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ANNEX

ANNEX

to the

Proposal for a COUNCIL IMPLEMENTING DECISION

**amending the Implementing Decision of 13 July 2021 on the approval of the assessment
of the recovery and resilience plan for Germany**

{SWD(2026) 153 final}

ANNEX

SECTION 1: REFORMS AND INVESTMENTS UNDER THE RECOVERY AND RESILIENCE PLAN

Description of Reforms and Investments

A. COMPONENT 1.1: Decarbonisation using renewable hydrogen in particular

The component of the German recovery and resilience plan addresses the challenge of climate change mitigation by aiming to reduce greenhouse gas (GHG) emissions in the economy. The objectives of the component are to support the use of hydrogen produced with energy from renewable sources and to contribute as a primary goal to GHG emission reduction as defined in the German National Energy and Climate Plan (NECP), with a focus on industry. The component also seeks to make a contribution in terms of industrial innovation and employment policy.

The component supports addressing the Country Specific Recommendation on investment in the green transition and constitutes one building block in the design of clean, efficient and integrated energy systems (Country Specific Recommendation 1.6 in 2019 and Country Specific Recommendation 2.4 in 2020).

It is expected that no measure in this component does significant harm to environmental objectives within the meaning of Article 17 of Regulation (EU) 2020/852, taking into account the description of the measures and the mitigating steps set out in the recovery and resilience plan in accordance with the DNSH Technical Guidance (2021/C58/01).

A.1. Description of the reforms and investments for non-repayable financial support

1.1.1 Investment: Hydrogen projects within the framework of IPCEIs

The objective of the hydrogen Important Projects of Common European Interest (IPCEIs) is to accelerate the market uptake of hydrogen and its derivatives to decarbonise emission-intensive processes and develop new areas of application in Germany and in Europe. This measure consists of financial support for hydrogen projects.

1.1.2 Investment: Funding programme for decarbonisation in industry

The objective of the measure is to help industry shift from highly emission-intensive production processes to low GHG processes. The measure consists of support for research and development, testing in experimental or pilot plants, and investments in installations covered by the EU ETS.

1.1.3 Investment: Pilot scheme for climate action contracts based on the principle of Carbon Contracts for Difference

The objective of the measure is, as for measure 1.1.2, the introduction of new, cleaner production technologies for energy-intensive industries. The specific objective of the measure is to provide businesses with financial certainty when they make significant investments in climate-neutral technologies and to reduce on a permanent basis process-related GHG emissions which are difficult to avoid under the current state of the art of technologies.

Climate Action contracts shall guarantee a fixed CO₂ price over a fixed duration for

companies investing in CO2 reduction technologies. The programme is aimed primarily at companies in the steel, chemical and building materials industries where process emissions are particularly difficult to avoid. Only projects resulting in emissions substantially below the ETS benchmarks shall be eligible for support under the measure¹.

The implementation of the investment is expected to start by 31 December 2021 and shall be completed by 31 August 2026.

1.1.4 Investment: Project-related climate protection research

The objective of the measure is to contribute to decarbonising the economy considering 2050 targets with a focus on SMEs and basic industries. This measure consists of support to research projects in the areas of climate change mitigation, energy efficiency and climate resilience.

1.1.5 Investment: Flagship projects for research and innovation in the context of the National Hydrogen Strategy

The objective of the measure is to contribute to decarbonising the economy and specifically to addressing key issues related to the provision of green hydrogen in the future energy system. It consists of support for flagship projects for hydrogen research and innovation.

1.1.6 Investment: Federal support for efficient heat networks

The objective of the measure is to contribute to the decarbonisation of district heating systems, expanding the share of heat from renewable sources and waste heat. It consists of financial support for transformation plans, feasibility studies and investment projects for heat networks.

¹ Where the activity supported achieves projected greenhouse gas emissions that are not substantially lower than the relevant benchmarks an explanation of the reasons why this is not possible should be provided. Benchmarks are established for free allocation for activities falling within the scope of the Emissions Trading System, as set out in the Commission Implementing Regulation (EU) 2021/447.

A.2. Milestones, targets, indicators and timetable for monitoring and implementation for non-repayable financial support

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
1	1.1.1 Hydrogen projects within the framework of IPCEIs	Milestone	Completion of expression of interest procedure	Companies have submitted project sketches	-	-	-	Q2	2021	The expression of interest procedure has been completed. Potential projects and project participants in Germany have been identified.
2	1.1.1 Hydrogen projects within the framework of IPCEIs	Milestone	Issuance of first grant decisions	Grant decisions issued	-	-	-	Q1	2022	Grant award decisions have been issued to recipients/applicants by the Federal Ministry for Economic Affairs and Climate Action (BMWK) and the Federal Ministry for Digital and Transport (BMDV) enabling the start of the implementation of the selected projects.
3	1.1.1 Hydrogen projects within the framework of IPCEIs	Target	Commitment of at least EUR 500 000 000	-	EUR million	0	500	Q2	2024	At least EUR 500 000 000 have been committed to hydrogen projects in line with grant decisions issued.
5	1.1.1 Hydrogen projects within the framework of IPCEIs	Target	Commitment of EUR 1 411 722 000	-	EUR million	500	1 411	Q2	2026	At least EUR 1 411 722 000 have been committed to hydrogen projects in line with grant decisions issued.
6	1.1.1 Hydrogen projects within the framework of IPCEIs	Target	Electrolysis capacity	-	Megawatt	0	200	Q2	2026	At least 200 MW of electrolysis capacity shall be installed and connected to the electricity grid.

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
7	1.1.2 Support programme for decarbonisation in industry	Milestone	Entry into force of funding guideline (<i>Förderrichtlinie</i>) for decarbonisation in industry	Entry into force of funding guideline	-	-	-	Q1	2021	The guideline has entered into force, enabling companies to submit applications.
8	1.1.2 Support programme for decarbonisation in industry	Target	Issuance of grant decisions	-	Number	0	19	Q4	2024	Grant decisions have been issued to recipients/applicants, enabling the start of the selected projects. Only projects resulting in emissions substantially below the EU Emissions Trading System (ETS) benchmarks shall be eligible for support under the measure. ²
9	1.1.2 Support programme for decarbonisation in industry	Target	Disbursement to the supported projects	-	EUR million	0	55	Q2	2026	At least EUR 55 000 000 of funds have been disbursed to the recipients.

² Where the activity supported achieves projected greenhouse gas emissions that are not substantially lower than the relevant benchmarks an explanation of the reasons why this is not possible should be provided. Benchmarks are established for free allocation for activities falling within the scope of the Emissions Trading System, as set out in the Commission Implementing Regulation (EU) 2021/447.

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
11	1.1.3 Pilot scheme for climate action contracts based on the principle of Carbon Contracts for Difference	Milestone	Completion of expression of interest procedure for climate change contracts	Companies submit expressions of interest for climate change contracts to the Federal Ministry for Economic Affairs and Climate Action (BMWK)	-	-	-	Q4	2021	The expression of interest procedure has been completed, with companies having expressed their interest in receiving support for their projects through climate change contracts and projects having been selected.
12	1.1.3 Pilot scheme for climate action contracts based on the principle of Carbon Contracts for Difference	Milestone	Funding guideline (<i>Förderrichtlinie</i>) for a pilot programme on climate change contracts based on the principle of Carbon Contracts for Difference	Entry into force of funding guideline	-	-	-	Q3	2022	The guideline for a pilot programme on climate change contracts based on the principle of Carbon Contracts for Difference has entered into force, enabling companies to submit applications.
14	1.1.4 Project-related climate protection research	Target	Approval of applications for support of climate-related research projects	-	Number of applications approved	0	45	Q4	2021	The climate-related research projects selected under the call for tender have been approved for funding.
16	1.1.4 Project-related climate protection research	Target	Availability of climate research project reports	-	Number	0	45	Q4	2025	Final reports describing the results of 45 collaborative projects have been made available to the project promoters.

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
17	1.1.5 Flagship projects for research and innovation in the context of the National Hydrogen Strategy	Milestone	Publication of the competition “Idea Competition ‘Hydrogen Republic Germany’” (Förderaufruf zum Ideenwettbewerb „Wasserstoffrepublik Deutschland“)	Publication of the competition on the Federal Ministry of Education and Research’s homepage	-	-	-	Q2	2020	The competition, including the eligibility conditions, has been published on the homepage of the Federal Ministry of Education and Research and opened for applications.
18	1.1.5 Flagship projects for research and innovation in the context of the National Hydrogen Strategy	Target	Issuance of grant decisions	-	Number of grant decisions issued	0	150	Q2	2022	Grant decisions have been issued to recipients/applicants, enabling the start of the implementation of the selected projects.
19	1.1.5 Flagship projects for research and innovation in the context of the National Hydrogen Strategy	Target	Availability of hydrogen research project reports	-	Number	0	150	Q2	2026	Final reports describing the results of 150 projects have been made available to the project promoter.

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
21	1.1.5 Flagship projects for research and innovation in the context of the National Hydrogen Strategy	Target	Commitment for flagship research and innovation projects	-	EUR million	0	665	Q1	2025	Of the EUR 700 000 000 allocated to the flagship projects, at least EUR 665 000 000 have been committed.
21A	1.1.6 Federal support for efficient heat networks	Target	Signing of grant decisions	-	Grant decisions	0	200	Q4	2023	The implementing authority, BAFA (<i>Bundesamt für Wirtschaft und Ausfuhrkontrolle</i>), has signed 200 grant decisions for projects in line with the measure description. New district heating networks shall be supported by at least 75% of renewable energy and waste heat. No fossil fuels shall be financed. Support under the scheme shall be granted only to heat generation from renewable energy sources, including sustainable biomass, and waste heat.
21B	1.1.6 Federal support for efficient heat networks	Target	Submission of feasibility studies and/or transformation plans	-	Feasibility studies and/or transformation plans	0	50	Q4	2024	At least 50 feasibility studies and/or transformation plans have been submitted to the implementing authority, BAFA (<i>Bundesamt für Wirtschaft und Ausfuhrkontrolle</i>).

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
21C	1.1.6 Federal support for efficient heat networks	Target	Disbursement for the supported projects	-	EUR million	0	300	Q2	2026	At least EUR 300 000 000 have been disbursed for the supported projects.

B. COMPONENT 1.2: Climate-friendly mobility

The component of the German recovery and resilience plan addresses the challenge of climate change mitigation with a focus on the transport sector.

The objective of the component is to contribute to substantially reducing CO₂ emissions in the transport sector. It specifically aims to establish alternative technologies in the transport sector in a sustainable way, to make them more energy-efficient, climate- and environmentally friendly, thereby further promoting the energy transition in transport.

Support for the market development of electro-mobility and the complementary investment in sustainable mobility technologies are also intended to support the transition towards a climate-neutral automotive and supply industry and to help Germany strengthen its economy in the medium and long term.

The component supports addressing the Country Specific Recommendation to “focus investment on the green and digital transition, in particular on sustainable transport”, (...) research and innovation” (Country Specific Recommendation 2.3 and 2.8 in 2020).

It is expected that no measure in this component does significant harm to environmental objectives within the meaning of Article 17 of Regulation (EU) 2020/852, taking into account the description of the measures and the mitigating steps set out in the recovery and resilience plan in accordance with the DNSH Technical Guidance (2021/C58/01).

B.1. Description of the reforms and investments for non-repayable financial support

1.2.1 Investment: Support for the construction of charging infrastructure

The objective of the measure is to develop clean mobility solutions to decarbonise the transport sector. The measure consists of support for recharging points.

1.2.2 Investment: Funding for the development of electro-mobility

The general challenge addressed by this measure is also the need to develop clean mobility solutions to decarbonise the transport sector. In particular, it targets the further market development of electro-mobility and, in particular, the development of municipal and commercial vehicle fleets.

The measure consists of financial support given for the purchase of electric vehicles in municipal and commercial fleets and necessary charging infrastructure for the operation of these vehicles. In addition, application-oriented research and development projects, the development of electric mobility projects (municipal and commercial) and electro-mobility concepts shall be supported. The support shall take the form of funding a grant scheme to be operated by the Federal Ministry for Digital and Transport.

The implementation of the measure shall be completed by 30 June 2024.

1.2.3 Investment: Support for the replacement of the private vehicle fleet

The objective of this measure is to lower emissions in the transport sector. The measure consists of financial support to promote the purchase or lease of zero-emission electric vehicles and plug-in hybrid vehicles emitting less than 50g CO₂/km.

1.2.4 Reform: Extension of the initial registration period for granting the ten-year tax exemption for purely electric vehicles

The objective of this measure is to support electro mobility. The measure consists of a ten-year tax exemption for electric vehicles.

