 (below the EU average of 6.6%) and is expected to increase by 0.3 pps by 2040 and by a further 0.3 pps between 2040 and 2070.

Graph A2.2: **Primary spending evolution and compositional change**



Source: Eurostat *Note:* Based on economic literature, the categories considered to have a greater growth impact include education, R&D, health, transport and communication (See Barbiero and Cournede (2013), Gemmel et al. (2016), Lupu et al. (2018), Cepparulo and Mourre (2020) and OECD (2025)).

Public expenditure on long-term care is projected to be 3.9% of GDP in 2025, significantly above the EU average of 1.7%. It is expected to further increase by 0.9 pps. of GDP between 2025 and 2040 and by a further 0.9 pps of GDP between 2040 and 2070.

Public pension spending as a share of GDP is projected to increase by about 1 pp. over the next decades and by a little under 2 pps between 2025 and 2070. At 8.5% of GDP in 2070, projected gross spending on public pension benefits would be below the projected EU average of 12%. In the Netherlands, the uptake of supplementary pension schemes remains significant: by the end of 2024, private pension assets were equivalent to around 150% of GDP and participation covered around 97% of the

([39]) This refers to the set of government activities, policies, and expenditures aimed at regulating, supporting, and developing economic activity across major sectors, including general economic and labour policies, agriculture and natural resources, energy, industry, construction, and other economic functions not elsewhere classified. Although transport and communication, as well as research and development activities, are normally considered part of this function, they are treated separately in the graph presented.

Table A2.1: **Supplementary pension schemes – scope for expansion**

	Assets in 2024 (% GDP)	Gross replacement rate at retirement: (pps change 2025-2040)	Participation in 2024 (% working-age population)	
NL	150.9	*-6.1*	97.4	**NL**
EU	32.4	*-2.8*	55.9	EU

Source: European Commission

working-age population ([40]). This coincides with rising medium-term public pension spending pressures and a projected decline in the replacement rate by 6.1 pps between 2025 and 2040 (Table A2.2 and A2.3) ([41]).

The projected increases in public spending on long-term care, due to an ageing population, pose a risk to fiscal sustainability in the medium and long term for the Netherlands. In 2025, the Netherlands received a CSR on addressing this expected increase in long-term care expenditure, as it creates a significant fiscal risk. Despite the implementation of a major reform of the long-term care system in 2015, the Netherlands still spends a relatively high proportion of total expenditure on recipients of long-term institutional care in comparison to other EU Member States. There seem to be a number of reasons for this, including: (i) co-payments not being aligned across different types of long-term care benefits to induce recipients to choose the care setting that is most cost-effective for their care needs; (ii) the lack of broader criteria to assess each individual's need for care; and (iii) incentives for municipalities to shift responsibility for recipients to more expensive institutional care settings, which is financed at national level (see Section 4 of the country report narrative).

National fiscal framework

The Netherlands has two institutions that perform the tasks of an independent fiscal institution (IFI). The Council of State – Advisory Division (CoS – AD) is a small IFI with a very narrow mandate, consisting of monitoring the government's compliance with fiscal rules. Another organisation, the Netherlands Bureau for Economic Policy Analysis (CPB), is a long-standing and well-resourced institution, with the IFI task of producing the macroeconomic forecast underlying the government's budgetary plans. The CPB has a strong media presence. The CoS – AD is deeply embedded in the Dutch Council of State as a whole, which might both: (i) make it difficult to create a clear IFI identity; and (ii) complicate name/role recognition among the public, especially since the CPB may be the better-known fiscal surveillance institution in the Netherlands. Some features that are important for IFI independence and effectiveness, such as access to information and having an active policy dialogue with the government, have in the Netherlands so far been upheld via tradition and tacit agreements rather than via legal protections, but recent legal changes are meant to introduce such protections.

([40]) Source: OECD Pension Market in Focus 2025. The highest participation rate in at least one supplementary pension plan is reported.

([41]) The (gross) replacement rate refers, depending on data availability, to both public and private pensions. It is based on projections from the 2024 Ageing Report.

Table A2.2: **Fiscal governance database indicators and public accounting maturity**

2024	The Netherlands	EU Average
Country Fiscal Rule Strength Index (C-FRSI)	19.93	14.81
Medium-Term Budgetary Framework Index (MTBFI)	0.95	0.72
2025 Public accounting maturity of general government	53%	65%

(1) "The Country Fiscal Rule Strength Index (C-FRSI) shows the strength of national fiscal rules aggregated at the country level based on: i) the legal base; ii) how binding the rule is; iii) monitoring bodies; iv) correction mechanisms; and v) resilience to shocks. The Medium-Term Budgetary Framework Index (MTBFI) shows the strength of the national MTBF based on: i) coverage of the targets/ceilings included in the national medium-term fiscal plans; ii) connectedness between these targets/ceilings and the annual budgets; iii) involvement of the national parliament in the preparation of the plans; iv) involvement of independent fiscal institutions in their preparation; and v) their level of detail. A higher score is associated with higher rule and MTBF strength.
The score for public accounting reflects the degree of maturity in relation to the International Public Sector Accounting Standards (IPSAS). Countries with an accounting maturity of 70% or more in relation to IPSAS are deemed to apply accrual accounting. For more information, see the report on public accounting in the EU (COM(2025)746 and accompanying Staff Working Document SWD(2025)396)."
Source: Fiscal Governance Database, European Commission

Table A2.3: **Projected change in ageing-related expenditure in 2025-2040 and 2025-2070**

	ageing-related expenditure	change in 2025-2040 (pps GDP) due to:					ageing-related expenditure	
		pensions	*healthcare*	*long-term care*	*education*	*total*		
NL	21.0	*1.1*	*0.3*	*0.9*	*-0.3*	***2.1***	23.1	**NL**
EU	24.3	*0.5*	*0.3*	*0.4*	*-0.3*	***0.9***	25.2	EU

	ageing-related expenditure	change in 2025-2070 (pps GDP) due to:					ageing-related expenditure	
		pensions	*healthcare*	*long-term care*	*education*	*total*		
NL	21.0	*1.7*	*0.7*	*1.8*	*-0.6*	***3.5***	24.5	**NL**
EU	24.3	*0.2*	*0.6*	*0.8*	*-0.3*	***1.3***	25.6	EU

Source: 2024 Ageing Report (EC/EPC)

The spending review process in the Netherlands is mature, systematic and institutionalised. The *Interdepartementaal Beleidsonderzoek* (IBO) was established in 1980. Spending reviews are publicly available and cover 3-7 different government expenditure areas each year. There is strong institutional integration, as reviews are run by staff from the Ministry of Finance and line ministries. The spending review provides options to achieve 10-20% reductions in spending in the areas subject to the spending review over a four-year period.

Accrual accounting improves transparency over a public body's financial position and performance and can also support sustainability and intergenerational equity. Most (14) Member States have implemented accrual accounting across the general government sector and five are set to do so by 2030 ([42]). The Netherlands lags behind the EU average for the introduction of accrual accounting (see Table A2.2), in particular at the central government level. The country has no medium-term plans to transition towards accrual accounting ([43]).

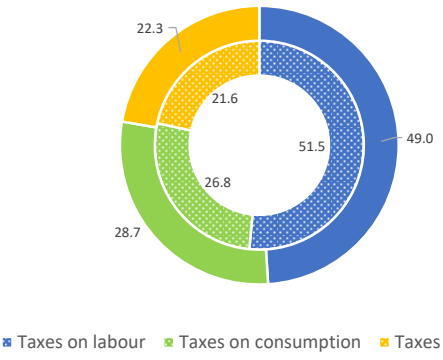
([42]) Report on public accounting in the EU (COM(2025)746 and accompanying Staff Working Document SWD(2025)396). Countries with an accounting maturity of 70% or more in relation to International Public Accounting Standards are deemed to apply accrual accounting.

([43]) Annexes 3.1 and 3.4 of SWD(2025)396.

This annex provides an indicator-based overview of the Netherlands' tax system. It includes information on the tax mix, on competitiveness and fairness aspects of the tax system, and on tax collection and compliance. Furthermore, it provides information on risks of aggressive tax planning activities. In the area of taxation, the 2025 country-specific recommendations for the Netherlands highlighted challenges in the area of capital taxation, particularly with regard to incentives for debt-financed homeownership.

The Netherlands' tax revenue and tax mix are in line with the EU average. In 2024, the Netherlands' tax revenues as a percentage of its GDP amounted to 38.8%, just slightly below the EU average of 39.4%. The structure by economic function is very similar to the EU aggregate (see Graph A3.1). In 2024, labour taxation was the largest revenue source (19.0% of GDP vs. EU average of 20.3%), followed by taxes on consumption (11.2% of GDP vs. EU average of 10.6%) and taxes on capital (8.7% of GDP vs. EU average of 8.5%). Revenue from VAT amounted to 7.0% of GDP (vs. EU average of 7.1%). See Table A3.1.

Graph A3.1: **Tax revenue by economic function in 2024, NL (outer ring) and EU-27 (inner ring)**



Source: Taxation Trends Data, DG TAXUD

There is scope to further reduce incentives for debt-financed homeownership. In 2025, the Netherlands received a country-specific recommendation that highlighted the need to reduce distortions in the tax system by better aligning the taxation of different types of income from wealth, among others to reduce incentives for debt-financed homeownership. More specifically, the Netherlands provides tax benefits in the form of generous mortgage interest tax relief for primary residence properties, coupled with a very low effective tax burden on imputed rents from homeownership (even though this effective tax burden will marginally increase per 2026). Consequently, there is a high concentration of household wealth in illiquid types of wealth, which may increase the severity of economic downturns and encourage tax planning strategies.

The mortgage interest tax relief scheme fuels housing market strain, but policy reform remains off the table. The mortgage interest tax relief scheme has been found to have a negative impact on macroeconomic stability by increasing volatility and driving up prices in the housing market, and by increasing the accumulation of household debt. The mortgage interest tax relief scheme is thus linked to the overvaluation of the Dutch housing market (see Annex 16). That leads, in turn, to higher rental prices on the private rental market, especially in the mid-range price category. The high rental prices are a major source of financial strain for many households. However, the 2026-2030 coalition agreement states that the Netherlands will not touch the mortgage interest tax relief scheme.

There is scope to increase the tax administration's enforcement in the field of bogus self-employment. Past policies have created an unequal playing field between employees and (solo) self-employed individuals and have also enabled bogus self-employment. In recent years, the government has implemented various measures to lower incentives for the use of self-employment. These aim to limit bogus self-employment and reduce the differences between the self-employed and employees. One of those measures was the abolition of the tax administration's enforcement moratorium for bogus self-employment as of 1 January 2025 (in line with the commitments in the Dutch recovery and resilience plan). The moratorium had been in place since 2016. However, the tax administration qualified 2025 as a 'soft landing' or transition year with respect to the moratorium, which meant that, in principle, no fines were levied. The tax administration started with (nearly) full enforcement as of 2026.

The tax wedge for medium- and in particular low-wage earners is below the EU average, whereas the one for high-wage earners is higher than the EU average. In 2025, the tax wedge for single persons at 50%, 67% and 100%

Table A3.1: **Taxation Indicators**

		Netherlands					EU-27				
		2019	2022	2023	2024	2025	2019	2022	2023	2024	2025
Tax structure	Total taxes (including compulsory actual social contributions) (% of GDP)	39.2	38.2	39.2	38.8		39.9	39.7	39.0	39.4	
By tax base	Taxes on labour (% of GDP)	19.7	18.3	17.9	19.0		20.6	20.1	19.9	20.3	
	of which, social security contributions (SSC, % of GDP)	13.8	12.6	12.3	12.1		13.0	12.7	12.7	13.0	
	Taxes on consumption (% of GDP)	11.8	11.2	11.3	11.2		11.2	10.9	10.5	10.6	
	of which, value added taxes (VAT, % of GDP)	7.0	7.1	7.2	7.0		7.1	7.4	7.1	7.1	
	Taxes on capital (% of GDP)	7.7	8.6	10.0	8.7		8.1	8.7	8.5	8.5	
Some tax types	Personal income taxes (PIT, % of GDP)	8.3	7.8	9.1	9.8		9.6	9.4	9.3	9.6	
	Corporate income taxes (CIT, % of GDP)	3.5	4.7	4.9	4.3		2.6	3.2	3.2	3.1	
	Total property taxes (% of GDP)	1.6	1.6	1.4	1.3		2.2	2.1	1.9	1.8	
	Recurrent taxes on immovable property (% of GDP)	0.8	0.7	0.6	0.6		1.2	1.0	0.9	0.9	
	Environmental taxes (% of GDP)	3.6	2.9	2.9	3.0		2.6	2.1	2.1	2.1	
	Effective carbon rate in EUR per tonne of CO_2 equivalents	na	na	120.0	na		na	na	84.8	na	
Progressivity & fairness	Tax wedge at 50% of average wage (single person) (*)	30.3	28.1	25.7	24.8	26.2	32.4	31.6	31.5	31.5	31.6
	Tax wedge at 100% of average wage (single person) (*)	41.0	39.6	39.0	38.7	38.6	40.1	39.7	39.9	39.9	40.0
	Corporate income tax - effective average tax rates (1) (*)	22.8	22.8	22.8	23.5		20.0	19.2	19.0	19.3	
	Difference in Gini coefficient before and after taxes and cash social transfers (pensions excluded from social transfers) (2) (*)	10.1	9.6	10.0	10.6		7.8	8.0	7.9	7.8	
Tax administration & compliance	Outstanding tax arrears: total year-end tax debt (including debt considered not collectable) / total revenue (in %) (*)	6.0	11.7	9.5	na		31.8	32.6	30.7	na	
	VAT gap (% of VAT total tax liability, VTTL) (**)	11.2	9.6	7.0	7.3		10.5	7.3	8.2	na	

(1) Forward-looking effective tax rate (KPMG).
(2) A higher value indicates a stronger redistributive impact of taxation.
(*) EU-27 simple average.
(**) Forecast value for 2024. EU-27 refers to the median value. For more data on tax revenues as well as the methodology applied, see the Data on Taxation Trends webpage.
Source: European Commission, OECD, ISORA.

of the average wage amounted to 26.2%, 30.7% and 38.6% and was below the EU average. Earners of high wages at 167% of the average wage faced a tax wedge of 46.9% and were above the EU average. Second earners that take up a job at 67% of the average wage and whose partners are at the average wage face a lower tax wedge than single persons at the same wage level, contrary to the EU average (see Graph A3.2) ([44]).

The progressive income tax system in the Netherlands reduces income inequality more than the EU average. In 2024 the reduction in income inequality, as measured by the Gini coefficient, was 10.6 pps, surpassing the EU average reduction of 7.8 pps ([45]). In contrast, wealth inequality in 2024 is relatively high in the Netherlands as compared to its European peers ([46]). However, according to a study by Statistics Netherlands wealth inequality as measured by the Gini coefficient fell sharply between 2015 and 2022 due to rising housing prices, namely by 9.5 pps ([47]). This could be related to the fact that, whereas an owner-occupied home is overall often the main asset of a household, wealthier households hold a lower share of their total assets in the form of real estate ([48]). Also, it should be noted that the relatively high pension entitlements in the Netherlands are not counted as 'wealth' (as they are not freely available and transferable).

([44]) The tax wedge is an indicator of the tax burden on labour that can be assessed at various levels of earnings. It is defined as the sum of personal income taxes, employee and employer social-security contributions and other mandatory contributions, expressed as a percentage of total labour costs (composed of the net wage, personal income tax, social security contributions, and other mandatory contributions). Tax wedge data in the 2026 country reports are calculated by the Joint Research Centre of the European Commission and based on the EUROMOD model, while in the past country reports they were based on the OECD tax and benefit model. While the underlying methodology is very similar, differences in the assumptions can lead to different results between both models.

([45]) The Gini coefficient measures the extent to which the distribution of income within a country deviates from a perfectly equal distribution. A coefficient of 0 expresses perfect equality where everyone has the same income, while a coefficient of 100 expresses full inequality where only one person has all the income.

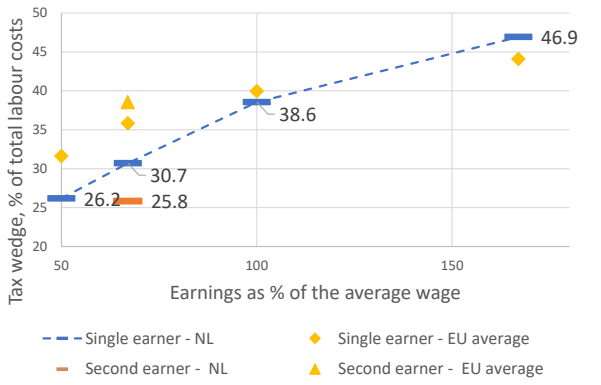
([46]) UBS (2025), 'Global Wealth Report 2025: Crafted wealth intelligence', UBS.

([47]) See Pen's Parade – Table of wealth distribution in the Netherlands in 2024. Central Statistics Bureau

([48]) For the share of total assets held in real estate for different wealth quantiles see Annex I of Leodolter, A., S. Princen and A. Rutkowski (2022), "Immovable Property Taxation for Sustainable and Inclusive Growth" (European Economy Discussion Paper 156).

The 2026 tax plan contains measures that affect the tax brackets and rates in personal income tax. In the Netherlands, the tax brackets are adjusted annually using a statutory correction factor (*tabelcorrectiefactor)*. This factor is based on the average price development from the previous year. Based on inflation figures from mid-2024 to mid-2025, the statutory correction factor was determined to be 2.9%. The government decided not to apply the full inflation correction for personal income tax purposes, but only for 52.8%. This means that for 2026 the inflation adjustment is 1.5312% (i.e. 52.8% of 2.9%).

Graph A3.2: **Tax wedge for single and second earners as a % of total labour costs, 2025**



Note: The second earner tax wedge shows a household's tax wedge resulting from the wage that a second earner taking up a job at 67% of the average wage receives. It does not show the total tax wedge of the household. The household is assumed to have a first earner at 100% of the average wage and no children. For the methodology of the tax wedge for second earners, see OECD (2024), Taxing Wages 2024.
Source: European Commission

As a result, taxpayers will move into a higher tax bracket sooner. The tax rate in the first bracket of the personal income tax (which includes national insurance contributions and applies up to an income of EUR 38 883 per year) will be reduced to 35.75% in 2026 (from 35.82% in 2025). The rate in the second bracket (for an income between EUR 38 883 and EUR 78 426) will be increased slightly to 37.56% (from 37.48% in 2025). The top rate will remain unchanged at 49.5%. The threshold above which the top rate applies will be increased by an additional EUR 432 (in addition to the inflation adjustment) increasing from EUR 76 817 to EUR 78 426.

The 2026 tax plan contains measures affecting VAT. The planned increase of the reduced VAT rate on culture, media, and sports has been reversed, keeping it at 9%. However, the reduced VAT rate for short-stay accommodation (e.g. hotels) will increase to the standard 21%.

In 2024 environmental taxes represented 3% of GDP compared with 2.1% of GDP for the EU. Since 2019, environmental taxes as a percentage of GDP have decreased by 0.6 percentage points. The Netherlands has introduced measures to reform energy, air travel and car taxation. The aim of these reforms is to promote and accelerate the green transition. For example, the 2026 tax plan adjusts air passenger tax such that the Dutch air passenger tax is now (one of) the highest in the EU. As from 2027, different rates will be applied based on the flight's distance and environmental impact: EUR 29.40 (for 0–2 000 km), EUR 47.24 (2 000–5 500 km), and EUR 70.86 (over 5 500 km or undetermined final destination). Furthermore, as from 2030, a separate rate will be introduced for small private aircraft. The tax per passenger will be EUR 420 (0–2 000 km), EUR 1 015 (2 000–5 500 km), or EUR 2 100 (over 5 500 km or undetermined final destination).

The Dutch corporate tax system applies rates above the EU average but supports the business environment through lower complexity. The top statutory tax rate in 2026 is 25.8% (equal to that of 2025). At the same time, the effective average tax rate has increased 0.7 percentage points since 2023 and stood at 23.5% in 2024, above the EU average in 2024 of 19.1% (which stood at 18.9% in 2023). The lower complexity of the tax system compared with the EU average further supports a strong business environment.

Support for R&D expenditure is above the EU average, but there seems to be scope to make the relevant schemes more accessible for SMEs. One example of an important public support scheme is the innovation box scheme, which aims to encourage research and development within the Netherlands. This scheme has a reduced corporate income tax rate of 9% (instead of the standard rates, which can be as high as 25.8%) on profits generated from self-developed and innovative assets. Another example is a subsidy that effectively lowers the wage tax liability for companies that conduct R&D activities (on the basis of the 'WBSO' R&D stimulation law). As a result of the WBSO, the companies involved pay a lower amount of the gross salary of its

employees to the tax administration. Even though these public schemes seem to foster R&D, it seems that the use of these schemes is concentrated mainly to a relatively small number of bigger companies. The 2026-2030 coalition agreement states that the WBSO will be made less complex and the administrative burden will be reduced. See Annex 4 for further details.

The Netherlands performs strongly in terms of tax compliance. In 2024, the VAT compliance gap ([49]) was estimated at 7.3% of the VAT total tax liability ([50]). This is slightly higher than the level of 2023 (7.0%), which itself was lower than the level of 2022 (9.6%) and 2019 (11.2%) ([51]). Hence, the slight increase in the VAT compliance gap for 2024 compared to the level of 2023 does not cause direct concern given the declining long-term trend in this respect.

In the Netherlands, considerable tax revenues are foregone due to tax expenditures. The Netherlands has a comprehensive reporting on tax expenditure. In 2025, the 125 actively monitored tax expenditures were budgeted to result in foregone revenue of EUR 167 billion (i.e. about 42% of total government tax revenues), representing 15.6% of GDP. Overall, the biggest tax expenditures in the Netherlands are (i) pension tax relief schemes, and (ii) home ownership incentives (such as the mortgage interest tax relief scheme).

The tax administration has also worked to improve voluntary compliance and prevent accidental mistakes by taxpayers, namely through the provision of prefilled tax returns, direct payment links in correspondence and the possibility to pay online using a payment app. E-filing rates are well above the EU average for corporate income tax (100%), personal income tax (98.9%) and VAT (100%), further indicating a lower compliance burden for taxpayers. The Dutch tax administration uses artificial intelligence to identify non-compliance and detect unregistered taxpayers by web scraping and also uses a nudging system to discourage non-compliant behaviour. ICT costs accounted for 22.4% of total operating expenditure in 2023, among the highest in the EU. This highlights the focus placed on digitalisation in the Dutch tax administration.

Since 2021, the Netherlands has completed multiple reforms under its recovery and resilience plan to curb the risk of aggressive tax planning (ATP). Specifically, it introduced withholding taxes on interest and royalty payments to listed zero- and low-tax jurisdictions in 2021 and on dividend payments in 2024. These reforms were undertaken to address the ATP-related issues raised in the country-specific recommendations made to the Netherlands in 2019 and 2020. The Netherlands has also made several amendments to the Corporate Income Tax Act (e.g. to limit loss relief for corporations).

Graph A3.3: **Indicators for financial activity risk as % of GDP**

		2023	2024
Stock of FDI	Inward	381.80%	314%
	Outward	397.60%	387%
Dividends	Received	22.20%	19%
	Paid	14.90%	14%
Interest	Received	4.20%	4%
	Paid	3.10%	2%
Royalties	Received	3.30%	4%
	Paid	2.70%	4%

Source: European Commission

Since enacting the reforms, the Netherlands has moved closer to the EU average on several relevant economic indicators. Despite this positive trend, there is room for further improvement. Financial flows of foreign direct investments, dividend, interest and royalty payments in the Netherlands remain significantly disproportionate and above the EU average. Specifically, in 2024 the inward and outward flow of FDI as a percentage of GDP ranked fourth in the EU, at 314% and 387% of GDP respectively. However, since the relevant reforms were implemented to curb the ATP risk, these economic indicators have moved closer to the EU average.

([49]) The VAT compliance gap is an estimate of revenues lost due to VAT fraud, evasion and avoidance, bankruptcies and financial insolvencies, or miscalculations.

([50]) The VAT total tax liability is the theoretical tax revenue that would be collected in a situation of perfect taxpayer compliance, assuming an unchanged net VAT base.

([51]) See the 'VAT GAP in Europe' report.

The position of the Netherlands among innovator leaders in the EU is at risk. The Netherlands is an innovation leader, with a performance slightly below the average of innovation leaders in the EU (129.1% vs 131.9% of the EU average in 2025) ([52]). However, Dutch R&D intensity, at 2.29% of GDP in 2024, is below the strongest R&I performing countries in the EU and globally. The very solid Dutch science base is under strain due a to a low and declining public R&D intensity. While the innovation ecosystem benefits from strong science-business linkages and start up dynamism, technological performance is under pressure. Moreover, challenges remain in securing adequate public resources to support Dutch R&I ambitions, as no long-term, structural and sustainable public funding plan for R&I exists. Concerning digitalisation, while Dutch businesses are among the most digitalised in the EU, SMEs lag behind large firms in adopting cloud, artificial intelligence (AI) and data analytics, and many companies still lack the expertise and resources to fully exploit these technologies. In addition, AI-related initiatives and support measures in the Netherlands remain fragmented across regions, limiting their overall impact and scalability. The 2025 country-specific recommendation highlighted the need to increase the intensity of public and private R&I by supporting key strategic technologies.

Excellent science

The Netherlands has a very solid and internationalised science base producing high-quality research output, but its performance is under strain. The quality of research outputs, as measured by the proportion of scientific publications within the top 10% most-cited publications, remains well above the EU average (14.2% vs 9.4%), but with a decreasing trend over the last decade (it was 15.3% in 2015).

([52]) 2025 European Innovation Scoreboard, country profile: The Netherlands. The scoreboard provides a comparative analysis of innovation performance in EU countries, including the relative strengths and weaknesses of their national innovation systems, and for the regions in the Regional Innovation Scoreboard 2025.

The investment in public R&D in 2024 stood at 0.67% of GDP, a decrease from the 0.71% achieved in 2023 and below the EU average of 0.72% (see table A4.1). The Netherlands' 3% R&D action plan, announced in July 2025 which aims to raise investment in R&D to 3% of GDP by 2030 ([53]) sets an overall goal of 1% of public funding. Although the critical role of government and knowledge institutions in R&D is acknowledged, actual allocation of resources remains uncertain. In the absence of decisive actions to implement the 2025 recommendation on enhancing public R&D intensity, Dutch scientific performance may continue to erode, undermining future innovation and competitiveness.

Business innovation

The Dutch innovation ecosystem benefits from very good science-business linkages, but business R&D intensity remains significantly below the other Innovation leaders. Business R&D intensity (1.61% in 2024) is higher than the EU average (1.49%) and slightly on the rise, but still significantly below the other innovation leaders. Expenditure on R&D performed by SMEs as a percentage of GDP (0.52 in 2023) has been stagnant in the last decade. The private sector absorbs researchers at a rate well over the EU average (with 8.8 researchers employed by businesses per thousand population in 2024 vs an EU average of 5.90) and business-science linkages are strong, as shown by a percentage of public-private scientific co-publications among the total number of publications which is well above the EU average (11.4 % vs 7.6%).

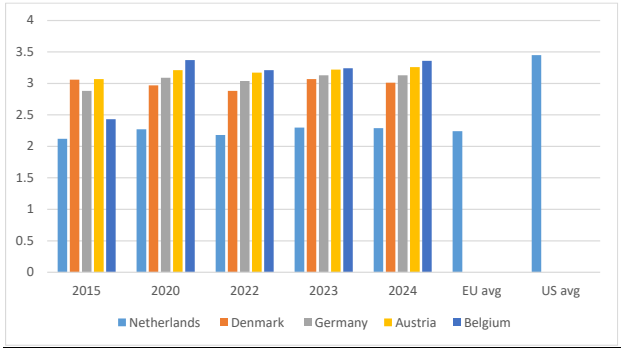
In line with the 2025 country-specific recommendations, new policy initiatives announced in the 3% action plan have the potential to promote private R&D intensity. In 2025, the Dutch roadmap to achieve R&D ambitions was laid down. It is aligned with the Draghi Report ([54]) and, if put into action and backed with adequate resources, it could be

([53]) Letter from the Ministry of Economic Affairs to Parliament on 3%-RD action plan.

([54]) Dutch competitiveness in the light of the Draghi Report.

instrumental in addressing the 2025 country-specific recommendation on the enhancement of private R&I intensity. The Netherlands' 3% R&D action plan ([55]) aims to achieve a 2% contribution from business investment. The strategy to promote private R&D focuses on: increasing R&D investment by existing enterprises, particularly SMEs; facilitating the creation and scaling of new R&D-intensive businesses; and improving the environment for innovative companies–both those already investing in the Netherlands and those considering setting up operations from abroad ([56]). Two actions envisaged in the 3% action plan have strong potential for business innovation: the creation of experimental spaces for technology development (sandboxes), and the launching of an ARPA-like National Agency for Disruptive Innovation (NADI). The proposal of NADI ([57]) as concept is under discussion and no decisions have been taken yet besides a preliminary design. The action plan has been accompanied by the release of the Wennink Report ([58]) which outlines proposals on how to unlock private R&D, especially in critical technologies, by increasing public support to de-risk investments and back early-stage innovation. However, the specific instruments to address these issues remain to be designed.

Graph A4.1: **R&D intensity (gross domestic expenditure on R&D (GERD) as PC of GDP) compared to leader and strong innovators**



Source: Eurostat

The technological position of the Netherlands is under pressure. The number of applications filed under PCT per billion GDP (in PPS EUR) has been declining for a decade: although it is still above the EU average (3.7 vs 2.8 in 2022), it is now far from the rate of 5.31 achieved ten years ago. Furthermore, a recent study ([59]) highlighted the decline over the last decade in the global position and global share of patents' value specifically in the ten key technologies outlined in 2024's national tech strategy (NTS) ([60]). The Recovery and Resiliency Facility (RRF) ([61]) supported investment in critical technologies such as quantum technology, AI or green technologies in recent years. However, further allocation of funds beyond the RRF will be critical, given that the estimated NTS budget of EUR 1 billion remains provisional, leaving implementation dependent on existing funds.

In line with the 2025 country-specific recommendation on supporting key strategic

([55]) Letter to Parliament on 3%-RD action plan | Parliamentary Paper | Rijksoverheid.nl : 3% R&D Action Plan | STIP Compass.

([56]) Letter to Parliament on 3%-RD action plan | Parliamentary Paper | Rijksoverheid.nl.

([57]) NADI - Nationaal Agentschap voor Disruptieve Innovatie. NADI agency would be intended to help translate research into transformative technologies. See also the Letter to the House of Representatives from the Ministry of Economic Affairs and Climate Policy on Bevindingen verkenning naar een Nationaal Agentschap voor Disruptieve Innovatie (NADI).

([58]) The Wennink Report (2025) was commissioned by the Dutch government to inform an independent advice and to translate the Draghi diagnosis to the singularities of the Dutch economy.

([59]) Een blik onder de motorkap Amber Geurts, Daan Pisa, Maike Conijn, Mirella Schrijvers, Sjoerd Hardeman, Sabine Kerssens & Hugo Gelever, 2025. Een blik onder de motorkap: sleutelen aan de technologiepositie van Nederland, TNO VECTOR: Centre for Societal Innovation and Strategy.

([60]) The NTS concentrates policy efforts on quantum technologies, green chemical production, biotechnology, imaging and opto-mechatronics, artificial intelligence and data science, energy materials, semiconductor technologies and cybersecurity.

([61]) Quantum technology (Quantum Delta NL programme, EUR 264 million RRF fund), AI Ned and applied AI learning communities programme, EUR 60 million RRF fund) or green energy (Green power of hydrogen, EUR 68.5 million RRF fund) and to the scale-up of technologies for the use of hydrogen as an energy carrier in aircrafts (Aviation in transition EUR 28.7 million RRF fund).

technologies, new key policy roadmaps combine enabling technologies with growth markets, driven by R&D investments in technological innovation. The revised 2025 industrial policy targets six strategic domains: semiconductors, high-tech machinery, defence and space technologies, biotechnology, digital and AI services and innovative chemistry, aiming to boost R&D investments to 3% of GDP. Similarly, the defence strategy for industry and innovation 2025-2029 strives to accelerate defence innovation through enhanced collaboration between government, industry and research institutions. It has secured over EUR 1.15 billion to expand the defence industry, strategically advancing high-tech industrial and security capabilities ([62]).

Adequate budget planning and allocation and timely implementation will be key to unlocking Dutch R&I enhancement. Despite renewed policy frameworks, the overarching challenge remains securing adequate public resources to support R&I ambitions. Budget cuts are still a matter of concern. For example, funding rounds of the national growth fund have been phased out since 2024 without an alternative programme ([63]), and there is still no long-term, sustainable, and structural public funding plan for R&I.

Direct public support for business R&D tends to be concentrated on larger firms. The Dutch government mainly supports business innovation through broad tax incentives such as the WBSO and the Innovation Box, complemented by several smaller funding schemes. While instruments such as the WBSO have a positive impact on private R&D spending ([64]), the current toolbox has not proven effective in enhancing structural productivity growth. Moreover, complex and fragmented administrative requirements make these funds difficult to access, especially for SMEs. As a result, large firms receive a relatively higher proportion of direct R&D funding ([65]). Better coordination between agencies is required to lower administrative burden and help SMEs benefit more from public funding.

While Dutch SMEs are steadily improving their levels of digitalisation and increasing their uptake of advanced digital technologies, a significant gap remains between smaller and larger companies. In 2025, 88.76% of Dutch SMEs reached at least a basic level of digital intensity, well above the EU average (71.39%). However, significant gaps persist between SMEs and large enterprises, as many SMEs still lack the resources and capabilities to fully integrate these technologies into their core business practices ([66]). Cloud adoption reached 68.54% of enterprises in 2025, driven mainly by large firms (89.65%), while uptake among SMEs remained lower (67.75%). A similar pattern is observed for data analytics: although overall adoption exceeded the EU average (55.96% versus 39.85%), large enterprises are far more likely to use these technologies than SMEs (88.60% of large companies vs 54.70% of SMEs).

AI adoption has accelerated markedly. AI has been adopted by 33.21% of Dutch enterprises, up from 23.06% in 2024. Nevertheless, uptake remains uneven, with only around one in three SMEs using AI (31.87%), compared with more than half (67.64%) of large enterprises. Moreover, relatively few companies have integrated AI into their core business models, with the technology being mostly used for text mining and natural language generation ([67]). This reflects differing levels of digital maturity, with SMEs being generally more hesitant to invest in higher-risk technologies due to knowledge gaps, funding constraints, regulatory complexity and limited access to data and computing power.

The Netherlands aims to reinforce support for companies' AI uptake. This will be carried out through the existing European Digital Innovation Hubs (EDIHs) network, for which additional EU funding was recently announced, as

([62]) Dutch government launches new strategy for innovation and upscaling of the defence industry | News item | Rijksoverheid.nl.

([63]) Rijksoverheid.nl Monitoring en effectmeting | Nationaal Groeifonds Adviescommissie Nationaal Groeifonds - Jaarverslag 2024.

([64]) Evaluation of the Research and Development (Promotion) Act (WBSO) 2018 - 2022 | Report | Rijksoverheid.nl.

([65]) OECD Economic Surveys: Netherlands 2025 | OECD; Top 50 meest R&D intensieve bedrijven van Nederland.

([66]) 2025 State of the Digital Decade package | Shaping Europe's digital future.

([67]) 2025 State of the Digital Decade. The Netherlands country Report 2025.

well as through the AiNed Innovation Labs, where a second round of proposals has opened. In addition, the recent approval of an AI factory in Groningen marks an important step towards strengthening national access to advanced computing infrastructure. While these developments have the potential to support the country's build-up of AI capabilities and infrastructure, initiatives remain fragmented, with fewer chances to scale up. At the end of 2025, a group of experts called for a large-scale national 'AI delta plan', advocating increased investment, stronger infrastructure, simplified rules and the establishment of new research institutes.

Entrepreneurial dynamism

The Netherlands benefits from a dynamic startup ecosystem. The country posts a relatively strong level of emerging startups and high-growth firms compared to many OECD peers. This is thanks to an entrepreneurial ecosystem which ranks among the stronger OECD countries, with favourable enabling conditions leading to solid performance on outputs related to business formation, innovation-oriented entrepreneurship, solid startup activity and inclusive dynamics.

According to the OECD Entrepreneurial Ecosystem Diagnostics (2025) ([68]), the Netherlands has fairly effective institutional frameworks, market access and business ecosystem connectivity, which support new business formations and early growth.

However, startups still face key regulatory and administrative barriers. These include uncompetitive employee stock option schemes, rigid labour market rules and slow permitting and compliance processes. Space and energy shortages, as well as limited and uneven access to sandboxes and testbeds, further hinder scaling-up, increasing the risk that startups will relocate ([69]). A more favourable tax system for employee stock options is being prepared: the Employee Stock Ownership Plan (ESOP) would allow employees to benefit from the company's success and thereby help to attract and retain talent in startups and scale-ups in particular ([70]). Beyond the ongoing ESOP reform, there is no specific national startup regulation in place, which leaves gaps in targeted support for high-growth companies.

Shortages of highly skilled workers risk affecting Dutch innovation performance and competitiveness. The Netherlands outperforms the EU average on the proportion of young people with tertiary education as well as on engagement in lifelong learning. However, despite an increasing trend over the last decade, the country is still lagging in producing new graduates in science and engineering fields (12.3 per thousand population aged 25-34 in 2023 vs an EU average of 16.8.). The number of graduates in the field of ICT also remains slightly below EU average (3.6 per thousand population aged 25-34 in 2023 vs an EU average of vs 3.8 in 2023). The Netherlands is characterised by one of the highest labour shortages in the EU. Despite some easing, the job vacancy rate stood at 4.1% in Q2 2025. Labour shortages remain widespread across several sectors, including scientific and technical activities. Although the Netherlands put in place an action plan for green and digital jobs ([71]) in 2023, recent policies to limit the intake of international students and budget cuts to international education could have a negative impact on attracting and retaining top talent at all levels (see Annex 13). Increasing mismatches between skills supply and demand might potentially impact competitiveness.

Despite having access to a deep venture capital market, some Dutch start-ups and scale-ups face difficulties in accessing funding. Following impressive growth over the last decade, venture capital investment level reached 0.11% of GDP in 2024 (vs 0.03% in 2014), largely outperforming the EU average (see Annex 6). The Netherlands has become home to 33 'unicorns' ('unicorns' are unlisted companies valued at EUR 1 billion or more*)* and more than 6 500 funded startups, which ranks it within the top 15 global destinations for venture and growth capital. However, access to funding remains particularly constrained at the seed stage

([68]) Entrepreneurial Ecosystem Diagnostics | OECD.

([69]) OECD Economic Surveys: Netherlands 2025 | OECD; See also Top 50 meest R&D intensieve bedrijven van Nederland.

([70]) Lower taxation on share options for start-ups and scale-ups | Business.gov.nl.

([71]) Letter to Parliament with Action Plan for Green and Digital Jobs.

compared to other leading ecosystems. Indeed, the fact that the Netherlands remains at the EU average in seed-stage funding intensity (at 0.01% of GDP in 2024) signals the persistence of a structural bottleneck in early-stage capital formation, despite programmes such as the seed capital scheme. Companies requiring more than EUR 50 million before commercialisation also still face major funding gaps. This is especially true for deep tech ([72]), where high R&D costs and long, uncertain timelines discourage private investors, making government-backed venture capital key to foster innovation and retain companies in the country. Moreover, the startup ecosystem would benefit from more guarantee's mechanisms that de-risk investments and better mobilise private capital.

Initiatives taken to strengthen the Dutch public financing system may help to address these gaps. The strengthening of Invest-NL with EUR 900 million for 2025-2027 was a first step in addressing these gaps, with about EUR 250 million allocated to a blended finance instrument to mobilise private capital and stimulate high-risk investment ([73]). Furthermore, the decision in July 2025 to integrate Invest-NL and Invest International was aimed at strengthening the Dutch public financing ecosystem. Complementing this initiative, the 2025 3% action plan envisages the mobilisation of institutional capital and, more importantly, the creation of a national investment institution. In line with the 2025 recommendation to *address the funding gap for late-stage startups and scale-ups by leveraging available financing tools*, these policy developments have the potential to help improve efficiency, reduce fragmentation and expand the range of financial instruments available to innovative enterprises, particularly in sectors where market financing is still insufficient, such as deep tech and R&D-intensive companies.

Entrepreneurship education in higher education is well developed. At universities, entrepreneurship is often advanced through centres for entrepreneurship, which promote entrepreneurial education and help connect higher education institutions with enterprises and innovation stakeholders. Even though entrepreneurship education is not explicitly part of the school curriculum, references to entrepreneurial skills appear across different learning areas ([74]). For example, the area 'Orientation in the world' includes learning outcomes related to financial and economic literacy and planning and management. There is, however, a lack of systematic national data on entrepreneurship education and monitoring, evaluation and evidence on student engagement, attitudes, skills and behaviours remain limited ([75]).

([72]) State of Dutch Tech Report 2025 - Techleap.

([73]) OECD Economic Surveys: Netherlands 2025 | OECD.

([74]) European Commission / EACEA / Eurydice, 2025, Entrepreneurship education at school in Europe – 2025. Eurydice Report.

([75]) Baggen, Y., Kuipers, R. & Veldman, J. (2021). Inzicht in ondernemerschapsonderwijs. Utrecht/Wageningen: Dialogic & Wageningen University.