1.2.5 Investment: Support for purchases of buses with alternative propulsion

The objective of the measure is to lower the CO₂ emissions of transport. It consists in support for alternatively fuelled buses and related infrastructure and feasibility studies.

1.2.6 Investment: Support to promote alternative rail propulsion

The objective of this measure is to replace rail vehicles to achieve a significant reduction in CO₂ emissions and air pollutants. It consists of financial support for the procurement of rail vehicles with alternative propulsion and/or the conversion to alternative engines.

1.2.7 Investment: Promotion of the industries involved in hydrogen and fuel cell applications in transport

The objective of this measure is to support a supply industry for hydrogen and fuel cell technology to facilitate the decarbonisation of the transport industry. The measure consists of financial support to projects and Technology and Innovation Centre(s).

B.2. Milestones, targets, indicators, and timetable for monitoring and implementation for non-repayable financial support

Sequential Number	Related Measure (Reform or Investment)	Milestone/ Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
22	1.2.1 Support for the construction of charging infrastructure	Milestone	Entry into force of funding guidelines	Two funding guidelines published in the Federal Gazette (Bundesanzeiger)	-	-	-	Q4	2021	The two funding guidelines are published in the Federal Gazette (<i>Bundesanzeiger</i>), enabling eligible organisations / households to submit applications to: (1) 'charging infrastructure for residential buildings' and (2) 'publicly accessible charging infrastructure for electric vehicles.
23	1.2.1 Support for the construction of charging infrastructure	Target	Support for publicly accessible recharging points	-	Number of publicly accessible recharging points	0	2 500	Q3	2025	Commissioning notifications (<i>Inbetriebnahmemeldungen</i>) have been issued for 2 500 publicly accessible recharging points.
24	1.2.1 Support for the construction of charging infrastructure	Target	Expansion of recharging points in residential buildings	-	Thousand recharging points in residential buildings	0	689	Q4	2023	At least 689 000 recharging points have been funded through the disbursement of financial support from the grant scheme operated by the Federal Ministry for Digital and Transport (BMDV).
25	1.2.2 Funding for the development of electro-mobility	Milestone	Entry into force of the funding guidelines	Entry into force of funding guidelines published in the Federal Gazette (Bundesanzeiger)	-	-	-	Q4	2020	The funding guidelines covering the development of municipal and commercial e-vehicle fleets and charging infrastructure, as well as related applied R&D (e-mobility concepts/designs) and e-mobility concepts have been published in the Federal Gazette (<i>Bundesanzeiger</i>), enabling eligible organisations / households to submit applications.

Sequential Number	Related Measure (Reform or Investment)	Milestone/ Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
26	1.2.2 Funding for the development of electro-mobility	Target	Commitment of funds	-	EUR million	0	71.25	Q4	2022	Of the EUR 75 000 000 allocated to the measure, at least EUR 71 250 000 have been committed.
27	1.2.2 Funding for the development of electro-mobility	Target	Expansion of municipal and commercial e-mobility fleets	-	Number of e-vehicles	0	4 000	Q2	2024	Municipalities, companies and other eligible organisations have received funding commitments for at least 4 000 e-vehicles with support of the grant scheme.
28	1.2.2 Funding for the development of electro-mobility	Target	Completion of electro-mobility preliminary designs	-	Number of completed electro-mobility preliminary designs	0	80	Q2	2024	At least 80 electro-mobility preliminary designs have been completed for municipalities, companies or other eligible organisations.
29	1.2.3 Support for the replacement of the private vehicle fleet	Target	Support for the purchase of 240 000 electric vehicles	-	Number of e-vehicles purchased	0	240 000	Q1	2021	Recipients have received grant support for the purchase of a total of 240 000 electric vehicles on the basis of the amended funding guidelines that entered into force on 8 July 2020.
30	1.2.3 Support for the replacement of the private vehicle fleet	Target	Support for the purchase of another 320 000 electric vehicles	-	Number of e-vehicles purchased	240 000	560 000	Q4	2022	Recipients have received grant support for the purchase of a (cumulative) total of 560 000 electric vehicles on the basis of the amended funding guidelines that entered into force on 8 July 2020.

Sequential Number	Related Measure (Reform or Investment)	Milestone/ Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
30A	1.2.3 Support for the replacement of the private vehicle fleet	Target	Support for the purchase of 399 450 electric vehicles	-	Number of electric vehicles purchased	0	399 450	Q1	2025	Additionally to the purchases supported under targets 29 and 30, grant support has been disbursed to recipients for the purchase (which includes the purchase or leasing) of 399 450 electric vehicles, (PHEV, BEV and FCEV) on the basis of the funding guidelines (BAnz 07.07.2020 B2) that entered into force on 8 July 2020 as well as any subsequent guidelines and amendments to those guidelines.
31	1.2.4 Extension of the initial registration period for granting the ten-year tax exemption for purely electric vehicles	Milestone	Entry into force of the Seventh Motor Vehicle Tax Amendment Act	Provision in the law indicating the entry into force of the Seventh Motor Vehicle Tax Amendment Act	-	-	-	Q4	2020	The amendment to the Motor Vehicle Tax Act to extend the initial registration period for e-vehicles to obtain the ten-year tax exemption has entered into force.
33	1.2.5 Support for purchases of buses with alternative propulsion	Milestone	Publication of funding guidelines	Publication in the Federal Gazette (<i>Bundesanzeiger</i>)	-	-	-	Q3	2021	The funding guidelines on the support scheme for the purchase of buses and coaches for passenger transport with alternative propulsion have been published in the Federal Gazette(<i>Bundesanzeiger</i>). Funds shall mainly be used for battery-powered electric buses, battery trolley buses, fuel cell buses and 100% biomethane-powered buses.
35	1.2.5 Support for purchases of buses with alternative propulsion	Target	Orders of buses with alternative propulsion	-	Number of buses ordered	0	2 800	Q2	2026	Orders or order confirmations or contracts have been issued for at least 2 800 buses with alternative propulsion.

Sequential Number	Related Measure (Reform or Investment)	Milestone/ Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
36	1.2.6 Support to promote alternative rail propulsion	Milestone	Entry into force of the funding guidelines	Entry into force	-	-	-	Q1	2021	The funding guidelines for the grant scheme to promote alternative rail propulsion have entered into force enabling eligible organisations to submit applications.
38	1.2.6 Support to promote alternative rail propulsion	Target	Order of rail vehicles with alternative propulsion	-	Number of rail vehicles ordered	0	200	Q2	2026	Orders or order confirmations or contracts have been issued for at least 200 rail vehicles (locomotives) with alternative (to conventional diesel) propulsion.
39	1.2.7 Promotion of the industries involved in hydrogen and fuel cell applications in transport	Milestone	Entry into force of amendment extending existing supporting guidelines (<i>Förderrichtlinien</i>) of the National Hydrogen and Fuel Cell Technology Innovation Programme (NIP) (or if not sufficiently covered by existing supporting guidelines, entry into force of new supporting guidelines)	Publication in Federal Gazette (<i>Bundesanzeiger</i>)	-	-	-	Q4	2021	The relevant funding guidelines in the National Hydrogen and Fuel Cell Technology Innovation Programme (NIP), currently limited to 30 June 2021, has been extended in time and this extension has entered into force. If planned projects under the measure are not sufficiently covered by existing supporting guidelines, separate supporting guidelines shall be adopted.

Sequential Number	Related Measure (Reform or Investment)	Milestone/ Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
40	1.2.7 Promotion of the industries involved in hydrogen and fuel cell applications in transport	Target	Projects for hydrogen and fuel cell applications in transport	-	Number of projects	0	268	Q3	2025	Grant decisions have been issued for at least 268 R&D and market activation projects for hydrogen and fuel cell applications in transport.
41	1.2.7 Promotion of the industries involved in hydrogen and fuel cell applications in transport	Milestone	Provision of services via Technology and Innovation Centre(s) for Hydrogen Technology	Provision of services	-	-	-	Q2	2026	The Technology and Innovation Centre(s) shall provide services for, for example, the development of fuel cell or electrolysis systems, subsystems or components; feasibility studies; market studies; patent research; simulation of existing components or their assembly; development of specifications for components or their assembly; and visualisations of components, stacks or systems.

C. COMPONENT 1.3: Climate-friendly renovation and construction

The component of the German recovery and resilience plan addresses the challenge of climate change mitigation and energy transition with a focus on energy-efficient renovation.

In the building sector, Germany aims to reduce CO₂ emissions by around 40% by 2030 compared to current levels (120 million tonnes of CO₂ equivalent in 2020). By 2050, Germany aims to achieve net-zero GHG emissions, including for the building stock in Germany. At the same time, it must be ensured that construction and housing remain affordable.

The climate-friendly construction and renovation component aims at contributing to the achievement of these objectives by increasing energy efficiency and the share of renewable energy in final energy consumption for heating and cooling in buildings. Accompanying measures for the timber construction sector towards digitalisation, circularity and climate-friendly practices shall also be undertaken as timber is identified as having the potential to constitute a climate friendly and resource-efficient building material, as well as leading to cost-effective and time-efficient construction and renovation methods.

The component supports addressing the Country Specific Recommendations related to the green transition, in particular clean, efficient and integrated energy systems and, indirectly, to making housing more affordable (Country Specific Recommendation 1 in 2019 and Country Specific Recommendation 2 in 2020).

It is expected that no measure in this component does significant harm to environmental objectives within the meaning of Article 17 of Regulation (EU) 2020/852, taking into account the description of the measures and the mitigating steps set out in the recovery and resilience plan in accordance with the DNSH Technical Guidance (2021/C58/01).

C.1. Description of the reforms and investments for non-repayable financial support

1.3.1 Investment: Support programme for the development of a climate-friendly timber construction

The objective of this investment is to accelerate the development, deployment and diffusion of innovative technologies, processes, products and services (digital transformation) to increase the use of timber as a climate-friendly building material. The measure is also intended to help overcome structural disadvantages and obstacles in order to be able to establish construction with timber on an equal footing in large-scale, multi-storey construction. To overcome the challenge of transfer of knowledge, innovation and technology between research and practice, the measure further aims to improve the networking between businesses, academia and research institutions related to climate-friendly construction with timber.

To that end, the measure shall focus support on advisory services (analysis, evaluations and recommendations) directed towards increasing the use of timber (coniferous/deciduous) and related to digitalisation, service and business innovation, business optimisation, and recyclability of construction products. The measure shall also focus on the development of innovation clusters related to innovation and development of climate-friendly timber construction. Given the structure of the sector, SMEs are aimed to be the main beneficiaries of the support.

The implementation of the measure shall be completed by 31 December 2021. This corresponds to the period during which project owners may apply for support.

1.3.2 Investment: Municipal living labs for the energy transition

The objective of this measure is to explore and demonstrate solutions for the efficient and sustainable energy supply of urban neighbourhoods. The measure consists of grants to municipal living labs for installations related to efficient and sustainable energy supply.

1.3.3 Investment: Building renovation: federal funding for energy-efficient buildings

The objective of this measure is to support the energy-efficient renovation of residential buildings. The measure consists of renovation programmes with at least a medium-depth level renovation as defined in Commission Recommendation (EU) 2019/786 on Building Renovation and in individual measures also including a 10% funding bonus for exchanging functioning oil/coal-based heating and gas boilers that are older than 20 years.

C.2. Milestones, targets, indicators, and timetable for monitoring and implementation for non-repayable financial support

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
42	1.3.1 Support programme for the development of a climate-friendly timber construction sector	Milestone	Funding guidelines on the promotion of climate-friendly timber construction	Publication in the Federal Gazette (<i>Bundesanzeiger</i>) and entry into force of the funding guidelines	-	-	-	Q1	2021	The guidelines have been published in the Federal Gazette (<i>Bundesanzeiger</i>), enabling companies and eligible organisations to apply for funding.
43	1.3.1 Support programme for the development of a climate-friendly timber construction sector	Target	Approval of projects related to the development of climate-friendly timber construction	-	Number of approved projects	0	17	Q2	2022	At least 17 projects have been approved, enabling the recipients to start their implementation.
44	1.3.2 Municipal living labs for the energy transition	Target	Approval of 'living labs' projects	-	Number of approved projects	0	4	Q4	2023	At least four joint living labs projects have been approved through a grant decision, enabling the start of their implementation.
45	1.3.2 Municipal living labs for the energy transition	Target	Urban neighbourhood projects	-	Number	0	10	Q1	2026	Energy balance reports of the 10 local energy systems shall be provided, demonstrating that the systems have been tested or are being piloted.

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
46	1.3.3 Building renovation: federal funding for energy-efficient buildings	Milestone	Funding guidelines for the support of energy-efficient renovation of buildings	Publication of funding guidelines in the Federal Gazette (<i>Bundesanzeiger</i>)	-	-	-	Q3	2021	The guidelines have been published, enabling households and eligible organisations to apply for funding.
47	1.3.3 Building renovation: federal funding for energy-efficient buildings	Target	Confirmation after execution of energy-efficient renovations of 10 000 housing units.		Number of housing units renovated	0	10 000	Q4	2024	Confirmation after execution (<i>Bestätigung nach Durchführung</i>) of energy-efficient renovations of 10 000 housing units.
48	1.3.3 Building renovation: federal funding for energy-efficient buildings	Target	Confirmation after execution of energy-efficient renovations of a further 30 000 housing units	-	Number	10 000	40 000	Q2	2026	Confirmation after execution (<i>Bestätigung nach Durchführung</i>) of energy-efficient renovations of a further 30 000 housing units.
48B	1.3.3 Building renovation: federal funding for energy-efficient buildings	Target	Completion of individual renovation measures for energy-efficient buildings	-	Completed individual renovation measures	0	145 000	Q4	2024	At least 145 000 individual renovation measures have been completed in total.

D. COMPONENT 2.1: Data as the raw material of the future

The objectives of this component of the German recovery and resilience plan are to support the transition towards a secure and dynamic data economy through the promotion of data-driven innovation in the context of the data strategy³ adopted by the German federal government on 27 January 2021, as well as through investments in research, development, innovation and first industrial deployments in strategic technological areas linked to the processing of data (microelectronics and next generation cloud infrastructures and services) in the context of large multi-country initiatives.

The component supports addressing the Country Specific Recommendations on investment in the digital transition (Country Specific Recommendation 1 in 2019 and Country Specific Recommendation 2 in 2020).

It is expected that no measure in this component does significant harm to environmental objectives within the meaning of Article 17 of Regulation (EU) 2020/852, taking into account the description of the measures and the mitigating steps set out in the recovery and resilience plan in accordance with the DNSH Technical Guidance (2021/C58/01).

D.1. Description of the reforms and investments for non-repayable financial support

2.1.1 Reform: Innovative data policy for Germany

The objectives of the measure are to increase data literacy in government, science and society and to foster the sharing and use of data. The measure consists of Chief Data Scientists or Chief Data Officers and data laboratories in the federal administration, as well as supporting projects or research on data intermediaries, the depersonalisation or anonymisation of data, and data literacy.

2.1.2 Investment: IPCEI Microelectronics and Communication Technologies

The objective of the measure is to contribute to a cross-border initiative aiming at endowing the European Union with capabilities in the next generation of low power trusted processors and other electronic components.

The investment consists of providing support to German participants in projects to be implemented as part of an Important Project of Common European Interest (IPCEI)⁴.

2.1.3 Investment: IPCEI Next Generation Cloud Infrastructure and Services (IPCEI CIS)

The objective of the measure is to contribute to a large-scale cross-border initiative on smart cloud and edge solutions.

The investment consists of providing financial support to German participants in projects to be implemented as part of an Important Project of Common European Interest (IPCEI).

³ See <https://www.bundesregierung.de/breg-de/suche/datenstrategie-der-bundesregierung-1845632>

⁴ IPCEIs are subject to the notification requirement and stand-still obligation in Article 108(3) of the Treaty on the Functioning of the European Union. The selection and the specificities of the individual projects may accordingly require adjustments to ensure compliance with the applicable State aid rules. Only projects approved by a Commission decision under the applicable State aid rules may receive State aid.

D.2. Milestones, targets, indicators, and timetable for monitoring and implementation for non-repayable financial support

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
49	2.1.1 Innovative data policy for Germany	Milestone	Start of projects	Start of all projects	-	-	-	Q4	2022	All projects and activities of the measure have started. Wherever relevant, selection procedures have been completed and selected projects have started.
50	2.1.1 Innovative data policy for Germany	Milestone	Project results and Chief Data Scientists or Chief Data Officers and data laboratories	Project results and Chief Data Scientists or Chief Data Officers and data laboratories		-	-	Q1	2026	<p>(i) At least one software tool or library supporting the research-based testing of data intermediaries has been made publicly available via public repository or public webpage.</p> <p>(ii) Project results on the depersonalisation or anonymisation of data have been published in at least one peer-reviewed scientific publication.</p> <p>(iii) A platform for data literacy in science has been published on a public webpage.</p> <p>(iv) A toolbox, i.e. a freely usable digital platform with tools for working with data (e.g. coding environment and tutorials), for data literacy has been published on a public webpage.</p> <p>(v) At least 15 federal ministries and the federal chancellery shall have a Chief Data Scientist or Chief Data Officer and a data laboratory.</p>

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
52	2.1.2 IPCEI Microelectronics and Communication Technologies	Milestone	Content design of the planned IPCEI	Completion of national call for expression of interest process to identify projects in Germany	-	-	-	Q2	2021	The expression of interest procedure has been completed. Potential projects and project participants in Germany have been identified.
53	2.1.2 IPCEI Microelectronics and Communication Technologies	Target	Launch of first projects	-	Number of projects	0	10	Q4	2022	Ten grant decisions have been signed.
54	2.1.2 IPCEI Microelectronics and Communication Technologies	Target	Budget execution – disbursement of at least EUR 1 275 000 000	-	EUR million	0	1 275	Q2	2026	At least EUR 1 425 000 000 have been committed (through signatures of grant decisions) and at least EUR 1 275 000 000 have been disbursed.
55	2.1.3 IPCEI Next Generation Cloud Infrastructure and Services (IPCEI CIS)	Milestone	Launch of R&D&I projects	Signature of grant decisions for R&D&I projects	-	-	-	Q4	2022	The grant decisions have been signed for all R&D&I projects covered by the IPCEI State aid decision. The selection criteria have ensured that more than 50% of these projects address energy-efficiency as one of their key priorities and comply with the European Code of Conduct on Data Centre Energy Efficiency.

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
56	2.1.3 IPCEI Next Generation Cloud Infrastructure and Services (IPCEI CIS)	Target	Open-source repositories or other web resources containing code		Repositories	0	35	Q2	2026	3 direct and 8 indirect partners have set up open-source repositories or other freely accessible web resources containing code. At least 35 of these repositories or web resources have received at least 350 commits each.

E. COMPONENT 2.2: Digitalisation of the Economy

The objectives of the component of the German recovery and resilience plan are to support the digital transition of the German economy and the challenges resulting from it. The component addresses essential aspects such as research and innovation on digital technologies, and skills. It also aims at providing specific support to the automotive and rail sectors.

The component supports addressing the Country Specific Recommendations on investment in the digital transition (Country Specific Recommendation 1 in 2019 and Country Specific Recommendation 2 in 2020).

It is expected that no measure in this component does significant harm to environmental objectives within the meaning of Article 17 of Regulation (EU) 2020/852, taking into account the description of the measures and the mitigating steps set out in the recovery and resilience plan in accordance with the DNSH Technical Guidance (2021/C58/01).

E.1. Description of the reforms and investments for non-repayable financial support

2.2.1 Investment: Vehicle manufacturer/supply industry investment programme

The objective of the measure is to provide support to the digital and ecological transition of the automotive industry.

The investment consists of supporting projects in the vehicle sector (excluding targeted support for fossil fuel combustion engine technologies), for example investments or research and development for (i) the digitalisation of production processes, (ii) innovative vehicle technologies and systems for automated driving, efficient electrification or lightweight material building, or (iii) regional innovation clusters for the transformation of the vehicle industry.

2.2.2 Reform: Federal programme ‘Building continuing education and training networks (CET networks)’

The objective of the measure is to support so-called ‘CET networks’, which are involved in the organisation of training activities.

The investment consists of supporting CET networks selected under the federal programme ‘Building CET networks’.

2.2.3 Investment: Digitalisation and Technology Research Centre of the Bundeswehr (dtec.bw)

The objective of the measure is to support research and innovation activities on strategic technological areas for the future, in order to contribute to German and European digital and technological sovereignty.

The investment consists of supporting research, development and innovation activities led by the Digitalisation and Technology Research Centre of the Bundeswehr (dtec.bw).

2.2.4 Investment: Promoting the digitalisation of rail by replacing conventional interlocking/fast-track programmes to speed up the roll-out of the ‘Digital Rail Germany’ (SLP)

The objective of the measure is to support the digitalisation of railway in the context of the ‘Digital Rail Germany’ initiative and the ‘fast track’ programme aiming at accelerating it. This initiative gathers public and private stakeholders (including the Federal Railway Authority (EBA), research and technical organisations and industry, amongst others) in order to develop standardised, interoperable and modular components

for the digitalisation of railway operations.

The investment consists of funding seven pilot projects of the programme, aiming at developing solutions to replace old signal boxes and level crossing protection systems by security systems of the latest digital generation.

Four of these projects shall enable established firms to certify new solutions in an operational context, while the other three shall enable additional providers to validate their solutions in laboratory tests. The new solutions developed by these projects shall be compatible with the technical specifications of the 'Digital Rail Germany' programme. They are also aimed to be upgradeable and compatible with a subsequent ETCS (European Train Control System) upgrade by means of uniform system interfaces.

The implementation of the investment shall be completed by 31 March 2023.

E.2. Milestones, targets, indicators, and timetable for monitoring and implementation for non-repayable financial support

Seq. No.	Related Measure (Reform or Investment)	Milestone/ Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
59	2.2.1 Vehicle manufacturers/ suppliers investment programme	Milestone	Publication of all funding guidelines	Publication of the funding guidelines in the Federal Gazette (<i>Bundesanzeiger</i>)	-	-	-	Q1	2021	All the funding guidelines for the four types of support measures under the programme have been published in the Federal Gazette (<i>Bundesanzeiger</i>) and have become legally binding.
60	2.2.1 Vehicle manufacturers/ suppliers investment programme	Target	Approval of projects	-	Number of projects approved	0	401	Q1	2023	At least 401 funding projects (for the three modules) have been approved and have received a support decision for implementation.
61	2.2.1 Vehicle manufacturers / suppliers investment programme	Target	Finalisation of projects	-	Number of final notices issued	0	531	Q2	2026	For at least 531 funding projects approved between 2021 and 2026, a final notice (<i>Schlussvermerk</i> or <i>Schlussbescheid</i>) has been issued.
62	2.2.2 Federal programme 'Building further CET networks'	Milestone	Publication of the funding guidelines	Publication of the funding guidelines in the Federal Gazette (<i>Bundesanzeiger</i>)	-	-	-	Q2	2020	The funding guidelines have been published in the Federal Gazette (<i>Bundesanzeiger</i>) and have become legally binding.
63	2.2.2 Federal programme 'Building further CET networks'	Target	Active participation of additional enterprises in CET networks	-	Number of additional enterprises participating in CET networks	0	200	Q4	2022	At least 200 additional enterprises participate in CET networks. These companies participate in the collection of training needs, the design of new training measures or modules and the use of proposed training measures or modules together with other companies (use of information and participation in events only shall not be considered as active participation). Only companies that have not already been designated as cooperation partners at the

Seq. No.	Related Measure (Reform or Investment)	Milestone/ Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
										start of the respective skills alliance shall be taken into account for this target.
64	2.2.2 Federal programme 'Building further CET networks'	Target	Involvement or contribution of CET networks to new or revised training measures or sub-modules	-	Number of new or revised measures or sub-measures	0	60	Q4	2024	The CET networks were involved in or contribute to 60 revised or new sub-modules or training measures (as evidenced for example by training materials, needs assessments or other documents proving CET-involvement).
65	2.2.3 Digitalisation and Technology Research Centre of the Bundeswehr	Target	Launch of research projects	-	Number of projects	0	68	Q1	2021	At least 68 funding grants have been signed and the corresponding 68 projects have received funding and may start their research activity.
66	2.2.3 Digitalisation and Technology Research Centre of the Bundeswehr	Milestone	Report on research and transfer outputs	Publication of a report to the Federal Ministry of Defence confirming successful progress of projects	-	-	-	Q4	2023	<p>A report to the Federal Ministry of Defence has been published, confirming the progress of the funded projects in terms of research outputs, cooperation, knowledge transfer and technology transfer with at least (overall):</p> <ul style="list-style-type: none"> - 200 publications; - 70 collaborations initiated with other research institutes; - 30 collaborations initiated with industrial companies and startups; - 15 collaborations initiated with agencies of the Federal Armed Forces and the public administration; - 10 prototypes of mature technologies; and - 10 patent applications. <p>Additionally, an external evaluation of the measure by the German Science Council has also been published.</p>

Seq. No.	Related Measure (Reform or Investment)	Milestone/ Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
67	2.2.3 Digitalisation and Technology Research Centre of the Bundeswehr	Target	Continuation of projects	-	Number of projects assessed as progressing satisfactorily	0	40	Q2	2024	On the basis of an interim evaluation, at least 40 projects are considered as progressing satisfactorily and may continue their activities.
69	2.2.3 Digitalisation and Technology Research Centre of the Bundeswehr	Target	Project outputs		Number of outputs	0	710	Q1	2026	A report submitted by the Digitalisation and Technology Research Centre of the Bundeswehr to the Federal Ministry of Defence, confirming the following outputs: <ul style="list-style-type: none"> - 410 publications; - 60 doctoral theses submitted; - 200 collaborations initiated with other research institutes, companies, startups or with agencies of the Federal Armed Forces and the public administration (as evidenced by, for example, letters of intent, confirmation letters, or cooperation agreements); - 20 prototypes of technologies; - 20 patent applications.
70	2.2.4 Promoting the digitalisation of railways by replacing conventional interlocking/fast-track programmes to speed up the roll-out of the 'Digital Rail Germany'	Milestone	Signature of the financing agreement for the 'fast track' programme between the Federal Government and Deutsche Bahn AG	Signed financing agreement between the Federal Government and Deutsche Bahn AG	-	-	-	Q4	2020	The financing agreement between the Federal Government and Deutsche Bahn AG has been signed.