Table A4.1: **Key innovation indicators**

NETHERLANDS	2010	2015	2020	2022	2023	2024	2025	EU average (1)	US
Headline indicator									
R&D intensity (gross domestic expenditure on R&D as % of GDP)	1.69	2.12	2.27	2.18*	2.3	2.29	:	2.24	3.44
Science and innovative ecosystems									
Public expenditure on R&D as % of GDP	0.88	0.76	0.76	0.68*	0.71	0.67	:	0.72	0.64
Scientific publications of the country within the top 10% most-cited publications worldwide as % of total publications of the country	16.07	15.12	14.57	14.28	:	:	:	9.44	12.31
Researchers (FTEs) employed by public sector (Gov+HEI) per thousand active population	3.1	3.1	3.4	3.4*	3.5	3.5	:	4.3	:
International co-publications as % of total number of publications	50.4	58.53	64.2	65.71	65.9	66.55	:	57.24	:
R&D investment & researchers employed in businesses									
Business enterprise expenditure on R&D (BERD) as % of GDP	0.81	1.36	1.51	1.49*	1.59	1.61	:	1.49	2.69
Business enterprise expenditure on R&D (BERD) performed by SMEs as % of GDP	0.26	0.49	0.49	0.48*	0.52	:	:	0.47	0.30
Researchers employed by business per thousand active population	3.0	6.2	7.6	8.3*	8.6	8.8	:	5.9	:
Innovation outputs									
Patent applications filed under the Patent Cooperation Treaty per billion GDP (in PPS €)	3.82	5.31	4.23	3.75	:	:	:	2.81	2.20
Employment share of high-growth enterprises measured in employment (%)	:	:	:	0.95	1	:	:	0.87	:
Digitalisation of businesses									
SMEs with at least a basic level of digital intensity % SMEs (EU Digital Decade target by 2030: 90%)	:	:	:	:	82.72	:	88.76	71.39	:
Data analytics adoption % enterprises (EU Digital Decade target by 2030: 75%)	:	:	:	:	50.77	:	55.96	39.85	:
Cloud adoption % enterprises (EU Digital Decade target by 2030: 75%)	:	:	:	:	60.39	68.54	65.81	46.69	:
Artificial intelligence adoption % enterprises (EU Digital Decade target by 2030: 75%)	:	:	:	:	14.10	23.06	33.21	19.95	:
Academia-business collaboration									
Public-private scientific co-publications as % of total number of publications	10.43	10.97	11.59	11.77	11.95	11.46	:	7.62	:
Public expenditure on R&D financed by business enterprises (national) as % of GDP	:	0.06	0.06	0.05*	0.06	:	:	0.06	0.02
Public support for business innovation									
Total public sector support for BERD as % of GDP	:	0.24	0.27	0.25*	0.26	:	:	0.21	:
R&D tax incentives: foregone revenues as % of GDP	0.13	0.13	0.15	0.13	0.13	:	:	0.10	:
BERD financed by the public sector (national and abroad) as % of GDP	:	0.11	0.12	0.12*	0.13	:	:	0.11	:
Financing innovation									
Venture capital (market statistics) as % of GDP (calculated as a 3-year moving average)	0.03	0.03	0.07	0.11	0.12	0.11	:	0.06	:
Seed stage funding share (% of GDP)	0	0	0	0.01	0.01	0.01	:	0.01	:
Start-up stage funding share (% of GDP)	0.02	0.02	0.05	0.1	0.1	0.1	:	0.03	:
Later stage funding share (as % of GDP)	0.01	0.01	0.02	0.05	0.05	0.04	:	0.03	:
Innovative talent									
New graduates in science & engineering per thousand population aged 25-34	:	:	11.24	11.96	12.33	:	:	16.8	:
Graduates in the field of computing per thousand population aged 25-34	:	:	2.49	3.38	3.63	:	:	3.8	:

(1) EU average for the last available year or the year with the highest number of country data. * break in series.

Source: Eurostat, OECD, DG JRC, Science-Metrix (Scopus database), Invest Europe, European Innovation Scoreboard

The Netherlands has a highly productive economy but faces several constraints to continued competitiveness. Business investment registers one of the lowest levels in the EU. Business dynamism has slowed down, mainly because of a fall in the entry rate. The insolvency framework in the Netherlands is more rigid than in most EU countries. The Dutch industry share is low in EU comparison. Production in energy-intensive industries has dropped significantly.

The 2025 country-specific recommendations (CSRs) feature several measures focused on removing barriers to investment and improving resource allocation. To remove barriers to construction (CSR 1), the government, with Recovery and Resilience Facility (RRF) support, has implemented reforms and investments, including for easing permitting and building connecting infrastructure. A Technical Support Instrument (TSI) project supports industrialisation of construction. A comprehensive simplification programme aims to reduce regulatory burden by 20% by end 2026. It takes time for the measures to bear fruit. To encourage mobility to high-productivity sectors (CSR 5), a new industrial policy is under implementation, focused on six growth markets. The authorities have taken steps to increase offshore gas production.

Business dynamics

Investment remains low in the Netherlands, mainly driven down by business investment. Total investment stood at 19.9% of GDP in 2024. This is below the EU average of 21.7%, close to Germany (20.5%) but far from other peers (Belgium – 24.3%, Sweden - 25.1%). Business investment's low level (10.2%, only four countries have lower levels) is the key component driving down the total, as government investment (3.3%) is closer to the EU average (3.7%), while households' share (6.4%) is the third highest in the EU. Since 2010, the Netherlands' total investment (as a share of GDP) has been below that of the EU and euro area except for 2015 and 2022. Dutch businesses and pension funds invest significant amounts abroad.

The 2025 CSRs feature several measures focused on removing barriers to investment, improving resource allocation and thereby boosting productivity growth. The relevant key areas are: i) *removing obstacles for the* ***construction*** *of new dwellings (CSR 1).* The government has set itself a national target of 100 000 new homes per year, with national sub-targets. With RRF support, the government has already implemented reforms and investments to incentivise construction (signature of agreements with local government to build 900 000 new dwellings, two thirds of them affordable; publication and substantial implementation of an action plan to tackle barriers; a subsidy scheme for construction-relevant infrastructure). The Netherlands has also taken important steps to digitalise building permits and is one of the front-runner states in this regard in the EU([76]). A TSI project on removing barriers to facilitate industrialisation of construction is under way. Several measures, supported by national and RRF investments and reforms, are deployed to tackle the nitrogen issue which slows down construction (see Annex 10). In terms of impact, it takes time for the measures to bear fruit, especially as regards shortening permitting time or building connecting infrastructure; ii) *encouraging* ***mobility to high-productivity sectors*** *(CSR 5).* The government has announced a new industrial policy, targeting a higher share for manufacturing (15% of GDP; current manufacturing share is 10%) and with a focus on six growth markets ([77]). It seeks to replicate the coordinated plan applied to keep the semiconductor company ASML in Eindhoven ('Operation Beethoven'). The authorities signed agreements to increase offshore gas production and developed plans for more nuclear capacities, which may boost productivity directly and indirectly ([78]).

Other factors may contribute to boosting investment. For **construction**, a new

([76]) European Commission, Development of a business case on the concept and potential impact of implementing Digital Building Permits (DBP) within the EU construction sector, December 2025.

([77]) 'Who Does Not Choose, Loses', openrijk.nl, 17 October 2025.

([78]) Reallocating resources to high-productivity sectors is not an easy or automatic operation as the relevant productivity lies in the future. Therefore, keeping a strong private entrepreneurial element is key to success, while the public sector can usefully contribute by ensuring high-quality framework conditions, relevant investments (where the state is the key producer for parts of education, infrastructure, etc.) and keeping its industrial policy/entrepreneurial bets limited.

government-commissioned study on barriers has been produced. It focuses on all the stages of the construction process and highlights the significant *cumulative* effects of regulation ([79]). The government has broadly accepted the recommendations and is preparing to implement them. The regulatory burden, which is also affecting construction companies, is being addressed (see the paragraph below on regulatory burden). For **resource-mobility but also for construction**, one of the critical factors is **land**, which is very scarce in the Netherlands. Industry and business take 2.6% of the land while agriculture takes 66% (15-19 percentage points more than neighbouring countries). There is no clear policy framework to facilitate transition in land use, which favours freezing the status quo. This is all the more important now as the political priorities may favour bold, structural solutions for tackling construction barriers.

Besides low investment, energy plays a significant part in the country's protracted productivity slowdown. The Dutch economy has had to manage a longer and more pronounced energy shock. The gradual phasing out of the Groningen gas field production started in 2014. Removing the effects of the capital-intensive mining and quarrying and the public sector moves the Netherlands towards the EU average in terms of productivity for the period 2013-2023([80]). The productivity level in Groningen declined by 23% over this period([81]).

Business environment

The business environment is good but regulatory burden has increased, especially for small and medium-sized enterprises (SMEs). Regulatory costs increased by EUR 731 million in the Netherlands between 2018 and 2023([82]). There are plans to tackle the burden associated with 500 regulations by mid-2026, which may reduce regulatory costs by 20% by end 2026 (see Annex 7). Keeping focus on initiatives needs political continuity, which has been a challenge in the last five years.

Business dynamism has slowed down and may be hindered by administrative requirements. Business cumulative entry and exit rate (business churn) for 2023 (15.4%) is below the EU figure (19%)([83]). A national study finds that business dynamism has decreased in the Netherlands over time, mainly because of a fall in the entry rate – from levels consistently above 14% during 1995-2010 to around 10-11% for 2011-2024([84]). There is scope for easing the registration requirements for setting up a new firm as well as for improving the licensing and permitting system by bringing it more into line with international best practice (keeping an inventory of all licences, reviewing it regularly, adopting the 'silence is consent' principle, tailoring the length and complexity of the licensing process to the risks inherent in the licensed activities)([85]). The insolvency framework in the Netherlands is more rigid than in most European countries and could be a factor in the low exit rate of companies ([86]). The early detection of financial distress could be strengthened by providing financial training and debt counselling for struggling firms([87]).

SMEs are performing well but the productivity divergence between the most productive firms and all the others is growing. In 2024, the Dutch SMEs had the third highest level of value added per person employed

([79]) Minister Keijzer receives final report STOER, openrijk.nl.

([80]) Dutch National Bank, Productivity growth remains remarkably stable in much of the Dutch business sector, May 2025; CPB/National Productivity Board, 2024 Annual Report.

([81]) IMF, Boosting Dutch Labour Productivity, 2025, p. 7.

([82]) According to the letter on regulatory burden (Actieprogramma Minder Druk Met Regels) sent to the Parliament by the Ministry of Economic Affairs on 9 December 2024.

([83]) Eurostat.

([84]) CPB, Dynamics, Productivity and Innovation in the Dutch Economy, November 2025, p. 8. Beyond this dynamic, the country is performing well as regards SME-intensity: 89 SMEs/1 000 inhabitants, well above the EU average of 58. See p. 11 of the Annual Report on European SMEs 2024-2025.

([85]) OECD, PMR 2024, The Netherlands country fiche, p. 2. The country ranks 30th among OECD countries for administrative requirements for new firms and 20th for licences and permits.

([86]) OECD, Enhancing Insolvency Frameworks to Support Economic Renewal, 2022, p. 9. For the low exit rate, see Eurostat.

([87]) OECD Economic Surveys: Netherlands 2025, p. 121.

in the EU ([88]). Their share of employment (66%) was slightly above the EU average (65.1%) but much higher for value added (62.7% vs 53.6%) ([89]). The gap between the productivity of large and small companies is not large. Value added per person employed is around 15% higher in large companies ([90]). Nevertheless, there are two areas of concern: the low productivity of self-employed professionals without employees; the growing productivity divergence between the small cohort of most productive firms and both median firms and least productive ones ([91]). On top of the regulatory burden mentioned above, SMEs are affected by some labour costs (the minimum two-year paid sick leave), high interest rates for bank loans and difficult access to scale-up funding (see Annex 6).

Payment discipline is deteriorating. Late payments between businesses increased in 2024 (16.8 days) and 2025 (17.9 days) but are in line with the EU average (17.4 days). Government performance in paying businesses has worsened compared with 2024 and is now above the EU average (15.1 vs 13.6 days).

The Netherlands is performing strongly in the deployment of digital connectivity, although some work could still be done to encourage the take-up of high-speed services. In 2024, the country's very high-capacity network (VHCN) coverage reached 98.41%, with rural coverage at 88.38%. Fibre-to-the-premises (FTTP) coverage also showed a strong growth rate of 9.9%, reaching 85.35% of households. Less progress was made in sparsely populated areas, with FTTP coverage only growing from 78.42% in 2023 to 78.79% in 2024. As of September 2024, around 27 500 households scattered in rural or underserved areas still lacked access to fixed fast internet, often relying on connections below 30 Mbps. The policy objective is to reduce this number to around 12 000 households by 2028, mainly through market-driven deployment, with a small residual group expected to rely on wireless or satellite solutions. Concerning 5G, the country has already achieved full coverage, meeting the EU's 2030 target ahead of schedule. The assignment of the 3.5 GHz band in 2024 further strengthened high-quality 5G coverage, while emerging fixed wireless access services highlight the role of 5G as a complement to fibre, particularly in remote areas. With regard to take-up, high-speed fixed broadband continued to increase in 2024, with 85.38% of subscriptions offering speeds of at least 100 Mbps. However, gigabit take-up remains limited (10.53%).

As technological change accelerates, the effectiveness of the European Standardisation System depends on the ability of national standardisation bodies (NSBs) to mobilise a strong and diverse pool of experts. The Netherlands should support the Stichting Koninklijk Nederlands Normalisatie Instituut and the Stichting Koninklijk Nederlands Elektrotechnisch Comité to ensure continued involvement of a critical mass of stakeholders and experts in standardisation activities. In addition, the shift toward a digitalised national standardisation system, aimed at improving speed, efficiency, and inclusiveness, requires increased investment in the national standardisation system. For The Netherlands, this investment is key to building a future-proof standardisation system and ensuring that businesses can fully benefit from the opportunities of the Single Market.

Single Market and barriers

The Netherlands is well integrated into the Single Market but could improve its performance in implementing Single Market legislation. In 2025, the country's trade integration with the single market for goods and services (42.6% of GDP) was above the EU average (40.7%). The Single Market Scoreboard indicates that Dutch performance is trailing the EU average on both the transposition deficit (percentage of directives not transposed: 1.4% vs 1.1%) and conformity deficit (percentage of directives incorrectly transposed: 1.5% vs 1.1%) for 2025. The number of Single Market infringement cases is now below the EU average (22 vs 25), but the average time taken to resolve infringement proceedings is above the EU average (51.1 months vs 44.5 months). The share of SOLVIT cases resolved (84%) improved compared

([88]) European Commission, Annual Report on European SMEs 2024-2025, p. 14. The figure referrers to the non-financial business economy.

([89]) 2025 SME Factsheet for the Netherlands.

([90]) Calculations based on the data in the SME Factsheet.

([91]) See the CPB study referenced in footnote 3.

with 2024 and is now in line with the EU average (84.6%).

Compliance of products circulating in the Single Market ([92]) is key to ensuring a level-playing field for law-abiding companies and the safety of consumers. In the Netherlands, the number of market surveillance investigations has increased compared with 2019. In 2025, national authorities reported in the EU system for market surveillance (ICSMS) a total of 190.9 investigations per one million inhabitants, which is higher than the EU median of 136.2. The number of notifications remains limited in absolute terms, which may also be the result of insufficient IT national interoperability to the ICSMS system. The upcoming revision of the Market Surveillance Regulation will upgrade ICSMS to a fully interoperable EU digital platform.

Internationalisation contributes significantly to the performance of the Dutch economy. Empirical research shows that internationalisation has increased productivity (by 1.8% per year) and profitability for the firms involved. The most productive firms in the economy are those that are part of a multinational company and those that engage in exports ([93]). No less than one third of jobs in the economy are related to exports ([94]). On the other hand, the simple position of a company in a value chain or a particular industry did not seem automatically related to good performance.

Professions face fewer regulatory constraints than in most OECD countries. The OECD restrictiveness index shows that the Netherlands has the lowest barriers for trading in services of any EU Member State, except for accountants. This is partly due to accountants also being responsible for auditing. Setting up a sole proprietorship is burdensome, as the procedure cannot be completed fully online for cross-border operators but rather requires physical presence to complete the process. Retail distribution could benefit from a reduction in regulatory barriers ([95]). Territorial supply constraints affect Dutch retailers, which face restrictions when trying to source products from other Member States. The restrictions limit the choice of products on the Dutch market and lead to higher consumer prices.

The level of competition in public procurement procedures is higher than the EU average. The share of single bids is below the EU median (23% vs 27%). On the other hand, the share of direct awards is more than twice as high as the EU median. SMEs' access to the largest national public procurement market (around 20% of GDP) could be improved.

Businesses' views on corruption risks in public procurement are below the EU average. In the Netherlands, 54% of companies (EU average: 53%) consider conflicts of interest in the evaluation of bids in public procurement procedures and 53% (EU average: 58%) tailor-made specifications for particular companies to be a 'very' or 'fairly widespread' practice. Among companies that have experience of and have participated in a public procurement procedure, 19% think that corruption has prevented them from winning a public tender or a public procurement contract in practice (EU average: 25%) ([96]). 64% of businesses perceive the level of independence of the public procurement review bodies (district courts) to be 'very' or 'fairly good' when these bodies are reviewing public procurement cases ([97]).

Public procurement is seen as one of the main areas at high risk of corruption in the country. The National Risk Assessment on Corruption is expected to be finalised in early 2026. A specific governmental programme on combating subversive organised crime, including corruption, continues; as one of its tasks, corruption risks in public and private bodies are assessed. As threats towards local politicians have intensified, an independent evaluation recommends reforming the Network of Resilient Governance. The proposed legislation on increased municipal risk screening is still going through the legislative process. The health sector is also

([92]) Part of the barriers highlighted in the Single market strategy ('Terrible Ten') and the 2026 Annual Single Market and Competitiveness Report.

([93]) CPB, Productivity, Positions, and Foreign Investment: Dutch Firms in International Production Chains, May 2025, p. 11, 24. CPB, Dynamics, Productivity and Innovation in the Dutch Economy, November 2025, p. 27.

([94]) CBS, Dutch Trade in Facts and Figures, 2025.

([95]) OECD, PMR 2024.

([96]) Flash Eurobarometer 557, p. 133.

([97]) Justice Scoreboard (2025); Flash Eurobarometer 555.

flagged as being at risk of corruption. This includes a public-private partnership between the financial investigative service FIOD and the banking sector to detect corruption amongst healthcare professionals ([98]).

The Netherlands' fragmented e-procurement landscape and data quality issues highlight the need for interoperable systems, common standards, and stronger data governance. Given the Netherlands' decentralised e-procurement service, which has at least two separate procurement services in operation ([99]), economic operators must use several systems to access all public procurement procedures, creating complexity and barriers to participation. This fragmentation underscores the need for introducing interoperability and common standards. The once-only principle is only partially implemented at national level (see Annex 7), and buyers across the EU still lack digital access to relevant evidence. The Netherlands is developing a national public procurement data space (NPPDS) while addressing challenges in setting up a spend-related database and connecting to the EU-wide Public Procurement Data Space (PPDS). This requires continued data structuring, alignment of national variations, and collaboration with the European Commission to ensure accurate data representation. It is essential that the country continuous on this path, given that the Dutch system would benefit from a dedicated public procurement data collection and analysis service within the government to support data-driven oversight of the procurement lifecycle ([100]).

Industry and economic security

The Dutch industry share is low in EU comparison, but the sector is one of the largest in the EU in absolute terms. Industry's weight in the Dutch GDP in 2025 amounted to 12.8%, at the long-term level, but well below the EU average (17.3%). Only four EU countries have lower shares. Manufacturing provides 10% of GDP, constant over the last decade. Dutch industry remains important in the EU context, as it represents 4% of EU industrial production, the sixth largest industrial sector in the EU ([101]).

High energy costs negatively affect energy-intensive industries and the attractiveness of the business environment. The Netherlands has high electricity and gas prices for industry. Keeping a strong industrial base in the country depends to a significant extent on affordable energy. Investment in energy infrastructure, which is recouped via grid and transmission tariffs, is affecting energy prices. EUR 10-11 billion will be spent on expanding the electricity and gas grid in 2026. This combines with some of the highest energy taxes in the EU, resulting in a drop in the GDP share of energy-intensive industries from around 3% in 2019-2022 to around 2% by 2024. Particularly hard-hit – see Graph 5.1 - were rubber and plastic (20% drop compared with 2021), non-metallic mineral products (-20%), chemicals (-15%), basic metals (-15%). (See also Annex 9.)

The Dutch chemical sector plays a significant role in the EU's strategic autonomy but faces challenges. The Netherlands is home to a sizeable chemical capacity (18% of EU cracking capacity, 22% for ammonia). On top of the large decline registered for 2022-2024, the Dutch chemical industry's production had the worst performance in the EU in 2025 (-4.9%) ([102]). To address some of the key challenges for the sector's competitiveness (high gas prices, technological flexibility, infrastructure and integration with refineries), initiatives are under way at EU level (e.g. the competitiveness coordination tool for chemicals) as well as at national level (expansion of offshore gas production).

The Netherlands has made sound progress in implementing the Net-Zero Industry Act (NZIA). It has successfully designated a single point of contact, which is crucial for communication and coordination among stakeholders. Furthermore, the authorities

([98]) Rule of Law Report - Country Chapter Netherlands (2025).

([99]) As reported in the e-procurement matrix.

([100]) European Court of Auditors, Special Report 28/2023: *Public Procurement in the EU. Less competition for contracts awarded for works, goods and services in the 10 years up to 2021*, 2023, Special report 28/2023: Public procurement in the EU.

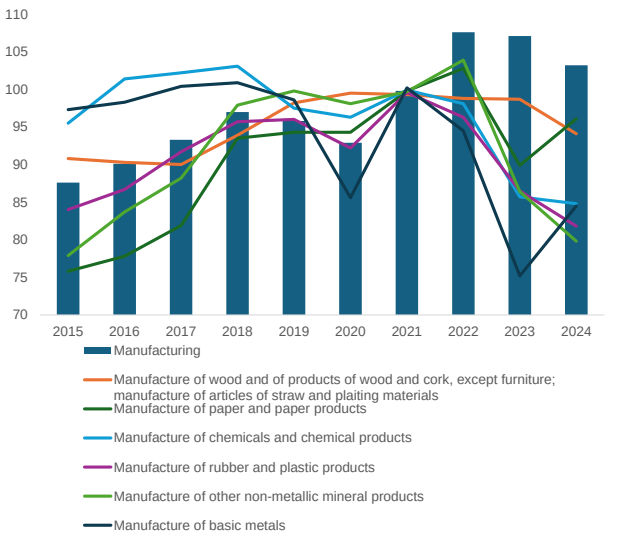
([101]) Eurostat, Industrial Production by Country for 2024.

([102]) World Chemistry Report, February 2026, p. 1. EU chemical industry contracted by 2.4%.

have established a national contact point to process applications for net-zero strategic projects, facilitating the advancement of these projects. Although there has been no specific indication of a designated net-zero acceleration valley, the country's interest in promoting net-zero activities is evident. There are already five different potential areas that could be designated, which highlights the country's commitment to the broader objectives of the NZIA. Actively promoting this process can help maintain momentum and encourage potential strategic projects.

Dutch manufacturing heavily depends on imports of critical raw materials needed for the green and digital transitions. The Netherlands' strategic dependency on raw materials in 2024 is one of the highest in the EU, suggesting limited diversification in its sources of supply. A Task Force on Strategic Dependencies has been set up and is working to identify and address high-risk, strategic dependencies, including in raw materials. In 2024, the value of imported unprocessed critical raw materials amounted to EUR 17 billion (EUR 7.4 billion without transit). Aluminium, nickel, coking coal and copper dominate (EUR 14 billion or 87% of the total). China is only the ninth largest supplier of critical raw materials to the Netherlands. In 2023, the Netherlands was the EU's largest importer of critical raw materials from non-EU sources. It has not had any projects under the Critical Raw Materials Act.

Graph A5.1: **Manufacturing industry production: total and selected sectors, index (2021=100), 2015-2024**



Source: Eurostat

Table A5.1: **Single Market and Industry**

Netherlands								
POLICY AREA	**INDICATOR NAME**		**2021**	**2022**	**2023**	**2024**	**2025**	**EU-27 average**
Business environment and investment								
Productivity and investment	Labour productivity (GDP per hour worked in PPP terms), % of EU27[1]		124.4	126.2	123.2	125.9	126.5	100.0
	Business investment (share of GDP)[1]		10.4	10.5	10.5	10.2	-	12.5
	Public investment (share of GDP)[1]		3.4	3.2	3.3	3.3	-	3.7
Business environment and simplification	Impact of regulation on long-term investment, % of firms reporting business regulation as a major obstacle[2]		9.0	12.6	9.7	5.5	34.0	34.0
SME liquidity	EIF Access to Finance for SMEs index - loans[3]		0.26	0.25	0.28	0.30	-	0.43
	EIF Access to Finance for SMEs index - equity[3]		0.27	0.21	0.18	0.24	-	0.19
Late payments	Payment gap - corporates B2B, difference in days between offered and actual payment[4]		11.1	13.0	12.5	16.8	17.9	17.4
	Payment gap - public sector, difference in days between offered and actual payment[4]		11.4	13.2	16.2	13.7	15.1	13.6
	Share of SMEs experiencing late payments, %[5]	from private entities in the previous or current quarter	-	-	-	30.73	24.70	47.13
		from public entities in the previous or current quarter	-	-	-	9.67	8.6	15.9
Single Market								
Integration	EU trade integration, average(intra-EU imports + intra EU exports)/GDP, %[1]		46.1	51.9	47.0	43.2	42.6	40.7
	EEA Services Trade Restrictiveness index[6]		0.037	0.037	0.037	0.037	0.037	0.050
Public procurement	Single bids, % of total contractors[7*]		13	19	19	24	23	27
	Direct awards, % of negotiated procedures[7*]		7	10	12	12	14	6
Compliance	Transposition deficit, % of all directives not transposed[8]		1.6	1.4	0.6	0.9	1.4	1
	Conformity deficit, % of all directives transposed incorrectly[8]		1.3	1.6	1.2	1.2	1.5	1.1
	SOLVIT, resolution rate per country, %[8]		89.19	78	73	74	83.8	84.6
	Number of pending infringement proceedings[8]		21	23	23	25	22	25
Industry and economic security								
Energy-intensive industries	Electricity prices for non-household consumers[1]		0.0777	0.1378	0.1763	0.1399	0.1209	0.1462
	Electrification (electricity as a share of total energy consumption in industry)[1]		22.9	23.7	23.6	-	-	32.7
	Share of energy from renewable sources (renewable energy generation as a share of overall energy consumption)[1]		13.1	15.3	17.6	20.2	-	25.2
Critical raw materials	Material import dependency, %[1]		81.4	82.0	83.0	83.7	-	22.4
	Circular material use rate[1]		30.1	28.5	32.0	32.7	-	12.2
Operational cleantech manufacturing capacity in 2025[9]	- Solar PV (c: cell, w: wafer, M:module), GW		0.219 (m)		- Electrolyzer, GW		-	
	- Heat pump assembly		0.28		- Battery, GW		-	

Source: (1) Eurostat, (2) EIB Investment Survey, (3) EIF SME Access to Finance Index, (4) Intrum Payment Report, (5) SAFE survey, (6) OECD, (7) data up to 2024: Single Market and Competitiveness Scoreboard, 2025: Commission calculation based on TED data, accessible at the Public Procurement Data Space (PPDS) (*) the value represented here under EU average is the median, (8) Single Market and Competitiveness Scoreboard, (9) European Commission calculations.

Table A6.1: **Savings and Investments Union summary diagnostic**

Netherlands					
Topic					***Main features***	***Relative EU positioning***
Asset-backed pension schemes					Assets at 150.9% of GDP (32.3% in the EU) 10-year real return of 0.4% (1.4% in the EU)	Pension assets, which are very high in volume, yield a low real return.
Households' financial assets					EUR 183 255 per capita (EUR 85 100 in the EU) o/w 2.2% in listed shares and bonds (7.6% in the EU) o/w 3.7% in investment funds (11.1% in the EU) o/w 3.1% in life insurance (13.4% in the EU) o/w 52.5% in pension claims (13.6% in the EU)	Households own a very high volume of financial assets, a high share of which is invested in equity and in capital markets. No savings and investment account.
Venture capital (VC) **Private equity (PE)**					VC at 0.107% of GDP (0.064% in the EU) PE at 0.856% of GDP (0.487% in the EU)	High venture capital and very high private equity investments.
Capital taxation					Capital gains tax of 0%, dividend tax of 15%, assumed interest income tax of 30%. Planned introduction of unrealised capital gains taxation at the rate of 37% as of 2028.	Preferential tax treatment for equity investments, very low rates of capital taxation, though significant increases are planned.
1-3	**4-10**	**11-17**	**18-24**	**25-27**	Colours indicate the country's relative ranking based on five groups, ranging from the three best to the three worst performers. The relative ranking as regards an SIU diagnostic topic derives from a consistent cross-country comparison, the starting point of which is the average of the underlying main features.	

Source: OECD (pensions), Eurostat (households' financial wealth), FISMA CMU dashboard (VC and PE), national sources (capital taxation).

The Netherlands stands out as one of the countries that have progressed most towards the policy goals of the Savings and Investments Union (see Table A6.1). Within a business landscape where small and medium-sized enterprises play an important role in value creation, Dutch companies, despite being more indebted than their EU peers, rely relatively moderately on debt finance to fund their activities. The domestic listed equity market is one of the most developed in the EU, while the deep debt markets channel savings mostly to non-bank financial institutions, banks, and the government. Despite a high level of financial assets, thanks to the mandatory participation in well-endowed asset-backed pension schemes, households do not have access to a preferential savings and investment account and their direct participation in capital markets is comparatively low. Bank lending by the well-capitalised, liquid and sufficiently profitable banking sector provides more stable funding to households than to corporates. The sizeable pensions funds, which are undergoing a transition towards defined contributions, dominate non-bank financial intermediation and crowd out insurance companies, which are less developed than the EU average. The reform away from the defined-benefits principle is expected to significantly strengthen institutional investors' interest for equity and growth capital, though not necessarily domestically. Even though the Netherlands has emerged as a regional leader in venture capital (VC) thanks to a consistent and predictable ecosystem, the downward trend in VC investments since 2021 suggests the Dutch economy might be experiencing a decline in international competitiveness. To support investment, a 2025 country-specific recommendation (CSR) highlighted the need to 'address the funding gap for late-stage start-ups and scale-ups by leveraging available financing tools and providing incentives to attract institutional investors.'

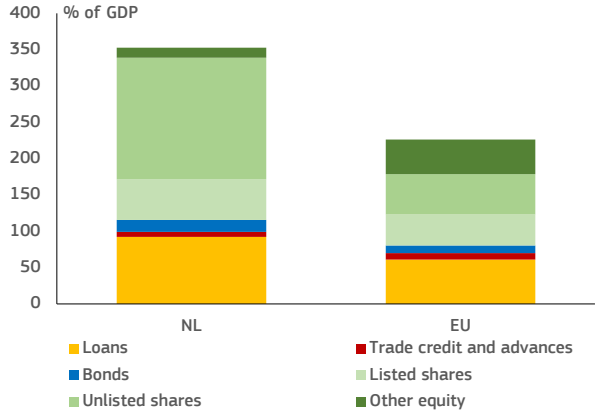
Business landscape and company funding

More value added in the Dutch economy is generated by smaller and medium-sized companies than the average EU business landscape, though these companies provide less employment than the EU average. While in the Netherlands the relative importance of small and medium businesses for value generation is higher than the EU average, large companies play a stronger role in employment (see Annex 5 for more details). This has implications for the corporate sector's demand for funding, which are discussed in this annex.

Even though on average Dutch companies are more indebted than their EU peers, they rely relatively moderately on debt finance to fund their activities. Financial borrowing by non-financial corporations (NFCs) in the Netherlands reached 108.6% of GDP in 2024, which is significantly higher than the EU average of 71.6% (see Graph A6.1). However, given the overall much larger size of the aggregate balance sheet of Dutch NFCs, which stood at 352.6% of GDP at end-2024 (versus an EU average of 225.6%), the relative share of financial loans in their funding structure (30.8%) is slightly lower than the EU

average (31.7%). In 2024, Dutch NFCs reported that about 18% of their investment was funded externally (vs 25% in the EU), which shows a much higher reliance on internal resources ([103]). At the same time, only 7% of companies in the Netherlands believed they had invested too little in the last three years, as opposed to 12% in the EU. This suggests a low perceived investment gap. However, this may not be the case for all firms, especially for the 7% of companies that consider themselves financially constrained.

Graph A6.1: **Composition of non-financial companies' funding**



Source: Eurostat. End-2024.

Size and structure of the financial sector

The Dutch economy stands out for one of the deepest domestic capital markets in Europe. Based on ECB data, the market capitalisation of listed equity issued by Dutch companies ([104]) reached 122% of GDP at end-2024 (see Graph A6.2), which is the fourth highest among Member States, after Ireland, Denmark and Sweden. Characteristically, the total market capitalisation is split almost equally between non-financial and financial corporations, which reflects the strong role that finance plays in the Dutch economy. Interestingly, while the general stock market index in the Netherlands surpassed the EU average, the index of Dutch banks plummeted and never recovered from the 2008-2009 Global Financial Crisis. The Netherlands is also home to the ICE Endex, which is a leading energy exchange for continental Europe, including natural gas derivatives and EU emission allowances ([105]). The volume of public and private Dutch debt securities stood at 193% of GDP at end-2024, making the Netherlands home to one of the most sizeable national debt markets in the EU. Bonds issued by other financial institutions represented almost half of the market (47% of the total), followed by debt securities issued by banks (26%) and by the government (18%) ([106]). The share of bonds issued by NFCs increased from around 8% in the previous years to 10% as of end-2024.

Non-bank financial intermediation in the Netherlands is very developed across all segments, even though the financial sector remains dominated by banks. After peaking at 311% of GDP in 2020, the size of the banking sector decreased to 250% of GDP as of end-2024, which is in line with the EU average of 251% and slightly below the EA average of 268%. Foreign presence is limited and accounts for about 10% in terms of assets. With the top five monetary financial institutions (MFIs) ([107]) representing 81% of the sector, banking concentration appears to be significantly higher than the EU average of 51%, which is also reflected in significantly lower inter-bank lending in the Netherlands than elsewhere in the EU. The pension funds sector, with total assets of 171% of GDP at end-2024 based on data from the ECB, dominates non-bank intermediation and, together with Denmark and Sweden, accounts for the largest asset-backed pension schemes ([108]) in the EU. Investment funds, though their total assets

([103])See the 2025 EIB Investment Survey. The higher reliance on internal resources could be ascribed to the higher importance of SMEs and to intra-group funding within multinational companies.

([104])This figure is a proxy for the degree of development of the Dutch stock exchange, given that i) Dutch companies could be listed abroad and ii) foreign companies could be listed in the Netherlands as well.

([105])Fore further details, consult the ICE Endex institutional website.

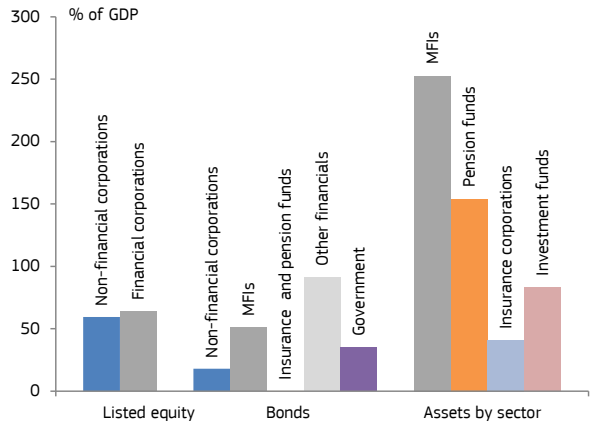
([106])The other financial institutions refer to the non-monetary financial institutions, i.e. pension funds, insurance corporations and investment funds.

([107])The MFIs, i.e. the financial institutions that participate in money creation, refer to banks.

([108])The Dutch pension funds sector, where occupational pension providers are set up under the IORP Directive, unlike in Denmark where they are set up under the Solvency II Directive, is sometimes reported as the fifth largest in the world. Such a country comparison is, however, inaccurate because of significant structural differences in contributors' ownership rights across national regimes.

dropped by almost 50 percentage points to 82% of GDP between 2020 and 2024, remain significant, though below the EA average of about 130% of GDP. Insurance corporations, whose assets were equivalent to 40% of GDP as of end-2024, are relevant as well, although they appear less developed than the EU average of 55% of GDP.

Graph A6.2: **Capital markets and financial intermediaries**



Source: ECB, EIOPA, AMECO. End-2024.

Households' participation in capital markets

Thanks to their large and mandatory contributions to asset-backed pension schemes, Dutch households hold high volumes of financial assets. As of end-2024, household aggregate financial assets equated to 293% of GDP, which is above the EU average of 212%, though still significantly behind the US average of 446%. After correcting for the relatively higher level of Dutch households' indebtedness, their net financial assets stood at 199.7% of GDP, which is still above the EU average of 162.3% of GDP. Investments in insurance and pension funds (164% of GDP) are almost three times larger than the EU average (59% of GDP) ([109]). As of end-2024, in per capita terms each Dutch person held EUR 183 300 in financial assets, which is the third largest in the EU after Denmark and Luxembourg and more than twice as high as the EU average of EUR 85 100. Dutch households held less than 20% of their financial wealth in cash and bank deposits, which is the third lowest in the EU after Denmark and Sweden, and well below the EU average of 32%. However, direct holdings of bonds and equity are significantly lower, both in nominal amounts per capita and relative to GDP (see Graph A6.3), despite a tax regime that penalises income from equity less than income from debt instruments ([110]). The absence of a preferential savings and investment account, unlike in Sweden and Denmark ([111]), also contributes to the low direct retail participation in equity and capital markets.

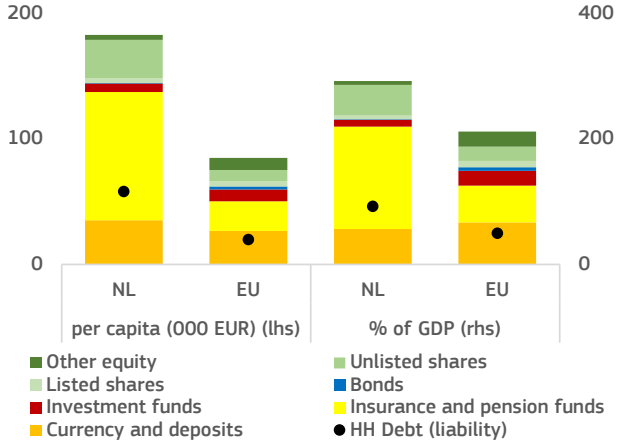
Financial literacy is very high in the Netherlands. Dutch society recognises that financial literacy is crucial to foster retail investors' participation in capital markets and to familiarise SMEs with alternatives to bank lending. The Netherlands has had a national financial literacy strategy in place since 2008. The current 2024-2026 national strategy is based on the EU/OECD competence framework and aims to prepare people, from a young school age, to take financially sound decisions. The Dutch central bank is committed to promoting financial education and responsible financial behaviour. As a result of the persistent educational measures, including the 'national money week', the 2023 Eurobarometer on monitoring financial literacy in the EU ranks the Netherlands first for financial knowledge. It shows that 43% of the Dutch public have a high level of financial knowledge (26% in the EU), while 18% have a low level (24% in the EU). Moreover, only 8% of Dutch respondents (23% in the EU) declare that they feel some degree of discomfort using digital financial services.

([109])See also the Overview of CMU Indicators.

([110])In 2025, the Dutch state taxed income from investments in equity, bonds, and secondary houses on an assumed return capped at 5.88%, at the rate of 36%, with the first EUR 57 684 of accumulated wealth tax-free. The government plans to introduce, as of 2028, unrealised capital gains taxation at the rate of 36% with a tax-free allowance of EUR 1 800 per person.

([111])For a comparative review of the various features of preferential savings and investment accounts in Member States, see the dedicated Commission staff working document SWD(2025) 6800.

Graph A6.3: **Composition of households' financial assets**



Source: Eurostat. End-2024.

The banking sector: resilience and financing of the economy

The banking sector appears resilient to risks, has a low exposure to vulnerabilities, and is thus not constrained in its role of funding the economy. As of Q3-2025, overall capitalisation stood at 22.3%, well above the EU average of 20.2%, and higher than in the previous three years (see Table A6.2). As of end-2024, the aggregate MREL level (Minimum Requirement for Own Funds and Eligible Liabilities) stood at 33.7%, 5.1 percentage points above the required level ([112]). With a return-on-equity of 10.1% as of Q3-2026, profitability remains in line with the EU average of 9.6%, though declining from 10.9% in 2023 and 10.6% in 2024. On the positive side, at 1.2%, the aggregate ratio of non-performing loans, which has been stable over the years, remains significantly below the EU average of 1.9%. However, banks' asset quality outlook is subject to increased global uncertainty and its likely impact on energy prices and economic growth. Dutch banks maintain strong liquidity positions thanks to ample liquidity buffers. As of end-2024, at the aggregate level, the net stable funding ratio stood at 137.6%, while the liquidity coverage ratio was close to 170%.

The dynamics of bank lending in the Netherlands is driven by loans to households, which account for 71.7% of the stock of all bank loans. As of end-2024, loans to households, mostly mortgages, reached EUR 617 billion or the equivalent of 54.4% of GDP. Corporate loans to non-MFIs amounted to EUR 272 billion or the equivalent of 24.0% of GDP. Though somewhat volatile, the growth of bank credit to households has been significantly less unstable than corporate credit. In the period Q1-2020 to Q4-2024 the shares of loans for real estate activity and for construction increased respectively from 32.8% and 2.9% to 35.5% and 5.4%. This suggests that, while total bank credit to corporates has been recovering, an increasing part of bank lending supported real estate and related activities instead of other productive ventures in the economy. Hence, smaller companies might be facing difficulties with access to finance. As of Q3-2025, bank lending to non-financial companies rebounded vigorously, by 4.7% on a yearly basis, well above the EU average of 2.5% (see Table A6.2). The expansion of lending to households accelerated even further, at the annual rate of 5.3% as of Q3-2025, also well above the EU average of 2.6%.

Role of non-bank financial intermediaries

The Dutch occupational asset-backed pension system is one of the most developed in the EU. In the Netherlands, participation in Pillar 2 pensions is mandatory for all wage-earners through collective bargaining agreements, with an average contribution rate of 17.9% (maximum rate of 25%). Most of the investment vehicles are industry-wide, though company-specific pension funds exist as well ([113]). Dutch pension funds were set up as defined-benefits pension schemes under the IORP Directive and offer an EET tax profile ([114]). Ownership rights remain very limited

([112])See the latest MREL Dashboard published by the EBA. For further information on the bail-in mechanics in the Netherlands, see the dedicated publication by the Dutch central bank.