Seq. No.	Related Measure (Reform or Investment)	Milestone/Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
71	2.2.4 Promoting the digitalisation of railways by Replacing conventional interlocking/fast-track programmes to speed up the roll-out of the 'Digital Rail Germany'	Milestone	Interim report on implementation	Interim report submitted by DB Netz AG to the Federal Ministry for Digital and Transport (BMDV) and the Federal Railway Authority (EBA) on the implementation of the programme	-	-	-	Q2	2021	DB Netz AG has submitted a report to the Federal Ministry for Digital and Transport (BMDV) and the Federal Railway Authority (EBA) on the implementation of the programme.
72	2.2.4 Promoting the digitalisation of railways by replacing conventional interlocking/fast-track programmes to speed up the roll-out of the 'Digital Rail Germany'	Target	Successful completion of pilot projects	-	Number of pilot projects completed	0	6	Q4	2021	Six pilot projects of the programme, aiming at developing solutions to replace old signal boxes and level crossing protection systems by security systems of the latest digital generation have been completed successfully, with validation in operational conditions for at least three of them, and validation in laboratory conditions for the others.
72A	2.2.4 Promoting the digitalisation of railways by replacing conventional interlocking/fast-track programmes to speed up the roll-out of the 'Digital Rail	Target	Successful completion of the final pilot project	-	Number of pilot projects completed	6	7	Q1	2023	The final pilot project of the programme has been completed successfully with validation in operational conditions.

Seq. No.	Related Measure (Reform or Investment)	Milestone/ Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
	Germany ⁷									

F. COMPONENT 3.1: Digitalisation of Education

The component of the German recovery and resilience plan focuses on providing financial support for investments in the digital transition in education. The overall aim is to allow for more and better digital teaching and learning throughout the different education and training systems in Germany.

The component addresses the challenge of digital education in Germany. The long identified challenge has been exacerbated by the COVID-19 pandemic as the related lockdown caused closure of education sites such as schools, training institutions and universities. With the shift to online education, suboptimal infrastructure and basic digital skills are putting a break on the learning processes.

The component supports addressing the Country Specific Recommendation on focusing the investment on digital transition, in particular on education (Country Specific Recommendation 2 in 2020 and 1 in 2019) and improving educational outcomes and skills levels of disadvantaged groups (Country Specific Recommendation 2 in 2019).

It is expected that no measure in this component does significant harm to environmental objectives within the meaning of Article 17 of Regulation (EU) 2020/852, taking into account the description of the measures and the mitigating steps set out in the recovery and resilience plan in accordance with the DNSH Technical Guidance (2021/C58/01).

F.1. Description of the reforms and investments for non-repayable financial support

3.1.1 Investment: Investment programme for teacher devices

The objective of this measure is to contribute to digital teaching and learning in schools. It consists of equipping teachers with mobile digital devices on a lending basis.

3.1.2 Reform: Education platform

The objective of this measure is to develop a network infrastructure that, with digital means, supports the development of competences by learners. It consists of a digital infrastructure to connect learners and educational institutions.

3.1.3 Reform: Educational centres of excellence

The objective of this measure is to institutionalise digital education as part of the established teacher education and further education framework. It consists of supporting competence centres for digital education by providing scientific content.

3.1.4 Investment: Modernisation of the Federal Armed Forces' educational and training facilities

The objective of the measure is to contribute to the digitalisation of the Federal Armed Forces (*Bundeswehr*). It consists of equipping Federal Armed Forces' educational institutions with information technology.

F.2. Milestones, targets, indicators, and timetable for monitoring and implementation for non-repayable financial support

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
73	3.1.1 Investment programme for teacher devices	Milestone	Administrative agreement	Conclusion of the administrative agreement between the Federal Government of Germany and the governing bodies at Länder level	-	-	-	Q1	2021	Publication in the Federal Gazette (<i>Bundesanzeiger</i>) of the administrative agreement between the Federal Government of Germany and the governing bodies at Länder level to implement this investment.
74	3.1.1 Investment programme for teacher devices	Target	Disbursement of at least EUR 475 000 000 to the supported projects	-	EUR million	0	475	Q1	2022	Of the EUR 500 000 000 allocated to the measure, at least EUR 475 000 000 have been disbursed for the provision of digital equipment for teachers.
76	3.1.2 Education platform	Milestone	Entry into force of the funding guidelines for education platform prototypes and procurement launched	Publication of the funding guidelines and call for tenders in the Federal Gazette (<i>Bundesanzeiger</i>)	-	-	-	Q1	2022	Funding guidelines have entered into force for the development of three separate prototypes of the meta-platform on education, as well as for cross-compatible research projects, accessible by learners and teachers. Depending on the result of these projects, the key dimensions of the project specifications are clarified and the procurement procedure shall be launched.

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
77	3.1.2 Education platform	Milestone	Launch of the beta-version of the education platform	Launch of beta version of the platform on the website of the Federal Ministry of Education and Research (BMBF)	-	-	-	Q3	2023	A beta version of the education platform shall be online, with all services and functions that have been identified in the functional description as high priority by the Federal Ministry of Education and Research (BMBF). These functions include access for information, user profile, collaboration, identity and access management, workflows, inbox. The launch shall be accompanied by additional security and data protection audits and successful load tests.
78	3.1.2 Education platform	Milestone	Evaluation report on the education platform	Publication of the evaluation report in the Federal Gazette (<i>Bundesanzeiger</i>)	-	-	-	Q3	2024	The evaluation report of the education platform has been published, with an assessment confirming that the project was successful. The project shall be successful if the continuation of the education platform is recommended or if key components, for example “digital certificates”, “wallet”, “digital identities”, “data space” or “display/workbench”, are technically usable as demonstrated by tests or by their use by other stakeholders.

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
79	3.1.3 Educational centres of excellence	Milestone	Entry into force of the first funding guidelines and call for tenders for a project-executing agency for the overall programme	Publication of the first funding guidelines in the Federal Gazette (<i>Bundesanzeiger</i>) and publication of a call for tenders on an award platform.	-	-	-	Q4	2021	Under the lead of the Federal Ministry of Education and Research (<i>BMBF</i>), the first funding guidelines have entered into force and have been published. A project-executing agency has been chosen based on applications received via a public call for tenders on an award platform.
80	3.1.3 Educational centres of excellence	Target	Approval of at least 45 research projects	-	Number of research projects approved and in progress	0	45	Q3	2022	At least 45 research projects have been approved by the project-executing agency and are in progress. Results have been published via the Federal catalogue of funds (<i>Förderkatalog</i>) and the <i>BMBF</i> website.
81	3.1.3 Educational centres of excellence	Milestone	Entry into force of three additional funding guidelines	Publication of the additional funding guidelines in the Federal Gazette (<i>Bundesanzeiger</i>)	-	-	-	Q3	2022	Under the lead of the Federal Ministry of Education and Research (<i>BMBF</i>), three additional funding guidelines, each of them with a specific thematic orientation, have entered into force and been published.
82	3.1.3 Educational centres of excellence	Milestone	Final external evaluation report on supported research projects	Publication of the final external evaluation report				Q2	2026	The final external evaluation report on supported research projects has been published.

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
83	3.1.4 Modernisation of the Federal Armed Forces' educational and training facilities	Milestone	Project contract signed	Project contract signed with the IT service provider	-	-	-	Q1	2021	The project contract for the initial phase for assessing the IT systems of the educational and training facilities of the Federal Armed Forces (<i>Bundeswehr</i>) has been signed between the Federal Office of Federal Armed Forces' Equipment, Information Technology and In-Service Support (BBAINBw), a civilian higher federal authority directly subordinate to the Federal Ministry of Defense (BMVg) and the IT provider, stipulating key steps in the future assessment work.
84	3.1.4 Modernisation of the Federal Armed Forces' educational and training facilities	Target	Analysis of educational institutions and identification of their IT needs	-	Number of educational institutions fully analysed	0	60	Q1	2022	An assessment report has been adopted by the Federal Ministry of Defence (BMVg). This report shall demonstrate that the IT environments and needs of the 60 initially designated educational institutions have been analysed, and the needs and implementation possibilities have been identified.

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
85	3.1.4 Modernisation of the Federal Armed Forces' educational and training facilities	Milestone	Final assessment report on the modernisation of educational institutions	The Federal Ministry of Defence (BMVg) has taken note of the final assessment report on the modernisation of educational institutions				Q1	2026	A final assessment report by the Project Manager of the BAAINBw on the results of the modernisation of educational institutions has been taken note of by the Federal Ministry of Defence (BMVg).

G. COMPONENT 4.1: Strengthening of social inclusion

This component of the German recovery and resilience plan mobilises resources to improve different aspects of social inclusion: (i) labour market inclusion of women and parents in general, (ii) improving educational outcomes and skills for students with a learning backlog, often from disadvantaged backgrounds, (iii) safeguarding apprenticeships, thereby supporting the labour market entry for young people, (iv) protecting take-home pay and jobs by avoiding an increase in the tax wedge, and (v) increasing transparency throughout all three pillars of the pension system and thereby access to social protection.

The component supports addressing the Country Specific Recommendation on focusing investment-related economic policy on education and on shifting away taxes from labour (Country Specific Recommendation 1 in 2019), on reducing disincentives to work more hours, on taking measures to safeguard the long-term sustainability of the pension system while maintaining adequacy of the pension level at the same time and on improving educational outcomes and skills levels of disadvantaged groups (Country Specific Recommendation 2 in 2019) and on focusing investment on education (Country Specific Recommendation 1 in 2019 and 2 in 2020).

It is expected that no measure in this component does significant harm to environmental objectives within the meaning of Article 17 of Regulation (EU) 2020/852, taking into account the description of the measures and the mitigating steps set out in the recovery and resilience plan in accordance with the DNSH Technical Guidance (2021/C58/01).

G.1. Description of the reforms and investments for non-repayable financial support

4.1.1 Investment: Investment programme ‘Childcare-financing’ 2020/21: special fund ‘Child Day-care Expansion’

The objective of the measure is to create new childcare facilities and refurbish existing facilities.

It consists of entry into force of legal acts and support to Länder and local authorities.

4.1.2 Reform: Social Guarantee 2021

The objective of the measure is to avoid that the financial impact of COVID-19 triggers extensive social security contribution rises, denting take-home pay and increasing labour costs.

For this purpose, the Federal Government shall provide fiscal transfers for the social security funds to fill their financing gap, and with this avoid that the contribution rate of social security contributions exceeds 40% in 2021.

The implementation of the reform shall be completed by 31 December 2021.

4.1.3 Investment: Apprenticeship support

The objective of the measure is to counteract the COVID-19-related reduction in the number of apprenticeships.

For this purpose, the government shall provide financial support to SMEs that take on apprentices and that maintain their current level of training, create additional

apprenticeships, avoid short-time working (*Kurzarbeit*) for apprentices, or take on apprentices from companies that have become insolvent.

The implementation of the measure shall be completed by 31 December 2022.

4.1.4 Reform: Educational support for students with a learning backlog

The objective of the measure is to avoid that a temporary learning backlog due to COVID-19-related disruption becomes entrenched.

For this purpose, the Federal Government shall provide financial support to the Länder so that these provide additional courses and mentoring to pupils, with a focus on core subjects and core competences, for example German language, mathematics and science.

The implementation of the measure shall be completed by 30 September 2022.

4.1.5 Reform: Digital Pension Overview

The objective of this measure is to create a Digital Pension Overview, a portal to provide citizens information about their individual pension provision.

This measure consists in establishing a pension information portal by the German Pension Fund (*Deutsche Rentenversicherung Bund*), to which pension providers are legally required to provide information.

G.2. Milestones, targets, indicators, and timetable for monitoring and implementation for non-repayable financial support

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
86	4.1.1 Investment Programme 'Childcare-financing' 2020/21: special fund 'Child Day-care Expansion'	Milestone	Entry into force of the Childcare Financing Act and the Federal Financial Assistance Act and of the implementing regulations at Länder level	Provision in the law indicating the entry into force of the Childcare Financing Act and the Federal Financial Assistance Act as well as the Länder-specific implementing regulations	-	-	-	Q4	2020	Amendments to the Childcare Financing Act and the Federal Financial Assistance Act (KitaFinHG) for the extension of day-care for children have entered into force. The Länder have adopted the federal rules and made them more specific in their Länder regulations.
87	4.1.1 Investment Programme 'Childcare-financing' 2020/21: special fund 'Child Day-care Expansion'	Milestone	Publication of interim report in compliance with KitaFinHG	Publication of interim reports containing amount of funding, number of childcare places, type and respective number of equipment in accordance with the legal provisions and the relevant coordination discussions between the federal government and the Länder.	-	-	-	Q4	2023	An interim report on approved and created childcare places and investments in equipment (§ 30 (2) and (3) KitaFinHG) has been published. The relevant Länder have reported to the federal government on the state of implementation, including on funding, number of childcare places, type and respective number of investments for equipment, in accordance with the monitoring and guidance obligations.

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
88	4.1.1 Investment programme 'Childcare-financing' 2020/21: special fund 'Child Day-care Expansion'	Milestone	Submission of the Länder reports on the number of childcare places	The Länder have submitted their reports on childcare places.				Q4	2025	The Länder have submitted their reports to the Federal Ministry for Education, Family Affairs, Senior Citizens, Women and Youth. The ministry has issued a report confirming that 45 000 childcare places have been funded.
89	4.1.2 Social Guarantee 2021	Milestone	Verification of the average social security contribution rate for year 2021	Total social security contribution rate calculated and it is established not having exceeded 40%	-	-	-	Q4	2021	The total social security contribution rate shall be calculated for year 2021 and it is established that this has not increased above 40%. The total social security contribution rate shall be calculated as the sum of the contribution rates for pensions, unemployment, long-term care (without childless supplement) and healthcare insurance including the average additional contribution rate under § 242a Social Code V (SGB V).
90	4.1.3 Apprenticeship support	Milestone	Entry into force of the revised funding guidelines for the federal programme <i>Ausbildungsplätze sichern</i>	Publication of revised funding guidelines	-	-	-	Q2	2021	The revised funding guidelines covering the whole federal programme <i>Ausbildungsplätze sichern</i> have been published in the Federal Gazette (<i>Bundesanzeiger</i>), reflecting the cabinet decision taken on 17 March 2021.
91	4.1.3 Apprenticeship support	Target	Outflow of support for the federal programme <i>Ausbildungsplätze sichern</i>	-	EUR million	0	282	Q4	2022	At least EUR 282 000 000 have been disbursed to recipients under the programme.

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
92	4.1.3 Apprenticeship support	Target	Award decisions on applications for the federal programme <i>Ausbildungsplätze sichern</i>	-	Number of eligible applications having been awarded funding	0	70 000	Q4	2022	At least 70 000 eligible applications have been awarded funding under the programme.
93	4.1.4 Educational support for students with a learning backlog	Milestone	Agreement between the Federal Government and the Länder to provide learning support for learners with pandemic learning backlogs.	Länder and the Federal Government adopt the funding agreement	-	-	-	Q2	2021	The Federal Government and Länder have adopted the funding agreement setting out the conditions of funding learning support.
94	4.1.4 Educational support for students with a learning backlog	Target	1 000 000 students have received learning support	-	Number of pupils receiving support under the programme	0	1 000 000	Q3	2022	At least 1 000 000 pupils have received learning support as part of the programme, as proved by the monitoring report.
95	4.1.5 Digital Pension Overview	Milestone	Entry into force of the Digital Pension Overview Act	Provision in the law indicating the entry into force of the law on the Digital Pension Overview	-	-	-	Q1	2021	The law on the Digital Pension Overview (RentÜG) has been published in the Federal Gazette (<i>Bundesanzeiger</i>) and has entered into force.
96	4.1.5 Digital Pension Overview	Milestone	Completion of the development and first operational phase.	The portal is available and has been tested in a first operational phase. The evaluation report	-	-	-	Q4	2023	The coordination body responsible for the digital pension overview (ZfDR, <i>Zentrale Stelle für die Digitale Rentenübersicht</i>) has provided an evaluation report according to § 6 (3) RentÜG of the first operational phase, assessing the achieved level of usability and

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
				on the first operational phase has been submitted by ZfDR to the steering committee for further discussion.						implementability for pension providers. The report shall clearly identify possible actions for improvements and new functionalities to be further discussed in the steering committee.
97	4.1.5 Digital Pension Overview	Milestone	Entry into force of a legal act containing a legal requirement for pension providers to provide information to the pension portal	Provision in the legal act indicating its entry into force	-	-	-	Q2	2025	The legal act containing a legal requirement for pension providers to provide information to the pension has entered into force.

H. COMPONENT 5.1: Strengthening of a Pandemic-resilient Healthcare System

This component of the German recovery and resilience plan aims to increase the resilience of the healthcare sector, including to shocks induced by pandemics. The specific objectives of the measures under this component are the digitalisation of the public health offices, which play an important role in pandemic management in Germany, the digitalisation of hospitals to increase their efficiency and resilience, and research and development of vaccines against SARS-CoV-2.

The component supports addressing the Country Specific Recommendation to mobilise adequate resources and strengthen the resilience of the healthcare system, including by deploying e-health services (Country Specific Recommendation 1 in 2020).

It is expected that no measure in this component does significant harm to environmental objectives within the meaning of Article 17 of Regulation (EU) 2020/852, taking into account the description of the measures and the mitigating steps set out in the recovery and resilience plan in accordance with the DNSH Technical Guidance (2021/C58/01).

H.1. Description of the reforms and investments for non-repayable financial support

5.1.1 Reform: Strengthening of the digital and technical resources of the public health service

The objective of the measure is to modernise the public health offices. It consists of increasing the overall level of digital maturity in the public health offices.

5.1.2 Investment: Programme to future-proof hospitals

The objective of the measure is to enable hospitals to invest in their digitalisation. The measure consists of establishing a fund from which hospitals may receive financial support for modernisation projects, increasing their overall digital maturity levels.

5.1.3 Investment: Special programme to accelerate research and development of urgently needed vaccines against SARS-CoV-2

The objectives of the measure are to support the research and development of vaccines against SARS-CoV-2 in order to reduce the severity and duration of the pandemic. The investment consists of financial support to German vaccine producers to increase their development and production capacity, and to increase patient numbers for clinical trial phases. This aims to strengthen the pharmaceutical/biotech sector in Germany in the long term and provide a broader base and flexibility to respond to the current and future pandemics.

The implementation of the measure shall be completed by 31 December 2022.

H.2. Milestones, targets, indicators, and timetable for monitoring and implementation for non-repayable financial support

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of milestone or target
					Unit of measure	Baseline	Goal	Quarter	Year	
98	5.1.1 Strengthening of the digital and technical resources of the public health service	Target	Comprehensive nationwide use of the German Electronic Reporting and Information System for Infection Protection (<i>Deutsches Elektronisches Melde- und Informationssystem für den Infektionsschutz, DEMIS</i>)	-	Percentage of public health offices using DEMIS	0	100	Q1	2021	The competent authorities of the Länder are using DEMIS to register persons in the context of SARS-CoV-2 and to discharge the reporting requirements under § 8 (1) (2) of the Infection Protection Law ⁵ .
99	5.1.1 Strengthening of the digital and technical resources of the public health service	Target	Progress of public health offices towards digital maturity	-	Percentage	0	35	Q1	2024	At least 35% of public health offices have improved their digital maturity by at least two levels by the end of Q4 2023 in at least two categories in the employed digital maturity system, as compared to their digital maturity level of 2021.

⁵ Gesetz zur Verhütung und Bekämpfung von Infektionskrankheiten bei Menschen (*Infektionsschutzgesetz – IfSG*), 20 July 2020 (BGBl. I p. 1045)

100	5.1.1 Strengthening of the digital and technical resources of the public health service	Target	Progress of public health offices towards digital maturity	-	Percentage	35	70	Q3	2025	At least 70% of public health offices have increased their digital maturity by at least two levels by Q3 2026 in at least three categories in the employed digital maturity system, as compared to their digital maturity level of 2021.
101	5.1.2 Programme to future-proof hospitals	Target	Applications submitted to the Federal Office for Social Security for at least EUR 2 700 000 000	-	Volume of funding (in million euro) for applications submitted to the Federal Office for Social Security	0	2 700	Q2	2022	Of the EUR 3 000 000 000 allocated to the measure, applications of at least EUR 2 700 000 000 in volume have been submitted to the Federal Office for Social Security for hospitals' projects under the Programme to future-proof hospitals by the deadline for the applications of 31 December 2021. By 31 March 2022, the Federal Office for Social Security shall publish the requested volume of funding.
103	5.1.2 Programme to future-proof hospitals	Target	Increase in the digital maturity levels of hospitals	-	Percentage of hospitals with increased digital maturity i) in at least two categories and ii) in at least three categories	i) 0 ii) 0	i) 80 ii) 60	Q2	2026	At least 80% of the hospitals whose application for funding under the "Programme to future-proof hospitals" was approved have increased their digital maturity in at least two categories related to the "Programme to future-proof hospitals" by at least two digital maturity levels in the employed digital maturity system compared with the evaluation from 30 June 2021 and at least 60% of the hospitals whose application for funding under the "Programme to future-proof hospitals" was approved have increased their digital maturity in at least three categories related to the "Programme to future-proof hospitals" by at least two digital maturity levels in the employed digital maturity system compared with the evaluation from 30 June 2021.

104	5.1.3 Special programme to accelerate research and development of urgently needed vaccines against SARS- CoV-2	Milestone	Approval of a first vaccine against SARS-CoV-2 by the regulatory authority	Recommendation for authorisation by the European Medicines Agency of a vaccine against SARS- CoV-2 developed by one of the three companies supported	-	-	-	Q4	2020	Approval recommended by the European Medicines Agency for a vaccine against SARS-CoV-2 developed by one of the three companies supported through measure 5.1.3.
106	5.1.3 Special programme to accelerate research and development of urgently needed vaccines against SARS- CoV-2	Target	Disbursement of at least EUR 561 450 000 to vaccine research supported by this special programme	-	EUR million	0	561.45	Q3	2022	Of the EUR 591 000 000 allocated to the measure, at least EUR 561 450 000 (95% of the total funding) have been disbursed to the recipients for vaccine research.
107	5.1.3 Special programme to accelerate research and development of urgently needed vaccines against SARS- CoV-2	Milestone	End of programme	Completion and conclusive audit of the utilisation reports and of all final reports	-	-	-	Q4	2022	All final reports on the utilisation of funds have been submitted and audited.

I. COMPONENT 6.1: Modern Public Administration

The component of the German recovery and resilience plan addresses the challenges of modernising Germany's public administration. The objective of the component is to advance the digitalisation of the public administration decisively and reduce the administrative burden for companies and citizens when interacting with the government.

The component supports addressing the Country Specific Recommendation on improving digital public services across all levels (Country Specific Recommendation 2 in 2020).

It is expected that no measure in this component does significant harm to environmental objectives within the meaning of Article 17 of Regulation (EU) 2020/852, taking into account the description of the measures and the mitigating steps set out in the recovery and resilience plan in accordance with the DNSH Technical Guidance (2021/C58/01).

I.1. Description of the reforms and investments for non-repayable financial support

6.1.1 Reform: European identity ecosystem

The objective of the measure is to create a digital ecosystem that verifies identities and personal documents online.

The measure consists of making application cases for the identity ecosystem available online.

6.1.2 Reform: Digitalisation of the administration – implementation of the Online Access Act (OZG)

The objective of the measure is to make public services digitally available. The measure consists of digitalising service bundles that fall within the implementing competency of the Länder and the Federal Government as well as the publication of quality requirements and definition of architectural specifications and the entry into force of the Ordinance on Standards for Online Access to Administrative Services.

6.1.3 Reform: Digitalisation of the administration – modernisation of registers

The objective of the measure is to enable a simple, secure and digital exchange of data stored in various German registers, to allow citizens and companies to submit their data only once.