([113])For further details on the asset-backed pension schemes in the Netherlands, see the Country profiles published by the OECD and the Country fiches of the latest Ageing report published by the European Commission.

([114])The EET feature means that i) contributions are tax-exempt, ii) investment returns are tax-exempt, and iii) pay-outs are taxed.

despite the higher flexibility introduced by the ongoing reform. Contributors do not have access to their contributions before reaching the retirement age (currently 67 years) and cannot liquidate them after retirement. Re-investment in another vehicle is not possible. Accrued holdings are not inheritable. As of end-2024, based on OECD data, total assets accumulated by Dutch asset-backed pension schemes amounted to EUR 1 694 billion, which represented 150.9% of GDP or EUR 94 111 per capita. Concentration is very high, with the three largest investment vehicles representing almost 52% of the sector as of end-2023. The public servants' pension fund alone holds more than one quarter of all assets.

As the transition from defined benefits to defined contributions is progressing, Dutch pension funds' sustainability is improving, while the share of assets invested in high-yield and riskier investments is expected to grow. The prolonged period of low interest rates as well as the defined-benefits feature of the system have been putting a significant pressure on investment vehicles' funding, as shown by assets-to-liabilities ratios that were as low as 95% in late 2020. To improve the funds' sustainability and risk-sharing between the different age groups, the authorities are currently implementing a gradual transition towards defined contributions. This reform of Pillar 2 of the pension system is included in the Dutch RRP, including the transfer of the pension assets of at least 66% of policy holders to the new pension system. Based on end-2024 data from European Insurance and Occupational Pensions Authority (EIOPA), assets were distributed mainly between investment funds (33.2%), government bonds (22.4%), equity (19%), real estate (10.2%), corporate bonds (8.7%) and deposits (3.7%) ([115]). The Dutch pension funds raised 14% of the funds committed to VC and PE (private equity) between 2007 and 2023, which is slightly below the EU average of 15%, despite the Netherlands being a regional leader in venture capital and a European leader in funded pension schemes ([116]). The ongoing transition towards defined contributions will imply a sizeable re-allocation of investments from sovereign bonds towards more equity and growth capital, though not necessarily domestically ([117]). Pension funds are also exposed to derivatives, which entails some specific liquidity risks, notably due to the dependence on well-functioning repo markets ([118]).

The insurance sector in the Netherlands appears sound despite an aggregate capital level that is below the EU average. The Dutch insurance sector has been undergoing consolidation over the last two decades, with the number of supervised entities decreasing from 358 in 2004 to 127 as of end-2024. Fourteen companies specialise in life insurance, eight companies in re-insurance, with the rest active in the non-life business line. However, in terms of total assets, life insurance remains by far the most important segment. As of end-2024, the total assets of all insurers were equivalent to 40.3% of GDP, which is lower than the EU average of 54.8% and below the peak from 2020 at 68% of GDP, despite an increase in the value of assets and the insurance penetration rate being the 15th highest globally ([119]). As of end-2024, insurers' solvency ratio of 185.7%, though robust and above statutory requirements, was significantly below the EU average ([120]) and lower than in previous years (see Table A6.2). In terms of non-life risks, EIOPA estimates that the Netherlands is exposed to a high protection gap for coastal flooding (a score of 3) and a significant protection

([115])While equity holdings appear high, only about 5% of shares and participations are invested in the Netherlands, which implies that the sector's actual contribution to the financing of the domestic economy remains limited, while foreign investments imply a specific currency risk. For details on the geographical distribution of Dutch pension funds' assets, see the note Attractive European capital markets published by the Authority for the Financial Markets (AFM).

([116])See ECMI - Closing the gaping hole in the capital market for EU start-ups – the role of pension funds.

([117])Analysts estimate that Dutch pension funds will divest at least EUR 125 bn of government bond holdings by 2028.

([118])However, the ongoing transition to defined contributions is expected to ease the risk of fire sales for liquidity reasons, as shown in the 2024 Liquidity risk stress tests of the DNB and AFM.

([119])See the FSAP Country Report 24/170 published by the IMF.

([120])In addition, the technical note to the 2024 FSAP by the IMF clarifies that the Volatility Adjustment (VA) has a significant impact on Dutch life insurers. For companies using the VA, the SCR ratio would have been around 70 percentage points lower, though still above the regulatory threshold of 100%. This is due to some structural features of the Dutch life insurers. First, the duration of technical provisions is considerably longer than in other EU countries. Second, the relatively sizeable exposure to mortgage loans is not properly reflected in the 'representative portfolio' used by EIOPA to calculate the VA.

gap for flooding in general (score of 2.5), which requires monitoring ([121]).

In terms of aggregate asset exposure, insurance companies' balance sheets appear soundly diversified. Based on end-2024 data from EIOPA, the sector's aggregate balance sheet was exposed primarily to investment funds (33.7%), mortgages and loans (21.6%), and government bonds (16%). The financing of the corporate sector, through bonds (13.1%) or equity (7.7%), was comparatively less significant.

In addition to pension funds and insurance companies, asset management is another major segment of the Dutch financial sector. Total assets under management expanded by further 7% in 2024 and reached EUR 2 119 billion or 187% of GDP, ranking the Netherlands first in the EU, followed by France (181%) and Denmark (138%) ([122]). The assets under management were distributed between investment funds (EUR 902 billion) and discretionary mandates (EUR 1 217 billion). All funds domiciled in the Netherlands are also managed there, while Dutch ownership of funds, which reached EUR 1 262 billion, exceeds the volume of domestically registered funds by almost 40%. This reflects the large aggregate size of the sector of institutional investors in the Netherlands. Investment funds' total assets were distributed between equity funds (32.8%), real estate funds (15%), bond funds (10.2%), mixed funds (8.8%) and hedge funds (0.9%) ([123]). The remaining third of total assets is reported as invested by other funds.

Venture capital ecosystem

The Netherlands is a regional leader in VC and PE investments in the EU. Venture capital (VC) investments in the Netherlands averaged 0.107% of GDP in 2022-2024, significantly above the EU average of 0.058%, though on the decline since 2021 ([124]). Private equity (PE) investments, despite a moderate decline, amounted to 0.856% of GDP in 2022-2024, significantly above the EU average of 0.461% and second only to Sweden in the EU. Over the past decade, the country has emerged as a prominent regional player in the start-up ecosystem thanks to a consistent and predictable environment that is favourable for innovative business projects (see Annex 4 for more details). Yet, in 2025 VC investments continued their declining trend and contracted by 2% relative to the previous year, which suggests the Dutch economy might be experiencing a decline in international competitiveness ([125]).

The funding gap for late-stage start-ups and scale-ups remains an issue, despite ongoing initiatives in relation to the 2025 CSR to '[a]*ddress the funding gap for late-stage start-ups and scale-ups by leveraging available financing tools and providing incentives to attract institutional investors*.' As of end-2024, the total portfolio of InvestNL, the Dutch promotional institution which the Ministry of Finance endowed with a EUR 3 billion capital in 2019, reached EUR 1.4 billion committed to 180 companies. To mobilise private capital directly towards scale-ups and projects with larger financing needs, in 2025 the authorities committed EUR250 million to a Blended Finance instrument under InvestNL, currently under review for State aid approval. Another EUR 200 million was committed to the continuation of the European Tech Champions Initiative (ETCI 2.0). In addition, ETCI is also making efforts to attract institutional investors to the fund-of-funds within the initiative, where it expects to mobilise about EUR 600 million. While the results of these ongoing initiatives are still to come, the need to leverage available financing tools and to provide incentives to attract institutional investors remains.

([121])See EIOPA Dashboard on insurance protection gap for natural catastrophes.

([122])See the 2025 Asset Management Report published by the EFAMA.

([123])In the absence of EFAMA data on the distribution of total assets between the different classes, the DNB publishes the reported breakdown between types of funds.

([124])See the updated Overview of CMU Indicators.

([125])See the Dutch country page on Dealroom.

Table A6.2: **Financial sector indicators**

		2018	2019	2020	2021	2022	2023	2024	2025-Q3	EU
Banking sector	Total assets of MFIs, % of GDP	294.9	291.0	311.2	296.6	288.9	263.6	252.5	254.2	246.1
	Common equity Tier 1 ratio	17.0	16.9	17.9	17.8	16.5	16.7	17.2	17.7	16.8
	Total capital adequacy ratio	22.4	22.9	23.2	22.7	21.2	21.2	22.0	22.3	20.2
	Overall NPL ratio, % of all loans	1.9	1.8	1.9	1.4	1.3	1.3	1.4	1.2	1.9
	NPL ratio, loans to NFCs	4.3	4.3	4.8	3.3	3.2	3.0	3.0	2.8	3.5
	NPL ratio, loans to HHs	1.2	1.1	1.3	1.3	1.0	1.0	1.1	1.0	2.1
	Return on equity ratio[1]	8.1	7.7	3.1	8.2	7.7	10.9	10.6	10.1	9.6
	Loans to NFCs, % of GDP	32.2	30.3	29.6	28.2	26.7	25.0	24.2	24.0	29.3
	Loans to HHs, % of GDP	71.2	68.1	70.4	65.4	60.1	57.6	55.6	55.3	43.6
	NFC credit growth rate, %	-0.8	-1.8	0.9	4.0	2.5	-1.0	1.9	4.7	2.5
	HH credit growth rate, %	0.1	0.2	-0.9	1.2	1.7	1.0	3.4	5.2	2.6
Non-banking sector	Stock market capitalisation, % of GDP	122.0	152.0	150.3	170.6	121.3	129.7	123.1	132.5	69.9
	Initial public offerings, % of GDP	1.09	0.00	2.14	2.04	0.00	0.01	0.00	-	0.06
	Market funding ratio	50.7	50.5	45.9	50.3	48.5	47.2	45.7	-	49.7
	Private equity, % of GDP	0.683	0.768	0.877	0.929	1.057	0.958	0.856	-	0.487
	Venture capital, % of GDP	0.043	0.053	0.068	0.099	0.113	0.120	0.107	-	0.064
	Financial literacy, composite index	-	-	-	-	-	53.0	-	-	45.5
	Bonds, % of HHs' financial assets	0.3	0.2	0.2	0.2	0.2	0.2	0.2	-	2.8
	Listed shares, % of HHs' financial assets	1.5	1.6	1.6	2.0	1.9	1.9	2.0	-	4.8
	Investment funds, % of HHs' financial assets	3.3	3.3	3.0	3.6	3.4	3.5	3.7	-	11.0
	Insurance/pension funds, % of HHs' financial assets	62.3	64.4	65.0	61.5	55.3	56.2	55.9	-	27.8
	Total assets of insurers, % of GDP	60.3	62.8	68.1	59.3	44.7	42.7	40.7	38.7	53.9
	Pension assets, bn EUR	-	-	-	1836.3	1445.5	1572.4	1693.8	-	5813.8
	Pension assets, % of GDP	-	-	-	206.0	145.5	149.7	150.9	-	32.3
	10y real return average of pension assets, %	-	-	-	-	-	1.4	0.4	-	1.4
	Pension funds assets, ECB (% of GDP)	-	209.9	235.9	222.1	170.9	171.5	170.5	163.0	23.0
	1-3 / 4-10 / 11-17 / 18-24 / 25-27	Colours indicate performance ranking among the 27 EU Member States.								

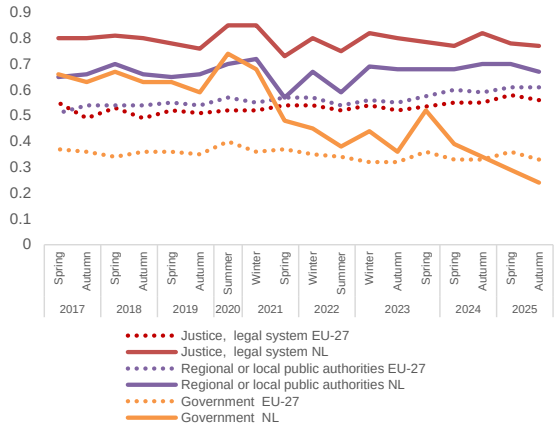
(1) Annualised data. EU data for credit growth and pension funds refer to the EA average.

Source: ECB, Eurostat, EIOPA, DG FISMA CMU dashboard, AMECO.

An effective institutional framework is essential for competitiveness. This requires public trust built on integrity, high-quality legislation, regulatory simplification and efficient services for people and for businesses.

Public trust

Graph A7.1: **Trust in the justice system, regional / local authorities and in government**



(1) EU-27 since 2019; EU-28 before
Source: European Commission, Standard Eurobarometer surveys

Trust in the Dutch government has fallen to one of the lowest levels in the EU. Trust in government dropped below the EU average (Netherlands 24%; EU 33%) (see graph A7.1). This is the sharpest decline in the EU between 2017 and 2025 (from 66% in 2017) ([126]). This fall seems to be the result of political instability, the government's perceived indecisiveness and concerns over ministers' competence ([127]). Trust in government has also been negatively impacted by systemic failures and scandals such as the childcare allowance scandal for which the response has is seen as delayed and insufficient ([128])([129]). There is a contrast between the low trust in government and the high levels of trust in the legal system, among the highest in the EU (Netherlands 77%; EU 56%), and the trust in regional and local authorities (67%), which is also above the EU average. Additionally, both businesses and the general public retain trust in public administrations ability to handle their data securely and responsibly ([130]).

Quality of lawmaking and implementation

The Netherlands has a sound framework for assessing the impact of new and existing legislation, but there is room for improvement (Table A7.1)**.** The Netherlands has improved its policy framework, mostly thanks to enhanced transparency for *ex post* evaluations. However, transparency remains well below the EU average for regulatory impact assessments of both primary (Netherlands 0.1; EU 0.5) and secondary legislation (Netherlands: 0.1; EU 0.4).

When developing legislation, the government is only required to estimate the costs and assess the benefits of new legislation for business, people and the government. Monitoring does not need to include specific indicators to measure progress, which hinders the ability to monitor implementation and the effectiveness of *ex post* evaluations ([131]). That has led to 43% of businesses finding administrative procedures complex ([132]) and to implementation difficulties. In its 2025 State of the Implementation at municipal level, the association of municipalities (VNG) referred to a number of challenges arising from complex rules that do not take the reality of municipalities into account and have unintended consequences at the implementation stage ([133]).

Implementation of key policies may be hindered by capacity challenges. The Dutch Court of Audit found 40 operational shortcomings

([126])Sociaal and Cultureel Planbureau, Burgerperspectieven 2025.

([127])Ibid.

([128])Commissie Van Dam, 2025, Minder beloven, meer doen.

([129])Sociaal and Cultureel Planbureau, 2025, Kennisnotitie Vertrouwen in de politiek.

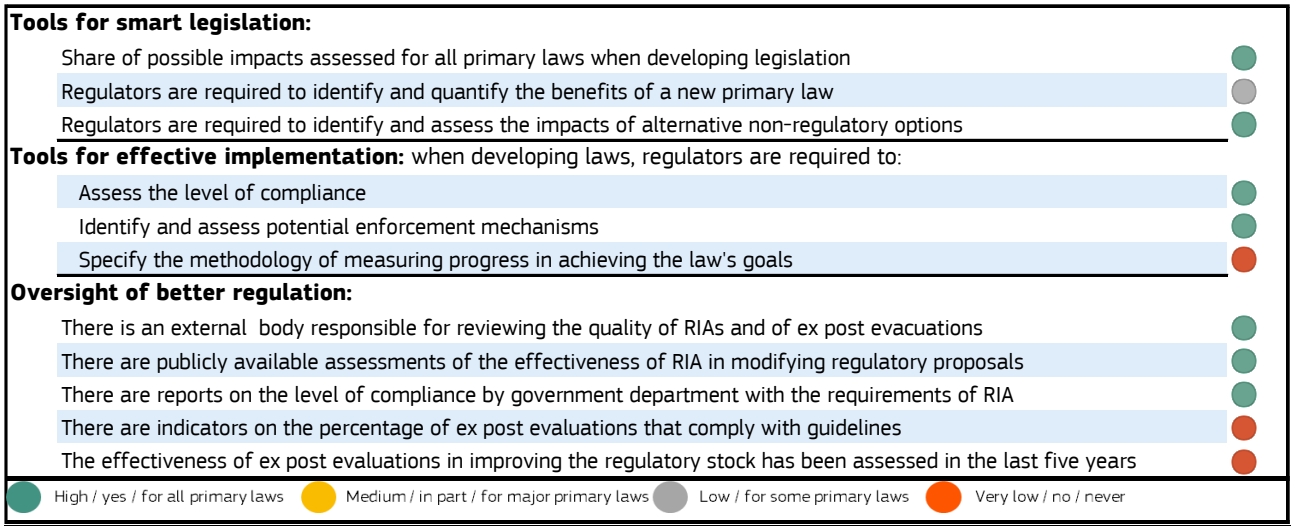
([130])European Commission, 2026, Flash Eurobarometer surveys 567 and 568 on satisfaction with administrative services.

([131])OECD, 2025, Indicators of Regulatory Policy and Governance (iREG),.

([132])European Commission, 2024, Flash Eurobarometer survey 557 on Businesses' attitudes towards corruption in the EU.

([133]), Vereniging van Nederlandse Gemeenten (VNG), Stand van de Uitvoering Gemeenten 2025.

Table A7.1: **The Netherlands. Selected indicators on better regulation practices for primary legislation**



Source: OECD, 2025, Regulatory Policy Outlook 2025 [https://doi.org/10.1787/56b60e39-en] and Better Regulation across the European Union 2025

in different ministries ([134]), including three serious ones, up from zero, as well as procurement errors affecting procedures amounting at least EUR 1.6 billion, leading to implementation difficulties. The gap between planned and actual spending grew from around EUR 4 billion in 2020 to EUR 17 billion in 2024([135]). The Ministry of Finance's mid-year budget update incorporates an implementation shortfall of between EUR 7 and 8 billion per year for 2025 and 2026 ([136]). 89% of municipalities reported that policy implementation fell short of targets in 2024, caused by staff shortages and lack of expertise, despite a 17% workforce expansion since 2017([137]). This systemic implementation shortfall severely constrains the Netherlands' capacity to deliver on reforms and policy goals. Strengthening coordination between different levels of governance could help close this implementation gap.

The Dutch government is taking steps to minimise the regulatory burden by strengthening the assessment of proposed legislation and simplifying existing rules and regulations. The advisory board on regulatory burden (*Adviescollege Toetsing Regeldruk* (ATR)) was established in January 2026 as a permanent, independent body ([138]). Its mandate has since been expanded to assess proposed legislation, including EU regulations, for regulatory burden. Alongside this, the government has launched a programme to simplify 500 rules by summer 2026 ([139]), as part of a broader drive to reduce regulatory burden costs by 20% by end of 2026.

The business impact assessment system (*bedrijfseffectentoets*) enables ministries to assess the impact on businesses of proposals before review by ATR. This system now incorporates a "*no, unless*" principle under which new reporting may be imposed only if demonstrably necessary ([140]). In 2024, The ATR expressed a negative opinion for 45% of proposed legislation, preventing an increase of regulatory burden for businesses worth over EUR 426 million ([141]).

([134])Algemene Rekenkamer, 2025, Bij 3 ministeries ernstige problemen in uitvoering van rijksbeleid.

([135])ESB, 2025, Steeds minder voorgenomen overheidsuitgaven worden uitgegeven.

([136])Rijksfinancien, 2025 Voorjaarsnota.

([137])Rikjsoverheid, 2025, Integraal Overzicht Financiën Gemeenten.

([138])Eerste Kamer der Staten-Generaal, 2025, Instellingswet Adviescollege toetsing regeldruk; Rijksoverheid, 2025, Adviescollege toetsing regeldruk krijgt stevigere rol.

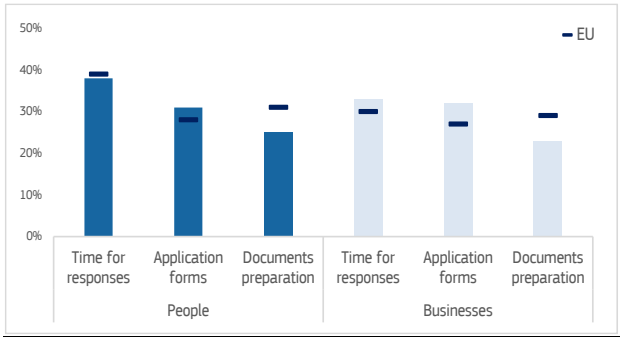
([139])Tweede Kamer der Staaten-Generaal, 2025, Stand van zaken ten aanzien van het versterken van het ondernemingsklimaat en aanpak vermindering regeldruk voor ondernemers.

([140])Rijksoverheid, 2025, Kabinet voorkomt regeldruk ondernemers door aanscherpen Bedrijfseffectentoets.

([141])Adviescollege Toetsing Regeldruk, 2025, ATR Jaarverslag 2024.

Public service delivery and digitalisation

Graph A7.2: **Most time-consuming aspects of service delivery**



Source: European Commission, 2026, Flash Eurobarometer surveys 567 and 568 on satisfaction with administrative services.

Although people are broadly satisfied with administrative services, their perception of service delivery has fallen sharply since 2023. 46% of companies and 51% of people say they are satisfied with administrative services, above the EU averages of 42% and 45% respectively ([142]). Both companies and people identify processing time and completing application forms as the most time-consuming aspects of obtaining administrative services (Graph A7.2). 56% of individuals say they need more correspondence than expected to obtain administrative services, which is below the EU average of 69%.

Perceptions of service delivery have changed since 2023([143]), with a significant decrease in the public's overall perception of public administration. 43% describe it as lacking transparency, 10 percentage points (pps) higher than in 2023; 38% describe it as 'not close to the citizens', 6 pps higher; and 37% describe it as slow, 9 pps higher. Obstacles to administrative services - mostly in the form of delays and increased operational costs - have a detrimental effect on 49% of companies (EU: 51%). Additionally, 45% of companies think that the administration is not transparent about how it uses business data. This proportion is well above the EU average of 28%, and the highest in the EU. This demonstrates a growing disconnect between administrative performance and the experience of users, i.e. people and businesses.

The Netherlands has seen a slight increase in the provision of digital public services but further progress is needed in the provision of electronic health records (Table A7.2)**.** The availability of digital public services for the public has increased slightly, remaining above the EU average. In terms of the provision of electronic health records, the Netherlands' e-health maturity score dropped to its lowest level, even further below the EU average ([144]). The decentralised nature of the healthcare system has complicated previous efforts, and the Netherlands is working on a new, centralised health platform ('*MijnGezondheidsoverzicht*', which means 'My Health Overview') ([145]). Cross-border service accessibility has increased to 80 (from 78) ([146]), higher than the EU average of 71.

Digital public services are widely used, but there is room for improvement in terms of user-friendliness and efficiency. The proportion of e-government users remains stable and well above the EU average (Netherlands 96%; EU 76%), and the proportion of people using eID remains high at 95% (EU: 52%). Although overall eID usage has remained stable, its frequency and scope of use have increased, partly driven by a growing number of connected services and organisations ([147]). The Netherlands is developing a digital identity wallet to improve people's access to public services and has run pilots in selected municipalities. Despite the very high uptake in digital public services, 24% of people stated that digital services either increase or do not reduce the time and effort needed to obtain administrative services. This suggests that

([142])European Commission, 2026, Flash Eurobarometer surveys 567 and 568 on satisfaction with administrative services.

([143])European Commission, 2023, Flash Eurobarometer 526 Understanding Europeans' views on reform needs.

([144])The provision of electronic health records has decreased in the past year following the discontinuation of a pilot to assist legal guardians and other authorised persons in accessing health data on behalf of others.

([145])Ministerie van Volksgezondheid, Welzijn en Sport, 2025, MijnGezondheidsoverzicht.

([146])European Commission, 2025, Digital Decade 2025: Country reports.

([147])Logius, Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2025, DigiD usage report.

Table A7.2: **Digital Decade key performance indicators: availability of digital public services**

	Netherlands			EU-27
	2023	2024	2025	2025
Digital public services for citizens (0 to 100)	85	86	89	82
Digital public services for businesses (0 to 100)	89	87	89	86
Access to electronic health records (0 to 100)	69	72	65	83

(1) Digital Decade target by 2030: 100. (2) Publishing year, data was collected in the previous year
Source: European Commission, State of the Digital Decade report 2025

improvements could be made to the user-friendliness of digital services ([148]).

The Netherlands scores above the EU average in the availability of digital public services for businesses, but many companies report that these services do not necessarily make administrative tasks easier (Table A7.2)**.** The availability of digital public services to companies has increased slightly, remaining above the EU average. Cross-border service accessibility for companies has increased from 73 to 78 (EU: 73) ([149]). However key services, such as starting a business, remain inaccessible online for cross-border users: EU residents without a Dutch eID cannot apply for it digitally ([150]). Despite the high online availability, only 62% of companies report regular use of digital public administration services and 30% stated that digital services either increase or do not reduce the time and effort needed to obtain administrative services ([151]).

Permitting legislation has been updated, but underlying challenges remain. The Netherlands overhauled its permitting legislation in 2024 with the *Omgevingswet* (Environment and Planning Act) and its *Digitaal Stelsel Omgevingswet* (Digital System for the Environment and Planning Act) (DSO), which consolidated laws governing spatial planning, construction, environment and nature ([152]). The DSO established a digital end-to-end permitting portal for authorities, businesses and the public ([153]). However, the reform consolidated the legislation and the digital portal without tackling underlying institutional challenges. In 2025 only 3 out of 28 environmental protection agencies (*Omgevingsdiensten*) in charge of permitting for environment regulations met minimum operational capacity requirements ([154]). While the time taken to obtain some permits was shortened from 26 to 8 weeks, in practice these gains were negated by pre-consultations, essentially shifting the burden to an earlier, non-digital, phase ([155]).

Structural usability issues in the DSO led municipalities to default to the legacy digital standard, which still accounted for around three quarters of publications of draft plans in the third quarter of 2025, and use other permit types that deviate from environmental plans (BOPA) ([156]). The legacy digital standard was then discontinued in January 2026 ([157]). Sector-specific fast tracks have been introduced in parallel, for example simplified building regulations and single-instance appeals

([148])European Commission, 2026, Flash Eurobarometer surveys 567 and 568 on satisfaction with administrative services.

([149])European Commission, 2025, Digital Decade 2025: Country reports.

([150])European Commission, 2026, Simplification of key life events.

([151])European Commission, 2026, Flash Eurobarometer surveys 567 and 568 on satisfaction with administrative services.

([152])Rijksoverheid, 2024, Teksten Omgevingswet bij inwerkingtreding.

([153])Rijksoverheid, 2024, Digitaal Stelsel Omgevingswet (DSO).

([154])Rijksoverheid, 2025, Kamerbrief over voortgang versterking VTH-stelsel april 2025.

([155])Rijksoverheid, 2025, Eerste reflectierapport Omgevingswet 2024 'In werking, maar onderbenut'.

([156])Rijksoverheid, 2025, Rapportage Monitor Werking Omgevingswet 2024. BOPA permits allow for municipalities to deviate from their Environmental Plans through a different system than the Omgevingswet mandates. The number of BOPAs granted increased from 500 per quarter in early 2024 to nearly 2000 in Q1 2025.

([157])Rijksoverheid, Kamerbrief voortgang uitvoering Omgevingswet derde kwartaal 2025.

for housing ([158]), and single-instance appeals for priority projects relating to the electricity grid (from July 2026) ([159]). While these may provide temporary relief, they address symptoms instead of tackling the underlying fragmentation across authorities and the redesigning processes that hinder the implementation of the *Omgevingswet*.

A new whole-of-government approach to digitalisation was introduced to strengthen coordination and enhance user-centricity. The Netherlands' digitalisation strategy, launched jointly by all levels of government ([160]) in 2025, acknowledges previously identified shortcomings. Responsibilities tended to be handled in isolation by individual administrations, meaning that the objective of making the system more user-centric and accessible was not addressed properly ([161]). The digitalisation strategy establishes a whole-of-government approach based on a model of 'centralised agreement, federated design'. It is a model that establishes common standards and shared building blocks, while allowing administrations to implement them at their own pace. The strategy places a strong emphasis on making administrative services more user-focused, accessible and seamless.

The Netherlands has enabled the cross-border exchange of data and documents between authorities through the EU Once-Only Technical System ([162]). When services ([163]) become accessible, the public and businesses will no longer have to search for their data, download, and upload documents manually across e-government portals in different Member States. There is scope of improvement in identifying the types of documents and data they need to exchange through the system and explore ways to shift from the submission of unstructured to structured data formats. The Netherlands has authority registries connected in the field of education.

Civil service

The civil service is making progress on gender parity and has high levels of education and adult training. The ratio of staff aged 25-49 to staff aged 50-64 has increasedand remains above the EU average (Netherlands 1.70; EU 1.47) ([164]). The ratio has reached similar levels as the economy as a whole (1.73), and the average age has decreased across the public administration ([165]). The proportion of civil servants with post-secondary education has also increased and remains above both the EU average (Netherlands 63%; EU 55%) ([166]), and the economy as a whole (49%). The proportion of civil servants participating in adult learning remained stable, 16 pps above the EU average (Netherlands 34%; EU 19%) ([167]). Gender parity continues to improve but vary considerably between administrations ([168]). The proportion of women in senior management positions decreased from 47% to 45% ([169]).

([158])Rijksoverheid, 2025, Kamerbrief met kabinetsreactie op adviesrapport STOER and Tweede Kamer der Staten-Generaal, 2025, Wet versterking regie volkshuisvesting.

([159])Tweede Kamer der Staten-Generaal, 2025, Besluit procedurele versnellingen elektriciteitsprojecten.

([160])The Netherlands' Digitalisation Strategy is a joint initiative between the Dutch government, the Association of the Provinces, the Public Services Network, the Dutch Water Authorities and the Association of Netherlands Municipalities.

([161])Netherlands' Digitalisation Strategy, 2025.

([162])European Commission, *Once-Only Technical System Acceleratormeter*, Ec.europa.eu.

([163])Procedure types under Annex II of the SDGR (2018/1724/EU) and directives 2005/36/EC, 2006/123/EC, 2014/24/EU and 2014/25/EU.

([164])European Commission, Eurostat, 2026, European Union Labour Force Survey, Employed persons by economic activity (NACE Rev. 2) (2008-2026).

([165])Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2025, Omvang en samenstelling personeelsbestand.

([166])European Commission, Eurostat, 2026, European Union Labour Force Survey, Employees by educational attainment level and NACE Rev. 2 activity (2008-2026).

([167])European Commission, Eurostat, 2026, European Union Labour Force Survey, Participation rate of employees in education and training (last 4 weeks) by NACE Rev. 2 activity (2008-2026).

([168])Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2025, Omvang en samenstelling personeelsbestand.

([169])European Institute for Gender Equality (EIGE), 2025, National administrations: top two tiers of administrators by function of government.

Integrity

The perception of corruption when doing business in the Netherlands remains low, yet the reported level of experienced corruption is as high as the EU average. Over half of companies perceive corruption as widespread (Netherlands 52%; EU 63%) and 57% consider that excessively close ties between business and political actors contribute to corrupt practices (EU: 76%). 15% of businesses consider that corruption is a problem when doing business (EU: 35%) ([170]).

The Netherlands focuses its efforts on combating the bribery of government officials by organised crime. There is ongoing analysis to identify sectors particularly vulnerable to corruption ([171]) (see also Annex 5). At the same time, a slightly smaller proportion of companies than the EU average report that they have been asked or expected to offer a gift, a favour or extra money for permits, services or procurement (Netherlands 9%; EU 10%). In terms of enforcement, less than half of companies believe that people and businesses caught bribing a senior official are appropriately punished, although this is significantly higher than the EU average (Netherlands 45%; EU 33%) ([172]).

The previous government announced limited procedural improvements as regards the transparency of lobbying. Substantial reform of existing rules has not yet taken place. The government followed up on a study by Leiden University ([173]) on transparency of interest representation and announced procedural improvements such as simplifying the page on which ministers' agendas are published and improving guidance on publication. The previous government had explicitly ruled out a more substantial reform of the existing system or the creation of a transparency register, as it believed the existing measures sufficient ([174]). The current government's coalition agreement includes an explicit commitment to introduce such register ([175]).

The investigation and prosecution of corruption offences remain effective. The government launched a dedicated programme on combating organised crime, which also looks at corruption, assessing risks in public and private bodies. The police introduced a new monitoring programme to better flag cases of potential unauthorised access to official databases by corrupt civil servants and police officials. The Fiscal Information and Investigation Service has reassigned posts internally to increase capacity to investigate the bribery of foreign public officials. It has been fully operational since May 2025, but only partially addresses concerns about the effective enforcement of foreign bribery cases as further results are awaited ([176]).

Justice

The justice system continues to perform efficiently. The time taken to reach a decision in civil and commercial cases in first-instance courts stood at 124 days in 2024 (compared to 127 in 2020; no data are available for the intervening years) ([177]). The estimated time to resolve administrative cases in first-instance courts fell from 267 days in 2023 to 246 in 2024 ([178]).

The level of digitalisation has improved, but there is room for improvement in the use of electronic case allocation. The Netherlands performs well in digital solutions to initiate and follow proceedings in civil/commercial and administrative cases ([179]), and in online access for the general public to published judgments ([180]). It

([170])European Commission, 2025, Flash Eurobarometer survey 557 on Businesses' attitudes towards corruption in the EU.

([171])European Commission, 2025 Rule of Law Report.

([172])European Commission, 2025, Flash Eurobarometer survey 557 on Businesses' attitudes towards corruption in the EU.

([173])Leiden University, 2024, A Mosaic of Interests: Towards better insight in the involvement of externals in public decision-making.

([174])European Commission, 2025 Rule of Law Report.

([175])VVD en CDA, 2026, D66, Aan de slag Bouwen aan een beter Nederland (Coalition agreement 2026-2030).

([176])European Commission, 2025 Rule of Law Report.

([177])European Commission, 2025, EU Justice Scoreboard, figure 5; European Commission, 2026, EU Justice Scoreboard (upcoming). Data collected in the CEPEJ study.

([178])Ibid, figure 7.

([179])Ibid, figure 45.

([180])Ibid, figure 47.

also performs well regarding arrangements for producing machine-readable judicial decisions ([181]).

([181])Ibid, figure 48.

The Netherlands faces significant structural and legal challenges in meeting its climate and environmental objectives, including in relation to its transition to clean industry and water pollution. Addressing grid congestion and excessive nitrogen levels remains crucial for accelerating emission reductions, but additional efforts are also needed to increase demand for low-carbon products and clean energy sources. This is even more pertinent considering the recent 'Bonaire' judgment, which highlights the need to make the country's nationally set climate targets more explicitly legally binding through legislation. While the Netherlands is on track to meet its 2030 effort sharing target, it is falling short of its nationally set greenhouse gas (GHG) reduction targets. Water pollution from industry also remains a concern, despite some improvements, with 90% of the Netherlands' surface water bodies failing to achieve good chemical status. This annex reviews the areas in need of urgent attention in the Netherlands' climate, environmental and clean industry transitions, looking at a number of different aspects.

Industry decarbonisation

Greenhouse gas emissions from industry

The industrial sector in the Netherlands is a significant contributor to the country's GHG emissions, accounting for one of the largest shares of total emissions ([182]). Industry represented approximately 20% ([183]) of the Netherlands' total emissions, making it a major emitter. Most emissions arise from energy consumption and the combustion of fossil fuels for heat and power, rather than from purely non-energy industrial processes. This reflects the sector's energy intensity. The chemicals, petroleum and basic metals industries are significant contributors to GHG emissions, with a relatively small number of installations accounting for the majority of emissions ([184]). In recent years, the Netherlands has made progress in reducing its per capita manufacturing emissions, achieving a decrease of approximately 40% between 2019 and 2023 (compared with an EU average reduction of approximately 22%). However, at 1.64 tonnes of CO_2eq, its per capita emissions remain above the EU average of 1.29 tonnes of CO_2eq ([185]). Although there has also been progress in reducing energy-related GHG emission intensity, a substantial shift towards clean energy sources has not yet been fully realised, with the overall share of renewable energy standing at 20.18% in 2024 ([186]) and the share of renewables in industry at 11.3%.

Policies to promote industry decarbonisation

The Netherlands has developed a variety of policies aimed at decarbonising its industrial sector, yet further efforts remain necessary to meet decarbonisation targets. Key policies include adopting carbon pricing mechanisms, such as the CO_2 levy for industry, which is designed to complement the EU emissions trading system by setting a minimum carbon price for major industrial emitters. However, the 2026-2030 coalition agreement states that the Netherlands will scrap the CO_2 levy ([187]). The Netherlands has also developed innovative, tailor-made agreements with industry stakeholders to facilitate bespoke decarbonisation pathways. Although these agreements continue to encounter delays, a number have now been concluded, with more negotiations ongoing ([188]). New agreements will

([182]) This Annex discusses the transition of Bulgaria's manufacturing industry, specifically its energy-intensive industries, to low-carbon and net-zero modes of production, which is key to preserving competitiveness on the path towards climate neutrality as mandated by the European Climate Law. A broader perspective on the current competitiveness challenges facing Bulgaria's manufacturing industry is provided in Annex 5. For a more detailed description of greenhouse gas emissions from industry, see European Commission (2025), 2025 Country Report - Bulgaria, Commission staff working document, SWD (2025) 205 final, Brussels, 4.6.2025, Annex A7. Clean industry and climate mitigation.

([183]) For more information, see EEA greenhouse gases – data viewer.

([184]) For more information, see Which sectors emit greenhouse gases? (CBS).

([185]) For more information, see ESTAT: ENV_AC_AINAH_R2.

([186]) For more information, see Annex 9.

([187]) For more information, see Aan de slag - Coalitieakkoord 2026-2030.

([188]) The agreements concluded would lead to an additional reduction of 2 megatonnes of scope 1 CO_2 emissions and

focus on sectors or areas, rather than individual companies. The Netherlands has also developed an agenda for action on industrial electrification ([189]). These policies are supported by public funding dedicated to fostering innovation and supporting clean energy projects, such as the Sustainable Energy Climate Transition Incentive Scheme (SDE++) ([190]). The Netherlands also champions public-private partnerships to accelerate innovation and the scaling of low-carbon technologies, as illustrated by the Port of Rotterdam's hydrogen initiatives and carbon capture and storage projects like Porthos ([191]). Strategic investments in clean energy infrastructure further boost these efforts. Despite these initiatives, the Netherlands remains behind in achieving its nationally set ambitions for greenhouse gas reductions in industry by 2030. Projections indicate that current measures will likely be insufficient ([192]).

Calls for support under both national and EU programmes have provided support to decarbonisation efforts in energy-intensive sectors. For instance, the Netherlands participates actively in the EU Innovation Fund ([193]), with selected projects including large-scale green hydrogen production (e.g. Holland Hydrogen I), carbon capture and storage in the Rotterdam and North Sea Port areas (e.g. the Porthos and Aramis projects) and the electrification of industrial heat. These projects contribute to a first-of-a-kind deployment and to reducing technological and investment risks in hard-to-abate sectors. The SDE++ funding programme also supports projects in these sectors.

The Netherlands is working with the financial sector and is implementing sustainable finance policies to support industrial decarbonisation. In 2019, the Dutch financial sector launched the financial sector climate commitment (*Klimaatcommitment*) ([194]), a voluntary initiative in which participants pledge to measure and report financed emissions, submit climate action plans and finance the energy transition. Despite being voluntary, nearly all signatories have published their climate action plans and are actively contributing to the climate and energy transition. The Dutch government maintains an active collaborative and monitoring role. While the emission intensity of the institutional portfolios of institutions that have signed up to the commitment has fallen, the real-world impact has been mixed ([195]). In response to the Omnibus package on sustainability ([196]), the Netherlands is currently updating its Corporate Sustainability Reporting Directive Implementation Act (*Wet implementatie richtlijn duurzaamheidsrapportering*) ([197]).

The Netherlands promotes demand for climate-friendly products through a mix of regulatory frameworks and market-based initiatives. Central to this approach is the country's sustainable public procurement policy and its commitment to achieving a fully circular economy by 2050 ([198]). To achieve these goals, the government integrates rigorous climate and environmental criteria into public tenders, using standardised tools such as the MVI-criteriatool ([199]) and the CO_2 Performance Ladder ([200]). However, despite these robust frameworks, the transition remains challenging. This is partly because there is insufficient demand for low-carbon or circular industrial products ([201]) for significant market

0.5 kilotonnes of nitrogen emissions by 2030. For more information on the latest state of play, see Maatwerkafspraken (NPVI).

([189])For more information, see Actieagenda Elektrificatie Industrie.

([190])The new government intends to increase the overall level of SDE++ subsidies. For more information on SDE++, see SDE++: Features.

([191])For more information on Porthos, see Porthos: CO2-transport en -opslag onder de Noordzee.

([192])For the latest projections, see Klimaat- en Energieverkenning 2025.

([193])Overview of innovation projects supported in the Netherlands (August 2025).

([194])For more information on the initiative, see Klimaatcommitment Financiele Sector.

([195])For more information, see the annual progress reports.

([196]) https://finance.ec.europa.eu/news/omnibus-package-2025-04-01_en.

([197])For the latest status of the law, see Wet implementatie richtlijn duurzaamheidsrapportering.

([198])For more information on this goal, see Circulaire economie in 2050.

([199])Ambitieniveau bepalen MVI-criteriatool.

([200])CO2-Presetatieladder.

([201])See for instance this recent analysis by PBL.

uptake and there is a lack of clarity on post-2030 policies and measures ([202]).

Despite the Netherlands' expanding and comprehensive policy toolkit for the clean industrial transition, challenges remain. A key constraint is severe grid congestion ([203]), which hampers business expansion and decarbonisation projects. This is exacerbated by the nitrogen crisis (*stikstofproblematiek*), which makes it difficult to obtain construction permits, including for industrial decarbonisation projects ([204]). Other constraints include the limited availability of renewable hydrogen at scale and financing gaps for first-of-a-kind projects, despite the SDE++ scheme and EU funding, including from the Recovery and Resilience Facility. Uncertainty regarding long-term electricity and clean energy prices, the pace of the roll-out of the national hydrogen backbone and future demand for low-carbon products continues to weigh on investment in net-zero industries. Concerns about international competitiveness and carbon leakage risks persist in energy-intensive sectors. Consequently, many industrial decarbonisation measures remain at an early stage of deployment. Implementation will need to pick up pace in the second half of the decade to meet the nationally set target for GHG emission reductions in industry by 2030.

Economy wide GHG reduction

The structural and legal challenges to achieving climate neutrality and the interim 2030 GHG reduction targets have increased as a result of the 'Bonaire' judgment and persistent domestic emission gaps. In January 2026, The Hague District Court ruled that the absence of effective climate adaptation and mitigation measures for the Caribbean Netherlands violates fundamental human rights, making it necessary to implement equivalent protection across all Dutch territories ([205]). This landmark ruling could create immediate fiscal and legislative pressure to finalise a comprehensive climate adaptation plan for Bonaire by 2030. It also highlights the need for the country's nationally set climate targets to be made more explicitly legally binding through legislation. The 2025 Climate and Energy Outlook (KEV 2025) confirmed that the Netherlands is currently not on track to meet its nationally set economy-wide 55% GHG emission reduction target or its sectoral targets for industry and agriculture ([206]). Meeting those targets would require efforts to be stepped up to implement policies and measures including, but not limited to, electricity grid expansion and nitrogen reduction. While the Dutch government is appealing the Hague District Court's ruling ([207]), the 'provisionally enforceable' status (*uitvoerbaar bij voorraad*) ensures that compliance remains mandatory during the appeal procedure, unless a suspension is granted.

Reduction of effort sharing emissions

Compliance with effort sharing limits with domestic measures

For 2030, the Netherlands' effort sharing emissions are projected to be above its target, but it could cover the gap with unused emission allocations from previous years ([208]). In 2024, GHG emissions from the Netherlands' effort sharing sectors are expected to have been 36% below those of 2005. By 2030, current and planned policies and measures are expected to lead to a decrease of 46.7%, leaving a gap of 1.3 percentage points to the 2030 target of 48%. The Netherlands could bridge this gap with

([202])See Klimaat- en Energieverkenning 2025 | Planbureau voor de Leefomgeving.

([203])See also Annex 9.

([204])See also Annex 10.

([205])For more information, see this Uitspraken - ECLI:NL:RBDHA:2026:1344.

([206])See KEV 2025.

([207])For more information, see Kamerbrief over hoger beroep in Klimaatzaak Greenpeace Bonaire.

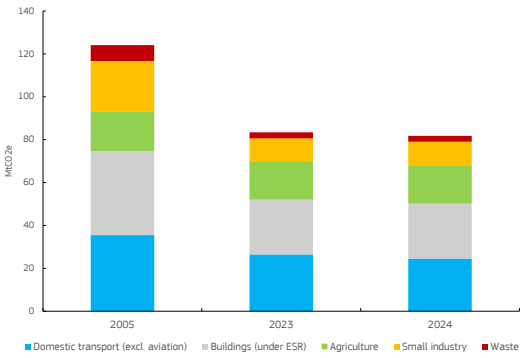
([208])The national GHG emission reduction target is set out in Regulation (EU) 2018/842 (the Effort Sharing Regulation). It applies jointly to buildings (heating and cooling), road transport, agriculture, waste and small industry (known as the effort sharing sectors). The emissions from effort sharing sectors for 2024 are based on approximated inventory data. The final data will be established in 2027 after a comprehensive review. Projections about the impact of current policies ('with existing measures', WEM) and additional policies ('with additional measures', WAM) as per the Netherlands' 2025 reporting under Article 17 of Regulation (EU) 2018/1999 (the Governance Regulation). Also see European Commission (2025), Climate Action Progress Report 2025 – Technical Information, Commission staff working document, Brussels, Chapter 9 (pp. 111ff.), and in particular Tables 25 and 26.

unused annual emission allocations from previous years. Swift and steady implementation of the additional measures will remain crucial to progress towards climate neutrality. While many of the policies and measures outlined in the final updated Dutch energy and climate plan remain relevant, several have been adjusted to align with new government plans; a recent national assessment of these measures confirms that, in cumulative terms, the Netherlands would remain under the limits provided for by its annual emission allocations ([209]). Since this analysis, the Netherlands has introduced additional policies that could further reduce emissions covered by the Effort Sharing Regulation, such as cancelling the reduced tariff for diesel used in agricultural vehicles and implementing measures to increase sustainable mobility.

Sustainable transport

The Netherlands remains a front runner in the transition to sustainable mobility, with a dense charging network and a mature market for zero-emission vehicles. Road transport is the largest sector in terms of GHG emissions under the Effort Sharing Regulation, together with energy use in buildings, both accounting for around 30% of the effort sharing emissions in the Netherlands ([210]). Road transport emissions in 2024 were 7% lower than in 2023. In February 2026, the market share of battery electric vehicles in new passenger car sales reached 28%, among the highest in the EU ([211]). Electric vehicles are supported by the continued roll-out of alternative fuels infrastructure. The Netherlands already has more than 202 000 electric charging stations, of which more than 6 600 are fast charging stations ([212]). The second-hand market for electric vehicles is expanding, but a persistent mismatch remains between the supply of ex-lease luxury vehicles and the demand for more affordable, compact models. To sustain the transition, the policy focus has recently shifted towards tax-based incentives and the expansion of zero-emission zones in over 30 cities, which began enforcing stricter access requirements for delivery vans and trucks in early 2025.

Graph A8.1: **Greenhouse gas emissions in the effort sharing sectors, 2005, 2023, and 2024**



Source: European Environment Agency.

Efforts to promote modal shifts are increasingly centred on addressing congestion on the rail and road networks. The road and rail networks are operating close to their physical limits, and minor technical failures often trigger system-wide delays. The Netherlands has the highest bicycle use in the EU ([213]). Active mobility (i.e. cycling and walking combined) accounts for about 50% of all trips ([214]). However, this success in sustainable urban transit cannot fully offset the infrastructure hurdles facing heavier transport. Congestion in the national electricity grid has become a critical bottleneck for the further electrification of heavy-duty trucks and public bus fleets.

The Netherlands, home to one of the most important European aviation hubs (i.e. Amsterdam Schiphol airport), hosts two operational sustainable aviation fuel (SAF) facilities. It also has a long list of synthetic sustainable aviation fuel (eSAF) projects in the pipeline. Planned State aid for these projects could amount to EUR 300 million ([215]).

Decarbonisation of fisheries

([209])For an assessment of the policies adopted as at 1 January 2025 and proposed/additional policies as at 1 May 2025, see Klimaat- en Energieverkenning 2025 | Planbureau voor de Leefomgeving.

([210])See Graph A8.1, and Table A8.1 at the end of this Annex.

([211])For more information, see Stand van zaken elektrisch vervoer en laadpunten (2026).

([212])For more information, see Laad- en tankinfrastructuur in Nederland.

([213])Cycling facts 2023.

([214])Fietsen en lopen: de smeerolie van onze mobiliteit (2015).

([215])For more information, see this ReFuelEU Aviation Annual Technical Report 2025.

The Dutch fishing fleet is among the higher emitting fleets in the EU in terms of total CO2 equivalents, amounting to an average of 479 thousand tonnes CO_2eq between 2018 and 2022 ([216]), and 120.6 million litres of marine fuel consumed in 2023. In view of climate change mitigation, both the fisheries and aquaculture sectors face the dual challenge of moving away from fossil fuels and increasing energy efficiency to enhance sector resilience. This requires a comprehensive energy transition strategy that incorporates renewable energy sources, technological innovation, adequate infrastructure and access to energy sources, and improved energy practices across the sector's operations.

Sustainable industry

Circular economy industry

The Netherlands is one of the EU's top performers in the circular economy, notably in resource productivity, secondary material use and waste management and is not at risk of missing municipal and packaging waste targets. Further progress could be achieved through economic instruments to reduce incineration of recyclable waste and incentivise reuse and recycling ([217]). The circular material use rate reached 32.7% in 2024 (EU: 12.2%), the highest in the EU ([218]), while resource productivity stood at EUR 8.17/kg (EU: EUR 3/kg). Over five years, resource productivity increased by 72% ([219]). and material consumption decreased by 12% ([220]) However, the circular economy sector remains small, accounting for around 1.1% of employment (110 000 FTEs), below the EU average of 2% ([221]). Municipal waste generation declined to 473 kg per capita in 2024 (EU: 517 kg) ([222]). The recycling rate reached 58% (EU: 48.1%), while landfilling is limited to 1.5%. Nevertheless, 40.6% of waste is still incinerated (EU: 26.1%), indicating scope to further shift waste towards reuse and recycling. Incineration volumes have remained broadly stable, with a decline in imported waste (from ~25% in 2016 to 16% in 2022) partly offset by increased domestic incineration ([223]). Incinerated waste consists mainly of organic matter, plastics, construction waste, paper and sorting residues ([224]). At the same time, material import dependency remains very high at 82.7% in 2023 (EU: 22%) and has increased since 2011 ([225]), highlighting continued reliance on external resources. Performance is particularly strong in specific streams: 100% of construction and demolition waste is recovered (EU: 89%) ([226]) and plastic packaging recycling reached 49.1% in 2023 (EU: 42%) ([227]).

The Netherlands also stands out as a good performer in patents related to recycling and secondary raw materials. In 2019, it filed 24.6 patents (1.42 per million inhabitants). In 2021, this number increased to 29.68 (or 1.69 per million inhabitants), far above the EU average (0.73 per million inhabitants) ([228]). The Eco-Innovation Index score also reflects this trend, indicating above-average performance in environmentally sustainable innovation (133.1 vs an EU average of 127.5 in 2024).

The GHG emission intensity of energy consumption is slightly higher than the EU average (91.1 vs 82.8, based on 2018-2020

([216])Study on greenhouse gas emission (GHG) reduction costs, scenarios and pathways for EU fisheries to achieve net zero by 2050 - Publications Office of the EU.

([217])European Commission, Environmental Implementation Review (2025), Netherlands country report, p. 2.

([218])Eurostat, Circular Material Use rate.

([219])Eurostat, 'Resource productivity', last updated on 4 July 2025, accessed on 13 January 2026.

([220])Eurostat, Material footprints.

([221])Eurostat, Persons employed in circular economy sectors, last updated on 21 March 2025, accessed on 16 January 2026.

([222])Eurostat, Municipal waste by waste management operations.

([223])PBL, Integrated Circular Economy Report 2025.

([224])Rijkswaterstaat 2023.

([225])ETC-CE Report 2024, Netherlands_2024 CE Country profile_Final.pdf, p. 7.

([226])Techno-economic and environmental assessment of CDW management, JRC, 2024.

([227])Eurostat, Packaging waste by waste management operations, last updated on 17 October 2025, accessed on 16 January 2026.

([228])Eurostat, Patents related to recycling and secondary raw materials, last updated on 25 November 2025, accessed on 16 January 2026.

data), which shows that the Dutch energy mix still relies more heavily on fossil fuels ([229]).

The Netherlands' circular strategic objective since 2016 remains the same: to achieve a 50% reduction in the use of primary raw materials by 2030. In 2023, the Netherlands put in place the 2023-2030 national circular economy programme ([230]), following up on the broader 2016 programme on a fully circular economy by 2050 ([231]). To achieve the ambitious objectives from 2016, the 2023-2030 programme introduced measures to improve the economy of raw materials, with a focus on reducing and substituting raw materials, extending product lifetimes, high-grade processing and circular design. Dedicated initiatives have been developed for the more impactful product groups, namely some consumer goods, plastics, construction products and certain manufacturing practices.

The new update of the 2025 national circular economy programme (NPCE 2025) ([232]) aims to reduce raw material consumption by 15% by 2035 compared with 2016 levels. The programme sets targets of 82% for waste recycling and 55% for the use of recycled or sustainable materials. However, the update has drawn criticism for its lack of concrete measures and insufficient funding. In addition, there is a significant gap between, on the one hand, the ambition and perceived need to move towards a circular economy and, on the other hand, the resources deployed under the NPCE 2025 to achieve this ([233]).

Extended producer responsibility (EPR) schemes are well developed in the Netherlands. A statutory EPR already applies to the following product groups: cars, car tyres, packaging, batteries and accumulators, electrical and electronic equipment, packaging from the office, shops and services sector, disposable plastics, and textiles. EPRs for nappies and incontinence materials are being developed. The scope for developing EPRs for furniture, agricultural film and floor coverings is also being explored. For a number of waste flows, producers have set up producer responsibility themselves, without a statutory EPR, and that producer responsibility has been declared universally binding ([234]). Under the updated 2025 national circular economy programme ([235]), a process is under way to improve the EPR system. It is to be modernised and extended to include repair and reuse. Points for improvement include: (i) clearer responsibilities for producers, municipalities and other stakeholders involved in EPRs; (ii) requirements for producer organisations; and (iii) improved enforceability for all parties involved in EPRs by supervisory bodies and environmental services. In terms of the separate collection of waste electric and electronic equipment (WEEE), the Netherlands is above the EU's 2019 target of 65%, with a collection rate of 80.5% in 2023, compared with 72.6% in 2022. In 2024, an infringement case was opened by the Commission, as the Netherlands did not achieve the agreed collection recycling rate for WEEE in 2021 (INFR(2024)2125). In November 2025, a new infringement case (2025/0349) was initiated for late transposition of the revised WEEE Directive (Directive 2024/884/EU). The reply was satisfactory, indicating that transposing legislation would be adopted in May 2026.

The total amount of household waste has decreased, while the recycling rate has remained relatively stable. The total amount of household waste in 2022 was 8.0 megatonnes, which is lower than in previous years: 9.0 megatonnes in 2020 and 8.3 megatonnes in 2016 (Rijkswaterstaat 2024b). This equates to around 457 kg of waste per person in 2022, compared with 519 kg in 2020 and 489 kg in 2016. For household waste, a recycling rate of 53% was achieved in 2022, which is a slight decrease from 54% in 2020, but slightly higher than 51% in 2016. These are the waste streams that are actually recycled and not what has been

([229])European Commission, European Innovation Scoreboard 2025, The Netherlands, p. 7.

([230])Ministry of Infrastructure and Water Management, National Circular Economy Programme 2023-2030.

([231])Ministry of Infrastructure and Water Management, National Agreement on the Circular Economy, 2016.

([232])Ministry of Infrastructure and Water Management, National Circular Economy Programme 2025.

([233])PBL, Netherlands Environmental Assessment Agency, 14 October 2025, Reflection on the update of the National Circular Economy Programme, p. 3.

([234])Ministry of Infrastructure and Water Management, National Circular Economy Programme 2023-2030, p. 43.

([235])Ministry of Infrastructure and Water Management, National Circular Economy Programme 2025, p. 30.

collected and sorted, bearing in mind that streams are still lost after sorting. In the production of pictorial plastic recyclates, there are often unusable fractions left over, and much of the sorted plastic waste is found to be too contaminated for recycling, which means that it is still incinerated.

The Netherlands remains highly dependent on imports of critical raw materials, with rising supply risks for key industrial sectors (see also Annex 5 on Industry for further details on strategic dependencies and trade flows). Supply risks for the most critical raw materials used in industrial sectors that are important for the Dutch economy, such as manufacturing, have increased over the past decade ([236]). The Netherlands' tools to encourage circular practices remain underexploited. The Netherlands has a tax on landfill disposal and incineration of municipal solid waste. It amounted to EUR 39.70/tonne in 2025 ([237]). However, the Netherlands could consider updating the rates to maintain incentives for recycling and waste prevention as the market evolves. The current waste tax rate is well below the benchmark recommended by Hogg et al. (EUR 50 per tonne) ([238]). In addition, at the request of the Ministry of Finance, the Ecorys/CE Delft consortium evaluated the waste tax in October 2024 and one of its conclusions was that the exemption for the incineration of sewage sludge should be removed ([239]). In addition to the environmental advantages, increasing the landfill tax and waste incineration tax would increase revenues by EUR 33 million and EUR 696 million, respectively, from current level by 2030 ([240]).

Bioeconomy industry

In the Netherlands, bioeconomy value added grew by 6.5% on average between 2018 and 2023, driven in particular by the food and beverages and wood products and furniture subsectors. The food and beverages subsector registered the highest growth in value added (6.4% on average between 2018 and 2023) ([241])([242]).

Overall bioeconomy employment has shown limited growth. However, of the bioeconomy subsectors of interest, food and beverages, wood products and furniture, and bio-based chemicals and plastics all recorded higher than average employment growth ([243]). In particular, the bio-based chemicals and plastics subsector registered the highest growth in total employment between 2018 and 2023 (2.8% on average).

Labour productivity in the bioeconomy – measured as value added per person employed – stood at 121.6% of the national average and has grown from 107.8% in 2018 ([244]).

R&D business expenditure from bioeconomy-relevant subsectors has grown in line with overall R&D business expenditure in the Netherlands (7.1% compared with an average of 7.2% between 2018 and 2023) ([245]).

Zero-pollution industry

Air quality in the Netherlands is generally good, with some exceptions. The latest available annual estimates for 2023 attribute 3 847 deaths each year (or 39 747 years of life lost (YLL)) to fine particulate matter (PM2.5), 1 074 deaths each year (or 11 103 YLL) to NO_2 and 1 795 deaths each year (or 18 639 YLL) to ozone. All indicators for each parameter had fallen in comparison with 2022 ([246]). Emissions of several air pollutants have decreased significantly since 2005, while GDP growth has continued. According to inventories submitted under the National Emission Reduction Commitments Directive (NECD)

([236])PBL, Integrated Circular Economy Report 2025, p. 15.

([237])https://ce.nl/publicaties/evaluatie-afvalstoffenbelasting/.

([238])European Commission, Greening the European Semester – Resource and Pollution Taxes (2025), Annex 6, Netherlands (p. 299).

([239])Evaluatie afvalstoffenbelasting - CE Delft.

([240])European Commission, Greening the European Semester – Resource and Pollution Taxes (2025), Annex 6, Netherlands (p. 300).

([241])Bioeconomy subsectors: food and beverages; bio-based textiles; wood products and furniture; bio-based chemicals and plastics.

([242])Joint Research Centre, Developments of Economic Growth and Employment in Bioeconomy Sectors across the EU.

([243])Joint Research Centre, Developments of Economic Growth and Employment in Bioeconomy Sectors across the EU.

([244])Ibid.

([245])Joint Research Centre, Business expenditure in Research and Development (R&D) in the EU bioeconomy.

([246])EEA, 2025, Harm to human health from air pollution in Europe: burden of disease status, 2025, Link.

in 2024, the Netherlands met its emission reduction commitments for 2020–2029 for nitrogen oxides (NOx), non-methane volatile organic compounds (NMVOC), sulfur dioxide (SO_2), ammonia (NH_3) and PM2.5, and is projected to meet its commitments for 2030 onwards. In addition, limit values under the Ambient Air Quality Directive (AAQD) were not exceeded in 2023([247]). However, these positive trends at national level contrast with persistent challenges related to nitrogen deposition, which continues to exceed critical loads in many sensitive ecosystems and remains a key driver of biodiversity loss.

In 2022, the Netherlands incurred damage costs from concentrations above air quality standards. Annual damage costs are estimated at EUR 16.3 million per year ([248]). This underscores the potential benefit of further action, particularly in industrial regions and urban transport corridors. The solution to air pollution can be found through a combination of measures: (i) sustainable transport, energy and agricultural policies to reduce emissions of air pollutants; (ii) targeted urban and land-use planning policies; and (iii) specific fiscal actions (removing environmentally harmful subsidies and increasing targeted environmental taxation).

Water pollution from industry also remains a critical challenge, imposing direct and indirect costs of EUR 89 million annually ([249])**.** The Netherlands had a high level of pollutant releases into water in 2022, with 0.82 kg/EUR 1 billion GVA, weighted by human toxicity factors (2022 EU average: 0.86). Nevertheless, between 2010 and 2023, there was a 35% reduction in industrial heavy metal releases (cadmium, mercury, nickel and lead), a 27% drop in total organic carbon emissions and a 26% reduction in total phosphorus emissions as reported under the Industrial Emissions Directive ([250]). However, 90% of the Netherlands' surface water bodies is still failing to achieve good chemical status due to the presence of ubiquitous, persistent, bio-accumulative and toxic substances (uPBTs) ([251]) that result from industrial activities (e.g. PFAS). The Netherlands has the 9th highest level of emissions of heavy metals to water and is in 12th place for emission intensity (slightly below the EU average intensity of 0.864 kg/EUR 1 billion GVA). (see also Annex 10 on Decarbonisation for further details on the chemical status of water bodies). The total economic cost of industrial pollution in Netherlands was just over EUR 16 billion in 2021, encompassing healthcare expenses, lost productivity and environmental degradation ([252])([253]). Yet, investment still falls short. To meet national and EU targets for pollution prevention and control, the Netherlands would need to spend an additional EUR 2.3 billion per year (about 0.25% of GDP), largely focused on improving air quality – particularly in industrial regions and urban transport corridors ([254]).

([247])Directive 2008/50/EU of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe (OJ L 152, 11.6.2008, p. 1).

([248])EEA, The costs to health and the environment from industrial air pollution in Europe – 2024 update. The costs reported are calculated in terms of value of a statistical life (VSL).

([249])European Commission: Directorate-General for Environment, IEEP, Green taxation and other economic instruments – Internalising environmental costs to make the polluter pay (p. 35, Table 5), 2021.

([250])EEA, Water pollutant releases changes from 2010 to 2022 for the EU Member States, 2024.

([251])European Commission, Third River Basin Management Plans Second Flood Hazard and Risk Maps and Second Flood Risk Management Plans Member State: Netherlands, 2025.

([252])European Commission: Directorate-General for Environment, Camboni, M., Markandya, A., Tyrer, D., Goonesekera, S. et al., *Greening the European Semester – Resource and pollution taxes. Annex 6, Country factsheets*, Publications Office of the European Union, 2026.

([253])EEA, The costs to health and the environment from industrial air pollution in Europe – 2024 update. The costs reported are calculated in terms of value of a statistical life (VSL).

([254])European Commission, Environmental Implementation Review (2025), Netherlands country report.

Table A8.1: **Key clean industry and climate mitigation indicators: The Netherlands**

Climate mitigation	Netherlands							Trend	EU	
Industry decarbonisation	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**		**2018**	**2023**
GHG emissions intensity of manufacturing production, g/€ [1]	428	407	417	375	320	298	319	↘	330	-
Share of energy-related emissions in industrial GHG emissions [2]	54.2	55.6	55.5	57.3	57.3	56.7	-	↗	55.5	57.9
Energy-related GHG emissions intensity of manufacturing and construction, g/€ (3)	237.0	232.5	235.9	216.2	183.8	174.1	-	↘	203.9	163.0
Share of electricity and renewables in final energy consumption in manufacturing, % (4)	24.3	24.5	24.4	24.2	25.3	25.1	24.3	↘	42.8	43.9
Energy intensity of manufacturing, GWh/€ [4]	1.72	1.66	1.69	1.52	1.33	1.28	1.37	↘	1.27	1.05
Share of energy-intensive industries in manufacturing production, % in GVA [5]	21.08	18.75	17.06	18.43	15.31	12.96	12.93	↘	-	-
GHG emissions intensity of production in sector [..], g/€ [6]										
- paper and paper products (NACE C17)	326	278	248	321	276	249	287	↗	722	619
- chemicals and chemical products (NACE C20)	2 059	2 218	2 476	2 125	1 907	2 248	2 350	↘	-	-
- other non-metallic mineral products (NACE C23)	798	660	631	618	557	590	546	↘	2 495	2 352
- basic metals (NACE C24)	3 786	3 886	3 725	3 405	3 490	3 413	3 898	↗	2 842	3 099
Reduction of effort sharing emissions	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**		**2018**	**2023**
GHG emission reductions relative to base year, %				-27.4	-33.6	-34.6	-36.0			
- domestic road transport	-14.3	-15.6	-28.2	-27.8	-28.4	-25.3	-30.7	↘	-1.4	-5.6
- buildings	-11.2	-13.9	-18.3	-11.3	-29.7	-34.7	-34.6	↘	-20.3	-33.5
	2005			**2021**	**2022**	**2023**	**2024**	**Target**	**WEM**	**WAM**
Effort sharing: GHG emissions, Mt; target, gap, %	128.1			93.1	85.0	83.7	82.0	-48.0%	-44.3%	-46.7%
Sustainable road transport	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**		**2018**	**2021**
New zero-emission vehicles, electricity motor, % [7]	5.41	13.82	20.50	19.75	23.47	30.83	34.64		↗	1.03	8.96
Number of publicly accessible AC/DC charging points [8]	-	-	64457	84588	114310	144450	183000	202833	↗	446956	n/a
Share of electrified railways, % of total [9]	73.16	73.16	73.17	74.45	74.48	74.55	74.43		↗	55.47	56.49

Sustainable industry	Netherlands							Trend	EU-27	
Circular economy transition	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**		**2018**	**latest data**
Material footprint, tonnes per person	8.8	9.5	9.5	8.9	9.0	7.8	8.3	↘	14.8	13.7
Circular material use rate, %	28.0	26.9	28.2	30.1	28.5	32.0	32.7	↗	11.6	12.2
Resource productivity, €/kg	4.6	4.8	5.1	5.9	6.0	7.4	8.2	↗	2.1	3.0
Employees in circular economy	1.2	1.2	1.2	1.2	1.1	1.1	-		2.1	2.0
Patents in circular economy	31.23	24.6	18.5	29.7					12.3	12.0
Recycling rate	55.9	56.9	57.0	57.8	57.6	57.9	58.0		46.40	48.1
Plastic recyling	52%	57%	49%	49%	46%	49%	-		41%	42%
Construction and demolition waste (CDW) recovery	100	-	100						88	89
Bioeconomy industry	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**CAGR 2018-2023**	**2018**	**2023**
Value added, million EUR	32 041	34 291	34 588	36 233	43 368	46 703	-	6.5%	642 438	863 436
Employment, total number of people employed	395 402	403 197	403 470	407 582	408 185	413 291	-	0.7%	17 649 040	17 085 642
Productivity										
Valued added per worker, thousand EUR	81.0	85.0	85.7	88.9	106.2	113.0	-	5.7%	36.4	50.5
Valued added per worker, % of national average	107.8	110.1	112.4	108.8	119.6	121.6	-	-	62.2	70.7
R&D business expenditure										
Total bioeconomy (biomass producing and converting sectors)	1 084	1 239	1 332	1 502	1 394	1 634		7.1%	15 672	23 335
Total R&D business expenditure	10 998	11 846	12 314	13 048	14 806	16 711	-	7.2%	196 587	259 525
Zero pollution industry	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**		**2018**	**2021**
Damage cost for industrial pollution	18.3	17.5	16.2	16.3	-	-	-		414.9	352.7
Water industrial pollutants releases	Cd, Hg, Ni, Pb		nitrogen		TOC		Phosporus			
	2021	change (2010)	2021	change (2010)	2021	change (2010)	2021	change (2010)		
	7 504	-31%	11 657 800	-5%	16 246 300	-23%	1 178 220	-19%		
Water chemical status		Good	70	Good (%)	0.1		Poor	673.0	Poor (%)	90%

Sources and notes: **Industry decarbonisation:** All data are from Eurostat; data following the UNFCCC Common Reporting Format (CRF) are from the European Environment Agency (EEA), republished by Eurostat. (1) Sectors covered: all divisions of section C - Manufacturing - of the NACE Rev. 2 statistical classification of economic activities, except C19 (manufacture of coke and refined petroleum products). (2) GHG emissions as per UNFCCC Common Reporting Framework (CRF) categories 1.A.2 - fuel combustion in manufacturing in industries and construction (that broadly correspond to the broadly correspond to the NACE sections C - Manufacturing and E - Construction, excluding C-19), and CRF2 - industrial processes and product use. The figures shows the emissions in the 1.A.2 category as a share of the sum of CRF1.A.2. and CRF2 emissions. (3) Sectors covered: CRF 1.A.2 as described above. Gross value added (GVA) data in the denominator aligned in sectoral coverage, in 2020 prices. (4) Sectors covered: NACE section C excluding C19. (5) Nominator: NACE divisions C17, 20, 23, 24; denominator: NACE section C excluding C19 (see above). (6) GVA (denominator) in 2020 prices. **Reduction of effort sharing emissions:** Data source: European Environment Agency, greenhouse gas data viewer; European Commission, Climate Action Progress Report, 2025. For details, see the footnote in the "Reduction of effort sharing emissions" section. **Sustainable road transport:** (7) Source: Eurostat; (8) Source: European Alternative Fuels Observatory; (9) Source: Eurostat. For all climate mitigation indicators, the trend arrows compare the latest available data (year t) with the data four years earlier (t-4). **Sustainable industry**: Bioeconomy value added, employment and productivity: JRC, Developments of Economic Growth and Employment in Bioeconomy Sectors across the EU. Bioeconomy R&D business expenditure: JRC, Business expenditure in Research and Development (R&D) in the EU bioeconomy. Damage cost for industrial pollution: EEA, The costs to health and the environment from industrial air pollution in Europe, 2024. Water industrial pollutants releases: EEA, Industrial releases of pollutants to water and economic activity in the EU-27, 2024. Water chemical status: WISE, Surface water bodies: Chemical status, 2024 and WISE Groundwater bodies: chemical status, 2024. Other indicators: Eurostat. For circular economy indicators, the trend arrows compare the latest available data (year t) with the data two years earlier (t-2).

This annex outlines the progress made and the ongoing challenges faced in increasing energy affordability, while advancing the transition to net zero, increasing grid capacity and flexibility and accelerating the deployment of renewable energy and energy efficiency (see also Annex 8). It reflects the implementation of past energy-related country-specific recommendations (CSRs) for the Netherlands.

In 2025, overall, the Netherlands progressed in advancing decarbonisation, making efforts in the streamlining of permitting procedures and the deployment of renewable energy sources. However, the country still relies on fossil fuels for electricity generation, making it vulnerable to price spikes. Challenges remain in enhancing the effective use of existing cross-border infrastructure and in reducing electricity grid congestion and implementing flexibility solutions.

Energy prices and costs

In the first half of 2025, household electricity prices in the Netherlands declined and remained below the EU average, at EUR 0.2342/kWh. Household gas prices also decreased but stayed well above the EU average, at EUR 0.1617/kWh, the third highest in the EU. Conversely, electricity industrial prices declined compared to 2024 but remained above the EU average. Non-household gas prices stabilised yet also remained above the EU average.

Overall, final energy price signals in the Netherlands in the first half of 2025 remained unbalanced. For large businesses, electricity was 2.7 times more expensive than gas in the first half of 2025 even though taxes and levies (excluding VAT and recoverable charging) accounted for 22% of electricity bills and 29% of gas bills. Network costs are a separate component of retail electricity prices and make up a significant share in the Netherlands, reflecting relatively high transmission and distribution tariffs compared with the EU average. Excluding taxes and levies, the electricity-to-gas price ratio would have increased to 3.4, indicating that the Dutch fiscal measures partly mitigate the price imbalance between electricity and gas. For household consumers, the impact of taxes and levies on the electricity-to-gas price ratio is even more substantial, with the ratio increasing from 1.4 to 3.6 once taxes are excluded, reflecting the presence of negative taxes in the overall electricity retail price for household consumers and the significant proportion of taxes (53.9%) in the final gas price([255]).

Due to continued reliance on fossil fuels for electricity generation, limited non-fossil flexibility and declining interconnectivity, wholesale electricity prices in the Netherlands averaged EUR 88/MWh in 2025, slightly above the EU average of EUR 85([256])**.** This reflects the day-ahead wholesale market price of electricity excluding taxes, network tariffs and retail margins. Fossil fuels accounted for over 48% of the Netherlands' electricity generation in 2025, the seventh-highest share in the EU, while natural gas maintained its structural role as the dominant, and costly, marginal price-setting technology. Average day-ahead electricity prices increased by 13% in 2025 amid rising natural gas procurement costs and heightened electricity demand.

Short-run marginal costs ([257]) **of natural gas in the EU increased from EUR 96/MWh in 2024 to nearly EUR 103/MWh in 2025.** Although daytime prices have fallen in recent years owing to the growing penetration of solar power, the Netherlands remains vulnerable to severe price spikes during peak-demand hours. This is because falling solar output in the evening and early morning, combined with limited non-fossil flexibility, have led to a significant ramp-up of gas-fuelled plants to cover the supply–demand gap. As a result, price spreads ([258]) in the Netherlands averaged EUR 118/MWh in 2025, up 4% from 2024.

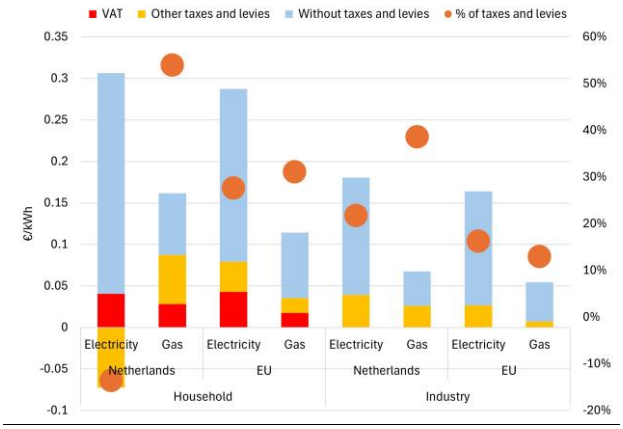
([255])Analysis based on Eurostat data from the first half of 2025.

([256])Source: Ember.

([257])Short-run marginal costs (SRMCs) are the sum of the variable costs associated with producing electricity using hard coal and fossil gas. These are fuel costs, carbon costs and variable operating and maintenance costs. Estimates are provided by Ember.

([258])'Spread' refers to the difference between the highest and lowest hourly day-ahead electricity prices in a single day.

Graph A9.1: **Electricity and gas prices for household and non-household consumers, first half of 2025**



(i) For household consumers, the consumption band is DC for electricity and D2 for gas.
(ii) For non-household consumers, the consumption band is ID for electricity and I4 for gas. VAT and recoverable charges are not displayed for non-household consumers as these are typically recovered by businesses. This also applies to the '% of taxes and levies', which is shown excluding VAT and recoverable charges for non-household consumers.
(iii) 'Without taxes and levies' indicates the retail price excluding all taxes and levies. It always includes the energy/supply and network cost components, which are not disaggregated in Eurostat's six-monthly price dataset.
Source: Eurostat

Graph A9.2: **Low-carbon electricity generation vs. electricity wholesale prices, 2025**

Unavailable data for Cyprus and Malta. Wholesale price is given as average of day-ahead electricity prices over 2025. EU-27 average is calculated as consumption-weighted. EU low-carbon share is calculated out of total EU electricity generation. Low-carbon share by country is calculated out of total public electricity generation. Low-carbon includes renewables and nuclear.
Source: Eurostat

Flexibility and electricity grids

The Netherlands is progressing to facilitate demand-side response and consumer empowerment. However, some barriers remain. Currently the roll-out of smart meters is above 90%. This has facilitated the introduction of dynamic contracts, which have increased to 4% of total contracts. This, together with a 29% rate of prosumers, creates many options for demand response. Net metering *(saldering)* will no longer be possible as of 1 January 2027 so as to encourage households to use self-generated electricity instead of feeding power back into the grid. The direct use of self-generated electricity reduces pressure on the grid.

While the country is physically well-linked to other markets in neighbouring countries, the nominal interconnection level is currently calculated at 9.53% for 2026, below the EU's 2030 target of 15%, largely due to the increasing volume of renewable generation relative to total capacity. Increasing the effective use of existing cross-border infrastructure remains challenging, highlighting the importance of cross-border coordination and flexibility solutions to manage congestion and grid connection constraints. To address these constraints, the national regulator (ACM) has recently launched several initiatives to enhance grid flexibility, including the promotion of 'flexible connection and transmission agreements' (contracts with a lower transport right) and the expansion of congestion management to the distribution level.

While the Netherlands has ensured that 70% of transmission capacity is offered for cross-zonal trade at the high-voltage direct current (HVDC) bidding zone borders with Denmark and Norway, this is not the case for cross-zonal trade within the Core ([259]) **capacity calculation region (CCR).** The

([259])Core is the CCR which covers central European countries, namely Belgium, Czechia, Germany, France, Croatia, Hungary, the Netherlands, Austria, Poland, Romania, Slovenia, Slovakia and, once connected, Ireland. A CCR is a group of countries which calculate cross-border electricity trade flows together.

Netherlands is part of the Core and Hansa ([260]) CCRs. The requirement to make at least 70% of capacity available for cross-border trade has not yet been implemented in most Core Member States, including the Netherlands.

In December 2019, the Dutch Ministry of Economic Affairs and Climate Policy adopted an action plan setting a linear trajectory for the minimum capacity available for cross-zonal trade by reinforcing the electricity grid to enable it to meet the 70% target by the end of 2025.

In addition, to manage these internal constraints, the Dutch transmission system operator TenneT has requested and been granted a derogation from the cross-zonal capacity 70% target, on the grounds of excessive loop flows from neighbouring Member States, most notably Germany.

Consequently, the Netherlands faces a major challenge at both transmission and distribution network level. Despite the allocation of a substantial investment budget, with grid operators noting that financing is no longer the primary constraint—the core challenges have shifted to execution. Many consumers, including industrial consumers and housing estates, cannot be connected to the grid because lengthy permitting and spatial planning procedures, as well as severe shortages of skilled labour required to expand and manage the network. Steps are being taken to reinforce the system, but given these non-financial bottlenecks, improvements will take time and congestion will continue to be a problem in the coming years. The transmission network operator TenneT plans to invest EUR 38 billion from 2024 to 2034 and to carry out around 700 major infrastructure projects, including grid extensions, replacement investments, new customer connections, offshore wind farms and reconstruction projects. These investments are aligned with ten-year network development plan (TYNDP)-identified needs for large-scale grid expansion and the new project of common interest to integrate an offshore wind hybrid interconnector with Germany.

The Energy Act has been revised to update, modernise and integrate the regulatory framework for gas and electricity energy systems. The energy market reform package includes measures that aim to reduce congestion on the electricity grid. In 2023, 62 GWh of renewables were curtailed (0.3% of total renewable energy production) ([261]), while negative day-ahead prices occurred 315 times ([262]).

The Netherlands' reported electricity storage capacity is around 600 MWh. The country is expecting more capacity to be installed in the coming years due to the increasingly congested electricity grid networks. This capacity will be derived from large-scale renewable electricity generation. As a result, national transmission system operators and distribution system operators have recognised the need to create a more flexible electricity system and have announced the goal of having at least 10 GW of battery storage by 2030. The Netherlands identifies the development of non-fossil flexibility as a priority in its national energy and climate plan (NECP) and is working to implement the new flexibility provisions of the EU electricity market design package.

One of the advantages for the Netherlands is the fact that more than 80% of connection points in the country already have a remotely readable measuring device (smart meter). The regulatory framework already allows the use of flexibility in the electricity system in several ways, for example through congestion management, aggregation and demand-response services. This flexibility also extends to supply contracts with flexible tariffs and the option of having multiple suppliers on a single connection. The country has opened its balancing services to all types of new actors and distributed energy resources. Lastly, the Netherlands allows electricity storage systems to participate in both the day-ahead and intraday markets.

In 2024, electricity accounted for 23.4% of the Netherlands' final energy consumption, equal to the EU average of 23.4%, and this share has remained largely stable over the

(260) Denmark, Germany, the Netherlands, Norway, Poland and Sweden are part of the Hansa CCR.

([261])Source: ACER.

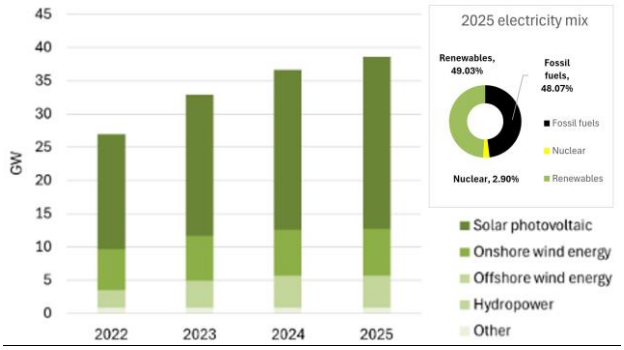
([262])Source: Ember

past ([263]). When it comes to households, electricity accounts for 24.2% of final energy consumption, while in industry it represents 22.7% (see also Annex 8). For the transport sector, this share remains negligible, at 4.1%. Further progress in electrification across sectors is required in order to cost-effectively decarbonise the economy and bring the benefits of affordable renewable generation to consumers.

Renewables and long-term contracts

In 2025, the Netherlands accelerated the roll-out of renewable energy. The contribution set in the NECP planned to increase that share to between 32% and 42% by 2030. Although in 2025 renewable energy sources (RES) accounted for 48.78% (vs an EU overall RES share of 47%) of the electricity mix ([264]). While this represents a marginal decrease of 1.2% from the 2024 share of 50.6%, it underscores the structural advancement of the Dutch power sector compared to the slower transition in heating and transport. Installed capacity for renewables represented 38 574 MW in 2025. The installed capacity for wind energy stalled to 11.8 GW in 2025 (compared to 11.7 GW in 2024, whilst installed capacity for solar grew slightly (+4,5% compared to 2024) reaching 25.9 GW ([265]). The contribution of solar energy (solar power and solar heat) to energy consumption from renewable sources is 22%. The development of electricity production from solar panels in 2024 was somewhat less substantial than in previous years. The renewable share in heating and cooling has increased to 11.27% (from 9.19%). The main bottlenecks for renewable energy development in the Netherlands are: grid congestion; high network tariffs; volatile electricity prices; a lack of electricity demand from industry; increased costs in offshore wind supply chains; and delayed hydrogen infrastructure development.

Graph A9.3: **Netherlands's installed renewable capacity vs electricity generation mix**



Electricity mix is given as net electricity generation (gross electricity production minus consumption of power stations' auxiliary services). Electricity produced in pumped hydro plants is excluded from total net electricity production, as it was previously counted as electricity produced from another source.
"Other" includes renewable municipal waste, solid biofuels, liquid biofuels, and biogas.
Source: IRENA, Eurostat

In 2025, the Netherlands continued its support for renewables through the SDE++ scheme, a one-sided contract-for-difference (CfD) instrument subsidizing a variety of technologies. While the scheme is slated for reopening in 2026, the new government has committed to extending it with six additional annual funding rounds starting in 2027. Furthermore, as part of the EU Electricity Market Design (EMD) package implementation, the Netherlands will introduce two-sided CfDs for onshore wind and solar PV beginning in 2027.