The measure consists of the standardised technical system (The National Once-Only Technical System, NOOTS) being ready to be connected with registers, the entry into force of the legal basis for connecting registers, the connection of use cases to the technical system and the testing of additional connections to the technical system within a readiness check.

I.2. Milestones, targets, indicators, and timetable for monitoring and implementation for non-repayable financial support

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
108	6.1.1 European identity ecosystem	Target	Launch of one pilot project for digital hotel check-in	-	Number of hotels with digital check-in	0	100	Q3	2021	A pilot project has been put into operation, allowing employees of four large German companies to check-in digitally to three large German hotel chains, with at least 100 hotels participating. The pilot provides first technical components as well as insights for the further development of the ecosystem.
109	6.1.1 European identity ecosystem	Target	Additional application cases	-	Number of application cases	1	5	Q4	2024	Following the first pilot application case, at least four additional application cases for the identity ecosystem are available online, each with at least 10 000 users.

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
110	6.1.1 European identity ecosystem	Target	Additional application cases	-	Number of application cases	5	10	Q4	2025	At least ten application cases for the identity ecosystem are available online with at least 10 000 users each.
111	6.1.2 Digitalisation of the administration —Implementation of the Online Access Act (OZG)	Target	Completion of individual agreements between the lead department and the lead Land	-	Number of individual agreements	0	14	Q3	2021	At least 14 individual agreements to implement the Online Access Act have been concluded between the lead department and the lead federal state, in which the operational arrangements are defined. The implementation shall be in accordance with the <i>one-for-all</i> principle. The individual agreements provide the legal basis for cooperation and work-based implementation.
112	6.1.2 Digitalisation of the administration— Implementation of the Online Access Act (OZG)	Target	Go-Lives of online access act service bundles (<i>Onlinezugangsgesetz-Leistungen</i>)	-	Number of service bundles going live	0	70	Q4	2021	At least 70 public service bundles are live (available online to the general public).

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
113	6.1.2 Digitalisation of the administration— Implementation of the Online Access Act (OZG)	Target	Widespread digitalisation of administrative services	-	Number of service bundles implemented	0	215	Q4	2022	<p>At least 100 of the most important administrative services of the Länder are implemented as one-for-all services, as well as an additional 115 Federal Government services.</p> <p>A service, as set out in the description of this target, shall be understood as equivalent to “service bundle” (OZG-Leistung). A service bundle shall be considered digitalised and implemented in line with the Online Access Act (Onlinezugangsgesetz, OZG) and maturity model version 1.1 if it achieves maturity level (Reifegrad) 3 or it achieves maturity level 2 and service users are able to initiate, sign (where signature is required) and submit their application digitally and they are not asked to provide supporting evidence offline. Service users may exceptionally be asked to provide supporting evidence offline.</p> <p>A “service bundle” (OZG-Leistung) shall be considered as one of the most important services of the Länder if it has been included into priority</p>

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
										categories 1, 2, or 3 in the “Online Access Act implementation catalogue with service objects” (OZGUmsetzungskatalog mit Leistungsobjekten). A one-for-all service bundle (einer-für-alle OZG-Leistung) is a service variant that is developed by one Land or a group of Länder and can then be adopted by other Länder.
113A	6.1.2 Digitalisation of the administration— Implementation of the Online Access Act (OZG)	Target	Services of the Länder available for submitting applications digitally	-	Number of services	0	40	Q2	2025	At least 40 administrative services of the Länder are available for submitting applications digitally in at least 8 Länder as one-for-all services.
113B	6.1.2 Digitalisation of the administration— Implementation of the Online Access Act (OZG)	Milestone	Publication of quality requirements and definition of architectural specifications	Quality requirements have been published and architectural specifications have been defined	-	-	-	Q2	2025	Publication of quality requirements (DIN SPEC 663366) and definition of architectural specifications (IT Architecture Directive V1.9) that address the standardisation for IT components of the services of the Länder.
113C	6.1.2 Digitalisation of the administration—	Milestone	Entry into force of the Ordinance on Standards for Online Access to	Provision in the law indicating the entry into force of the	-	-	-	Q3	2025	Entry into force of the Ordinance on Standards for Online Access to Administrative Services.

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
	Implementation of the Online Access Act (OZG)		Administrative Services	Ordinance on Standards for Online Access to Administrative Services						
114	6.1.3 Digitalisation of the administration—modernisation of registers	Milestone	Completion of pilot projects to test pilot registers	End of pilot and assessment document compiled	-	-	-	Q4	2023	Completion of a pilot project to test pilot registers, in accordance with the implementation of the Identification Number Act (<i>Identifikationsnummerngesetz</i> ⁶) and the Register Modernisation Act (<i>Registermodernisierungsgesetz</i> ⁷).
115	6.1.3 Digitalisation of the administration—modernisation of registers	Milestone	Standardised technical system is ready to be connected with registers	The standardised technical system is ready to be connected with registers, the legal basis has entered into force, use cases have been connected to the technical system and additional connections to the technical system have been tested.		-		Q2	2026	The standardised technical system (National Once-Only Technical System, NOOTS) is ready to be connected with registers. The legal basis for connecting registers has entered into force. Three use cases, each consisting of a register and an online service, have been connected to the technical system. For twelve additional registers and six additional online services, the connection to the technical system has been tested within a readiness check.

⁶ *Identifikationsnummerngesetz*, 28 March 2021 (BGBl. I p. 591)

⁷ *Registermodernisierungsgesetz*, 28 March 2021 (BGBl. I p. 591)

J. COMPONENT 6.2: Reduction of barriers to investment

This component of the German recovery and resilience plan addresses barriers to investment, which have been slowing public and private investment in Germany. Reducing barriers to investment enables the timely spending of funds and facilitates investment in the green and digital transition. Furthermore, it increases Germany's resilience to economic shocks and contributes to stimulating domestic demand, with potential to narrow the current account surplus, which has been repeatedly identified as a macroeconomic imbalance for Germany.

The component supports addressing the Country Specific Recommendations on achieving a sustained upward trend in private and public investment, and to enhance investment (Country Specific Recommendation 1 in 2019 and Country Specific Recommendation 1 in 2020).

It is expected that no measure in this component does significant harm to environmental objectives within the meaning of Article 17 of Regulation (EU) 2020/852, taking into account the description of the measures and the mitigating steps set out in the recovery and resilience plan in accordance with the DNSH Technical Guidance (2021/C58/01).

J.1. Description of the reforms and investments for non-repayable financial support

6.2.1 Reform: Joint programme of the Federal Government and the Länder for an efficient administration that benefits citizens and businesses

The objectives of the measure include to accelerate planning and approval procedures, to increase the outflow of grants, to accelerate housing construction, and to increase the number of successful transfers of business ownership to the next generation.

The measure consists of establishing a working group comprised of the federal level and the Länder to adopt proposals to simplify public administration procedures.

6.2.2 Reform: Expansion of consulting services of PD - Berater der öffentlichen Hand GmbH

The objective of the measure is to enable municipalities and other public entities to better integrate public funding programmes into their investment projects, as well as advance the rollout of IT investments in schools.

The measure consists in consulting work supporting municipalities and other public entities in navigating funding programmes, creating consulting concepts for the digitalisation of schools and advise school authorities.

6.2.3 Reform: Acceleration of planning and approval procedures in the transport sector

The objective of the measure is to accelerate the planning and approval procedures in the transport sector, increase the capacity of transport routes and facilitate the expansion of climate-friendly modes of transport.

The measure consists of adopting laws that accelerate planning and approval procedures in the transport sector.

J.2. Milestones, targets, indicators, and timetable for monitoring and implementation for non-repayable financial support

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
117	6.2.1 Joint programme of the Federal Government and the Länder for an efficient administration that benefits citizens and businesses	Milestone	First progress report for the Conference of Minister-Presidents (MPK)	First progress report published	-	-	-	Q2	2021	The first report to the heads of government of the Federal Government and the Länder has been published and shall encompass a list of those measures from the Federal/Länder programme of measures which shall be further examined and processed. The starting point of the report are the following eleven areas of action: —Accelerating the outflow of grants; —Identifying obstacles to the outflow of grants and reporting them to the Federal Ministry of Finance; —Improving the financial support of municipalities; —Streamlining and making grants from the Federal Government to the Länder and municipalities as uniform as possible; —Improving transfer of business ownership through a dedicated task force; —Revising the model building code (<i>Musterbauordnung</i>) ⁸ ;

⁸ *Musterbauordnung* – zuletzt geändert durch Beschluss der Bauministerkonferenz, 27 September 2019 (<http://www.bauministerkonferenz.de/verzeichnis.aspx?id=991&o=759O986O991>)

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
										<ul style="list-style-type: none"> —Strengthening planning and approval authorities; —Improving recruitment of skilled staff and ensuring an improved staffing situation; —Accelerating planning, in particular rail, local public and private transport; — Streamlining the consultation process and public participation procedures and simplifying participation through digitalisation; —Further accelerating planning and approval processes.

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
118	6.2.1 Joint programme of the Federal Government and the Länder for an efficient administration that benefits citizens and businesses	Milestone	Second progress report for the Conference of Minister-Presidents	Second progress report published	-	-	-	Q2	2022	The published progress report shall identify the measures that shall be implemented under the leadership of the Federal Government and/or the Länder. The progress report shall contain the following elements: The name of the measure; status (started, completed, not yet started); next milestone; expected end date.
119	6.2.1 Joint programme of the Federal Government and the Länder for an efficient administration that benefits citizens and businesses	Target	Completion of measures in the progress report	-	Percentage of measures completed	0	80	Q1	2025	Completion of the implementation of at least 80% of the measures identified in the second progress report.
120	6.2.2 Expansion of consulting services of PD- Berater der öffentlichen Hand GmbH	Milestone	Start of PD consulting services for selected funding programmes	Agreement with the federal ministries on selection of funding programmes	-	-	-	Q4	2022	Suitable funding programmes have been identified by PD jointly with the relevant federal ministries, and the consulting project to improve the calibration of these funding programmes to the needs of the recipients has started.

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
121	6.2.2 Expansion of consulting services of PD- Berater der öffentlichen Hand GmbH	Target	Consultation certificates issued		Number of consultation certificates issued	0	100	Q3	2024	For 100 consultations, a certificate of conclusion of consultations (signed by the beneficiary) has been issued.
122	6.2.2 Expansion of consulting services of PD - Berater der öffentlichen Hand GmbH	Target	Concepts for revision of funding programmes issued		Concepts for funding programme revisions	0	4	Q3	2024	Concepts for funding programme revisions have been issued for four funding programmes.
123	6.2.2 Expansion of consulting services of PD Berater der öffentlichen Hand GmbH	Milestone	Publication of a funding guide	Funding Guide of the Federal Ministry of Finance published	-	-	-	Q2	2026	Publication of a Federal Ministry of Finance Funding Guide on how to design public funding programmes for public infrastructure measures.

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
124	6.2.2 Expansion of consulting services of PD -Berater der öffentlichen Hand GmbH	Target	Consultation certificates issued	-	Number of consultation certificates issued	100	400	Q2	2026	For at least 400 consultations, a certificate of conclusion of consultations (signed by the beneficiary) has been issued.
125	6.2.2 Expansion of consulting services of PD- Berater der öffentlichen Hand GmbH	Target	Roll-out and pilot consulting projects on school IT	-	Number of consulting projects carried out	0	5	Q4	2022	At least five consulting projects for school authorities on school IT have started.
126	6.2.2 Expansion of consulting services of PD- Berater der öffentlichen Hand GmbH	Milestone	Model concept for school IT	Model concept for school IT created				Q3	2024	A model concept for school IT has been created and IT-related educational materials have been published on a website (which may include, but is not limited to, checklists and guides).
127	6.2.2 Expansion of consulting services of PD - Berater der öffentlichen Hand GmbH	Target	School consulting projects	-	Number of consulting certificates issued	5	50	Q3	2024	Certificates of conclusion of consultations (signed by the beneficiary) have been issued for consultations on school IT of 50 school authorities.

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
128	6.2.3. Acceleration of planning and approval procedures in the transport sector	Milestone	Entry into force of the Investment Acceleration Act, the Planning Acceleration Act III, and the measure-act-preparatory-act	Provision in the law indicating the entry into force of the Investment Acceleration Act, the Planning Acceleration Act III, and the measure-act-preparatory-act.	-	-	-	Q4	2020	The Investment Acceleration Act, the Planning Acceleration Act III, and the measure-act-preparatory-act (<i>Investitionsbeschleunigungsgesetz</i> , <i>Planungsbeschleunigungsgesetz III</i> , <i>Maßnahmengesetzvorbereitungsgesetz</i>) have entered into force.