Offshore wind development in the Netherlands faced significant pressure in 2025, illustrated by the lack of bids for the Nederwiek I-A tender. This stall is primarily attributed to rising costs and lower-than-expected electricity demand, which have reduced developer certainty regarding cost recovery. Consequently, the government now considers subsidy-free bids unlikely and has shifted toward direct price support to maintain the roll-out. In early 2026, the government announced tenders for IJmuiden Ver Sites Gamma A and B (2 GW total) via the TOWOZ mechanism (one-sided CfD). These sites are backed by anticipated subsidy payments of approximately €2.5 billion and €2.3 billion respectively, with the permit competition expected in September 2026. Looking ahead to 2027, the government is developing two-sided CfDs for future tenders to align with evolving market conditions.

([263])CAGR (compound annual growth rate) of 1.47% between 2015 and 2024 and minimum/maximum share of 20.3% and 23.4% respectively (source: Eurostat).

([264])Source :Eurostat: nrg_ind_ren.

([265])Source : Irena, *Renewable Capacity Statistics 2026*.

For the building sector this includes support for renewable and low-carbon heat production technologies for district heating and solar PV installations. For buildings, there are various subsidy schemes available for investments in the roll-out of renewables, specifically for, e.g., heat pumps, solar panels and the connection to district heating. From 2026 onwards, municipalities will be authorised (by law) to announce that a specific neighbourhood will need to be disconnected from the natural gas grid, i.e. that every building in that neighbourhood will need to make the transition to a more sustainable energy system.

An action plan to help industry electrify, in particular through power purchase agreements (PPAs), a corporate PPA guarantee fund and CfDs, has been released. Moreover, in January 2026 the design phase of grid projects will be accelerated, for example by more standardised application of the overriding public interest principle, and updated design and permitting procedures. Lastly, the Netherlands is providing more funding to local governments to allocate additional resources to issuing and managing renewable energy permits.

Energy efficiency

Overall, the Netherlands made little progress in energy efficiency. In 2024 final energy consumption (FEC) increased by 2.1%, compared to 2023, to 41.7 ([266]) Mtoe, reversing the declining trend since 2019 ([267]). The Netherlands is thus not in line with the trajectory to its expected contribution in 2030.

Final energy consumption decreased only in the residential sector, by 21.3% between 2019 and 2024, despite a slight increase in the number of dwellings. This was the result mainly of energy savings made through behavioural measures, policies and building renovations. This decrease in final residential energy consumption is in line with the objectives set in the Netherlands' 2020 long-term renovation strategy, which forecast a 13% reduction in energy consumption between 2020 and 2030. With 32% of energy consumed in the Netherlands is used in buildings – and hence the importance of the sector to increasing energy security, the Netherlands has submitted its draft national building renovation plan pursuant to the recast EPBD in order to ensure a clear and predictable pathway towards an energy-efficient and decarbonised building stock. Anchored to the Social Climate Fund reforms in the building sector, new energy performance standards will be set requiring rental properties to upgrade to at least Energy Label D by 2029.

Heating and cooling account for 79% of the country's residential final energy consumption, with renewables supplying 11% of the total energy used for heating and cooling in all sectors. Approximately seven million households heat their homes with a gas boiler. Approximately 130 000 heat pumps were sold in 2024, a decrease of 30% compared to the previous year, taking the total stock of installed heat pumps to almost 680 000. The decline in heat pump sales in 2024 was driven by a combination of factors. These include increased policy uncertainty following postponement of the plan to make the installation of hybrid heat pumps mandatory when replacing gas boilers, lower gas prices than during the 2022–2023 energy crisis peak and slower residential construction activity.

Energy renovations are supported through several measures. The national insulation programme (NIP) aims to insulate 2.5 million homes by 2030, targeting 1.5 million poorly insulated houses (Labels E, F and G). The investment subsidy for sustainable energy and energy savings (ISDE) is part of the Dutch recovery and resilience plan. The subsidy provides support for heat pumps, insulation measures, solar installations, connections to district heating systems, etc. It was recently upgraded to be more accessible for the renovation of protected buildings and the use of bio-based insulation materials. The Netherlands reported 41 ecodesign and energy labelling in-depth checks in 2025 ([268]). This was fewer than in the previous year, and insufficient given the country's size and the EU's overall non-compliance levels.

([266])Eurostat 2024.

([267])ENER elaboration based on Eurostat.

([268])Inspections for Ecodesign/Energy Labelling in 2025 in the ICSMS database.

Security of supply and diversification

The Netherlands remains heavily reliant on fossil fuels, with only limited progress made towards the 2025 Country Specific Recommendations (CSRs) to reduce this dependence by accelerating the roll-out of renewables. The total renewable energy share in the Netherlands continues to track below the trajectories mandated by the Revised Renewable Energy Directive (RED). Fossil fuels accounted for 82.6% of the total energy mix, comprising oil at 42.3%, natural gas at 34.1%, and coal at 6.2%, while renewables and biofuels contributed 15.08% ([269]).

As part of its national energy system plan ([270]), **the Netherlands plans to build tat least four new nuclear power plants, which are set to start operating at the end of 2030.** The national energy system plan sees room for 3.5-7 GW of nuclear energy capacity in the Dutch electricity mix by 2050. Currently, there is only one nuclear power plant operating in the Netherlands – the Borssele plant, which was built in the early 1970s and has a net capacity of 0.48 GW. In 2024, it generated approximately 3% of the country's power. It is scheduled to close in 2033, but the government aims to keep the nuclear power plant operating beyond then, provided that this can be done safely. The Netherlands is also interested/involved in developing small modular reactors (SMRs). On 17 October 2025, the government presented the national strategy for SMRs, aiming to provide clarity about whether, when and under what conditions an SMR can possibly be built**.** Implementation focuses on identifying suitable sites, establishing commercial partnerships, and deepening R&D cooperation to integrate SMRs into the country's long-term nuclear expansion.

Although the country is not directly dependent on Russian gas, the Netherlands has committed to phasing out Russian gas as soon as possible. On the demand side, security of supply will be increased through the acceleration of the energy transition and gas savings. The Netherlands consumed, on average, 28% less gas in the first 10 months of 2024 than the pre-crisis average.

Regarding security of oil supply, the Netherlands is already importing oil from diversified sources (mainly Belgium, Norway and the UK). The Dutch oil infrastructure plays an important role in north-west Europe's security of supply, in terms of the import and export of oil and oil products. The country is willing to continue to do this in the future.

In response to the regional crisis in the Middle East, the Netherlands has scaled up to Phase 1 of the National Oil Crisis Plan, preparing to release 5.4 million barrels of oil from strategic reserves. The government has also increased the tax-free travel allowance to €0.25/km, introduced a 50% reduction in motor vehicle tax for delivery vans, and established an emergency fund to support vulnerable households with high energy bills.

Fossil fuel subsidies

In 2024, environmentally harmful ([271]) fossil fuel subsidies without a planned phaseout before 2030 represented 0.06% ([272]) of the Netherlands' GDP ([273]). Additionally, the Netherlands' 2023 effective carbon rate ([274]) averaged EUR 120.03 per tonne of CO_2, above the EU weighted mean of EUR 84.80 ([275]).

([269])Eurostat.

([270])Nationaal plan energiesysteem, 2023.

([271])Explicit fossil fuel subsidies (e.g. direct transfers) and implicit fossil fuel subsidies (i.e. tax expenditures linked to forgone tax revenues that have an identifiable fiscal impact for the central budget) that support fossil fuel energy production, transmission and/or consumption.

([272])European Commission calculation based on underlying data from the *Study on energy subsidies and other government interventions in the EU – 2025 edition,* Enerdata.

([273])2024 gross domestic product at market prices, Eurostat.

([274])The effective carbon rate is the sum of carbon taxes, ETS permit prices and fuel excise taxes, representing the aggregate effective carbon rate paid on emissions.

([275])OECD (2024), Pricing Greenhouse Gas Emissions 2024.

The Netherlands faces significant climate risks – requiring ongoing efforts to bolster resilience – while also confronting challenges in making its agricultural sector more sustainable. Despite these climate risks, a comprehensive policy framework and robust insurance coverage help mitigate economic losses from climate-related events, though continued economy-wide investments will be necessary to enhance resilience against increasing climate impacts. The national climate adaptation strategy (NAS) and delta programme are key frameworks, although broader climate adaptation policy integration and coverage could be enhanced, despite recent progress. Nature-based solutions are crucial but face challenges due to high land costs, necessitating a shift from flood-centric to biodiversity-led strategies. The Netherlands is not on track to meet its 2030 agricultural emission reduction target, underscoring the need for additional action. Nitrogen deposition ([276]) remains a major environmental challenge in the Netherlands, contributing to eutrophication and acidification of soils and water. Water quality is negatively affected by diffuse pollution from intensive agriculture, electricity production, the metal sector and chemical industries. In 2025, the Netherlands received a country-specific recommendation to implement structural measures to tackle excessive nitrogen deposition and water quality deterioration, including further efforts to promote sustainable agriculture, but limited progress has been made thus far.

Climate adaptation and preparedness

The Netherlands is increasingly vulnerable to climate change. Approximately 59% of its land is susceptible to flooding from both the sea and major rivers, with nearly 26% of its territory situated below sea level ([277]). Heavy precipitation ([278]) further exacerbates flooding risks, and the resultant damages are projected to escalate in response to climatic change. Additionally, the Netherlands faces recurrent threats from extreme weather events, such as severe flooding, droughts and heat stress, which may lead to cumulative impacts and impose significant pressure on its national budget ([279]).

Climate risks have a direct economic impact on the Dutch economy, even as the insurance coverage remains high. Between 1980 and 2024, the Netherlands recorded EUR 6.4 billion in economic losses ([280]) caused by weather and climate-related extreme events. Despite these losses, the country is positioned among the EU Member States with the lowest share of the natural catastrophe damages relative to GDP ([281]). The Netherlands boasts one of the highest rates of insurance coverage against weather- and climate-related extreme events in the EU, at 47%, compared to the EU27 average of 19% ([282]). Climate risks are set to increase in the future, which could lead to both higher costs and higher insurance premiums ([283]).

Available sources estimate that investment needs in the Netherlands related to climate adaptation will be significant in the future. A recent study estimates that the Netherlands will need to invest almost EUR 2.5 billion per year up to 2050 (0.2% of annual GDP, which is below EU average of 0.5%) ([284]): first and foremost in infrastructure retrofitting and reinforcement (approximately 50% of the total), followed by food (approximately 29%, significantly higher than the EU average of approximately 17%), ecosystems

([276]) The two gas compounds (ammonia and nitrogen oxides) are generally referred to as 'nitrogen' in the context of its impact on nature and the environment in general. Ammonia and nitrogen oxides have different emission sources but cause cumulative and significant damage to the health of humans and the environment, especially Natura 2000 sites.

([277]) Most of this (55% of the Netherlands) is protected by dunes, dikes, dams or engineered structures, while only 4% is not. PBL Correctie formulering over overstromingsrisico Nederland in IPCC-rapport.

([278]) KNMI – Uitleg over neerslag.

([279]) For more information on climate risks that pose a threat to the Netherlands as well as other European countries, see the European Climate Risk Assessment.

([280]) EEA, 2024, Economic losses from weather- and climate-related extremes in Europe.

([281]) ECB, EIOPA (2024), Towards a European system for natural catastrophe risk management.

([282]) EEA, 2024, Economic losses from weather- and climate-related extremes in Europe.

([283]) PBL, 2024, Klimaatrisico's in Nederland, de huidige stand van zaken.

([284]) European Commission (2026), Assessment of EU and Member States adaptation investment needs, Table 25. The study provides detailed estimates of adaptation investment needs at the level of the EU and individual Member States per type of measure. It relies on a common methodology that makes estimates comparable across the EU. Four accompanying methodological reports provide a detailed description of how the results were estimated to ensure full transparency.

(approximately 12%), and health (approximately 8% of the total), while investments in economy and finance account for only approximately 0.15% ([285]).

The Netherlands has established a robust institutional framework to implement adaptation efforts. It includes the NAS ([286]), which involves collaboration across the administration, and the delta programme, supported by the delta fund ([287]). The delta programme adopts strategic objectives every six years, and the programme is submitted to the national parliament annually. Key institutions involved in these efforts include the Ministry of Infrastructure and Water Management, including Rijkswaterstaat, the national agency for water management, all provinces, all regional water authorities and all municipalities. The NAS addresses the overall adaptation efforts. However, while climate adaptation policy is increasingly integrated into broader governmental policies and long-term planning, including at regional and local levels ([288]), this integration remains incomplete and uneven ([289]), leaving scope for improvement

The share of the Netherlands' population covered by EU Covenant of Mayors ([290]) signatories remains relatively low compared to the EU average. It stood at 4% (vs EU27: 34%) in 2024 ([291]). This reflects a distinct national context where local climate action is primarily driven through the country's comprehensive domestic frameworks like the delta programme rather than through EU-led initiatives alone. Despite the smaller number of signatories, those that have committed demonstrate a high level of commitment. Many Dutch participants have successfully moved from initial pledges to submitting formal action plans (56%) and monitoring reports (40%).

The Netherlands is continuously improving its adaptation framework. As part of the preparatory work for the 2026 update of its NAS, the country has developed 15 adaptation pathways ([292]). These pathways allow for a change in strategy when a climate or societal threshold, known as an adaptation tipping point, has been reached. This approach avoids low-regret or high-regret solutions while allowing for flexibility. They distinguish a phase of 'intensification' and one of 'transformation'. The Dutch Environment Agency (PBL) has published the first part of a new national climate risk assessment and will publish the second part in the course of 2026 ([293]). In addition, the Netherlands has recently launched the Dutch Risk Portal ([294]), which offers open-source data on climate risks and hazards for informed decision-making. It was developed in close cooperation with the Dutch financial sector and leading climate experts. It has also drawn up risk maps ([295]).

While adaptation measures for water-related climate hazards are highly developed, those addressing other risks - such as cold snaps, storms, and heat stress - remain less mature. As a result, the economic costs of increasingly frequent extreme weather events could be higher. Recent events underscore these vulnerabilities. In early 2026, the Netherlands experienced a severe Arctic blast that brought the nation's infrastructure to a halt. Snowfall of 5 to 25 centimetres blanketed the country, resulting in the most severe traffic congestion since 1999, with over 800 kilometres of recorded traffic jams ([296]). The country's largest airport, Amsterdam Airport Schiphol, was also forced to cancel hundreds of flights, stranding thousands of passengers ([297]). Furthermore, during recent

([285])Typical investments in ecosystems include soil restoration, wildfire prevention, biodiversity protection and coastal ecosystems restorations while typical investments in health are linked to occupational health and safety, wastewater treatment facilities upgrade and wildfire disaster response.

([286])Kennisportaal klimaatadaptatie.

([287])More information about the Dutch National Delta Programme and its accompanying fund can be accessed through a dedicated website, english.deltaprogramma.nl.

([288])Dutch regional and local government are increasingly preparing their own climate adaptation programmes. See, for instance, the one from Utrecht.

([289])See, for instance, OECD Economic Surveys: Netherlands 2025.

([290])The EU Covenant of Mayors for Climate & Energy is the largest movement of local governments in Europe acting on climate change to secure a better future for their people. It gathers over 10 500 local authorities voluntarily committed to the European Union's energy and climate targets.

([291])EU Covenant of Mayors - Netherlands. Data retrieved on the 7 May 2026.

([292])Kennisportaal Klimaatadaptatie – Nationale klimaatadaptatiestrategie.

([293])PBL - Klimaatrisico's in Nederland - De huidige stand van zaken.

([294])Dutch Climate Risk Portal.

([295])Risicokaart.nl.

([296])Covered in several news outlets, e.g. in NOS Nieuws - Sneeuw ontregelt Nederland, ook rest van de week nog overlast verwacht.

([297])This was widely covered in media, see e.g. de Volkskrant – Hoe Schiphol grotendeels stilvalt door de sneeuw.

heatwaves, the country's preparedness for heatwaves was tested as the electricity grid faced localised cooling failures and steel bridges jammed after expanding in the heat. The Netherlands plans to strengthen its approach to major climate risks in the 2026 update of its NAS.

Climate proofing is being applied across the Netherlands. This is done primarily through the NAS and Delta programme. For the energy sector, the Netherlands has recognised that the transition to clean energy sources is sensitive to rising water temperatures and sea-level rise, which threaten cooling water availability for power plants and the integrity of coastal energy hubs. As per the final updated Dutch national energy and climate plan ([298]), billions of EUR in grid reinforcements and protective measures for offshore wind landing points will be required through 2040 to mitigate these risks. The transport vulnerability index of the Dutch TEN-T network remains one of the highest in the EU due to the country's low-lying geography and high density of assets ([299]). Unlike the challenges faced by many Member States, the Dutch risk is not driven by a lack of mainstreaming of climate proofing, but rather by a significant concentration of infrastructure in flood-prone areas. While the transport network has historically focused on flood defence against the sea ([300]), future risks are increasingly tied to pluvial flooding from extreme rainfall ([301]). Soil subsidence in peatland areas also adds to climate adaptation challenges, but is not, in principle, a direct threat to the transport network. Although the Netherlands reports some of the most consistent investments in TEN-T adaptation, the intensity of its land use and its position below sea level mean that even small failures in the adaptation chain could lead to significant economic disruptions. Consequently, key parts of the infrastructure - particularly the high-speed rail links and the Port of Rotterdam ([302]) - require continuous, multi-billion-euro protective upgrades to remain resilient against mid-century climate impacts.

The Netherlands is often cited as a global leader in nature-based solutions, yet there remains significant scope to move from flood-centric nature-based solutions to more integrated, biodiversity-led urban and agricultural resilience strategies. Nature-based solutions and prevention play a foundational role in increasing Dutch climate resilience. Extreme droughts and soil subsidence are no longer isolated events but are becoming chronic challenges for the country's peatlands and foundations. In the Netherlands, nature-based solutions have already been deployed at a large scale and systematically, particularly within the water management sector. The Dutch have integrated nature-based solutions into national policy through the 'Room for the River' programme ([303]) and the 'Building with Nature' initiative ([304]). These are applied extensively to manage fluvial floods (e.g. the widening of the Waal and Rhine floodplains) and coastal defence (e.g. the Sand Motor, a large-scale innovative beach nourishment project). If current levels of coastal protection are not raised, direct economic damages and social impacts from coastal flooding in the Netherlands are projected to rise sharply this century. At the same time, benefits of avoided flooding are estimated to significantly outweigh the costs of coastal protection. A particular challenge for implementing nature-based solutions in the Netherlands is the very high price of land ([305]), among the highest in Europe, which makes nature-based solutions – often requiring a change of land use – quite expensive.

Water resilience

Large areas of the Netherlands face water stress due to demand from energy,

([298]) Final updated NECP of the Netherlands.

([299]) Support study on the climate adaptation and cross-border investment needs to realise the TEN-T network.

([300]) Notwithstanding the already made substantial investments, if current levels of coastal protection are not raised, direct economic damages and social impacts from coastal flooding in the Netherlands are projected to rise sharply this century. At the same time, the benefits of avoided flooding are estimated to significantly outweigh the costs of coastal protection, see e.g. this article from nature.com - Economic motivation for raising coastal flood defenses in Europe.

([301]) Support study on the climate adaptation and cross-border investment needs to realise the TEN-T network. Publications Office of the European Union, 2024.

([302]) The climate proofing of ports in general, as well as fisheries ports more specifically, is essential to protect critical onshore infrastructure from accelerating sea-level rise and to facilitate the upgrading of electrical grids required for the transition to a climate-neutral fleet.

([303]) Rijkswaterstaat – Ruimte voor de rivieren.

([304]) Rijkvastgoedbedrijf – Natuurinclusief bouwen.

([305]) See for instance the price of agricultural land. Eurostat – agricultural land prices and rents.

manufacturing and public water supply ([306]). These sectors depend heavily on stable water availability. Water stress has been observed for several years, with increasing drought, salinisation and rising water consumption by households and businesses. Between 2000 and 2019, total abstraction of surface and groundwater increased by 24% while the share of groundwater abstraction declined from 13% to 12% ([307]).The Netherlands ranks 13th in the EU in terms of water exploitation according to the national Water Exploitation Index+ ([308]) which measures water use relative to renewable freshwater resources and suggests low overall pressure due to relatively abundant resources. However, seasonal pressure can be higher: in summer 2022 the WEI+ reached 6%, close to the EU average of 6.8% in the same period. This overall picture masks significant underlying pressures and structural imbalances in water use ([309]). In 2023 the energy sector consumed 6 517 million m^3 (62%) of water. Energy and manufacturing together account for 86% of total abstraction ([310]), pointing to a high and increasing concentration of water use in a limited number of water-intensive sectors. This concentration heightens vulnerability to localised shortages and seasonal stress, which are not fully reflected in national-level indicators. Water resources play a key role in the Dutch economy. Major rivers and extensive canal systems connect industrial centres and support economic activity. According to the Commission's European Drought Risk Atlas, drought can significantly affect river transport and terrestrial and freshwater ecosystems in the Netherlands ([311]).

Water productivity in the Netherlands ([312]) **remains relatively low** (16th in the EU), reaching EUR 96 per m^3 of abstracted water in 2022 and declining over the past five years. This reflects the importance of water-intensive sectors such as energy and manufacturing. In 2023 electricity accounted for 62% of freshwater abstraction, manufacturing for 24% and public water supply for 13% ([313]). Total abstraction remained broadly stable between 2022 and 2023. The NL confirmed the decision to introduce periodic review of authorisations for water abstraction and discharge into water in the second half of 2027.

Water quality remains a major concern for surface and groundwater bodies. The assessment of the River Basin Management Plans (RBMPs) shows deterioration in ecological status/potential and chemical status compared with the second RBMPs (covering 2015– 2021); this is mainly due to the incorporation of new substances and standards. Main pressures include high population density, intensive land use, economic and agricultural activities, legacy pollution and transboundary pollution. These pressures affect hydromorphology (e.g. canalisation, flood protection and agricultural modifications) and lead to pollution from nitrates, fertilisers, pesticides and river-basin-specific pollutants. The Netherlands regulates around 80 river-basin-specific pollutants, although only a small subset drives failure to achieve good status or potential (including ammonium, cobalt, arsenic, selenium, silver and zinc) ([314]). Marine water quality is also under pressure from agricultural runoff, microplastics and industrial discharges affecting the Wadden Sea and North Sea ecosystems.

Chemical status remains a major challenge, with 90% of surface water bodies failing to reach good status ([315]). This limits the availability of high-quality water for agriculture and industry and is mainly linked to ubiquitous persistent bioaccumulative and toxic substances and industrial chemicals. The Netherlands has taken steps to strengthen the link between water quality objectives and permitting, control and enforcement systems, although governance

([306]) EEA, Water abstraction by economic sector, 2000-2023, 2025.
([307]) Netherlands | Country profiles on water resources | WISE Freshwater.
([308]) A measure of how much water is being used compared with the total renewable freshwater resources available for a given territory and period.
([309]) Between 2018 and 2023, water abstraction increased by 93% in the energy sector and by 1% in manufacturing, while it decreased by 44% in agriculture and rose by 3% in public water supply.
([310]) EEA, Water abstraction by economic sector, 2000-2023, 2025.
([311]) European Commission, 2023, European Drought Risk Atlas,.
([312]) Water productivity is a metric that is calculated by dividing GDP (in chain-linked volume) by total water abstraction. It indicates the average economic value (GDP) a Member State creates for each unit of water it takes from nature.
([313]) EEA, 2025, Water abstraction by source and economic sector in Europe.,
([314]) European Commission, Environmental Implementation Review (2025), *Netherlands country report*, page 32.
([315]) European Commission, Environmental Implementation Review (2025), *Netherlands country report*, Figure 28. (failure to achieve good chemical status is mostly due to exceedances of the EU environmental quality standards of about 10 % of regulated priority substances.)

remains decentralised and fragmented ([316]). The long-standing delta programme aims to address climate-related water risks. Drinking water quality supplied by large providers does not raise concerns. Compliance with the Urban Wastewater Treatment Directive reached 100% in 2022, unchanged since 2018 and well above the EU average of 76% ([317]). Annual investment needs in the water sector are estimated at EUR 4.6 billion (2022 prices). Of this, EUR 1.9 billion relates to wastewater management (including additional costs from the revised UWWTD), EUR 2.7 billion to drinking water and around EUR 64 million to water protection and management ([318]). Current investments amount to about EUR 3.7 billion annually (2021-2027). Approximately EUR 1.3 billion supports wastewater management, EUR 2.3 billion drinking water and EUR 71 million other Water Framework Directive measures. Most financing comes from national sources (98%), while EU funding accounts for 0.4% (mainly cohesion policy) and the Recovery and Resilience Facility for 0.3%. EIB financing represents around 1.4% ([319]). To meet the objectives of the Water Framework Directive and the Floods Directive, the Netherlands faces an annual investment gap of EUR 935 million (0.1% of GDP), including EUR 567 million for wastewater measures and EUR 367 million for drinking water investments ([320]).

Economic instruments to strengthen water resilience remain underused. Although pollution charges under the Water Board Act and groundwater abstraction fees are applied, there is scope to better reflect environmental costs ([321]). Current levies are relatively low and vary regionally due to the autonomous role of water boards. Gradually harmonising rates and aligning them with environmental costs could improve efficiency and support cost recovery in line with the Water Framework Directive's 'polluter pays' principle.

Nature restoration

Nature degradation poses significant risks to the Dutch economy and competitiveness. Around 26% of supply chains' gross value depends highly on ecosystem services (EU-27: 22%) ([322]) and overall 44% of the economy relies strongly on these services. Sectors such as agriculture, forestry and fisheries, mining and metals, construction, water utilities and healthcare are particularly dependent ([323]), with ecosystem services underpinning their entire value added. Preserving and restoring ecosystems is therefore essential to avoid economic losses and maintain long-term competitiveness. The nitrogen and nitrates situation largely due to emissions from agriculture is relevant as it has a negative impact also on new construction permits. It remains very urgent to address in order to facilitate new infrastructure and housing projects. In 2023, the Netherlands legally protected 26.5% of its land area (EU-27: 26.4%) and 31.6% of its marine area (EU: 13.7%) ([324]), meeting the EU 30% marine target. While the Natura 2000 network is largely complete, gaps remain for some Annex II species ([325]). Biodiversity indicators show continued decline: the farmland bird index fell to 60.4 in 2022 (EU: 68.7 in 2023), down from 81.1 in 2011. This led the Commission to open an infringement procedure in July 2024 under the Birds Directive. A separate infringement case concerns the monitoring of harbour porpoise bycatch ([326]). The Netherlands still needs to restore up to 3 305 km²

([316]) European Commission, Environmental Implementation Review (2025), *Netherlands country report*, page 33.

([317]) Netherlands | Country profiles on urban waste water treatment | WISE Freshwater, Fig. 4

([318]) See European Commission, 'Estimating investment needs and financing capacities for water-related investment in EU Member States', 28 May 2020, https://commission.europa.eu/news/estimating-investment-needs-and-financing-capacities-water-related-investment-eu-member-states-2020-05-28_en ; and OECD, Financing Water Supply, Sanitation and flood Protection: Challenges in EU Member States and policy options, OECD Publishing, Paris, 2020, https://www.oecd-ilibrary.org/environment/financing-watersupply-sanitation-and-flood-protection_6893cdac-en

([319]) Water investment levels are estimated through tracking EU funds, EIB projects and national expenditure (EPEA accounts, Eurostat).

([320]) European Commission, Environmental Implementation Review (2025), *Netherlands country report*, page 46.

([321]) Hogg et al. (2016) proposed a water abstraction tax of €190 per 1 000 m³ for industrial users and €300 per 1 000 m³ for households, alongside a wastewater tax of €3.02 per kilogram of biochemical oxygen demand (BOD_5).

([322]) Hirschbuehl et al. (JRC), *The EU economy's dependency on nature*, VASILAKOPOULOS, P. editor(s), European Commission, (2025).

([323]) Dataset from Commision/JRC, based on Hirschbuehl et al., 2025, *The EU economy's dependency on nature*,.

([324]) Eurostat, *Protected Areas Indicator*,

([325]) European Commission, Environmental Implementation Review (2025), *Netherlands country report*.

([326]) European Commission, Environmental Implementation Review (2025), *Netherlands country report*, page 16.

of Annex I habitats (around 8.3% of land) ([327]), while only 12% of habitats and 26% of species are in favourable conservation status ([328]) The forest condition index stood at 0.56 in 2018 ([329]).

Pressures from invasive alien species (IAS) remain significant, with 59 IAS recorded in 2024 ([330]), and damages estimated at EUR 2.86 billion (1960-2020), mainly affecting agriculture ([331]). The Netherlands ranks fourth in the EU for established IAS populations. This relatively high number is linked to its river delta location, intensive economic activity and strong monitoring systems. Rising North Sea temperatures are also altering marine ecosystems: (i) cold-water fish stocks, such as North Sea cod, are shifting northwards, forcing local fleets to move away from traditional fishing grounds ([332]) ([333]) ([334]); and (ii) while invasive species such as the Pacific oyster and the comb jelly alter marine ecosystems by competing with or preying on planktonic organisms, including fish larvae, thereby threatening native species (e.g. mussel beds) and commercial fisheries ([335])([336]). In this context, it is essential to improve data collection and ensure an effective fisheries control enforcement.

Measures under the Dutch recovery and resilience plan support river restoration, water management and hydrological improvements, contributing to the EU objective of 25 000 km of free-flowing rivers by 2030 and supporting the Water Framework Directive. These actions also generate co-benefits, including improved water quality, flood protection, and socio-economic opportunities such as tourism and job creation. Despite some improvement, eutrophication pressures remain high, with affected areas declining from 87.9% to 76.3% since 2005 ([337]). Exceedances of critical nitrogen loads remain among the highest in the EU, including in Dutch border regions. Agricultural nutrient pressures are a key driver, affecting both ecosystems and water quality. According to RBMP assessments, nutrient pollution from agriculture continues to hinder the achievement of good ecological status. In 2019, around 112 million kg of nitrogen from livestock farming was not taken up by plants and was released to the environment, representing ~23% of unused nitrogen (about 16% of total inputs) ([338]). This contributes to acidification and eutrophication, affecting sensitive habitats protected under EU nature legislation ([339]) ([340]).

Economic impacts of insufficient action to address excessive nitrogen deposition are significant. Permitting constraints could potentially cause losses of EUR 4.1–21.5 billion between 2024 and 2030 ([341]). Court rulings in December 2024 and January 2025 have further restricted permitting and required reductions in nitrogen overload (Greenpeace case), highlighting the urgency of action ([342])([343]). More broadly,

([327]) European Commission, 2022, Impact assessment accompanying the proposal for a regulation on nature restoration.

([328]) EEA, Conservation status of habitats under the EU Habitats Directive.

([329]) Maes, J., Bruzón, A.G., Barredo, J.I. *et al.* Accounting for forest condition in Europe based on an international statistical standard. *Nat Commun* **14**, 3723 (2023).

([330]) European Commission, Environmental Implementation Review (2025), *Netherlands country report.*, p. 22.

([331]) NeoBiota, *Economic Cost of invasive alien species across Europe*, 2021 and European Commission: EMRC, Logika Group and RPA Europe, *Update of the costs of not implementing EU environmental law*, 2025, p. 62.

([332]) Engelhard et al. Climate change and fishing: a century of shifting distribution in North Sea cod. Global Change Biology (2014), doi: 10.1111/gcb.12513.

([333]) Camapana et al. Shifting fish distributions in warming sub-Arctic oceans. Nature Research: Scientific reports (2020), doi.org/10.1038/s41598-020-73444-y.

([334]) DeFilippo et al. Characterizing dominant patterns of spatiotemporal variation for a transboundary groundfish assemblage. Fisheries Oceanography (2023). https://doi.org/10.1111/fog.12651.

([335]) Javidpour et al. Cannibalism makes invasive comb jelly, Mnemiopsis leidyi, resilient to unfavourable conditions. Communications Biology (2020), doi.org/10.1038/s42003-020-0940-2.

([336]) Joyce et al. R elative impacts of the invasive Pacific oyster, *Crassostrea gigas*, over the native blue mussel, *Mytilus edulis*, are mediated by flow velocity and food concentration. NeoBiota, doi.org/10.3897/neobiota.45.3316.

([337]) EEA, Eutrophication caused by atmospheric nitrogen deposition in Europe 2024.

([338]) https://longreads.cbs.nl/nederland-in-cijfers-2021/hoeveel-stikstof-produceert-de-veehouderij/.

([339]) Scientific reports show that 17 habitat types are 'sensitive' to nitrogen and 28 habitat types are considered 'very sensitive' to nitrogen (Wamelink, W., van Dobben, H., van der Zee, F. et al., Overzicht van kritische depositiewaarden voor stikstof, toegepast op habitattypen en leefgebieden van Natura 2000, Wageningen University & Research, 2023, Link).

([340]) Habitats much more vulnerable for nitrogen deposition than previously thought | WUR.

([341])https://www.rijksoverheid.nl/documenten/kamerstukken/2025/07/02/eindrapport-onderzoek-economische-effecten-stikstofproblematiek and Article NOS 2 July 2025, Lack of nitrogen policy costs the Dutch economy tens of billions .

([342]) Council of State limits further shift of nitrogen space.

([343]) *'Greenpeace wint zaak tegen Staat, rechter dwingt kabinet meer haast te maken met stikstofaanpak' [Greenpeace wins case against the state, judge compels cabinet to make*

studies suggest that the current agricultural system generates a net negative impact of around EUR 5.3 billion annually when environmental and societal costs are considered ([344]). Transitioning to alternative farming systems could significantly reduce these costs. So far, policy action has been insufficient. In April 2025, the government presented a nitrogen package, which fell short of delivering a clear and structurally robust solution, with subsequent measures remaining uncertain. Voluntary buy-out schemes have delivered limited results and effective implementation of concrete measures is still needed. The government plans to allocate EUR 20 billion until 2035 to reduce nitrogen pollution through an integrated area-based approach addressing multiple environmental pressures, but its effectiveness will depend on implementation and coordination with regional authorities. An 8th Nitrates Action Programme is also under development. However, the national target of 50% reduction of nitrogen is delayed from 2030 to 2035, with interim stock taking in 2030. If in 2035 nitrogen deposition reduction is not on track, 'production rights' may be curtailed. A recent official report ([345]) suggests that chances for reaching the objectives for climate in 2050 and nitrogen in 2035 are minimal, meaning the challenge remains significant. The report concludes that the package of the coalition agreement represents progress compared to previous policies, but falls short of achieving nitrogen and nature restoration objectives, mainly due to implementation gaps, insufficiently defined measures and lack of structural expansion of natural areas. Additional structural measures and faster implementation are thus needed to meet nitrogen and nature restoration objectives. Investment needs for biodiversity are estimated to be at least EUR 1.51 billion per year for 2021–2027 ([346]), including EUR 957 million for Natura 2000 and other nature management ([347]) and nature restoration, and EUR 553 million for sustainable soils and other agricultural nature management ([348]). The existence of a biodiversity investment gap is recognised, but its quantification will require future/further work (e.g. updated estimates on available financing). Cost recovery remains incomplete for water quality measures, and no plans exist to tax fertilisers and pesticides despite Commission recommendations ([349]).

Sustainable agriculture and land use

The Netherlands' carbon removals are in line with the level of ambition needed to meet its 2030 target for land use, land use change and forestry (LULUCF). In the Netherlands the LULUCF sector is a net source of GHG emissions, with agricultural land being the main contributor. Since 2018, there has been a modest reduction in LULUCF emissions. To meet its 2030 LULUCF target, additional carbon removals of -0.4 million tonnes of CO_2 equivalent (CO2eq) are needed ([350]). Projections covered by the latest Climate Action Progress Report show a slight surplus over the target of around 0.2 $MtCO_2eq$ for 2030 ([351]). However, more recent projections indicate that the country has only an approximately 35% chance of meeting its LULUCF objective with existing measures and an approximately 60% chance with additional measures, indicating a need to closely monitor the situation ([352]). Further investments in healthy forests and soils are key to building resilient biobased product value chains and enabling a growing, competitive EU bioeconomy. Continued improvements in the monitoring system of net removal data and projections will be crucial

more haste with tackling nitrogen issues]. NOS (in Dutch). 22 January 2025. Retrieved 2 February 2025. Case ECLI:NL:RBDHA:2025:578, District Court of The Hague, C/09/651046 / HA ZA 23-641.

([344]) Societal costs of agriculture in the Netherlands (estimated around EUR 18.6 billion per year) exceed its annual economic returns (valued at EUR 13.3 billion per year) .20251016-The-Hidden-Bill-final.pdf.

([345]) Analysis on the coalition agreement package, drafted by the NL Bureau for Economic Policy Analysis (CPB) and the NL Environmental Assessment Agency (PBL), 20.2.2026, Link

([346]) European Commission, 'Financing Natura 2000 – Prioritised action frameworks', European Commission website, Link, including additional information and clarification received from the authorities of the Netherlands.

([347]) European Commission: Directorate-General for Environment, Biodiversity Financing and Tracking – Final report, Publications Office of the European Union, Luxembourg, 2022, Link.

([348]) Proposal for a Directive of the European Parliament and of the Council on soil monitoring and resilience (Soil Monitoring Law) COM(2023) 416 final of 5 July 2023, Link.

([349]) European Commission, Greening the European Semester – Resource and Pollution Taxes (2025), Annex 6, Netherlands (page 299).

([350]) National LULUCF targets of the Member States in line with Regulation (EU) 2023/839.

([351]) Climate action progress report 2025.

([352]) Klimaat- en Energieverkenning 2025 | Planbureau voor de Leefomgeving.

in supporting timely and effective action in the sector.

Dutch agriculture is still a notable source of greenhouse gas emissions and continues to have a significant impact on air, water and soils. In 2024, agriculture generated 24,8 million tonnes of CO2eq. The Netherlands is not on track in terms of reducing agricultural sector emissions, with projected GHG emissions of 21.9 Mt CO2eq compared to the national sectoral 2030 emission reduction target of 17.9 Mt CO2eq ([353]). Additional efforts are therefore needed to reduce emissions in the sector.

Agriculture continues to exert significant pressure on water and soils ([354]). The utilised agricultural area (UAA) in the Netherlands has been relatively stable but on a slight downward trend in recent years, reaching 1.8 million hectares in 2023. However, the Netherlands' soils were significantly impacted by nutrient loss, mainly from mineral fertilisers and manure. This poses a significant environmental concern and a threat to human health. This is reflected in the country's nitrogen balance of 132 kg of nitrogen per hectare of UAA in 2023, reduced since 2022 and 2018 though. Despite the substantial reduction by 32% compared to 2018 value, the balance remains far the highest in the EU. The Netherlands' functional urban area has considerably expanded in the last years, with net land taken between 2018-2021 accounting for 1 186 parts per million (ppm)/year of the total urban surface of the country. Most land has been taken from pastures (52%) and arable land (37%). This ongoing 'land take' and the associated soil sealing cause less resilient ecosystems, decreased carbon sequestration and impaired flood protection ([355]). The Netherlands is on track to reduce its ammonia emissions. Ammonia emissions reported for the year 2023 indicate that the agriculture sector is responsible for 90% of the total national emissions (105 Gg). Within this sector, livestock has the highest share (72.5%). The national planning bureau (PBL) expects that the Netherlands will comply with the reduction of ammonia, notably due to the end of the derogation under the Nitrates Directive ([356]). Water quality pressures remain significant. Between 2016 and 2019, 14% of groundwater monitoring stations recorded nitrate concentrations above 50 mg/l, exceeding safe thresholds for drinking water. Although livestock density has declined, the livestock density index remained 3.31 in 2023, the highest in the EU ([357]). A 12% reduction in agricultural ammonia emissions between 2018 and 2023([358]) indicates recent progress in emission control. However, under the National Emission Ceilings Directive (NEC Directive), compliance is assessed against the 2005 baseline year; according to the RIVM inventory, emissions in recent years are around 24% lower than in 2005([359]), indicating that the Netherlands complies with its reduction commitments. According to the latest projections, the Netherlands is on track ([360]) to meet its ammonia emission reduction commitments for 2030 onwards. In 2023, no exceedances above the limit values established by the Ambient Air Quality Directive were registered. However, despite this compliance, nitrogen-related pressures persist, notably in the form of nitrate pollution and excessive nitrogen deposition, indicating remaining gaps in nutrient management.

Pesticide contamination remains a critical issue, with 52% of river water bodies exceeding regulatory thresholds for pesticide residues ([361]). Between 2018 - 2023, pesticides were detected in 65% of rivers and 57% of lakes at levels exceeding the thresholds. The Netherlands has one of the highest rates of pesticide use per hectare in Europe – 7 kg per hectare of arable land ([362]) - and the severe impact on Dutch nature and the health of the Netherlands is demonstrated by numerous recent studies ([363]). In regions such as Friesland, Gelderland and

([353]) Klimaat- en Energieverkenning 2025 | Planbureau voor de Leefomgeving.
([354]) For more information, see this link.
([355]) EEA, Land take and land degradation in functional urban areas, 2022. Link.

([356]) PBL-raming 2030: EU-emissiedoelen luchtverontreiniging op schema, nationale doelen stikstofdepositie op natuur ver buiten bereik | Planbureau voor de Leefomgeving.
([357]) Eurostat, [ef_fsi_lskds] Livestock density,
([358]) EEA, Air pollutant emissions data viewer (Gothenburg Protocol, Air Convention) 1990-2023.
([359]) Informative Inventory Report 2025, Emissions of transboundary air pollutants in the Netherlands 1990–2023
([360]) EEA, Magnitude of emission reductions (percentage) required by EU Member States to meet their emission reduction commitments for 2030 onwards, based on 2023 data, 2025.
([361]) EEA, Pesticides in rivers, lakes, and groundwater in Europe, 2024.
([362]) Pesticide use per hectare of cropland, 2023
([363]) Water Framework Directive: time is running out - KWR.

Limburg, the nutrient and pesticide loads remain high and compliance with EU water-quality standards remains challenging ([364]). Pesticides not only threaten aquatic ecosystems but also pose long-term risks to human health through contaminated drinking water and food chains.

Soil contamination is also widespread. The Netherlands ranks second in the EU, with more than 10 contaminants detected in 34% of soils. Excessive nutrient concentrations affect around 88% of agricultural land, with 69% of the national territory exceeding 50 mg/kg of phosphorus and 63% exceeding 50 kg/ha of nitrogen. Unsustainable soil erosion affects 16% of national territory, corresponding to 63% of cropland ([365]).

The Netherlands is taking steps towards a more sustainable food system. In 2022, 7.2% of agricultural land contained landscape features such as woods or non-productive grasslands, above the EU average of 5.6% ([366]). However, organic farming accounted for only 5.06% of agricultural land in 2024, the fourth lowest share in the EU, well below the EU average ([367]). The Netherlands therefore remains far from the EU target of 25% organic farming by 2030.

([364])European Commission, Greening the European Semester – Resource and Pollution Taxes (2025), Annex 6, Netherlands (page 302).

([365])Commission staff working document – Impact assessment report: Annexes – Accompanying the proposal for a directive of the European Parliament and of the Council on soil monitoring and resilience Soil Monitoring Law), SWD(2023) 417 final of 5 July 2023, link.

([366])European Commission, *Land Use/Land Cover Area Frame Survey*; *Landscape features in agricultural land: what is the extent?*, p. 34, Figure 14 (map).

([367])Eurostat, Area under organic farming.

Table A10.1:**Key Adaptation Indicators**

Climate adaptation and preparedness:							EU-27
	2019	2020	2021	2022	2023	2024	latest data
Drought impact on ecosystems *[area impacted by drought as % of total]*	5.15	16.91	0	17.88	0	-	2.76
Forest fires burned area (1) *[burned area in ha. per year]*	-	822	-	274	31	-	354 510
Economic losses from extreme events *[EUR million at constant 2022 prices]*	50	567	847	822	119	56	40 452
Insurance protection gap (2) *[composite score between 0 and 4]*	-	-	-	2	2	2	-
Sub-national climate adaptation action *[% of population covered by the EU Covenant of Mayors for Climate & Energy]*	5	5	5	5	5	5	34

Water resilience:							EU-27
	2019	2020	2021	2022	2023	2024	latest data
Water Exploitation Index Plus, WEI+ (3) *[total water consumption as % of renewable freshwater resources]*	2.87	2.96	2.32	3.99	2.75	-	4.53
Water productivity *[EUR per m^3]*	88	86	95	96	-	-	151
Water abstraction							
Water abstraction by source (% from surface water)	86.39%	85.90%	87.54%	86.14%	-		-
Water abstraction by sector	Agriculture	Electricity cooling	Manufactu-ring	Public water supply	Mining and Quarrying	Constru-ction	
	1.60%	61.91%	23.64%	12.85%	0.00%	0.00%	
Status of water bodies (4) *[% of water bodies in a good status]*							
Surface water bodies (ecological)	-	-	-	-	-	0%	38%
Groundwater bodies (quantitative)	-	-	-	-	-	96%	93%

Nature restoration:							EU-27
	2019	2020	2021	2022	2023	2024	latest data
Ecosystem dependency *[% of direct dependency]*	-	-	-	44%	-	-	44%
Protected area *[% of terrestrial protected areas]*	22.7	22.7	22.7	22.7	26.5		26.4
Invasive alien species (IAS) *[number of IAS of Union concern]*	-	-	-	-	-	59	29.2
Damage cost of IAS *[EUR billion]*	-	-	-	-	2.86		1.69
Eutrophication *[AAE of area at risk of euthrophication]*				441	441		295

Sustainable agriculture and land use:							EU-27
			2012-2018		2018-2021		latest data
Yearly net land taken by Member State *[ppm of total urban surface per Member State]*			897		1 186		670
Land conversion in functional urban area *[% of total land taken from 2018-2021]*							
Arable land					37%		
Complex and mixed cultivation					0%		
Forests					3%		
Herbaceous vegetation associations					2%		
Open spaces with little or no vegetation					0%		
Pastures					53%		
Permanent crops					0%		
Water					5%		
Wetlands					0%		
	2019	2020	2021	2022	2023	2024	latest data
Nitrates in groundwater (5) *[$mgNO_3/l$]*	10.9	9.6	8.3	8.3	8.3		
Livestock density *(number of livestock units per hectare of utilised agricultural area)*		3.45			3.31		0.75
Ammonia emissions *[% of total utilised agricultural area]*	91%	91%	91%	91%	90%	-	94%
Pesticide contamination on rivers and lakes water bodies				rivers	65%		27%
[% of monitoring sites with pesticides exceeding thresholds, 2018-2023]				lakes	57%		18%
Pesticide contamination in soil *[% of samples with a concentration over 0.5 mg/Kg^{-1}]*					74%		57%
Net greenhouse gas removals from LULUCF (6) *[$ktCO_2$-eq]*	3707.2	3321.4	3378.6	3470.2	3804.5	-	-198 421

(1) EFFIS (European Forest Fire Information System). Link.

(2) The climate protection gap refers to the share of non-insured economic losses caused by climate-related disasters, based on modelling of the risk from floods, wildfires and windstorms and on the insurance penetration rate. Scale: 0 (no protection gap) – 4 (very high gap). EIOPA, 2025, Dashboard on insurance protection gap for natural catastrophes.

(3) This measures total water consumption as a percentage of the renewable freshwater resources available for a given territory and period. Values above 20% are generally considered to be a sign of water scarcity, while values equal to or greater than 40% indicate severe water scarcity.

(4) European Commission, 2024, *Seventh Implementation Report from the Commission to the Council and the European Parliament on the implementation of the Water Framework Directive (2000/60/EC) and the Floods Directive (2007/60/EC) (Third River Basin Management Plans and Second Flood Risk Management Plans).*

(5) Indicator refers to concentrations of nitrate (NO_3) in groundwater, measured as milligrams per litre ($mgNO_3/L$). Nitrate can persist in groundwater for a long time and accumulate at a high level through inputs from anthropogenic sources (mainly agriculture). The EU drinking water standard is limited to 50 $mgNO_3/L$ to avoid threats to human health.

(6) Net removals are expressed in negative figures, net emissions in positive figures. Reported data are from the 2025 greenhouse gas inventory submission. 2030 value of net greenhouse gas removals as in Regulation (EU) 2023/839 – Annex IIa.

Sources: Eurostat, EEA and JRC

ANNEX 11: LABOUR MARKET

The Dutch labour market remains resilient, with high employment and participation rates, although structural pressures increasingly weigh on competitiveness. The 2025 country-specific recommendations for the Netherlands highlighted the challenges related to labour market segmentation and persistent labour and skills shortages. Unemployment has edged up from historically low levels in recent years, while remaining low overall. Labour shortages have eased somewhat from their peak but remain among the highest in the EU. Labour and skills shortages continue to constrain firms' capacity to expand production and economic activity, while labour market fragmentation hampers the upskilling and mobility needed to tackle shortages in high-productivity sectors and those linked to societal challenges. Job quality concerns persist for certain groups, particularly mobile and migrant workers in low-wage sectors with precarious working conditions. Addressing these challenges will be crucial to ensuring an inclusive labour market while boosting productivity and competitiveness.

The labour market continues to perform well overall despite signs of a gradual cooling. The labour market remained strong in 2025, with the employment rate broadly stable at 83.4%, one of the highest in the EU and well above the EU average of 76.1% and the national 2030 target of 82.5%. Following a modest increase in 2024, unemployment rose further from 3.8% in January 2025 to 4% in January 2026, but it was still at a historically low level ([368]). The increase was largely driven by a rise in the number of people entering the labour market, outpacing employment growth. Labour market participation is still high, including for women (the employment rate for this group stood at 79.6% in 2025 compared with 71.3% in the EU). However, part-time employment remains widespread in this group, although it is largely voluntary. The share of young people neither in employment nor in education and training increased to 4.9% in 2024, still among the lowest in the EU, including for young persons with disabilities. After a decade of subdued outcomes, labour productivity showed a mild rebound in 2025 ([369]), but structural productivity growth remains constrained by several factors, including continued expansion of employment in low-productivity sectors and high prevalence of flexible work arrangements. Removing these structural bottlenecks will be essential to supporting sustainable growth and competitiveness, while ensuring sufficient labour supply for the green and digital transitions.

Labour shortages are still a significant constraint on economic activity. The 2025 country-specific recommendations call for measures to tackle labour and skills shortages, including by mobilising underused labour potential, strengthening upskilling and reskilling opportunities and facilitating mobility towards high-productivity sectors and sectors linked to societal challenges. Despite some easing from its 5% peak in Q2-2022, the job vacancy rate stood at 4.0% in Q4-2025, still one of the highest in the EU (EU: 2.1%). National data also point to a gradual easing of labour market tightness, with the number of unemployed people again exceeding the number of vacancies since mid-2025 ([370]). While the macroeconomic skills mismatch ([371]) and overqualification rate remain low, shortages persist across several sectors ([372]), notably construction (7.1% in Q4-2025), professional, scientific and technical activities (5.0%), accommodation and food services (4.3%) and ICT (4.8%). This is also reflected in the share of employers reporting labour shortages as a major factor limiting production ([373]). In Q1-2026, this share was 38.6% in services, 27.8% in industry and 20.7% in construction, all above pre-pandemic levels.

([368]) Euro area unemployment at 6.1% - Euro indicators - Eurostat.

([369]) Labour productivity in the Dutch economy up by 2.4 percent in 2025 | CBS.

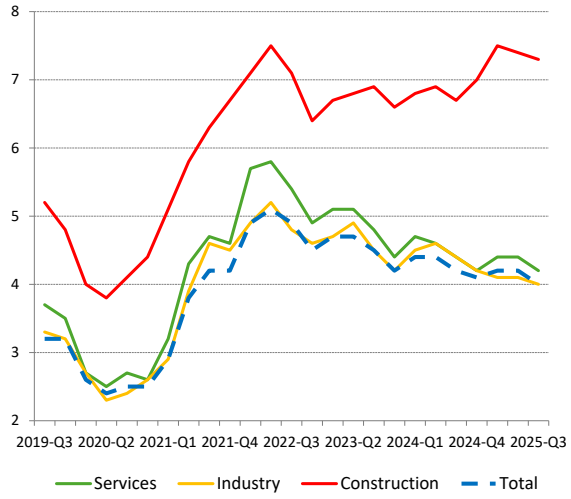
([370]) Spanning op de arbeidsmarkt | CBS.

([371]) The macroeconomic skills mismatch indicator measures the discrepancies between employment outcomes for workers with low, medium and high levels of skills (represented by qualification levels, with ISCED 0-2– low, 3-4 – medium and 5-7 – high).

([372]) See Eurostat for sectoral differences.

([373]) Source: European Business and Consumer Surveys.

Graph A11.1: **Job vacancy rates by sector (2019-2025)**



(1) Job vacancy statistics by NACE Rev. 2 activity - quarterly data
Source: Eurostat

Structural labour and skills shortages may also slow the green and digital transitions. Several structural factors continue to underpin labour and skills shortages, including demographic ageing, slowing labour supply growth and persistent productivity constraints in parts of the economy. According to long-term projections by the Dutch Central Planning Bureau, workforce growth is expected to be close to zero in the coming decades, which is expected to weigh particularly heavily on sectors such as healthcare (see Annex 15), education, transport, manufacturing and public administration. Uncertainties around future migration inflows may constrain labour supply even further. At the same time, a substantial share of employment growth over the past decade has occurred in low-productivity sectors ([374]), food processing and basic services, affecting aggregate productivity growth ([375]). The government has taken steps to address labour and skills shortages through a combination of activation, skills development and improved matching measures. Efforts to tap into the remaining underused labour potential focus primarily on refugees and asylum seekers, including targeted integration pathways, employer support and pilot schemes combining work and integration. Upskilling and reskilling are supported through sector-specific development paths, complemented by SLIM training subsidies (a scheme supporting learning and skills development in SMEs) in key sectors affected by shortages. These measures are complemented by the ongoing reform of regional labour market services. Measures to further increase labour supply remain relevant, including enhancing job quality and improving work-life balance for parents and carers, notably through reforms to childcare affordability and access, thereby facilitating an increase of the number of hours worked. Together with sustained investment in innovation and productivity-enhancing technologies, such measures could help ensure adequate labour supply in sectors facing structural shortages and support sustainable and inclusive growth.

Labour market segmentation is still a major structural challenge. The 2025 country-specific recommendation calls for reducing incentives for the use of flexible and temporary contracts. Despite a slight decrease from the 2024 level, the use of flexible employment, including temporary contracts and self-employment without employees, continues to be very high. The shares of flexible and temporary contracts remain far above the EU average (22.3% and 11.5% respectively in 2025), as does the number of self-employed people without employees (10.9% vs 7.6% of total employment in 2025). The prevalence of flexible employment continues to reinforce labour market segmentation, driving down employers' investment in their employees' skills, while leaving workers at the margins of the labour market more exposed to in-work poverty and social exclusion. It may also slow progress towards the green and digital transitions, as workers in flexible arrangements tend to receive less employer-provided training and may have fewer opportunities to move into higher-productivity occupations. To address perverse incentives for the use of self-employment and create a more level playing field for employees, the recovery and resilience plan introduced a gradual reduction of the tax deduction for the self-employed and ended the tax administration's enforcement moratorium on bogus self-employment. The reduction of the tax deduction started in 2023 and is continuing gradually, while the moratorium ended in 2025. By contrast, two other measures in the plan, that is, (i) the

([374])Labour Market and Wage Developments Review 2025.

([375])Dynamics, Productivity, and Innovation in the Dutch Economy | CPB Website.

introduction of mandatory disability insurance for the self-employed and (ii) the bill clarifying what an employment relationship is, including a legal presumption of an employment relationship, have been delayed and remain under preparation. The government has also proposed legislation to strengthen job security for workers in flexible employment, for instance by abolishing zero-hours contracts, introducing more predictable bandwidth contracts and improving protections for temporary agency workers. Separately, legislation introducing a mandatory licensing system for temporary-employment agencies has been adopted and will enter into force in 2027.

Despite a high participation rate, access to quality employment remains uneven across groups. The 2025 country-specific recommendations also call for better mobilisation of underused labour potential. People with low levels of skills, people with a migrant background and persons with disabilities continue to face difficulties in securing stable and well-paid jobs. Workers on flexible and temporary contracts are concentrated in the low-skilled, low-productivity sectors, which contributes to lower earnings and significantly higher in-work poverty risk than in the case of workers on permanent contracts. Part-time work is widespread, particularly among women (60.2% vs 27.5% in the EU in 2025), mainly due to care responsibilities. Although involuntary part-time work is rare, and the gender employment gap is below the EU average (7.6 pps vs 9.6 pps in 2025), this results in one of the widest gender gaps in part-time work in the EU (41.3 pps vs 19.7 pps) and a substantial gender pension gap (29.5% vs 23.9%). While the employment rate of people born outside the EU is above the EU average (68.8% vs 66.0% in 2025), the gap separating them from native-born workers remains more than twice the EU average, reflecting lower educational outcomes and discrimination affecting both people born outside the EU and native-born workers with a migrant background, as well as limited recognition of foreign qualifications. A recent analysis points to a still substantial untapped labour potential ([376]), suggesting that the effectiveness and reach of existing measures will need to be improved and closely monitored. The disability employment gap has increased in 2025 (24.3 pps vs 20.9 pps in 2024) and is around the EU average, while the Netherlands has not set a target for improving the employment rate of persons with disabilities.

Non-native workers are disproportionately affected by poor job quality and working conditions. EU mobile and migrant workers are over-represented in labour-intensive and low-productivity sectors such as logistics, meat processing and horticulture. While present across the country, these sectors are concentrated in specific regional clusters, including logistics hubs in Noord-Brabant and Zuid-Holland, agro-industrial areas in Gelderland, and greenhouse horticulture in Westland (Zuid-Holland). Many of these workers are employed through temporary work agencies, accounting for around half of all international workers in these sectors ([377]). These workers face substantially higher contractual instability: in 2025, 21.3% of Dutch nationals were on limited-duration contracts, compared with 29.1% of mobile EU workers and 44.9% of migrant workers. Income levels are lower and exposure to in-work poverty markedly higher, especially among non-EU nationals. In-work poverty stood at 4.5% for nationals in 2025, compared with 6.8% for mobile EU workers and 24.3% for migrant workers. These rates rose sharply during the economic slowdown in 2023 for both mobile EU workers (to 9.7%) and migrant workers (to 23.1%), while remaining relatively stable for Dutch nationals. This indicates a pronounced cyclical vulnerability linked to weaker job security, higher dependence on agency work and poorer working and living conditions. The Dutch Safety Board estimates that at least 200 000 low-paid EU mobile workers are in a structurally vulnerable position, including a higher risk of workplace accidents compared with native-born workers in similar jobs. These patterns reflect persistent risks of poor working and living conditions for some mobile and migrant workers ([378])([379]). Not only does this affect workers' well-being, but it also generates downward competition on labour standards, disadvantaging employers who invest in stable contracts and

([376])Adviesraad Migratie, 2025.

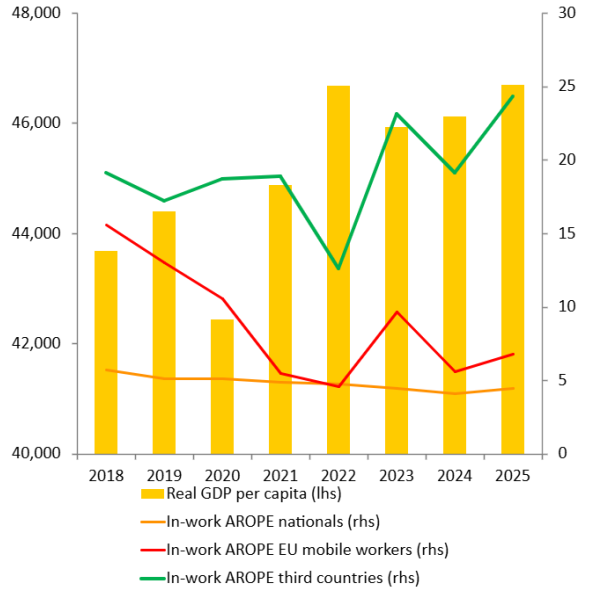
([377])ABU & NBBU, 2024; SER, 2025.

([378])Onderzoeksraad voor Veiligheid, 2025.

([379])In the Netherlands, employers are legally allowed to deduct up to 25% of the statutory minimum wage when accommodation is provided as part of remuneration. Recital 29 of Directive (EU) 2022/2041 on adequate minimum wages expressly states that deductions for allowances in kind, for example accommodation, are very likely to be disproportionate.

decent housing. Some steps have been taken to address these risks, notably through the adoption of legislation introducing a mandatory licensing system for temporary work agencies, which is set to enter into force in 2027 and to be enforced from 2028. However, tackling these issues may require stronger enforcement of labour standards, monitoring accountability along subcontracting chains, requiring clearer certification of adequate employer- or agency-provided accommodation, closing gaps in registration and access to information, as well as introducing effective complaints mechanisms and basic services, while supporting labour mobility into higher-productivity sectors and transition-related occupations.

Graph A11.2: **Cyclical effects on in-work poverty among native, mobile and migrant workers**



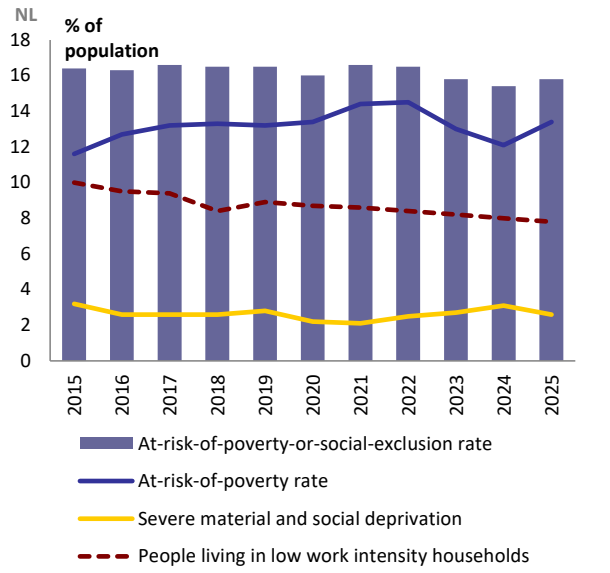
Source: Eurostat

Labour market tightness has contributed to robust wage growth in the Netherlands since 2023. Annual growth in compensation per employee stood at 6.6% in 2024, 4.7% in 2025 and is projected at 3.8% in 2026. In real terms, wages grew by 3.2% in 2024, 1.4% in 2025 and growth is forecast to have reached 0.5% in 2026. However, these growth rates come after the first post-pandemic period marked by declines in real wages due to high inflation. From a cost-competitiveness perspective, projections show nominal unit labour costs grew by an average of 5.3% per year between 2023 and 2026, above the EU average of 4.3%. The statutory minimum wage increased by 7.9% in real terms between 2020 and 2026, boosting the purchasing power of lower-income households. These positive wage developments are supported by a well-established system of collective bargaining and social dialogue, characterised by regular consultation of social partners within the established tripartite framework (the 'Polder model'), notably through the Social and Economic Council of the Netherlands.

The green and digital transitions are shaping employment patterns and skills requirements. In 2025, employment in the Netherlands' energy-intensive industries represented 1.2% of total employment (EU: 3.5%). At the same time, a significant potential for further job creation has been identified in renewable energy sectors, particularly in wind and solar electricity generation. Labour shortages remain particularly acute in construction, a sector of key importance to the green transition. The greenhouse gas emission intensity of the workforce has declined markedly, from 20.4 tonnes per worker in 2014 to 13.6 in 2024 (EU: 12.0), reflecting progress towards climate neutrality. The ICT sector is well developed, with ICT specialists accounting for 7% of total employment in 2024 (EU: 5%). However, shortages of technically skilled staff continue to impede the digital transition, and significant gender disparities persist, with women accounting for only 18.7% of ICT specialists in 2024. In this context, appropriate skills are crucial for successful labour market transitions, particularly in sectors crucial to the transformation (see Annex 13). The Dutch population nonetheless has a high level of digital skills, with 83.6% of individuals aged 16-74 possessing at least basic digital skills in 2025, compared with an EU average of 60.4%. To support a fair green transition, several policy instruments have been adopted, including measures under the Just Transition Fund to upskill workers to prepare them for green jobs and mitigate transition-related risks for vulnerable groups. The Action Plan for Green and Digital Jobs aims to boost skills and labour market participation, although further targeting of workers most affected by the transition would strengthen its impact.

The Netherlands continues to perform strongly on social outcomes. Although overall poverty trends have improved, the risk of poverty remains markedly higher for non-EU-born residents, persons with disabilities and children with foreign-born parents. Persistent disparities between population groups and structural gaps in access to key services pose ongoing challenges. At the same time, rising demand for long-term care and workforce shortages are putting increasing pressure on the sustainability and accessibility of care provision. The 2025 country-specific recommendation therefore calls on the Netherlands to improve the cost-effectiveness of long-term care, including by allocating benefits more efficiently. Addressing these challenges will be essential to ensuring inclusive social outcomes and sustained progress towards the national 2030 poverty reduction target.

Graph A12.1: **At-risk-of-poverty or social exclusion rate and its components**



Source: Eurostat, EU-SILC [ilc_peps01n, ilc_li02, ilc_mdsd11, ilc_lvhl11n]

Although poverty levels remain relatively low, some vulnerable groups face higher risks. The at-risk-of-poverty or social exclusion (AROPE) rate is low, standing at 15.8% (EU: 20.9%). Nevertheless, several population groups continue to experience significantly higher AROPE rates. Among non-EU-born people living in the Netherlands, 35.4% were AROPE (EU: 38.9%), which is 22.3 pps higher than among native-born residents (EU: 21.3%). European citizens (non-Dutch) living in the Netherlands also faced elevated poverty risks, with an AROPE rate of around 20.9%, 7.8 pps higher than that of native-born Dutch people; this group includes EU mobile workers ([380]). These vulnerable groups are over-represented in precarious and flexible forms of employment and continue to face challenges such as limited recognition of qualifications, reduced job opportunities, in-work poverty and discrimination. The AROPE rate for children is relatively low overall at 12.7% (EU: 24.3%), but children with foreign-born parents are disproportionately affected at 24.4% (EU: 33.8%). This rate is nearly four times the rate of 6.2% observed among children with native-born parents (EU: 14.4%). Participation in early childhood education and care (for children aged 0-3) also shows one of the largest income-related disparities in the EU, with a gap of 40.5 pps between children living in poverty and children not living in poverty in 2023. Recent evidence also shows significant variation in service availability across municipalities, reflecting differences in local capacity that contribute to uneven access to early childhood services and family support, particularly for low-income ([381]). Progress towards the national 2030 target of reducing the number of people at risk of poverty or social exclusion by 163 000 compared with 2019 weakened substantially in 2025. After a net reduction of 86 000 persons in 2024, the number of people at risk of poverty or social exclusion in 2025 was only 3 000 below the 2019 level. In this context, a comprehensive approach, as set out in the EU Anti-Poverty Strategy, could help address the multiple dimensions of poverty and support progress towards the national anti-poverty target.

Income inequality remains relatively low. The income quintile share ratio (S80/S20) declined to 3.76 in 2025 (from 4.15 in 2020), which is well below the EU average of 4.62. Despite this favourable trend, the level of real gross adjusted disposable household income per capita has grown slightly less strong in the Netherlands than in the EU since 2008, reaching an index of 114.86 compared to 115.55 in 2025. However, wealth inequality remains comparatively high, with a net wealth Gini coefficient ([382]), and more recent estimates suggest the Netherlands experienced the largest increase in wealth inequality among

([380])Social Service Index 2025 NL.

([381])Social Service Index 2025 NL.

([382])https://www.eurofound.europa.eu/en/publications/all/a-picture-of-wealth-inequality-across-eu-member-states.

the ([383]). When pension wealth is taken into account, measured wealth inequality is considerably lower. However, differences in life expectancy across income groups make the distributional implications more complex. Wealth disparities are also increasingly reflected in differences in asset ownership, particularly between homeowners and renters.

Energy poverty remains relatively low, although some regional and structural disparities persist. In 2025, 6.6% of the population reported being unable to keep their homes sufficiently warm (EU: 8.8%), up by 4.2 pps since 2021, with much higher rates among people at risk of poverty (21.3%). Arrears on utility bills remain among the lowest in the EU, at 2.2% (EU: 7%). Energy poverty is more prevalent in regions with older or poorly insulated housing stock, particularly in parts of Groningen, Friesland, Drenthe and Zeeland ([384]), and in post-war urban neighbourhoods, where lower incomes and inefficient dwellings increase vulnerability to energy price fluctuations. Several temporary measures have mitigated the impact of rising energy costs. These include price caps, targeted energy allowances and local 'energy fixers' ([385]). However, regions with structurally poor housing quality and limited municipal capacity struggle to reduce energy poverty without sustained investment. From 2026, the Social Climate Fund will provide additional support, with EUR 720 million allocated to the Netherlands. The draft social climate plan includes measures such as an expanded National Heat Fund, a Public Energy Fund that links income support to renovation advice, and municipality-led advisory and repair teams ('energy houses' and 'fix teams') that support vulnerable households and micro-enterprises. The availability of public transport does not appear to be a major issue at national level. However, regional disparities persist, with public transport services being more limited in certain regions such as Friesland than in the rest of the country ([386]). Transport fuel expenditure under ETS2 is projected to increase at a rate comparable to the EU average.

While the legal framework provides for equal access to social protection, effective coverage remains uneven in practice. In sectors with a high prevalence of temporary and agency work, risks of non-compliance and abusive practices persist, undermining access to social rights. Capacity constraints in labour inspection and enforcement, particularly at local level, remain a challenge. In this context, effectively rolling out and enforcing the certification system for temporary work agencies will be important for ensuring that formal rights translate into effective protection for workers. Gaps in access to social protection persist for non-standard workers and self-employed people. Although there is broad mandatory protection for employees on permanent contracts, significant disparities persist for those in flexible or atypical work. Certain groups are disproportionately represented in these types of employment, especially in seasonal, agency-based and low-paid jobs. This increases the risk of fragmented contribution histories, in-work poverty and reduced access to earnings-related benefits. Substantial formal coverage gaps also remain for self-employed people: around 1.29 million are not subject to mandatory cover for unemployment benefits, paternity benefits or accidents at work, while participation in voluntary schemes remains very limited (around 17 700 contributors in 2023, or 1.5% of self-employed workers). Access to social protection and related social services also varies across regions and municipalities, reflecting differences in local administrative capacity and resources. Areas with high inflows of mobile and migrant workers face particular pressure, which can limit timely access to registration, guidance and social assistance in practice, despite formally broad national coverage. Although registration in the municipal population register is not a prerequisite for free movement, it remains an important gateway to accessing social services and social assistance. Labour migrants and EU mobile workers may also face barriers to using these services, including administrative complexity and limited information ([387]).

The Netherlands is planning to introduce mandatory disability insurance for self-employed people as part of its recovery and

([383])Global Wealth Report 2025 | UBS Global.

([384])Netherlands Organisation for Applied Scientific Research (TNO).

([385])Netherlands Organisation for Applied Scientific Research (TNO).

([386])Data from Commission's Transport Poverty Hub.

([387])Social Service Index 2025 NL.

resilience plan. This reform aims to close a structural gap in income protection and reduce disparities in social protection coverage between employees and self-employed, as these can incentivise bogus self-employment. However, the reform has not yet been adopted and is expected to enter into force only later in the decade. Additional national proposals seek to limit the excessive use of flexible contracts and further narrow gaps between employees and self-employed people. Nevertheless, given the high prevalence of flexible employment and the comparatively weaker social protection for non-standard workers, disparities in coverage across employment types remain a structural feature of the Dutch labour market (see Annex 11).

Ensuring adequate and sustainable long-term care provision is a growing challenge. The population aged 65 and over is projected to rise steadily, with the old-age dependency ratio expected to increase from 34.3% in 2022 to 56.3% in 2070. Public spending on long-term care (health) amounted to 2.90% of GDP in 2023, the highest level in the EU. Expenditure on long-term care is projected to increase by 1.9 pps of GDP by 2070 ([388]). Demographic pressures and increasing care intensity are expected to put further pressure on the long-term care system. Workforce shortages remain a structural constraint. High part-time employment rates, demanding working conditions and difficulties in recruiting and retaining staff limit the system's capacity. Recent findings from the Dutch interdepartmental policy review on labour migration further indicate that reliance on migrant labour is expected to increase in response to persistent staff shortages in the coming years ([389]). Although the Netherlands has one of the highest shares of long-term care workers in the EU (7.8 per 100 people aged 65 and over vs EU: 3.3 in 2024), shortages remain particularly acute in the care sector ([390]). Strengthening workforce sustainability, enhancing home- and community-based care, and improving cost-effectiveness will be essential to maintain accessible, high-quality long-term care in the years ahead.

([388])Commission 2024 Ageing Report.

([389])Netherlands, Ministry of Finance (2025), *IBO Arbeidsmigratie – Wat werkt voor de toekomst?* Available at: rijksfinancien.nl.

([390])Social Service Index 2025 NL.

The Netherlands' long-term productivity and competitiveness increasingly depend on its ability to strengthen skills development across the education and training system. The increase in the share of underachievers in reading, mathematics and science (combined) among 15-year-olds between 2018 and 2022 was one of the highest in the EU. Despite efforts, teacher shortages persist, affecting the quality of education. In recent years, several measures have been launched to address declining basic skills, but their impact is yet to be seen. The low share of science, technology, engineering and mathematics (STEM) and information and communications technology (ICT) graduates further exacerbates skills shortages. Despite high participation in education and training overall, gaps in access to lifelong learning and the alignment of training provision with labour market needs persist, limiting the effectiveness of upskilling and reskilling efforts. In 2025, the country-specific recommendations addressed to the Netherlands called for improvements in basic skills, including by addressing teacher shortages, providing tailored support to disadvantaged schools, and boosting participation in STEM programmes through targeted educational support and career advice, especially for women and students with a migrant background.

Participation in early childhood education and care (ECEC) is high, but persistent access gaps and growing staff shortages pose a risk to inclusiveness. Participation from age three is 93.6% (2024), slightly below the EU average (95%) and the 2030 target (96%). Access for children under three has expanded significantly: between 2015 and 2024, participation rose by 32.6 percentage points (pps) ([391]), the highest increase in the EU and well above the 2030 target of 45%. However, the participation gap between disadvantaged children and their peers remains one of the largest in the EU (33.9 pp.) ([392]). Staff shortages are a major challenge: about one third of childcare facilities face staffing issues, with an average shortfall of 25%. This limits targeted support ([393]). The government is preparing scheme to make childcare nearly free ([394]).

Basic skills are decreasing, but the share of top performers in mathematics and science remains among the highest in the EU, highlighting widening performance gaps. The share of underachieving students in PISA almost doubled between 2012 and 2022 for mathematics and science, and it increased 2.5 times for reading. Almost half of foreign-born students underachieve in mathematics (48.5%), while for native-born students with foreign-born parents, the underachievement rate is lower (37.9%). At the same time, the Netherlands has the highest top performance rate in mathematics in the EU, even if the share of top performers has decreased significantly. To address decreasing basic skills, in 2022, the Netherlands launched the 'Masterplan for basic skills' with a budget of almost EUR 2 billion. By 2025, the initiative had reached 7800 schools and 95% of all students in primary and secondary education ([395]). According to a teacher survey, 80% of primary schools and 60% of secondary schools that participated in the first round of programme reported clear progress in language and mathematics skills ([396]). The interim evaluation of the Masterplan is planned for the end of the 2025/2026 school year.

Despite increased government investment in equity measures, Dutch education continues to face significant challenges in ensuring fair opportunities for all students. According to PISA, the share of learners from disadvantaged backgrounds achieving at least a 'good' level of proficiency dropped between 2018 and 2022 from 29.4% to 21.7%. An evaluation of government policies for equity in primary and secondary education shows that government spending on equity measures doubled between 2016 and 2023, however equity outcomes did not improve.

([391]) Education and Training Monitor 2025, Education and Training Monitor 2025.

([392]) Education and Training Monitor 2025, Education and Training Monitor 2025.

([393]) Bakker, A-F. Das, L. de Lange, A. Leseman, P. Varwijk, J. (2023) *Personeelstekort bij Voorschoolse Educatie* https://open.overheid.nl/documenten/dpc-e545e79882de36fe0ac7edf0173493c463952fac/pdf.

([394])Ministerie van Sociale Zaken en Werkgelegenheid (2025). *Kamerbrief Kinderopvang.* 15 September 2025. [31 322 nr. 569].

([395])Subsidie Verbetering basisvaardigheden | Masterplan basisvaardigheden.

([396])https://www.masterplanbasisvaardigheden.nl/documenten/2024/12/04/vijfde-voortgangsbrief-tweede-kamer.

Early tracking and strong differentiation in secondary education are identified as the main factors contributing to education inequity ([397]). Starting from 2024, students take a literacy and numeracy test in primary education aimed at enhancing equity (transition test), to give an objective indication, alongside teacher advice for determining secondary education track ([398]). After the first round of test, held in 2024, more students followed higher-level tracks in secondary education ([399]); however, it raised questions about comparability and fairness of tests ([400]).

The level of students' digital skills is low, but measures to address it are ongoing. Most Dutch students are low achievers in digital skills, and students show one of the largest differences in the EU based on the level of their parents' education ([401]). To boost students' digital skills, learning goals for digital literacy in primary education and first-cycle secondary education are developed within the ongoing curriculum reform, covering learning about how artificial intelligence works, the functioning of digital and social media, ethical aspects, and how digital media and society influence each other.

Teacher shortages are considerable and impact education quality. In 2022, the Teacher Strategy introduced several measures to enhance the attractiveness of the profession, including salary increases. In 2023, educational regions were established to address shortages in a more strategic and coordinated manner. The first results are visible. In 2025, shortages amounted to 6.3% in primary schools (5 760 full-time equivalents, FTEs) and 3.5% in secondary education (2 200 FTEs) ([402]). The largest shortages are faced by primary schools in the five biggest cities (11%, compared with 4.8% outside these cities) and in primary schools for students with special education needs (7%, compared with 6.3% in regular schools). Although shortages are still substantial, the situation has improved compared with 2022, when the shortage in primary education reached nearly 10 000 ([403]). According to TALIS 2024 data ([404]), the Netherlands has the EU's highest share of secondary-education teachers who are satisfied with their salary at 74.1%, which is a significant increase compared with 58% in 2018. The main factors driving teacher shortages include a tight labour market, ([405]) the strong part-time work culture: in primary education, around 70% of teachers work part-time ([406]).

Vocational education and training (VET) supports strong school-to-work transitions, despite its limited contribution to addressing STEM skills shortages. In the Netherlands, vocational pathways account for a markedly larger share of upper-secondary enrolment than in most Member States, with 69.7% of students enrolled in programmes with a vocational orientation, compared with 52.9% on average in the EU in 2024. People who have recently completed VET show very strong labour market outcomes, with 87.6% in employment in 2025 (EU average: 80.2%), while exposure to work-based learning remains among the highest in the EU, reaching 85.4% of VET students. At the same time, participation in STEM-oriented VET programmes remains limited. In 2024, only 19.0 ([407]). This constrains the ability of the VET system to address persistent shortages in technical occupations linked to the green and digital transitions. In response, the Netherlands is implementing the VET Work Agenda 2023–2027, strengthening regional partnerships with employers, expanding modular and micro-credential provision, and adapting VET programmes and apprenticeships to emerging skills needs, including under the Action Plan for Green and Digital Jobs. Further progress will depend on scaling up STEM provision in VET, tackling shortages of teachers in technical subjects and improving the inclusiveness of STEM pathways

([397]) https://www.rijksoverheid.nl/documenten/rapporten/2024/10/25/kiezen-voor-kansen-strategische-evaluatie-kansengelijkheid-in-het-funderend-onderwijs-2017-2023.

([398]) https://open.overheid.nl/documenten/158f6a2b-03c9-4f30-ba5a-d0d2a7cb89b1/file.

([399]) https://open.overheid.nl/documenten/158f6a2b-03c9-4f30-ba5a-d0d2a7cb89b1/file.

([400]) Kamerbrief schetst positief beeld van doorstroomtoets maar zorgen blijven | PO-Raad.

([401]) 2023 International Computer and Information Literacy Study.

([402]) Arbeidsmarktramingen onderwijs 2025.

([403]) Scarcity grinds - in brief | Onderwijsraad.

([404]) TALIS 2024 data for the Netherlands should be interpreted carefully due to its low reliability linked to low response rate.

([405]) Nieuwe stap bij het stimuleren van meer uren werken in het onderwijs | Nieuwsbericht | Rijksoverheid.nl.

([406]) Nieuwe stap bij het stimuleren van meer uren werken in het onderwijs | Nieuwsbericht | Rijksoverheid.nl.

([407]) StatLine - Mbo; studenten, niveau, leerweg, studierichting, regio 2015/'16-2021/'22.

to fully realise VET's contribution to productivity growth and competitiveness.

Tertiary educational attainment in the Netherlands remains among the highest in the EU, but the system continues to undersupply STEM skills, contributing to persistent shortages in high-demand sectors. Among those aged 25-34, 55.1% held a tertiary degree (EU average: 44.2%). Among the non-EU-born population, this figure is 47.8%. The urban–rural gap in tertiary educational attainment (aged 25–34) is below the EU average (20.5 percentage points vs 22 percentage points), meaning that young people from rural areas participate in higher education less often than their urban peers (see Annex 18). Students from disadvantaged or non-traditional backgrounds face higher first-year dropout and programme switching rates ([408]). They remain under-represented relative to the overall student population ([409]). The overall strong tertiary attainment does not translate into sufficient STEM output. In 2023, only 18.6% of tertiary students were enrolled in STEM fields, compared with an EU average of 26.9% and the proposed EU 2030 target of 32%. Women remain under-represented, accounting for 30.2% of STEM students (EU average: 32.2%). Specialisation in ICT is also limited, including at doctoral level, where ICT enrolment stood at 3.6% in 2023 (EU average: 3.8%), below the proposed EU target of 5%. These patterns point to structural constraints in the STEM pipeline, despite high overall participation in tertiary education, and continue to weigh on the supply of skills needed for the green and digital transitions.

Persistent skills shortages in key sectors for the green transition highlight challenges in aligning training provision with labour market needs. Shortages remain particularly pronounced in sectors that are key for the transition to climate neutrality, including construction, energy and manufacturing, where job vacancy rates are consistently above the EU average (see Annex 11). Nearly half of small to medium-sized enterprises (SMEs) in the Netherlands report that skill shortages are hindering their efforts to adopt digital technologies or green their business activities. In 2025, there continued to be reported shortages of several technical and professional profiles linked to the green transition and climate adaptation, such as civil engineers, systems analysts and welding specialists. While participation in education and training among workers in energy-intensive industries is high (25.9% in 2024; EU average: 11.7%), it remains below the national average across all sectors (35.6%), suggesting further scope to strengthen upskilling and reskilling efforts in sectors most affected by the transition. Improving the targeting and labour-market relevance of training provision would help close skills gaps and support productivity growth against the background of the green transition.

The rate of early leavers from education and training increased in 2024. In 2024, the rate of early leavers from education was 7%, up from 6.2% in 2023, but this is still below the EU average of 9.4% and the EU target of keeping rates below 9%. National data based on the number of people aged 12-23 obtaining an upper-secondary qualification show an improvement. The number of dropouts from secondary vocational education (*middelbaar beroepsonderwijs,* MBO) decreased from 24 286 in 2022/2023 to 22 308 in 2023/2024 ([410]). The total number of dropouts from secondary education reached 29 163, still far above the 2026 target of 18 000. Students who enter preparatory secondary vocational education (*voorbereidend middelbaar beroepsonderwijs*, VMBO) or MBO from special secondary education are particularly at risk of dropping out during the first few years of upper-secondary vocational education: 60% of them drop out. Under a new law planned for 2026, educational institutions, municipalities and regional organisations will have to conclude collaborative agreements on taking additional measures in order to prevent dropout and youth unemployment.