K. COMPONENT 7.1: REPowerEU

The objective of the REPowerEU component of the German recovery and resilience plan is to support the energy transition by integrating security of supply, affordability, resource conservation and environmental compatibility with innovative and intelligent climate protection. The component aims to address the contribution of the heating and cooling sector to greenhouse gas emissions by promoting the decarbonization of buildings through energy efficiency measures. The component also aims to promote climate-friendly freight transport, targeting a substantial reduction in emissions by incentivising the adoption of electrically powered vehicles and supporting the necessary infrastructure development. In addition, facilitating planned hydrogen infrastructure projects is identified as crucial for meeting decarbonization goals. The expansion of wind energy, both offshore and on land, is further introduced to reduce dependency on fossil fuel imports and accelerate progress towards climate neutrality. Legislative reforms are proposed to streamline permitting procedures, ensuring sustainable and responsible use of renewable energy resources.

The REPowerEU component contributes to addressing Country-Specific Recommendations, in particular CSR 2022.4 and CSR 2023.4.

Several measures are expected to have an indirect cross-border impact, including the scale-up of the federal funding for energy-efficient buildings, which aims to reduce the reliance on fossil fuels. Additionally, a digital platform to accelerate application and approval procedures could eventually facilitate the access of other EU companies to the German market by simplifying administrative processes and therefore reduce the reliance on fossil fuels, as the platform is intended to speed up the establishment of a core hydrogen grid. Direct cross-border impacts are also anticipated with the reform of the *Wind Energy on Land Act* and the *Offshore Wind Energy Act*, as the additional electricity obtained from wind energy can have an impact on the demand-supply balance in Germany and across several countries and affect cross-border flows.

It is expected that no measure in this component does significant harm to environmental objectives within the meaning of Article 17 of Regulation (EU) 2020/852, taking into account the description of the measures and the mitigating steps set out in the recovery and resilience plan in accordance with the ‘do no significant harm’ Technical Guidance (2021/C58/01).

K.1. Description of the reforms and investments for non-repayable financial support

7.1.1 Scaled-up investment: Building renovation: federal funding for energy-efficient buildings

The objective of this measure is to scale up investment 1.3.3 ‘Building renovation: federal funding for energy-efficient buildings’ under Component 1.3. The scaled-up part of the measure consists of supporting 190 000 individual renovation measures, in addition to those financed from the non-repayable support as part of the investment 1.3.3.

7.1.2 Investment: Support programme for light- and heavy-duty zero-emission transport

The objective of this measure is to increase zero emission road transport. The measure consists in the registration of zero-emission commercial vehicles and the commissioning of electric charging stations.

7.1.3 Investment: Digital platform for processing authorisation requests for the hydrogen core network

The objective of this measure is to accelerate the planning and approval process of energy infrastructural projects for the hydrogen core network. The measure consists in a platform that processes authorisation requests for the hydrogen core network, for example through automated completeness and plausibility checks or drafting proposals for justifications and approval decisions.

7.1.4 Reform: Wind Energy on Land Act

The objective of this measure is to accelerate the deployment of onshore wind energy power plants.

The act shall define each federal state (Land)'s land-use target for wind energy. The act shall also contain provisions to change the Construction Code to enable federal states (Länder) to designate additional areas as suitable for onshore wind generation. The implementation of the reform shall be monitored by a joint committee of the federal level and federal states (Länder) (EEG-Bund-Länder Kooperationsausschuss).

The implementation of the measure shall be completed by 31 March 2023.

7.1.5 Reform: Offshore Wind Energy Act

The objective of this measure is to accelerate the deployment of offshore wind energy power plants.

The reform shall increase the expansion targets for offshore wind energy in Germany from 20 GW to at least 30 GW by 2030, and to reach 40 GW by 2035 and 70 GW by 2045 (previously: 40 GW by 2040). It shall also contain provisions to streamline planning and approval procedures and bundle the review of applications.

The implementation of the measure shall be completed by 31 March 2023.

K.2. Milestones, targets, indicators, and timetable for monitoring and implementation for non-repayable financial support

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
130	Investment 7.1.1 (scale-up): Building renovation: federal funding for energy-efficient buildings	Target	Grants awarded for individual renovation measures for energy-efficient buildings	-	Grants awarded for individual renovation measures	145 000	335 000	Q2	2026	Grants shall be awarded for 335 000 individual renovation measures.
131	Investment 7.1.2: Support programme for light- and heavy-duty zero-emission transport	Target	Interim target for registration of zero-emission commercial vehicles	-	Zero-emission commercial vehicles	0	670	Q4	2024	670 zero-emission commercial vehicles, including at least 190 vehicles of class N3, have been registered.
132	Investment 7.1.2: Support programme for light- and heavy-duty zero-emission transport	Target	Zero-emission commercial vehicles and recharging stations	-	Zero-emission commercial vehicles and recharging stations	670	2139	Q2	2026	1 139 zero-emission vehicles, including at least 529 vehicles of class N3, have been registered and commissioning certificates (<i>Inbetriebnahmeprotokolle</i>) have been issued for 1000 electric charging stations. The registered vehicles may include

Seq. No.	Related Measure (Reform or Investment)	Milestone / Target	Name	Qualitative indicators (for milestones)	Quantitative indicators (for targets)			Indicative timeline for completion		Description of each milestone and target
					Unit of measure	Baseline	Goal	Quarter	Year	
										vehicles purchased and rented.
135	Investment 7.1.3: Digital platform for processing authorisation requests for the hydrogen core network	Milestone	Platform enabling the digital processing of authorisation requests for the hydrogen core network	Digital platform for processing authorisation requests for the hydrogen core network	-	-	-	Q4	2025	The digital platform processes authorisation requests for the hydrogen core network, for example through automated completeness and plausibility checks or drafting proposals for justifications and approval decisions.
136	Reform 7.1.4: Wind Energy on Land Act	Milestone	Entry into force of the Wind Energy on Land Act (<i>Wind-an-Land - Gesetz</i>)	Provision in the legal act indicating the entry into force of the legal act	-	-	-	Q1	2023	The Wind Energy on Land Act (<i>Wind-an-Land -Gesetz</i>) has entered into force.
137	Reform 7.1.5: Offshore Wind Energy Act	Milestone	Entry into force of the Offshore Wind Energy Act (<i>Wind- auf-See- Gesetz</i>)	Provision in the legal act indicating the entry into force of the legal act	-	-	-	Q1	2023	The Offshore Wind Energy Act (<i>Wind-auf-See-Gesetz</i>) has entered into force.

Estimated total cost of the recovery and resilience plan

The estimated total cost of the recovery and resilience plan of Germany, including the REPowerEU chapter, is EUR 30 336 828 678. The estimated total cost of the REPowerEU chapter of Germany is EUR 2 410 896 431.

SECTION 2: FINANCIAL SUPPORT

1. Financial contribution

The instalments referred to in Article 2(2) shall be organised in the following manner:

1.1 First instalment (non-repayable support):

Sequential Number	Related Measure (Reform or Investment)	Milestone / Target	Name
1	1.1.1 Hydrogen projects within the framework of IPCEIs	Milestone	Completion of expression of interest procedure
7	1.1.2 Support programme for decarbonisation in industry	Milestone	Entry into force of funding guideline (<i>Förderrichtlinie</i>) for decarbonisation in industry
11	1.1.3 Pilot scheme for climate action contracts based on the principle of Carbon Contracts for Difference	Milestone	Completion of expression of interest procedure for climate change contracts
14	1.1.4 Project-related climate protection research	Target	Approval of applications for support of climate-related research projects
17	1.1.5 Flagship projects for research and innovation in the context of the National Hydrogen Strategy	Milestone	Publication of the competition “Idea Competition ‘Hydrogen Republic Germany’” (Förderaufruf zum Ideenwettbewerb „Wasserstoffrepublik Deutschland“)
22	1.2.1 Support for the construction of charging infrastructure	Milestone	Entry into force of funding guidelines
25	1.2.2 Funding for the development of electro-mobility	Milestone	Entry into force of the funding guidelines
29	1.2.3 Support for the replacement of the private vehicle fleet	Target	Support for the purchase of 240 000 electric vehicles
31	1.2.4 Extension of the initial registration period for granting the ten-year tax exemption for purely electric vehicles	Milestone	Entry into force of the Seventh Motor Vehicle Tax Amendment Act
33	1.2.5 Support for purchases of buses with alternative propulsion	Milestone	Publication of funding guidelines
36	1.2.6 Support to promote alternative rail propulsion	Milestone	Entry into force of the funding guidelines

Sequential Number	Related Measure (Reform or Investment)	Milestone / Target	Name
39	1.2.7 Promotion of the industries involved in hydrogen and fuel cell applications in transport	Milestone	Entry into force of amendment extending existing supporting guidelines (<i>Förderrichtlinien</i>) of the National Hydrogen and Fuel Cell Technology Innovation Programme (NIP) (or if not sufficiently covered by existing supporting guidelines, entry into force of new supporting guidelines)
42	1.3.1 Support programme for the development of a climate-friendly timber construction sector	Milestone	Funding guidelines on the promotion of climate-friendly timber construction
46	1.3.3 Building renovation: federal funding for energy-efficient buildings	Milestone	Funding guidelines for the support of energy-efficient renovation of buildings
52	2.1.2 IPCEI Microelectronics and Communication Technologies	Milestone	Content design of the planned IPCEI
59	2.2.1 Vehicle manufacturers/suppliers investment programme	Milestone	Publication of all funding guidelines
62	2.2.2 Federal programme 'Building further CET networks'	Milestone	Publication of the funding guidelines
65	2.2.3 Digitalisation and Technology Research Centre of the Bundeswehr	Target	Launch of research projects
70	2.2.4 Promoting the digitalisation of railways by replacing conventional interlocking/fast-track programmes to speed up the roll-out of 'Digital Rail Germany'	Milestone	Signature of the financing agreement for the 'fast track' programme between the Federal Government and Deutsche Bahn
71	2.2.4 Promoting the digitalisation of railways by replacing conventional interlocking/fast-track programmes to speed up the roll-out of 'Digital Rail Germany'	Milestone	Interim report on implementation
72	2.2.4 Promoting the digitalisation of railways by replacing conventional interlocking/fast-track programmes to speed up the roll-out of 'Digital Rail Germany'	Target	Successful completion of pilot projects
73	3.1.1 Investment programme for teacher devices	Milestone	Administrative agreement
79	3.1.3 Educational centres of excellence	Milestone	Entry into force of the first funding guidelines and call for tenders for a project-executing agency for the overall programme
83	3.1.4 Modernisation of the Federal Armed Forces' educational and training facilities	Milestone	Project contract signed
86	4.1.1 Investment programme 'Childcare-financing' 2020/21: special fund 'Child Day-care Expansion'	Milestone	Entry into force of the Childcare Financing Act and the Federal Financial Assistance Act and of the implementing regulations at <i>Länder</i> level

Sequential Number	Related Measure (Reform or Investment)	Milestone / Target	Name
89	4.1.2 Social Guarantee 2021	Milestone	Verification of the average social security contribution rate for year 2021
90	4.1.3 Apprenticeship support	Milestone	Entry into force of the revised funding guidelines for the federal programme <i>Ausbildungsplätze sichern</i>
93	4.1.4 Educational support for students with a learning backlog	Milestone	Agreement between the federal government and the Länder to provide learning support for learners with pandemic learning backlogs.
95	4.1.5 Digital Pension Overview	Milestone	Entry into force of the Digital Pension Overview Act
98	5.1.1 Strengthening of the digital and technical resources of the public health service	Target	Comprehensive nationwide use of the German Electronic Reporting and Information System for Infection Protection (<i>Deutsches Elektronisches Melde- und Informationssystem für den Infektionsschutz, DEMIS</i>)
104	5.1.3 Special programme to accelerate research and development of urgently needed vaccines against SARS-CoV-2	Milestone	Approval of a first vaccine against SARS-CoV-2 by the regulatory authority
108	6.1.1 European identity ecosystem	Target	Launch of one pilot project for digital hotel check-in
111	6.1.2 Digitalisation of the administration—Implementation of the Online Access Act (OZG)	Target	Completion of individual agreements between the lead department and the lead federal state (<i>Bundesland</i>)
112	6.1.2 Digitalisation of the administration—Implementation of the Online Access Act (OZG)	Target	Go-Lives of online access act service bundles (<i>Onlinezugangsgesetz-Leistungen</i>)
117	6.2.1 Joint programme of the federal government and the Länder for an efficient administration that benefits citizens and businesses	Milestone	First progress report for the Conference of Minister-Presidents (MPK)
128	6.2.3.1 Acceleration of planning and approval procedures in the transport sector	Milestone	Entry into force of the Investment Acceleration Act, the Planning Acceleration Act III, and the measure-act-preparatory-act
Instalment amount		EUR 4 344 763 676	