Skills intelligence is essential for a well-coordinated steer of training towards shortage areas. Over 7 in 10 SMEs report difficulties in finding workers with the right skill

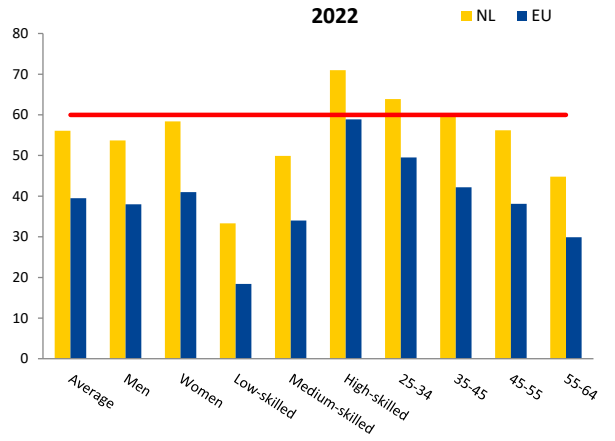
([408]) Social and Economic Conditions of Student Life in Europe. Eurostudent 8 Synopsis of Indicators 2021-2024.

([409]) Social and Economic Conditions of Student Life in Europe. Eurostudent 8 Synopsis of Indicators 2021-2024.

([410]) OCW (2025c): Ministerie van Onderwijs, Cultuur en Wetenschap (OCW): Voortgang actieplan voortijdig schoolverlaten. https://www.rijksoverheid.nl/documenten/kamerstukken/2025/03/24/voortgang-actieplan-voortijdig-schoolverlaten.

set ([411]). The Netherlands combines a well-established skills intelligence system, such as the Research Centre for Education and the Labour Market, with targeted policy instruments to steer training towards shortage areas. Labour market monitoring integrates vacancy and employment data with macroeconomic and labour market forecasts to anticipate shortages and surpluses by occupation and qualification. This is translated into guidance tools for education providers, public employment service counsellors, and learners. The national qualifications framework is referenced to the European Qualifications Framework, supporting transparency and comparability of qualifications. Building on this evidence base, sectoral development paths are being rolled out to link identified bottlenecks to concrete training and transition routes, notably in technical sectors. Developed jointly with social partners and partly financed through the SME training subsidy scheme (SLIM), this approach strengthens coordination and targeting. However, implementation remains at an early stage, with limited scale and roll-out in key technical sectors having only begun in late 2025.

Graph A13.1: **Adult learning**



(1) Participation in learning in the last 12 months (excluding guided on-the-job training (GOTJ))
Source: AES 2022 (excluding guided on-the-job training)

Adult digital skills are among the strongest in the EU, but significant gaps persist for vulnerable groups. The Netherlands has one of the highest shares of adults with at least basic digital skills in the EU (83.3%), well above the EU average (55.6%). However, shortages of advanced digital and technical skills continue to constrain digital transformation across sectors (see Annex 11). Adults with lower levels of education, those in non-standard employment, older people, and people outside the labour force remain significantly less likely to possess adequate digital skills or participate in upskilling ([412]). The recovery and resilience plan supports digital skills development, notably in secondary and higher education, while the Action Plan for Green and Digital Jobs provides the overarching framework to address shortages in digital and technical occupations up to 2030. The plan brings together government, social partners and education providers to increase inflows into technical and digital education, support reskilling and upskilling, improve labour market matching through sectoral development pathways, and strengthen coordination. While early implementation shows progress in expanding training pathways, ensuring that adult digital upskilling opportunities reach groups most at risk of digital exclusion remains a key challenge.

Despite strong overall performance, structural challenges in ensuring inclusive and labour-market relevant lifelong learning persist. In 2022, 56.1% of adults (aged 25-64) participated in formal or non-formal education and training (excluding on-the-job training), well above the EU average and close to the national 2030 target of 62%. However, participation had declined slightly compared to 57.1% in 2016, and more recent data ([413]) point to a stagnating trend. Participation also remains uneven: low-qualified adults, those on temporary or flexible contracts, people with a migrant background, persons with disabilities and people outside the labour force participate significantly less, limiting the role of training in supporting upward mobility and career transitions. Following the abolition of the STAP (*Stimulering Arbeidsmarkt Positie*) individual learning budget in 2023, the Netherlands no longer provides a general individual entitlement to lifelong learning. The SLIM subsidy mainly supports employer-based training and firm-specific needs, offering limited support for intersectoral mobility or individual career transitions, while the decentralised organisation of support contributes to uneven outreach for

([411]) European Year of Skills - Skills shortages, recruitment and retention strategies in small and medium-sized enterprises - September 2023 - - Eurobarometer survey.

([412]) Network of Experts in Adult Learning, Second Status Report, European Commission 2025.

([413]) Data on adult learning participation (in the past 12 months) for 2022 and 2024 based on the labour force survey.

vulnerable groups. Consequently, access to adult learning remains closely linked to people's position in the labour market. Strengthening inclusive access to adult learning and better aligning training opportunities with labour market transitions remain key challenges for reaching the national 2030 target and supporting competitiveness.

The Netherlands continues to invest in tackling labour shortages through targeted upskilling and activation measures. Under the European Social Fund Plus, investments support people in unfavourable employment and vulnerable social situations to access work or training and to activate untapped skills and employment potential. The Dutch recovery and resilience plan includes an investment (*Scholingsregeling WW*) to upskill and reskill temporarily unemployed individuals with a weak labour market position. This initiative, which became operational in 2023, provides financial support for at least 8 000 training programmes to facilitate the labour market reintegration of the target group.

Table A14.1:**Social Scoreboard for Netherlands**

Equal opportunities and access to the labour market	Adult participation in learning (during the last 12 months, excl. guided on the job training, % of the population aged 25-64, 2022)	56.1
	Early leavers from education and training (% of the population aged 18-24, 2025)	7.4
	Share of individuals who have basic or above basic overall digital skills (% of the population aged 16-74, 2025)	83.6
	Young people not in employment, education or training (% of the population aged 15-29, 2025)	5.3
	Gender employment gap (percentage points, population aged 20-64, 2025)	7.6
	Income quintile ratio (S80/S20, 2025)	3.76
Dynamic labour markets and fair working conditions	Employment rate (% of the population aged 20-64, 2025)	83.4
	Unemployment rate (% of the active population aged 15-74, 2025)	3.9
	Long term unemployment (% of the active population aged 15-74, 2025)	0.5
	Gross disposable household income (GDHI) per capita growth (index, 2008=100, 2024)	112.3
Social protection and inclusion	At risk of poverty or social exclusion (AROPE) rate (% of the total population, 2025)	15.8
	At risk of poverty or social exclusion (AROPE) rate for children (% of the population aged 0-17, 2025)	12.7
	Impact of social transfers (other than pensions) on poverty reduction (% reduction of AROP, 2025)	36.8
	Disability employment gap (percentage points, population aged 20-64, 2025)	24.3
	Housing cost overburden (% of the total population, 2025)	6.5
	Children aged less than 3 years in formal childcare (% of the under 3-years-old population, 2025)	66.5
	Self-reported unmet need for medical care (% of the population aged 16+, 2025)	0.5

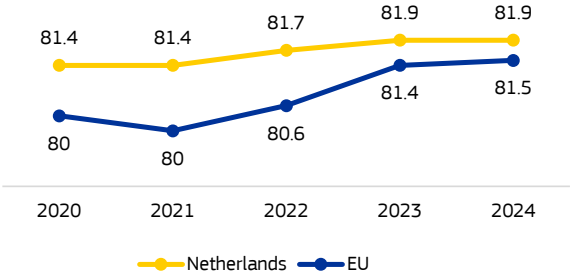
Critical situation	To watch	Weak but improving	Good but to monitor	On average	Better than average	Best performers

Update of 4 May 2026. Members States are categorised based on the Social Scoreboard according to a methodology agreed with the EMCO and SPC Committees. Please consult the Annex of the Joint Employment Report 2026 for details on the methodology (https://employment-social-affairs.ec.europa.eu/joint-employment-report-2026_en).

Source: Eurostat

Netherlands' health system performs comparatively well, with high life expectancy at birth linked to low levels of treatable and preventable mortality. Healthcare spending in the Netherlands is among the highest in the EU and primarily focuses on outpatient services. The country also has a strong primary care system. However, inequalities across most behavioural risk factors and regarding participation in preventive programmes persist between socio-economic groups, potentially increasing future healthcare demand. Income-related inequalities in access also remain, affecting particularly people at risk of poverty with regards to dental care. Unmet needs for mental healthcare are also large In addition, structural shortages of certain healthcare professions further increase workloads and job strain.

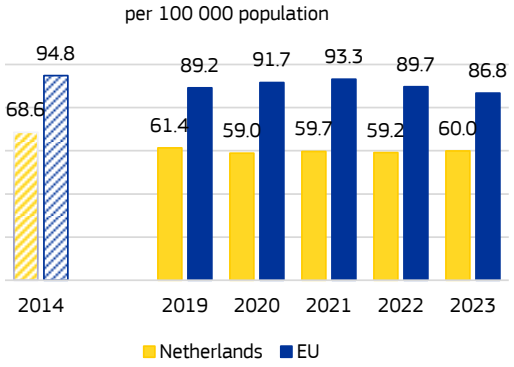
Graph A15.1: **Life expectancy at birth, in years**



Source: Eurostat (indicator: demo_mlexpec)

Life expectancy at birth in the Netherlands was slightly above the EU average in 2024 and is catching up to its pre-COVID-19 pandemic level (see Graph A15.1). Women are expected to live 2.8 years longer than men (below the EU average gap of 5.2 years). However, Dutch women have a lower life expectancy than the EU average reflecting partly the legacy of higher smoking rates among older cohorts of women, which continues to influence current mortality patterns. Treatable mortality is one of the lowest in the EU. In 2023, cancer and diseases of the circulatory system ('cardiovascular diseases', CVDs), including ischaemic heart disease and stroke, were the leading causes of death. CVDs and cancer jointly account for around half of all deaths, followed by Alzheimer's disease and other dementias. Cancer mortality is above the EU average. While men have higher cancer incidence than women, cancer incidence among women in the Netherlands was estimated to be 17% higher than the EU average, compared to only 4% higher among men. The most common cancer among men is prostate cancer, while breast cancer is the most common among women. The second most common cancer for both men and women is colorectal cancer, and the third most common is lung cancer. This is closely linked to tobacco use being the country's leading behavioural risk factor. As in other EU countries, the incidence and prevalence of CVDs in the Netherlands are significantly higher among men than women. Ischaemic heart disease (also known as coronary artery disease, caused by a narrowing of heart arteries) is the most common CVD ([414]).

Graph A15.2: **Treatable mortality**



Age-standardised death rate - mortality that could be avoided through optimal quality healthcare.
Source: Eurostat (indicator: hlth_cd_apr)

Preventable mortality was just below the EU average in 2023. The share of spending allocated to prevention of total health expenditure decreased in 2023 compared to 2022 despite being still above the EU average (5.2% vs 3.7%). Additionally, participation in all three population-based programmes for breast, cervical and colorectal cancer in the Netherlands has declined in recent years. Socio-economic inequalities in breast cancer screening are substantial. The 2021/2022 Survey of Health, Ageing and Retirement in Europe (SHARE) shows a 13 percentage-point gap in mammography rates between women with high and low education levels ([415]). The country participates in a joint action on cancer screening funded by the

([414]) OECD/European Observatory on Health Systems and Policies (2025), *Country Health Profile 2025: The Netherlands. State of Health in the EU.*

([415]) *Country Health Profile 2025: The Netherlands* – see earlier footnote.

Table A15.1:**Key health indicators**

	2020	2021	2022	2023	2024	10-year change**	EU average* (latest year)
Cancer mortality per 100 000 population	261.3	256.2	254.1	247.6	n.a.	0.88	233.1 (2023)
Mortality due to circulatory diseases per 100 000 population	219.7	219.9	225.7	220.6	n.a.	0.81	313.0 (2023)
Current expenditure on health, purchasing power standards, per capita	4 238	4 694	4 719	4 848	5 210	1.44	3834.9 (2023)
Public share of health expenditure, % of current health expenditure	85.0	83.8	82.8	82.7	83.2	1.02	80.6 (2023)
Spending on prevention, % of current health expenditure	4.6	9.7	6.8	5.2	4.8	1.38	3.7 (2023)
Available hospital beds per 100 000 population***	212	183	166	159	n.a.	n.a.	440 (2023)
Doctors per 1 000 population*	3.8	3.9	3.9	3.9	n.a.	1.17	4.3 (2023)*
Nurses per 1 000 population*	11.1	11.4	11.6	11.1	n.a.	1.10	7.6 (2023)*
Mortality at working age (20-64 years), % of total mortality	12.8	13.2	12.8	12.6	12.3	0.82	14.3 (2023)
Consumption of antibiotics in the community and hospital sectors, defined daily doses per 1 000 inhabitants	8.5	8.3	9.1	9.6	9.8	0.94	20.3 (2024)

*The EU average is weighted for all indicators except for doctors and nurses per 1 000 population, for which the EU simple average is used based on 2023 data (or latest available). Doctors' density data refer to practising doctors in all countries except Greece, Portugal (licensed to practise) and Slovakia (professionally active). Density of nurses: data refer to practising nurses (EU recognised qualification) in most countries except Portugal (licensed to practice) and Slovakia (professionally active). Latest data update on nurses for Belgium and Sweden: 2022; for France: 2021; for Luxembourg: 2017.
** latest available 10-year trend: ratio 2023/2014 or 2024/2013; a factor of 2.00 means that it has doubled in 10 years.
***'Available hospital beds' covers somatic care, not psychiatric care.
Source: Eurostat

EU4Health programme ([416]). Annual influenza immunisation among people aged 65 and over in the Netherlands has consistently exceeded the EU average over the past decade. However, vaccination among children shows a less favourable trend. First-dose measles immunisation has slightly declined in recent years to reach 89% in 2024, below the EU average of 92% and well short of the 95% threshold required for herd immunity. Human papillomavirus (HPV) vaccination also falls short of the recommended level.

Netherlands performs relatively well on most behavioural risk factors for health, but inequalities are substantial across most of these factors. Smoking (including direct and indirect smoking) was the leading cause of deaths in 2021. However, the adult smoking rate has sharply declined in the last decade, falling below the EU average. The decline may be linked to the implementation of stricter tobacco control measures aimed to achieve a smoke-free generation by 2040 ([417]). The introduction of increased tobacco taxation, plain packaging and other tobacco control measures in 2020 and 2021 also played a major role in reducing the smoking rate. Despite a slight increase over the past years, the obesity rate is still below the EU average. Fruit and vegetable consumption is higher than the EU average, although the percentage is lower among adolescents. Similar to trends in other EU countries, the prevalence of behavioural risk factors in the population varies significantly across socio-economic groups. People with lower educational attainment smoked more daily (20% vs 7% of people with higher education attainment) and are more likely to be obese (10 percentage-point gap).

Health spending remains among the highest in the EU in 2023 with a strong focus on outpatient care and primary care gatekeeping. Per capita health spending is 26% above the EU average, with the largest share of health spending going towards outpatient care (above the EU average - see Graph A15.1). Among EU countries reporting 30-day mortality following heart attack and stroke based on patient-level data, the Netherlands recorded one of the lowest rates in 2023. These outcomes reflect robust emergency and acute care performance. Low hospital admission rates for chronic conditions suggest effective outpatient care. The Netherlands maintains one of the lowest levels of hospital capacity in the EU. Hospital bed density declined steadily from 3.2 in 2017 to 2.3 per 1 000 in 2023, over twice below the EU average of 5.1. The sharp decline observed since 2022 reflects a change in the inclusion criteria, as beds for psychiatric care covered by the Long-Term Care Act are no longer included. The Dutch healthcare system has increasingly shifted towards outpatient and day care services, reducing reliance on inpatient beds, as illustrated by the significant rise in the share of some procedures performed as day

([416])EUCanScreen.

([417])RIVM (2023), Towards a smoke-free generation: Options to make cigarettes less appealing and addictive.

surgery between 2015 and 2021([418]). The Dutch medical imaging capacity is also below the EU average reflecting the reduced investment on inpatient care. The Netherlands requested technical support as part of a multi-country project to apply health system performance assessment (HSPA) to strengthen policy decision-making, improve resource allocation, and accelerate progress toward national health goals. The project, funded through the Technical Support Instrument, aims to (i) systematically identify areas of suboptimal performance; (ii) understand the root causes; and (iii) develop timely policies to address challenges. This will be achieved by enhancing the use of HSPA to focus on performance pathways.

Netherlands demonstrates strong public health preparedness, although future capacity could be limited by budgetary and workforce constraints. The recovery and resilience plan (RRP) has supported a measure to strengthen healthcare workforce capacity in times of crisis. This investment has provided education and on-the-job training and has established a national reserve of former healthcare professionals. However, although the Netherlands is among the countries with higher estimated domestic spending on prevention, preparedness and response per capita ([419]), concerns have emerged over the long-term sustainability of public health readiness in emergencies. During the 2025 budget debate, the government announced a EUR 300 million reduction in funding for pandemic preparedness and infectious disease control. These constraints have raised concerns that future public health capacity could be undermined, with essential functions already under strain due to funding uncertainty and workforce shortages ([420]). However, on antibiotic use, the Netherlands maintains one of the lowest rates in the EU and has remained on track to meet its 2030 targets.

Unmet needs for medical care remain low but are much higher among people with low incomes and are rising sharply for mental health, especially among socio-economically disadvantaged groups. In 2025, only 1.6% of the population reporting a need of medical care also reported that this need was unmet. This represents less than half the EU average of 3.6%, according to the EU-SILC survey. However, the gender gap is more than double the EU average (2.1 vs 0.7). Inequalities in access by income group are observed in particular in unmet needs for dental care. While 3.1% of all people in need of dental care reported unmet needs for dental services, the rate rose to 7.6% among those in lower-income households. A significant access gap in the Netherlands concerns mental health. According to the 2024 Eurofound survey ([421]), 9% of adults in need of mental healthcare reported an unmet need in the Netherlands, compared to an EU average of 7%. This reflects a mismatch between growing demand and limited system capacity.

Although numbers of general practitioners (GPs) and nurses have risen recently, persistent structural shortages in some healthcare professions continue to intensify workload pressures and job strain. While the number of doctors and nurses has increased over the past decade, the demand for healthcare has also increased, and a large share of doctors, nurses and other healthcare providers report feeling growing pressure at work and trying to do too much at the same time. Healthcare professionals often raise concerns about limited autonomy and a lack of time for patient care due to heavy administrative burdens. The number of doctors relative to the population is slightly below the EU average in 2023, while the number of nurses is above the EU average, suggesting a greater reliance on nurses in delivering services, participating in task-sharing and engaging in advanced practices. However, significant staffing difficulties persist. Hospitals continue to struggle with nursing workforce gaps and shortages are also particularly acute in nursing homes (see Annex 12) and home care services. There is also a growing trend in healthcare workers opting for self-employment over salaried positions. However, this approach raises serious concerns about escalating costs and potential negative impacts on the quality and continuity of care. To support the implementation of health workforce planning and

([418]) *Country Health Profile 2025: The Netherlands* – see earlier footnote.

([419]) OECD Health Statistics 2025.

([420]) IGJ (2025), Fundament publieke gezondheidszorg bedreigd door onzekere toekomst GGD [Foundation of public healthcare threatened by uncertain future of Municipal Health Services].

([421]) The data from the Eurofound survey are not comparable to the Eurostat ones mentioned earlier, because of differences in methodologies.

forecasting, the Netherlands actively participates in the joint action HEROES ([422]) funded by the EU4Health programme.

Netherlands has promoted investment in digital technologies for health, expanding their uptake. The country has been investing consistently in digital technologies for health. In 2022, the Netherlands was among the EU countries investing the most on digital health, in particular ICT equipment, software, and databases ([423]). The national vision and strategy on the health information system, launched by the Ministry of Health, Welfare and Sport in 2025, aims to modernise health data infrastructure and support digital and AI competences among healthcare professionals and medical students. Netherlands also received substantial EU funds supporting digitalisation. Under the RRP, two measures out of the four under the healthcare component have contributed to supporting the digital transformation of the healthcare sector. One measure aims to support care for people living at home, in particular for older people and people with vulnerable health through e-health solutions. Another aimed at developing an integrated national health data infrastructure, also stimulating innovation in life sciences. In addition, the 2021-2027 cohesion policy funds provide around EUR 7 million for e-health services and digital applications. Moreover, the Netherlands participate in joint actions and benefits from direct grants under EU4Health, which aim to facilitate the implementation of the European Health Data Space and AI solutions.

The pharmaceutical sector holds significant economic importance in the Netherlands. While employment in pharmaceutical manufacturing remains among the lowest in the EU, the country stands out as a leading hub for clinical research and innovation. Despite relatively low investment from industry in pharmaceutical R&D, the Netherlands reported one of the highest numbers of clinical trials per million population in the EU in 2024 (31.4, compared with an EU average of 18.3) ([424]), alongside a high number of pharmaceutical patents granted (3.1) in 2024, almost double of the EU average (1.8) and further increasing in 2025 ([425]).

([422]) JA HEROES | Health Workforce Planning Project – A WordPress Full-Site Editor Theme https://healthworkforce.eu/.

([423]) *Country Health Profile 2025: The Netherlands* – see earlier footnote.

([424]) US National Library of Medicine, https://clinicaltrials.gov.

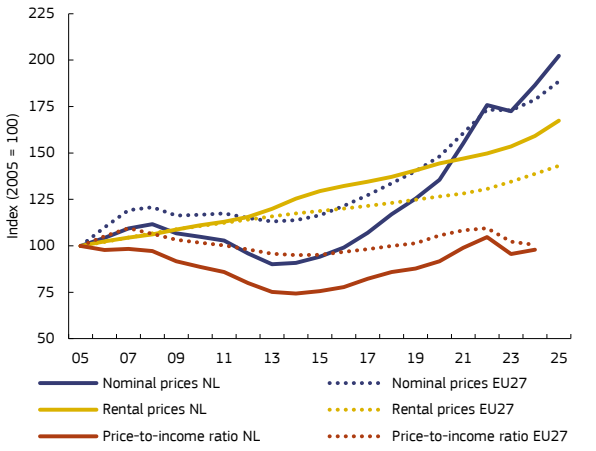
([425]) European Patent Office: Statistics & Trends Centre | epo.org.

Key challenges in the Netherlands include rapidly rising house prices, persistent shortages of new dwellings and constraints in the private rental market, which remains small and expensive. Affordability pressures disproportionately affect tenants. This is reflected in long waiting lists in the social rental sector and strong demand in the private rental segment. The supply of new housing remains below national targets due to complex planning and permitting procedures, environmental constraints, infrastructure bottlenecks and labour shortages, despite ongoing efforts to simplify procedures. In the rental market, protective regulations for tenants have been strengthened, but investor disincentives persist, leading to a shrinking private rental segment and limiting affordability. While social housing construction has increased, it remains insufficient to fully mitigate affordability pressures, particularly for lower-income households and vulnerable groups. Moreover, the housing association sector faces a significant EUR 20 billion investment gap to meet expected needs for new construction, renovation and decarbonisation of the housing stock. This gap reflects constraints on the sector's capacity to scale up investment despite strong and persistent demand. Overall, the Netherlands has made only limited or partial progress in addressing structural housing market challenges, reflecting the need for targeted reforms to increase housing supply, improve investment incentives and reduce demand-side distortions. Regional supply pressures, persistent affordability constraints in high-demand urban areas and energy-related cost burden for vulnerable households further compound housing access challenges. In the area of housing, the 2025 country-specific recommendations for the Netherlands highlighted the need to remove obstacles to the construction of new dwellings by simplifying planning and permitting procedures, to support the development of an affordable private rental sector including by making investment conditions more attractive, and to reduce incentives for debt-financed homeownership (see Annex 3 on Taxation).

Housing market developments

House prices continue to rise in an already expensive housing market. Since 2013, prices have increased strongly, with only a temporary slowdown in 2022-2023 because of a spike in interest rates (see Graph A16.1). This substantial increase in house prices has affected all provinces, with prices often more than doubling over the past decade. Despite a record number of 238 695 property sales in 2025, marking an almost 16% increase from 2024, largely driven by private landlords opting to sell their rental properties ([426]), average house prices increased by 8.6% in 2025 year-on-year ([427]) sustaining price overvaluation of around 20% (based on the standard European Commission methodology). This continued price increase is being driven by strong demand amid a constrained supply, which is expected to sustain house price growth in the next years.

Graph A16.1: **House prices, rents and price-to-income evolution in NL and EU27 since 2005**



Source: Eurostat

Demand pressures in the Dutch housing market are driven by demographic developments, favourable financing conditions and structural mismatches in the use of the existing housing stock. Population growth has been stronger than anticipated, while household formation has increasingly shifted towards smaller households, widening the mismatch, particularly in urban areas, between the available stock of larger dwellings and demand from groups such as students, first-time buyers and migrants. At the same time, rising disposable income, historically low interest rates and tax incentives, including mortgage interest deductibility and the low effective taxation of low imputed rents, have supported demand and

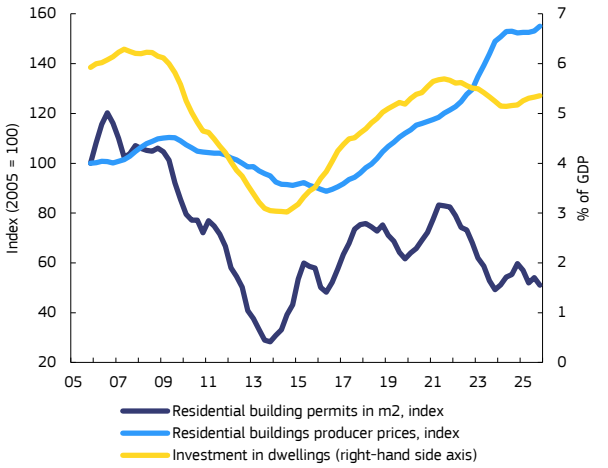
([426])See section on rental market.

([427])Statistics Netherlands (2026).

continued to favour homeownership financed through mortgages over renting (see Annex 5). These pressures are compounded by the high degree of under-occupation in the existing housing stock: around 59% of dwellings are classified as underoccupied, compared with an EU average of around 33% in 2024, reflecting limited mobility in the owner-occupied sector and the effects of population ageing.

The responsiveness of new dwelling supply to this high demand has remained limited. The housing supply gap is a major issue projected to exceed 400 000 dwellings in 2025 ([428]). The shortage is most acute in the Randstad and several rapidly growing medium-sized cities, such as Eindhoven, and other parts of Brabant. Multiple bottlenecks contribute to the shortfall in meeting the national target of adding around 100 000 dwellings per year (through both new construction and other additions to the housing stock, such as conversions and subdivision) with around 69 000 newly constructed dwellings and approximately 10 000–11 000 other additions (about 80 000–90 000 total additions) expected in 2025 and around 80 000 in 2026 ([429]) (see 2025 CSR 1.4). These bottlenecks include: (i) complex planning and permitting procedures; (ii) high costs and lack of available land; (iii) labour shortages; (iv) environmental regulations limiting building permits due to overall excessive nitrogen deposition; and (v) electricity grid congestion (see also the Section on structural policies). As the number of new residential building permits issued in 2025 dropped by 8.6% year-on-year, this will likely impact construction in 2027. (see Graph A16.2). These housing market bottlenecks also restrict labour mobility and can weigh on competitiveness by limiting workers' ability to relocate for job opportunities and increasing housing--related cost pressures on firms and households.

Graph A16.2: **House supply indicators in NL since 2005**



Source: Eurostat

The large social rental sector faces overwhelming demand, while the private rental market is shrinking as rent regulations increase the risk of unprofitable investments. The rental market consists of a small and expensive private segment (14.3% of the total housing stock in 2025) and a considerably larger social segment (28.2% of the total housing stock)**.** Despite its substantial size, the social rental sector has long waiting lists due to affordable rental options being accessible to both low- and middle-income households, causing demand to outstrip supply ([430]). Within the social housing sector, housing associations play a central role in sustaining affordability and expanding supply. However, their investment capacity is increasingly constrained, contributing to a growing housing association investment gap. This reflects structural supply bottlenecks, rising construction and compliance costs, and strong demand pressures in a context of insufficient overall housing supply, which limit their ability to scale up investment despite long-term financing needs. At the same time, the private rental segment remains relatively small and offers limited affordability, with tenants receiving considerably less public support than social rental households or homeowners. Recent rental regulations have been introduced to protect private tenants and rent caps have been extended to mid-range rentals (up to

([428])Balouktsi et al. (2026), Housing investment needs in the EU, JRC Technical Report 144419.

([429])Economisch Instituut voor de Bouw (2026).

([430])In 2026, maximum EUR 51 537 for single-person households and EUR 56 910 for multi-person households.

EUR 1 184.82) in the private rental sector ([431]), while prices for rental properties above the cap can still be freely set. However, these regulations, alongside higher interest rates and tax changes, have made buy-to-let investments unprofitable for many landlords. Consequently, this has resulted in a sell-off of rental properties and is likely to deter new construction for rental supply, leading to an even smaller private rental segment and a reduction in the total housing supply (see 2025 CSR 1.5). While capped rents benefit some tenants, others who rely on the private rental market face a further reduction in available dwellings and even stronger affordability pressures for units priced above the cap.

Productivity growth in construction lags behind other sectors. A decade of rising investment has not increased annual housing supply (see Graph 5.7.2). In 2010-2024, labour productivity measured as value added per hour worked increased by only 3.3%; far below the growth seen in industry (34.3%) or the overall commercial sector (10.3%) ([432]). This sluggish productivity growth contributes to rising construction costs, complicating the financial viability of housing construction.

Structural policies

Complex planning procedures, environmental restrictions and the limited availability of developable land constrain housing construction. Construction projects are delayed by lengthy permitting processes, nitrogen deposition limits and electricity grid congestion ([433]), while municipalities have limited instruments to coordinate land allocation. Permitting delays reflect the multi-layered nature of Dutch spatial planning and environmental approval systems, including zoning, building and environmental permits under the Omgevingswet, as well as additional licensing requirements linked to nitrogen emission constraints following the 2019 Council of State ruling, all of which increase administrative complexity and extend approval timelines ([434]).

Housing supply policies combine efforts to streamline permitting and planning procedures with limited RRP support and demand-side measures, but structural supply constraints continue to dominate outcomes. Efforts to increase construction and streamline permitting are ongoing, including under the STOER programme ([435]), which aims to reduce regulatory complexity and remove unnecessary administrative requirements in housing development. The Netherlands Recovery and Resilience Plan includes limited but targeted housing-relevant measures, mainly focused on improving spatial planning and permitting processes and supporting energy-efficiency and renovation of residential buildings, thereby addressing structural constraints to housing supply rather than directly financing large-scale housing construction ([436]). While policy efforts have also aimed to support first-time buyers, most notably through the increase of the National Mortgage Guarantee (NHG) ceiling and a recent rise in young homebuyers, these measures operate in a context of constrained supply and may contribute to upward price pressures in tight housing markets. Bottlenecks therefore persist, particularly in high-demand regions such as the Randstad, where supply expansion continues to face structural constraints. The government has also established a ministerial taskforce to accelerate housing construction, with initial measures focusing on addressing key bottlenecks in permitting and

([431])Ban on buy-to-let properties in specific neighbourhoods (2022), providing greater protection to tenants (Wet goed verhuurschap, 2023), making fixed-term rental contracts the norm (2024), and extending rent controls to the mid-price rental market segment (2024).

([432])See CBS (2025), Groeirekeningen; nationale rekeningen.

([433])Netbeheer Nederland (2024), Rapportage netcongestie elektriciteitsnet.

([434])OECD (2023), Housing policies in the Netherlands / Urban Development Reviews; Algemene Rekenkamer (Dutch Court of Audit), reports on spatial planning and permitting efficiency.

([435])STOER programme (Dutch Ministry of the Interior and Kingdom Relations, "Schrappen Tegenstrijdige en Overbodige Eisen en Regelgeving (STOER)"), a policy initiative aimed at simplifying and reducing regulatory burden in spatial planning and housing development procedures.

([436])European Commission, Commission Staff Working Document: Analysis of the Recovery and Resilience Plan of the Netherlands, SWD(2022) 173 final, accompanying the proposal for a Council Implementing Decision approving the Dutch Recovery and Resilience Plan.

project delivery, as outlined in a communication to Parliament in April 2026 ([437]).

Tax policies influence housing demand and investment incentives. Mortgage interest deductibility, imputed rent taxation and other incentives encourage homeownership but can cause further price rises. As detailed in Taxation Annex 3, the Dutch tax system continues to favour debt-financed homeownership through generous mortgage interest tax relief for primary residences and a relatively low effective taxation of imputed rents. No reforms are currently foreseen to change the tax treatment of owner-occupied housing, which has been a long-standing country-specific recommendation. The continued absence of reform, confirmed in the 2026–2030 coalition agreement, maintains these structural incentives. Ongoing reforms, including the simplification of housing benefits, aim to support low-income households while promoting sustainable housing investment.

Housing policies are implemented through a multi-level governance framework involving the national government, municipalities and housing associations, with regional housing deals and National Performance Agreements (NPAs) setting commitments on housing supply, affordability and sustainability. This framework aims to align national targets with local delivery, but differences in administrative capacity and implementation performance across regions lead to uneven outcomes. OECD analysis points to the need to strengthen regional coordination, simplify spatial planning governance and improve incentives for municipalities to release land in order to enhance housing supply responsiveness, particularly in the Randstad and in rapidly growing medium-sized cities ([438]). Regional disparities in housing outcomes remain significant. Concentration of population and economic activity in the Randstad, together with stronger household formation in medium-sized cities, continues to generate uneven pressure on local housing markets, with more acute affordability constraints and longer access times in these areas. Policy responses increasingly focus on improving coordination across governance levels, including more integrated spatial and infrastructure planning, stronger inter-municipal cooperation and improved alignment between land-use and housing strategies, alongside efforts to strengthen regional delivery capacity and accelerate permitting processes.

The social housing sector, at 28.6% of the total housing stock, plays an important role in mitigating affordability risks but faces increasing demand, supply and quality-related pressures. Construction of new social rental units has increased but remains insufficient to meet targets, particularly for larger households and vulnerable groups. At the same time, housing associations are expected to improve the quality and energy efficiency of the existing stock, including through renovation and insulation measures aimed at phasing out low energy-label dwellings and reducing energy costs for tenants, in line with the National Performance Agreements ([439]). Housing associations therefore continue to operate under fiscal and regulatory pressures while addressing long waiting lists and upgrading the sustainability and quality of the social housing stock.

Vulnerable groups

Housing affordability pressures have intensified over the past decade, with the burden falling disproportionately on lower-income households and tenants. House price growth has persistently outpaced income developments, with the house price-to-income ratio remaining well above its long-term average, reflecting sustained affordability pressures in both the ownership and rental markets. These dynamics, combined with constrained housing supply and high rental costs, continue to translate

([437])Dutch Government (2026), Brief aan de Tweede Kamer: Eerste resultaten Taskforce Versnelling Woningbouw, 20 April 2026. Available at: https://open.overheid.nl/documenten/561223f4-5f56-4b63-8e72-b38a357464c4/.

([438])OECD (2025), OECD Economic Surveys: Netherlands 2025, OECD Publishing, Paris, https://doi.org/10.1787/2dd1f4aa-en.

([439])National Performance Agreements (Nationale Prestatieafspraken) between the government, municipalities and housing associations, including commitments on new construction, affordability and energy-efficiency upgrades of the social housing stock. Government of the Netherlands: Housing associations https://www.government.nl/topics/housing/housing-associations.

into significant housing cost burdens for vulnerable groups. While the overall housing cost overburden rate declined to 6.9% in 2024, below the EU average of 8.2%, the burden remains substantially higher for households at risk of poverty, at 27.9% (EU-27 average: 31%). Tenants are particularly affected, especially those renting at market prices, for whom the overburden rate reaches 43.9%, compared with only 1.0% for homeowners with a mortgage. More broadly, housing costs account for a relatively high share of disposable household income, at around 20.5% in 2024, compared with an EU average of 19.2% ([440]).

Housing affordability pressures have intensified over the past decade, with the burden falling disproportionately on lower-income households and tenants. House price growth has persistently outpaced income developments, with the house price-to-income ratio remaining well above its long-term average, reflecting sustained affordability pressures in both the ownership and rental markets. The social housing sector plays a central role in mitigating affordability risks but faces growing demand and supply constraints. Although the absolute number of new social rental dwellings built by social housing providers has been rising in recent years, from 16 000 in 2022 to 17 800 in 2023 and just under 22 000 in 2024 ([441]) (about 33% of the total new construction), this increase still falls short of the levels needed to keep up with demand and broader housing shortages.

These dynamics, combined with constrained housing supply and high rental costs, continue to translate into significant housing cost burdens for vulnerable groups. While the overall housing cost overburden rate declined to 6.9% in 2024, below the EU average of 8.2%, the burden remains substantially higher for households at risk of poverty, at 27.9% (EU-27 average: 31%). Tenants are particularly affected, especially those renting at market prices, for whom the overburden rate reaches 43.9%, compared with only 1.0% for homeowners with a mortgage. More broadly, housing costs account for a relatively high share of disposable household income, at around 20.5% in 2024, compared with an EU average of 19.2% ([442]).

Both tenants and homeowners with mortgages are facing constraints on their disposable income. High housing costs, combined with inflation and elevated energy prices, continue to constrain the disposable incomes of low-income households, particularly tenants. At the same time, high – largely mortgage-related – household indebtedness increases exposure to interest rate shocks and constrains disposable income among homeowners with mortgages.

Housing quality challenges persist alongside affordability pressures, with clear regional and socio-economic disparities. In 2023, around 7% of the population reported housing difficulties, a proportion that almost doubles among people at risk of poverty or social exclusion. Energy-inefficient housing stock and affordability pressures are more pronounced in older post-war urban neighbourhoods and lower-income areas, as well as in structurally weaker regions in the north and south of the country, exacerbating territorial inequalities and increasing exposure to energy poverty. At EU level, energy poverty remains significantly higher, with around 10–9% of the EU population unable to keep their home adequately warm (Eurostat, 2024), compared with an estimated around 6% of households in the Netherlands, indicating relatively lower, but still non-negligible, energy vulnerability in the Dutch context.

Discriminatory practices that pose barriers to equal access to housing persist in the rental market, affecting people with a migrant background, in particular. Data show that prospective tenants with non-Dutch-sounding names continue to receive fewer invitations to viewings, despite gradual improvements over time, with discrimination remaining more pronounced outside cities ([443]). In response, the Netherlands strengthened its regulatory framework with the entry into force of the *Wet goed verhuurderschap* (Good Landlordship Act) in July 2023. The Act is a binding legislative measure that applies

([440]) https://ec.europa.eu/eurostat/databrowser/view/ilc_mded01__custom_19401920/bookmark/table.

([441]) CBS: Meer nieuwbouw woningcorporaties in eerste helft jaar | Aedes.

([442]) https://ec.europa.eu/eurostat/databrowser/view/ilc_mded01__custom_19401920/bookmark/table.

([443]) The third national monitor on housing discrimination (2022–2023).

Graph A16.3: **Housing affordability selected indicators**

		EU27				NL							
	unit	2000-25 avg.	2023	2024	2025	2000-25 avg.	2023	2024	2025	unit	2023	2024	2025
House price to income ratio	*2000-25 avg = 100*	100.0	102.0	100.2		100.0	106.0	108.4		YoY%	-8.7	2.3	
Rent to income ratio	*2000-25 avg = 100*	100.0	85.1	83.5	84.5	100.0	88.5	86.9	86.1	YoY%	-4.6	-1.9	-0.9
Overburden rate, total	%	9.9	8.8	8.2		12.5	9.3	6.9	6.5	PPS/y	-0.7	-2.4	-0.4
Overburden rate, tenant with market rent	%	23.8	20.3	19.2		27.8	47.9	43.9	39.5	PPS/y	6.5	-4.0	-4.4
Overvaluation gap	%					5.0	13.1	16.7	19.7				
Deflated construction production price	*2010 = 100*	102.2	112.2	111.8	110.5	93.7	102.6	101.6	100.4	YoY%	9.6	-0.9	-1.2
Building permits	*m^2 per ths persons*	483.5	376.9	362.9	379.9	682.1	464.3	544.6	464.4	YoY%	-26.6	17.3	-14.7
Residential construction investment	*% GDP*	5.5	5.8	5.1	5.0	5.1	5.2	5.2	5.4	YoY%	-5.5	0.0	3.8
Share of ownership	%	70.0	69.1	68.4		68.0	69.3	68.8	68.8	PPS/y	-1.8	-0.7	0.0
Share of people living in overcrowded homes	%	17.7	16.8	16.9		3.1	3.8	4.6	4.1	PPS/y	0.9	0.8	-0.5

Source: Eurostat and European Commission calculations.

enforceable standards for landlords and letting agents, including obligations to prevent discrimination, apply transparent tenant-selection criteria, and comply with municipal oversight and sanctioning powers ([444]). Policy efforts increasingly also target vulnerable groups through dedicated programmes, including the "Wonen en zorg voor ouderen" programme and "Een thuis voor iedereen", which aim to improve access to suitable housing for elderly people and other vulnerable groups such as low-income households, homeless people and other groups with complex housing needs.

Recent policy measures have not addressed underlying supply constraints. The simplification of the housing benefit system in 2026 is expected to increase support for nearly all current recipients (around 1.5 million people) and expand coverage by an estimated additional 170 000 beneficiaries. While these measures are expected to improve short-term affordability for low-income households, structural housing shortages persist, indicating that demand-side support alone is insufficient to address underlying supply constraints ([445]).

([444])Ministry of Housing and Spatial Planning, aanpak woondiscriminatie, 2023.

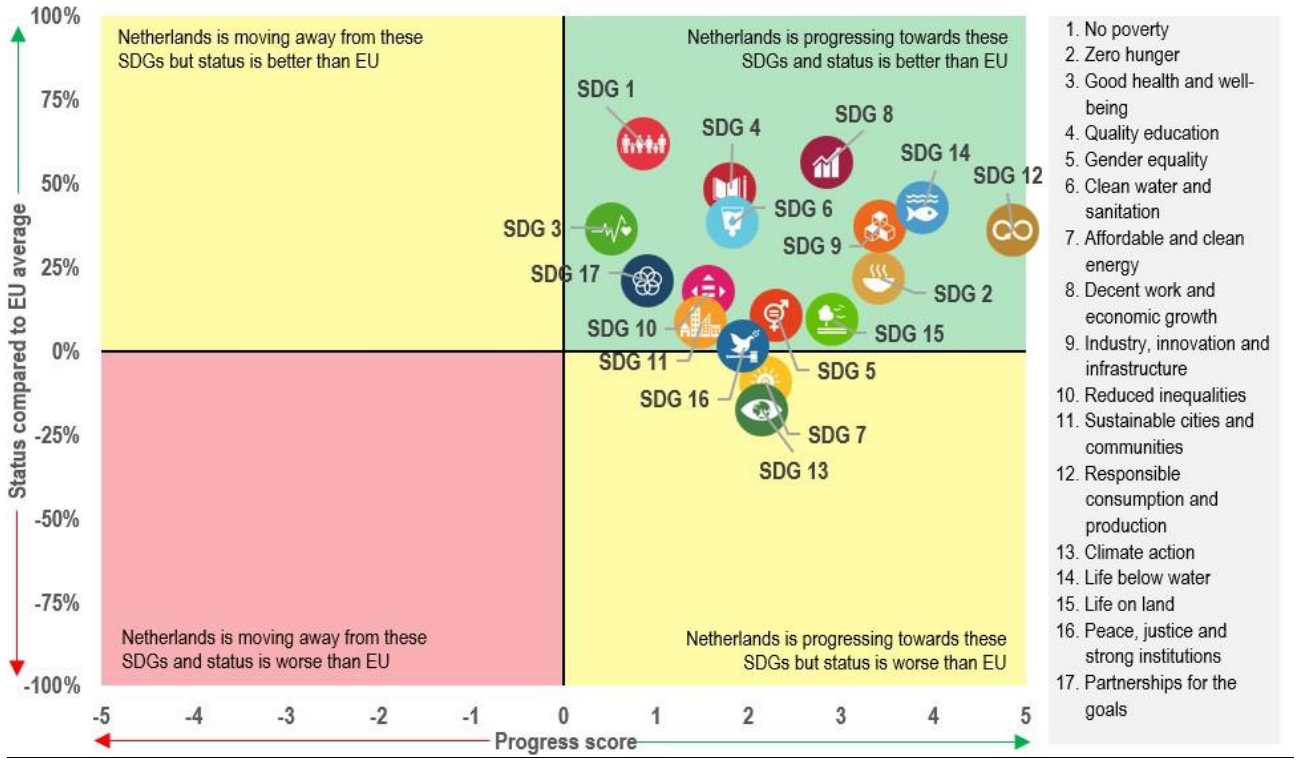
([445])Tax and Customs Authority, Huurtoeslag verandert vanaf 2026: meer mensen krijgen recht op deze toeslag | Dienst Toeslagen.

This annex assesses the Netherlands' progress on the sustainable development goals (SDGs) along the dimensions of competitiveness, sustainability, social fairness and macroeconomic stability. The 17 SDGs and their related indicators provide a policy framework under the UN's 2030 Agenda for Sustainable Development. The aim is to end all forms of poverty, fight inequalities and tackle climate change and the environmental crisis, while ensuring that no one is left behind. The EU and its Member States are committed to this historic global framework agreement and to playing an active role in maximising progress on the SDGs. The graph below is based on the EU SDG indicator set developed to monitor progress on the SDGs in the EU.

The Netherlands performs very well on SDG indicators related to *competitiveness* (SDGs 4, 8 and 9). When it comes to quality education (SDG 4), the Netherlands has one of the highest rates of people with at least basic digital skills (83.6% in 2025; EU average: 60.4%), and one of the highest rates of adult participation in learning (25.9% in 2025; EU average: 13.7%). In addition, the level of tertiary education attainment increased further (from 49.1% in 2019 to 56.1% in 2025) and was substantially above the EU average of 44.8% in 2025. On SDG 8 (Decent work and economic growth), the Netherlands reduced its rate of young people not in employment, education or training from 6.3% in 2019 to 5.3% in 2025, remaining well below the EU level of 11% in 2025.

On SDG 9 (Industry, innovation and infrastructure), the Netherlands outperforms the EU average in most indicators. The percentage of households with high-speed internet connection in 2024 (98.4%) was well above the EU average (82.5%), representing a continuous positive progress on this indicator since 2019 (88.6%). R&D expenditure in the Netherlands, as a

Graph A17.1: **Progress towards the SDGs in the Netherlands**



For a detailed progress assessment towards the various SDGs, see the annual Eurostat report 'Sustainable development in the European Union'; for extensive data on the short-term SDG progress of EU countries, see Key findings – Sustainable development indicators; for an interactive visualization of SDG progress of EU countries, see SDG country overview. A high status does not mean that a country is close to reaching a specific SDG, but signals that it is doing better than the EU on average. The progress score is an absolute measure based on the indicator trends over the past five or six years. The calculation does not take into account any target values, as most EU policy targets are only valid for the aggregate EU level. Depending on data availability for each goal, not all 17 SDGs are shown for each country.

Source: Eurostat, latest update of 29 April 2026. Data refer mainly to the period 2019-2024 or 2019-2025. Data on SDGs may vary across the report and its annexes due to different cut-off dates.

percentage of GDP, saw a modest increase from 2.14% in 2019 to 2.29% in 2024, slightly exceeding the EU average of 2.24% in 2024. Patent applications to the European Patent Office per million inhabitants increased by 4.2% between 2019 and 2025, rising from 362 to 378 and remaining well above the EU average, which recorded a more modest growth of 2.6% during the same period (reaching 156 per million inhabitants in 2025).

The Netherlands performs well on several SDGs related to *sustainability* (SDGs 2, 6, 9 and 12). It performs well on SDG 12 (Responsible consumption and production) having reduced its material footprint per capita from 9.5 tonnes in 2019 to 8.3 tonnes in 2024, well below the EU average of 13.7 tonnes in 2024. It also performs well on SDG 2 (Zero hunger), but environmental impacts of agricultural remain a concern. The Dutch RRP includes investments to boost the deployment of renewable energy and support the transition to sustainable agriculture.

However, it still needs to catch up with the EU average on SDGs 7, 13 and 15, although the progress is positive. On SDG 13 (Climate action), net greenhouse gas emissions have decreased over time (from 10.7 tonnes per capita in 2019 to 8.0 tonnes per capita in 2024) but were still above the EU average (6.5 tonnes per capita in 2024). With regard to SDG 7 (Affordable and clean energy), the share of renewable energy in gross final consumption is growing rapidly in the Netherlands (from 8.9% in 2019 to 20.2% in 2024) but still below the EU average (25.2%). The Netherlands also improved on indicators such as primary energy consumption (from 3.7 tonnes of oil equivalent per capita in 2019 to 3.0 in 2024), but consumption remains slightly above the EU average (2.7 against 2.0 tonnes in 2024). However, between 2019 and 2024, energy import dependency increased from 64.3% to 70.6% in the Netherlands, contrasting with a decrease from 60.5% to 57.3% in the EU average. Moreover, like other EU countries, the percentage of the population unable to keep their home warm enough rose from 3.0% in 2019 to 7.1% in 2024, but remained under the EU average of 9.2%.

The Netherlands performs well on most SDGs indicators related to *social fairness* (SDGs 1, 3, 4, 5, 8 and 10). The Netherlands outperforms the EU average in most indicators related to health, education, gender equality, and decent work and growth (SDGs 3, 4, 5 8). Historically, the Netherlands has performed very well on decent work and economic growth (SDG 8). The employment rate increased between 2019 and 2025 (from 81.0% to 83.4%), which makes the Netherlands one of the best performers in the EU (EU average: 76.1% in 2025). In addition, the long-term unemployment rate decreased (from 0.9% in 2019 to 0.5% in 2025) and is well below the EU average (1.9% in 2025). On SDG 5 (Gender equality), between 2019 and 2025, the gender gap for tertiary educational attainment slightly decreased in the Netherlands from 9.7% to 9.2%, and remains below the EU level of 11.3%.

A few indicators for SDG 1 (No poverty) have slightly improved in recent years in the Netherlands. The housing cost overburden rate impacted 6.9% of the population in 2024 (in contrast to 9.9% in 2019), and the number of people at risk of monetary poverty after social transfers decreased between 2019 and 2024 (from 13.2% to 12.1% of the population). On migration, asylum and social inclusion (SDG 10), the gap between EU and non-EU citizens in terms of people at risk of monetary poverty after social transfers decreased between 2019 and 2024 (from 25.2% to 23.3%) and was above the EU average of 21.1% in 2024. At the same time, the gap between EU and non-EU citizens in terms of employment rates slightly decreased (from 20.8% in 2019 to 20.6% in 2025), remaining above the EU average (11.8% in 2025). The Dutch RRP includes reforms and investments aimed at improving education and creating a resilient health system.

The Netherlands performs well on most SDG indicators related to *macroeconomic stability* (SDGs 8 and 17). However, it still needs to catch up with the EU average on several indicators for SDG 16 (Peace, justice and strong institutions). The perceived independence of the justice system increased from 71% in 2019 to 75% in 2025 (well above the EU average of 54% in 2025). Although the Corruption Perceptions Index score decreased from 82 in 2019 to 78 in 2025, it still remains above the EU average of 62 in 2024. The Netherlands also performs better than the EU average on most indicators related to partnerships for the goals (SDG 17).

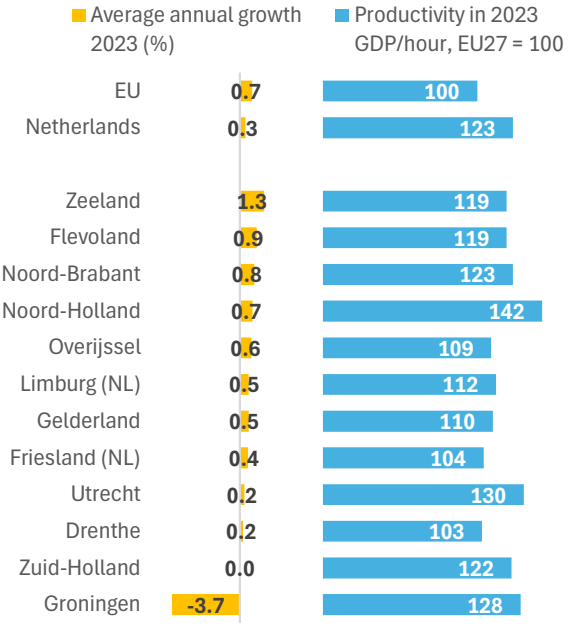
As the SDGs form an overarching framework, any links to relevant SDGs are either explained or depicted with icons in the other annexes.

Regional development trends

Regional disparities in the Netherlands have remained stable over the last two decades, with some trends reflecting differences in labour productivity, innovation and R&D investments. Since 2004, the Netherlands has remained above the EU average in terms of GDP per head (in purchasing power standard, PPS). At subnational level, GDP per head in 2004 varied across Dutch provinces, ranging from 100% of the EU average in Drenthe to 172% in Noord-Holland. Zeeland had the highest annual real GDP growth per head (1.6%) from 2004 to 2024. GDP growth per head was lower than the EU average in 7 out of 12 regions: Groningen, Zuid-Holland, Limburg, Utrecht, Drenthe, Friesland and Gelderland. Nevertheless, all provinces followed broadly similar growth trajectories between 2004 and 2024; Groningen was the only exception, reflecting the impact of phasing out local gas extraction. In 2024, GDP per head was high in all Dutch regions, but some disparities remain. Noord-Holland, which includes the metropolitan Amsterdam region, had the highest GDP per head ([446]) (175% of the EU average).

Labour productivity growth was low in the Netherlands, with relatively small regional disparities mirroring differences in GDP per head. While productivity in 2024 was higher than the EU average in all regions (see Graph A18.1), the trends over the last decade are of concern. Productivity growth was lower than the EU average in most regions between 2014 and 2024, and ensuring long-term sustainable growth is a challenge, with only Zeeland and Noord-Brabant exceeding the EU average of 0.7% (see Graph A18.1). Productivity declined in the province of Groningen, primarily due to the phasing out of local gas extraction.

Graph A18.1: **Labour Productivity growth (2014 – 2024) and labour productivity (2024), Netherlands (NUTS 2 regions)**



Source: Commission calculations based on Joint Research Centre (JRC) data

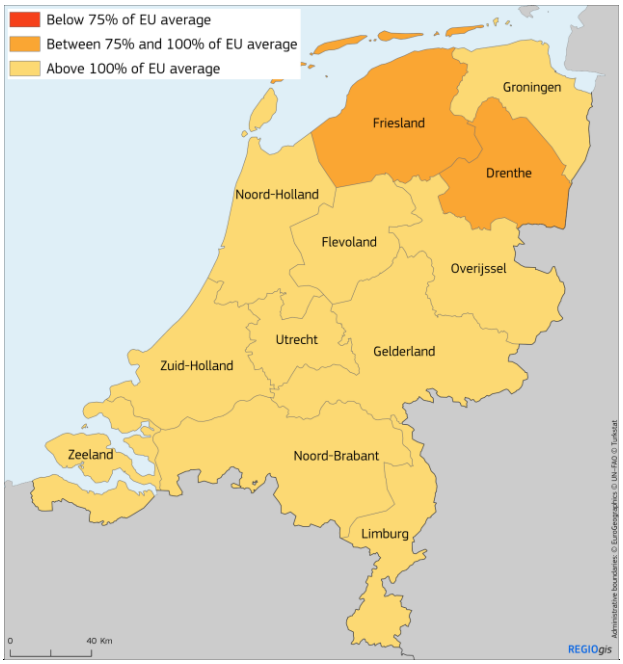
Innovation performance in the Netherlands is high, with moderate regional variations (Map 18.2). At 129.1% of the EU average, the Netherlands remained one of the EU's four innovation leaders ([447]) (see Annex 4). According to the 2025 Regional Innovation Scoreboard, all Dutch regions were strong innovators or innovation leaders, above the EU average of 100: from innovation leaders Noord-Holland (139.4) and Utrecht (136.2) to strong innovators Drenthe (108.4), Zeeland (107) and Friesland (103.2) ([448]).

([446]) For contemporaneous comparison of GDP levels in different regions (or countries), we use 'GDP in PPS terms' to account for difference in price levels between regions. GDP growth in a specific region is measured in 'constant prices' terms to correct for inflation in that region.

([447]) European Innovation Scoreboard, European Commission, 2025.

([448]) Regional Innovation Scoreboard, European Commission, 2025.

Map A18.1: **GPD per head compared with the EU average.**

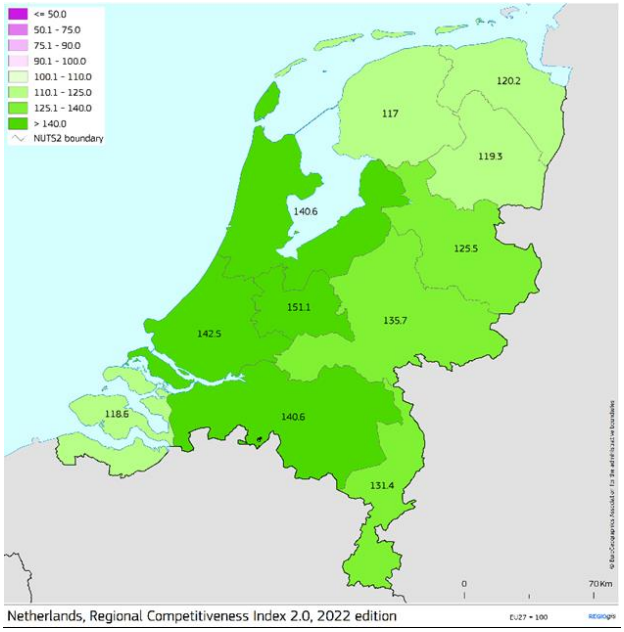


(1) 2021-2023 average GDP per head in purchasing power standard compared with the EU average.
Source: Commission calculations based on Eurostat 16 July 2025 data.

Key challenges for regional competitiveness

R&D intensity is low in the regions with the lowest GDP per head. R&D expenditure was low in Drenthe (1.01%), Friesland (0.91%) and Zeeland (0.83%) in 2019([449]). Those three provinces are among those with the lowest GDP per head in PPS, and Drenthe and Friesland are below the EU average. This is in contrast to the high levels of investment in Noord-Brabant (3.53%), Groningen (2.50%) and Gelderland (2.44%) (see Annex 4). The low R&D intensity in Friesland, Drenthe and Zeeland is related to the absence of universities other than subsidiaries ([450]). In 2022, the share of R&D staff in companies with more than 250 employees was lowest in Friesland, Drenthe, Zeeland and Overijssel, and R&D expenditure by SMEs was lowest in Groningen, Drenthe and Zeeland ([451]). The regions with high investment levels benefit from large economic clusters, including multinationals and universities (see Annex 4). For example, the geographic concentration of academic/engineering talent (the Delft, Eindhoven and Twente universities of technology) shapes where capital-intensive tech companies locate their deep tech operations, such as semiconductors and photonics ([452]). Noord-Brabant and Limburg stand out for the number of patent applications, owing in part to the presence of major clusters of economic activity (high-tech in Noord-Brabant and chemicals in Limburg).

Map A18.2: **Regional Competitiveness Index**



Source: Regional Competitiveness Index, 2.0

Regional innovation strategies for smart specialisation ([453]) (RIS3) focus investments in innovation on regional strengths and priorities. Four regional smart specialisation strategies ([454]) offer an effective investment

([449])REGIO calculations based on 2019 data from Netherlands Centraal Bureau voor de Statistiek, Regionaal-Economische Kengetallen 2021 | CBS.

([450])Oevering F. & O. Raspe (2020) Regionaal economische verschillen fors toegenomen. Available at: https://www.rabobank.nl/kennis/d011301125-regionaal-economische-verschillen-fors-toegenomen.

([451])Dutch Central Bureau of Statistics, 2025.

([452])State of Dutch Tech 2026, Techleap.

([453])European Commission, https://ec.europa.eu/regional_policy/policy/communities-and-networks/s3-community-of-practice/about_en.

([454])The North-Netherlands RIS3 covers the provinces of Groningen, Fryslân and Drenthe; the West-Netherlands RIS the provinces of North- and South-Holland, Utrecht and Flevoland; the East-Netherlands RIS3 the provinces Gelderland and Overijssel; the South-Netherlands RIS3 the provinces of Zeeland, North-Brabant and Limburg.

Table A18.1:**Main development trends in the Netherlands**

	Main development trends
Transition regions (population 1.16 million)	Drenthe and Fryslân are relatively sparsely populated, peripheral provinces with limited business-research networks. Both regions face declining natural population growth. Economic growth increasingly depends on innovation ecosystems anchored in regional campuses, clusters, and science parks. The Flevoland region's economic performance is improving. In Fryslân, Drenthe and Flevoland GDP per head is close to the EU average.
More developed regions (population 16.71 million)	Ten of the twelve Dutch provinces are more developed regions. GDP per head is more than 20% above the EU average in five of these regions: Noord-Holland, Utrecht, Noord-Brabant, Zuid-Holland, and Groningen. Due to the phase out of natural gas extraction, Groningen has seen a strong decline in GDP per head over the last decade. With a -2.4% GDP per head growth rate Groningen was also among the 20% of the EU's poorest performing regions in 2023. The provinces of Groningen, Zeeland and Limburg face declining natural population growth. By contrast, the Randstad area (Amsterdam and Utrecht) continues to attract investment and young people with high levels of education, and this area is extending to Nijmegen in the east. The high growth in the Eindhoven region (Noord-Brabant) is based on R&D and high-tech manufacturing.
Specific territories	Just transition regions: The Netherlands just transition plan identified six regional areas facing industrial transition challenges due to the importance of emission-intensive industries in their economies. These areas are: (i) the province of Groningen together with the municipality of Emmen; (ii) IJmond; (iii) Groot-Rijnmond; (iv) West-North-Brabant; (v) Zeeuws-Vlaanderen together with the Vlissingen port area; and (vi) South-Limburg. Half of the 2021-2027 Just Transition Fund budget is allocated to the Groningen/Emmen region, due to the phase out of natural gas extraction in 2024. All these areas fall within the five emission-intensive industrial area clusters identified in the Dutch Climate Agreement and the National Energy and Climate Plan. The Netherlands' coastal provinces have distinct blue economy strengths and risks, requiring tailored investment. North and South Holland rely on major ports (e.g., Rotterdam, IJmuiden) for maritime transport, offshore energy, and fisheries, but face spatial conflicts from wind farm expansion and infrastructure demands. Zeeland thrives on aquaculture (e.g., shellfish farming) and coastal tourism, though water quality, climate change, and invasive species pose threats. Friesland and Groningen depend on smaller-scale Wadden Sea fisheries, tourism, and emerging offshore wind supply chains, but must navigate environmental protections (e.g., Natura 2000) and competing spatial priorities.

Source: European Commission based on Eurostat data; categories of regions based on Map A18.1

framework for private and public companies to strengthen regional innovation ecosystems. Productivity growth in the Dutch regions largely depends on the quality of regional entrepreneurial ecosystems, such as clusters of collaborating firms, start-up and scale-up communities, universities and infrastructure ([455]). Recent reviews of the four regional smart specialisation strategies confirmed that they are still up to date.

Between 2015 and 2024, the population increased across all Dutch regions, exceeding the EU average in every region, except Limburg. This was mainly driven by net migration, which was positive in all regions, especially in the highly urbanised western part of the Netherlands. Natural growth was smaller but still positive in most regions, except for the three northern regions, Limburg and Zeeland. Demographic trends act as a primary driver for regional policies. Regions experiencing high population growth face pressures on social services, housing and infrastructure ([456]). Regions with ageing and declining populations face labour and skills shortages, an increased need for care services, a

([455])Oevering F. & O. Raspe (2020) Regionaal economische verschillen fors toegenomen. Available at: https://www.rabobank.nl/kennis/d011301125-regionaal-economische-verschillen-fors-toegenomen.

([456])European Commission, The Impact of Demographic Change in Europe https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/new-push-european-democracy/impact-demographic-change-europe_en.

Table A18.2:**Key regional indicators (at NUTS 2 level) for the Netherlands**

	GDP per head (PPS, index)	Real GDP per head growth	Real productivity growth (per hour worked)	Employment rate 20-64	Unemployment rate	Access to alternative fuel infrastructure	Innovation performance	Regional Competitiveness Index (RCI)
	EU27=100	Average annual % change	Average annual % change	% of population aged 20-64	% of labour force	Electric vehicles charging points within 10 km	Performance group	EU27=100
	2024	2014-2024	2014-2024	2025	2025	2022	2025	2022
EU	100.0	1.4	0.7	76.1	6.0	287.5		100.0
Netherlands	134.0	1.3	0.2	83.4	3.9	1842.1	Leader	137.0
Groningen	117.0	-1.9	-3.0	80.4	4.5	577.3	Leader-	120.0
Friesland (NL)	98.0	1.4	0.2	82.9	4.0	204.1	Strong-	117.0
Drenthe	96.0	1.1	0.2	83.2	3.6	195.8	Strong	119.0
Overijssel	116.0	1.9	0.5	84.2	3.7	492.4	Strong+	126.0
Gelderland	114.0	1.5	0.5	84.1	3.4	619.1	Leader-	136.0
Flevoland	103.0	1.7	0.6	84.4	3.7	726.5	Strong+	141.0
Noord-Holland	175.0	1.5	0.3	84.4	3.8	3338.0	Leader	151.0
Zeeland	113.0	2.0	1.0	84.5	2.2	275.8	Strong-	141.0
Utrecht	162.0	1.4	0.1	85.4	3.8	2448.0	Leader	143.0
Zuid-Holland	129.0	1.0	0.0	82.0	4.8	3533.0	Leader-	119.0
Noord-Brabant	139.0	1.7	0.7	84.1	3.5	1071.9	Leader-	141.0
Limburg (NL)	110.0	1.0	0.2	81.0	3.0	485.8	Leader-	131.0

Source: Eurostat and JRC

Dark green – the indicator is at least 120% of the EU average.
Light green – the indicator is at least 100% but less than 120% of the EU average.
Yellow – the indicator is at least 90% but less than 100% of the EU average.
Light red – the indicator is at least 75% but less than 90% of the EU average.
Dark red – the indicator is less than 75% of the EU average.
This colour scale applies to 'positive' indicators where higher values are favourable.
For 'negative' indicators (where higher values are unfavourable), the colours are reversed.

reduced tax base and underused or reduced infrastructure.

Skilled labour shortages are an impediment to regional development, including the clean industrial transition. Green jobs are strongly concentrated in western Netherlands, with the northern, eastern and southern provinces underperforming. However, green employment ([457]), with 22% of jobs classified as sustainable and competitive, was above the EU average of 15%.

Access to essential services is generally good in the Netherlands, with some regional differences. The share of people with access to healthcare within a 10-minute drive is above the EU average in all Dutch regions, except Friesland, Drenthe and Groningen in the north. In rural areas, the share is lower on average but still above the EU average in most regions (see Annex 15). The average share of children in rural areas with a primary school within a 15-minute walk is much higher than the EU average ([458]). In contrast to most EU regions, students from Dutch rural areas achieve higher PISA 2022 scores than their urban peers and rank among the highest in all EU rural areas. However, the urban–rural gap in post-secondary educational attainment is above the EU average (25.4% vs 22.4%): young people from rural areas (aged 25–34) participate in post-secondary education less often than their urban peers (see Annex 13).

([457])Regional Competitive Environmental Sustainability (RCES) indicator, https://publications.jrc.ec.europa.eu/repository/handle/JRC136629.

([458])Eurostat and JRC data, European Commission, 2023.

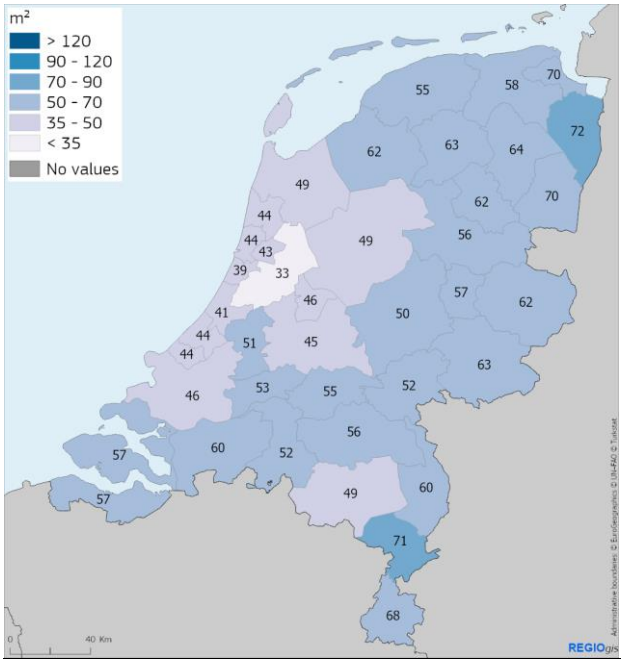
Demographic trends([459]), including ageing population and decline in natural growth; outmigration of youth to urban centres in peripheral and border areas in the northern, southern and eastern regions, impact access to quality basic services (education, health, public transport). The Dutch Government, through the former Regio Deals (2018-2025) and from 2025 the Vital Regions Programme, aims to support the revitalisation of 11 peripheral/border areas and their municipalities (improved safety and liveability; sustainable and accessible services; adequate health, education and economic/employment perspectives) as well as to support cross-border cooperation([460]) (Map A18.3).

Map A18.3: **Nationaal Programma Vitale Regio's ('National programme for vital regions')**

Source: Ministry of the Interior and Kingdom Relations

Affordable housing is a growing concern in the Netherlands, and it could affect the attractiveness of regions and aggravate existing labour shortages ([461]). To retain and strengthen the local microchip industry in Brainport Eindhoven, the Dutch government launched Project Beethoven in March 2024 (with funding of EUR 2.51 billion up until 2030). One of the project's three pillars is accelerating the construction of local housing ([462]). The price-to-income ratio (see Annex 16) is high in parts of the country, in particular in the western Randstad area and cities in the centre of the country (along the Randstad-Arnhem-Nijmegen axis)([463]) (Map 18.4).

Map A18.4: **House purchase capacity relative to income, NUTS 3, 2024**



Source: ESPON-H4ALL

High energy prices negatively impact the competitiveness of regions with energy-intensive industries, including the just transition regions ([464]). Continued investment in innovative clean technologies (including circular economy opportunities) and energy infrastructure could help energy-intensive industrial areas with high greenhouse gas emissions to fully realise the potential of the green transition.

Grid congestion has become a serious bottleneck, affecting regional growth and slowing the energy transition. The capacity of

([459]) Centraal Burau voor de Statistiek, https://www.cbs.nl/nl-nl/dossier/dossier-verstedelijking/waar-groeit-of-krimpt-de-bevolking.

([460]) https://www.elkeregiotelt.nl/npvr.

([461]) https://www.oxfordeconomics.com/resource/what-is-driving-european-cities-housing-affordability-challenge/.

([462]) https://brainporteindhoven.com/nl/strategie-en-organisatie/agenda-met-het-rijk/beethoven.

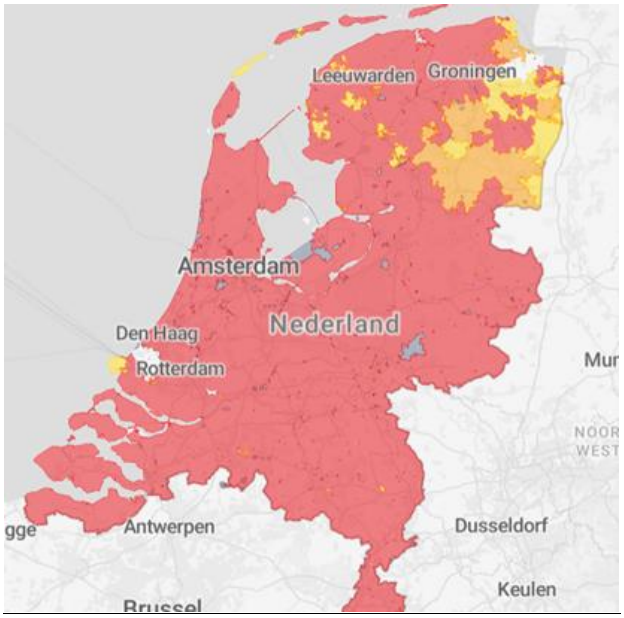
([463]) https://www.elkeregiotelt.nl/npvr.

([464]) The Netherlands' territorial just transition plan identifies six territories facing industrial transition-related challenges (incl. those of a wider socio-economic nature): Groningen-Emmen; IJmond; Groot-Rijnmond; West Noord-Brabant, Zeeuws-Vlaanderen and Zuid-Limburg.

the electricity grid is constrained in all provinces due to the high volatility of supply and demand, particularly in the centre of the country (Utrecht, Gelderland, parts of Flevoland) ([465]). Apart from national investments in network distribution and transmission capacity, testing and piloting localised innovative solutions. such as smart grids ([466]), energy storage and flexibility markets, could help alleviate grid congestion (Country Report 2025). To achieve this, positioning regions affected by grid congestion as test beds for such technologies is a promising avenue for both removing infrastructure bottlenecks and building regional innovation capacity.

Regions and municipalities face increasing financial pressure amid reduced national funding for innovation despite their increased responsibilities and enabling role for regional growth and competitiveness. Dutch provinces and municipalities have limited income from tax, relying mostly on national funding transfers. Tax revenues from subnational governments in the Netherlands make up almost 5% of general government tax revenue and 9.6% of all subnational government revenue ([467]), both significantly below the EU average (25% and 40%, respectively). Therefore, subnational governments are highly dependent on intergovernmental grants and subsidies (accounting for almost 75% of subnational revenues), well above the EU average (46%) and OECD average (42%) ([468]).

Map A18.5: **Capacity of electricity network**



(1) Colour legend:
Red: shortage of transport capacity with waiting list.
Orange: under investigation with waiting list.
Yellow: limited transport capacity available without waiting list.
White: transport capacity available without waiting list.
Source: https://www.netbeheernederland.nl/netcapaciteit-en-flexibiliteit/capaciteitskaart, 18 December 2025

([465])*Netbeheer Nederland*, https://data.partnersinenergie.nl/capaciteitskaart/totaal/afname.

([466])For example, the GENIUS (Grid Efficiency Network Integration for Universal Sustainability) smart grid project to optimise energy infrastructure and usage at the Technical University of Eindhoven campus, https://www.tue.nl/en/research/institutes/eindhoven-institute-for-renewable-energy-systems/projects/genius.

([467])OECD (2025), *OECD Dashboard on Subnational Government Structure and Finance*, https://www.oecd.org/en/data/dashboards/oecd-dashboard-on-subnational-government-structure-and-finance.html.

([468])OECD/UCLG (2022), *World Observatory on Subnational Government Finance and Investment*, https://www.sng-wofi.org/country_profiles.

This Transport Annex presents the state of play and the challenges the Netherlands faces with the implementation of the trans-European transport network (TEN-T), the European railway traffic management system (ERTMS), the roll-out of sustainable aviation fuels (SAF), and road safety.

The Netherlands is crossed by two European Transport Corridors (ETCs North Sea – Baltic and the North Sea – Rhine – Mediterranean). The TEN-T in the Netherlands comprises 2 513 km of rail (846 of which are on the core network), 2 088 km of road (670 of which on the core network) and 1 435 km of inland waterways on the TEN-T, five airports (including two core airports), 58 ports (including 11 core ports) and 26 urban nodes ([469]).

It has one of the densest and busiest rail networks in Europe, reflecting its central role in European transport with logistic hubs like the Port of Rotterdam and Schiphol airport. The system is well-integrated and meets key technical TEN-T parameters, such as electrification, track gauge and axle load. Transport infrastructure forms the backbone of the Dutch economy, underpinning a highly internationalised model that relies heavily on efficient import and export flows and seamless connectivity to European and global markets. NL invests strongly in maintenance and renewal of infrastructure. However, needs significantly exceed available funding, resulting in prioritisation and delayed required renewal.

To complement the core cross-border projects on the TEN-T core network and ensure efficient traffic flows along the two ETCs crossing the Netherlands towards Belgium and Germany, it is essential to address capacity constraints on key port hinterland connections. In particular, rail links connecting the ports of Rotterdam and Amsterdam to the European hinterland require targeted capacity upgrades, including additional tracks and operational separation of freight and passenger services where feasible, in order to improve reliability and punctuality. Moreover, past and ongoing cross-border pilot projects with Germany are a positive step. It would be important to move towards broader implementation across other relevant rail border sections.

In parallel, capacity upgrades in major rail nodes such as the Randstad conurbation are prioritised. Their objective is to resolve long-standing structural bottlenecks and to enhance the robustness of national and international rail services.

Dutch investment priorities in inland waterways include the modernisation and capacity enhancement of inland waterway corridors connecting the Rhine, Meuse and Scheldt basins. This includes lock construction, widening and upgrading works on key corridors to safeguard reliability, accommodate larger vessels, and support modal shift objectives.

Implementing the ERTMS is key to digitalising the railways and to modernising and harmonising railway operations across Europe. The ERTMS ensures the safety of rail networks by providing a unified signalling system that significantly reduces the risk of accidents. It also provides interoperability between national rail systems, improving cross-border train movements. Finally, the ERTMS enhances network capacity and operational efficiency, increasing the competitiveness of the rail sector.

Scaling up ERTMS deployment is key to maximising capacity on the country's densely used rail network and enabling efficient traffic management. As of late 2024 ([470]), the ERTMS was operational on 36% of the TEN-T network. To meet its national plan's ERTMS roll-out target by 2035, the Netherlands aim to deploy ERTMS on an additional length of 334 km. Cross-border sections are of particular importance in this context.

While planning and permit procedures and approval of projects are complex and lengthy in the Netherlands, there are no significant implementation delays overall. Moreover, harmonising technical and operational rules with

([469])TENtec Information System, according to Reg. 2024/1679.

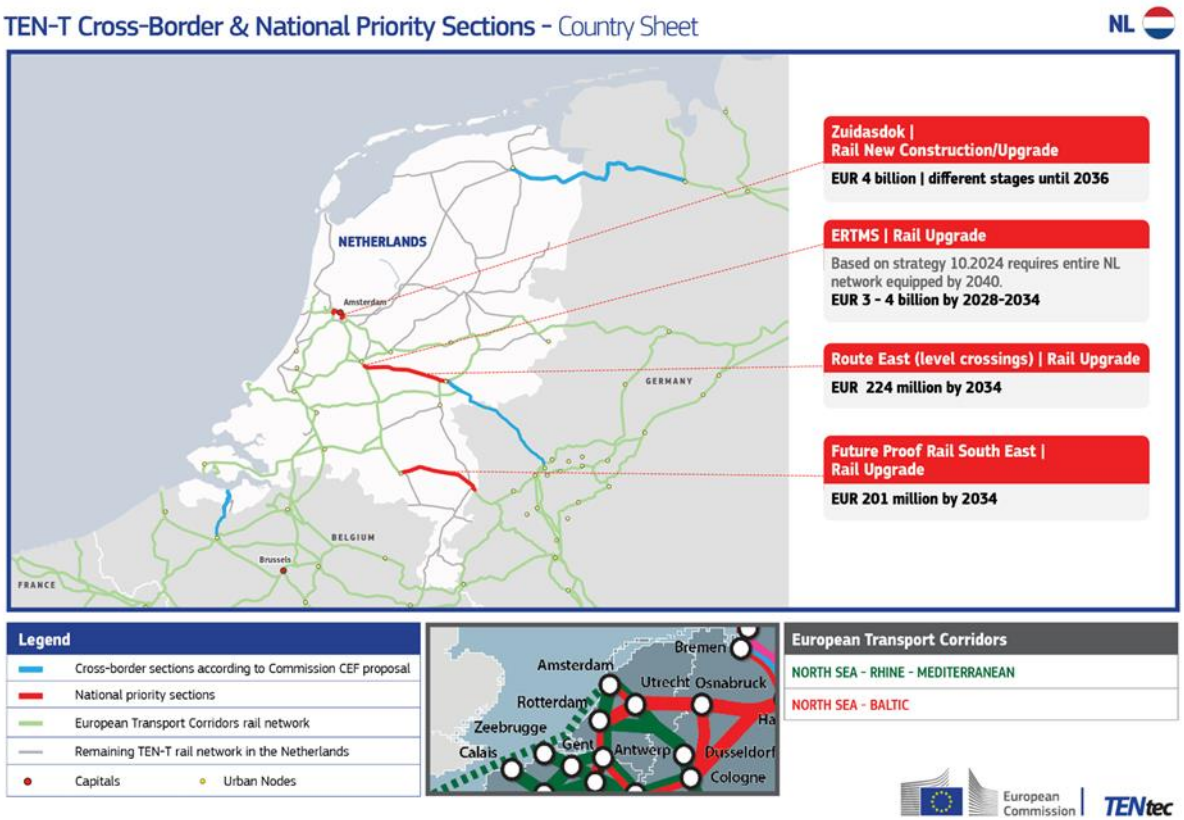
([470])Based on ERTMS – Third work plan of the European Coordinator Matthias Ruete.

Table A19.1:**ERTMS deployment in the Netherlands.**

ERTMS in The Netherlands				
TEN-T rail network	ERTMS (trackside) in operation			Min. estimated cost of additional deployment until 2035
2513 km	year	in km	% of total TEN-T	
	end 2024	354 km	14 %	
	by 2035	688 km	27 %	EUR 80 million

Source: Based on ERTMS – Third work plan of the European Coordinator Matthias Ruete.

Map A19.1: **TEN-T Cross-Border & National Priority Sections in the Netherlands**



the minimisation of national rules in line with the EU directives on rail interoperability and safety remains critical to ensure seamless cross-border rail transport.

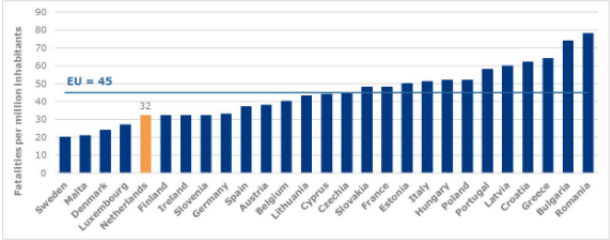
The Netherlands hosts two operational sustainable aviation fuels (SAF) facilities and is home to one of the most important European aviation hubs (i.e. Amsterdam Schiphol airport). It also has a long list of synthetic sustainable aviation fuels (eSAF) projects in the pipeline, but none have reached Final Investment Decision as yet ([471]). The planned State aid for these projects could amount to EUR 300 million to mature the technology, but the Netherlands' participation in double-sided auction mechanisms as part of its contribution to the eSAF Early Movers Coalition would help them reach commercialisation. To this end, the Netherlands would benefit from using EU ETS and ReFuelEU Aviation penalty revenues towards supporting the deployment of the above-mentioned SAF projects.

Road crashes impose an enormous social, economic and health burden on the EU economy. The external socio-economic costs of fatal, serious and minor injuries have remained persistently high despite the progress made in reducing crash frequency and severity. These resources could otherwise fuel innovation, education, healthcare and other crucial public investments ([472]).

In 2024, the Netherlands was well below the EU average (45) with 32 fatalities per million inhabitants. Compared with the EU average, the distribution of fatalities in the Netherlands featured a high proportion of cyclists and road users aged over 65 years old. Also, according to police data, the number of fatalities within urban areas increased over the 2019-2023 period, with significant high increases being recorded for pedestrians and cyclists.

A target of halving road casualties by 2030 will be challenging for the Netherlands, without it adopting additional measures. This is especially the case for serious injuries, which are expected to rise towards 2030. To that end, the Netherlands is carrying out analyses to measure the effectiveness of the implemented measures and explore new actions to chieve further improvements. Within this context, a better balance between the different safe system approach pillars could be considered ([473]).

Graph A19.1: **The Netherlands' road fatalities per million 2024**



Source: Report at the Mid-Point - Netherlands, SWD(2026) 52 final.

The map below presents the roads where the safety of the infrastructure is poor and thus where urgent action is required.

Map A19.1: **The Netherlands' road safety map**

Source: TENtec Information System and TEN-T map library – European Commission

([471]) ReFuelEU Aviation Annual Technical Report 2025 -– 2024 in review | EASA (page 92).

([472]) Report on the implementation of the EU Road Safety Policy framework at the Mid-Point, COM(2026) 77 final.

([473]) More details in Report on the implementation of the EU Road Safety Policy framework at the Mid-Point – Netherlands, SWD(2026) 52 final.