1.2 Second instalment (non-repayable support):

Sequential Number	Related Measure (Reform or Investment)	Milestone / Target	Name
2	1.1.1 Hydrogen projects within the framework of IPCEIs	Milestone	Issuance of first grant decisions
12	1.1.3 Pilot scheme for climate action contracts based on the principle of Carbon Contracts for Difference	Milestone	Funding guideline (<i>Förderrichtlinie</i>) for a pilot programme on climate change contracts based on the principle of Carbon Contracts for Difference
18	1.1.5 Flagship projects for research and innovation in the context of the National Hydrogen Strategy	Target	Issuance of grant decisions
26	1.2.2 Funding for the development of electro-mobility	Target	Commitment of funds
30	1.2.3 Support for the replacement of the private vehicle fleet	Target	Support for the purchase of another 320 000 electric vehicles
43	1.3.1 Support programme for the development of a climate-friendly timber construction sector	Target	Approval of projects related to the development of climate-friendly timber construction
49	2.1.1 Innovative data policy for Germany	Milestone	Start of projects
53	2.1.2 IPCEI Communication Technologies	Target	Launch of first projects
55	2.1.3 IPCEI Next Generation Cloud Infrastructure and Services (IPCEI CIS)	Milestone	Launch of R & D & I projects
63	2.2.2 Federal programme 'Building further CET networks'	Target	Active participation of additional enterprises in CET networks
72A	2.2.4 Promoting the digitalisation of railways by replacing conventional interlocking/fast-track programmes to speed up the roll-out of 'Digital Rail Germany'	Target	Successful completion of final project
74	3.1.1 Investment programme for teacher devices	Target	Disbursement of at least EUR 475 000 000 to the supported projects
76	3.1.2 Education platform	Milestone	Entry into force of the funding guidelines for education platform prototypes and procurement launched
80	3.1.3 Educational centres of excellence	Target	Approval of at least 45 research projects
81	3.1.3 Educational centres of excellence	Milestone	Entry into force of three additional funding guidelines
84	3.1.4 Modernisation of the Federal Armed Forces' educational and training facilities	Target	Analysis of educational institutions and identification of their IT needs
91	4.1.3 Apprenticeship support	Target	Outflow of support for the federal programme <i>Ausbildungsplätze sichern</i>
92	4.1.3 Apprenticeship support	Target	Award decisions on applications for the federal programme <i>Ausbildungsplätze sichern</i>

Sequential Number	Related Measure (Reform or Investment)	Milestone / Target	Name
94	4.1.4 Educational support for students with a learning backlog	Target	1 000 000 students have received learning support
101	5.1.2 Programme to future-proof hospitals	Target	Applications submitted to the Federal Office for Social Security for at least EUR 2 700 000 000
106	5.1.3 Special programme to accelerate research and development of urgently needed vaccines against SARS-CoV-2	Target	Disbursement of at least EUR 561 450 000 to vaccine research supported by this special programme
107	5.1.3 Special programme to accelerate research and development of urgently needed vaccines against SARS-CoV-2	Milestone	End of programme
113	6.1.2 Digitalisation of the administration— Implementation of the Online Access Act (OZG)	Target	Widespread digitalisation of administrative services
118	6.2.1 Joint programme of the federal government and the Länder for an efficient administration that benefits citizens and businesses	Milestone	Second progress report for the Conference of Minister-Presidents
120	6.2.2.1 Expansion of consulting services of PD: Effective Funding Support Management	Milestone	Start of PD consulting services for selected funding programmes
125	6.2.2.2 Expansion of consulting services of PD: School IT consultancy	Target	Roll-out and pilot consulting projects on school IT
Instalment amount		EUR 7 522 077 413	

1.3 Third instalment (non-repayable support):

Sequential Number	Related Measure (Reform or Investment)	Milestone / Target	Name
3	1.1.1 Hydrogen projects within the framework of IPCEIs	Target	Commitment of at least EUR 500 000 000
21A	1.1.6 Federal support for efficient heat networks	Target	Signing of grant decisions
24	1.2.1 Support for the construction of charging infrastructure	Target	Expansion of recharging points in residential buildings
27	1.2.2 Funding for the development of electro-mobility	Target	Expansion of municipal and commercial e-mobility fleets
28	1.2.2 Funding for the development of electro-mobility	Target	Completion of electro-mobility preliminary designs
44	1.3.2 Municipal living labs for the energy transition	Target	Approval of 'living labs' projects
60	2.2.1 Vehicle manufacturers/suppliers investment programme	Target	Approval of projects
66	2.2.3 Digitalisation and Technology Research Centre of the Bundeswehr	Milestone	Report on research and transfer outputs
67	2.2.3 Digitalisation and Technology Research Centre of the Bundeswehr	Target	Continuation of projects
77	3.1.2 Education platform	Milestone	Launch of the beta-version of the education platform
87	4.1.1 Investment programme 'Childcare-financing' 2020/21: special fund 'Child Day-care Expansion'	Milestone	Publication of interim report in compliance with KitaFinHG
96	4.1.5 Digital Pension Overview	Milestone	Completion of the development and first operational phase
99	5.1.1 Strengthening of the digital and technical resources of the public health service	Target	Progress of public health offices towards digital maturity
114	6.1.3 Digitalisation of the administration—modernisation of registers	Milestone	Completion of pilot projects to test pilot registers
136	7.1.4: Wind Energy on Land Act	Milestone	Entry into force of the Wind Energy on Land Act
137	7.1.5: Offshore Wind Energy Act	Milestone	Entry into force of the Offshore Wind Energy Act
Instalment amount		EUR 7 059 109 790	

1.4 Fourth instalment (non-repayable support):

Sequential Number	Related Measure (Reform or Investment)	Milestone / Target	Name
8	1.1.2 Support programme for decarbonisation in industry	Target	Issuance of grant decisions
21	1.1.5 Flagship projects for research and innovation in the context of the National Hydrogen Strategy	Target	Commitment for flagship research and innovation projects
21B	1.1.6 Federal support for efficient heat networks	Target	Submission of feasibility studies and/or transformation plans
23	1.2.1 Support for the construction of charging infrastructure	Target	Support for publicly accessible recharging points
30A	1.2.3 Support for the replacement of the private vehicle fleet	Target	Support for the purchase of 399 450 electric vehicles
40	1.2.7 Promotion of the industries involved in hydrogen and fuel cell applications in transport	Target	Projects for hydrogen and fuel cell applications in transport
47	1.3.3 Building renovation: federal funding for energy-efficient buildings	Target	Confirmation after execution of energy-efficient renovations of 10 000 housing units
48B	1.3.3 Building renovation: federal funding for energy-efficient buildings	Target	Completion of individual renovation measures for energy-efficient buildings
64	2.2.2 Federal Programme ‘Building further CET networks’	Target	Involvement or contribution of the CET networks to new or revised training measures or sub-modules
78	3.1.2 Education platform	Milestone	Evaluation report on the education platform
97	4.1.5 Digital Pension Overview	Milestone	Entry into force of a legal act containing a legal requirement for pension providers to provide information to the pension portal
100	5.1.1 Strengthening of the digital and technical resources of the public health service	Target	Progress of public health offices towards digital maturity
109	6.1.1 European identity ecosystem	Target	Additional application cases
113A	6.1.2 Digitalisation of the administration— Implementation of the Online Access Act (OZG)	Target	Services of the Länder available for submitting applications digitally
113B	6.1.2 Digitalisation of the administration— Implementation of the Online Access Act (OZG)	Milestone	Publication of quality requirements and definition of architectural specifications
113C	6.1.2 Digitalisation of the administration— Implementation of the Online Access Act (OZG)	Milestone	Entry into force of the Ordinance on Standards for Online Access to Administrative Services

Sequential Number	Related Measure (Reform or Investment)	Milestone / Target	Name
119	6.2.1 Joint programme of the federal government and the Länder for an efficient administration that benefits citizens and businesses	Target	Completion of measures in the progress report
121	6.2. Expansion of consulting services of PD: - - Berater der öffentlichen Hand GmbH	Target	Consultations certificates issued
122	6.2.2 Expansion of consulting services of PD - - Berater der öffentlichen Hand GmbH	Target	Concepts for revision of funding programmes issued
126	6.2.2 Expansion of consulting services of PD x- Berater der öffentlichen Hand GmbH	Milestone	Model concept for school IT
127	6.2.2. Expansion of consulting services of PD: - Berater der öffentlichen Hand GmbH	Target	School IT consulting projects
131	7.1.2: Support programme for light- and heavy-duty zero-emission transport	Target	Interim target for registration of zero-emission commercial vehicles
Instalment amount		EUR 4 953 033 425	

1.5 Fifth instalment (non-repayable support):

Sequential Number	Related Measure (Reform or Investment)	Milestone / Target	Name
5	1.1.1 Hydrogen projects within the framework of IPCEIs	Target	Commitment of EUR 1 411 722 000
6	1.1.1 Hydrogen projects within the framework of IPCEIs	Target	Electrolysis capacity
9	1.1.2 Support programme for decarbonisation in industry	Target	Disbursement to the supported projects
16	1.1.4 Project-related climate protection research	Target	Availability of climate research project reports
19	1.1.5 Flagship projects for research and innovation in the context of the National Hydrogen Strategy	Target	Availability of hydrogen research project reports
21C	1.1.6 Federal support for efficient heat networks	Target	Disbursement for the supported projects
35	1.2.5 Support for purchases of buses with alternative propulsion	Target	Orders of buses with alternative propulsion
38	1.2.6 Support to promote alternative rail propulsion	Target	Order of rail vehicles with alternative propulsion
41	1.2.7 Promotion of the industries involved in hydrogen and fuel cell applications in transport	Milestone	Provision of services via Technology and Innovation Centre(s) for Hydrogen Technology
45	1.3.2 Municipal living labs for the energy transition	Target	Urban neighbourhood projects
48	1.3.3 Building renovation: federal funding for energy-efficient buildings	Target	Confirmation after execution of energy-efficient renovations of a further 30 000 housing units
50	2.1.1 Innovative data policy for Germany	Milestone	Project results and Chief Data Scientists or Chief Data Officers and data laboratories
54	2.1.2 IPCEI Microelectronics and Communication Technologies	Target	Budget execution – disbursement of at least EUR 1 275 000 000
56	2.1.3 IPCEI Next Generation Cloud Infrastructure and Services (IPCEI CIS)	Target	Open-source repositories or other web resources containing code
61	2.2.1 Vehicle manufacturers/suppliers investment programme	Target	Finalisation of projects
69	2.2.3 Digitalisation and Technology Research Centre of the Bundeswehr	Target	Project outputs
82	3.1.3 Educational centres of excellence	Target	Final external evaluation report on supported research projects
85	3.1.4 Modernisation of the Federal Armed Forces' educational and training facilities	Milestone	Final assessment report on the modernisation of educational institutions
88	4.1.1 Investment programme 'Childcare-financing' 2020/21: special fund 'Child Day-care Expansion'	Target	Submission of the Länder reports on the number of childcare places

Sequential Number	Related Measure (Reform or Investment)	Milestone / Target	Name
103	5.1.2 Programme to future-proof hospitals	Target	Increase in the digital maturity levels of hospitals
110	6.1.1 European identity ecosystem	Target	Additional application cases projects
115	6.1.3 Digitalisation of the administration — modernisation of registers	Milestone	Standardised technical system is ready to be connected with registers
123	6.2.2 Expansion of consulting services of <i>PD</i> - Berater der öffentlichen Hand GmbH	Milestone	Publication of a funding guide
124	6.2.2 Expansion of consulting services of <i>PD</i> - Berater der öffentlichen Hand GmbH	Target	Consultation certificates issued
130	7.1.1 (scale-up): Building renovation: federal funding for energy-efficient buildings	Target	Grants awarded for individual renovation measures for energy-efficient buildings.
132	7.1.2: Support programme for light- and heavy-duty zero-emission transport	Target	Zero- emission commercial vehicles and recharging stations
135	7.1.3: Digital platform for processing authorisation requests for the hydrogen core network	Milestone	Platform enabling the digital processing of authorisation requests for the hydrogen core network
Instalment amount		EUR 6 445 680 778	

SECTION 3: ADDITIONAL ARRANGEMENTS

1. Arrangements for monitoring and implementation of the recovery and resilience plan

The monitoring and implementation of the recovery and resilience plan of Germany shall take place in accordance with the following arrangements:

- A coordination unit in the Federal Ministry of Finance shall monitor the implementation of Germany's recovery and resilience plan. The unit shall coordinate the monitoring and reporting of progress on milestones and targets and on relevant indicators, perform qualitative controls on all financial data and submit payment requests. The coordination unit shall be further responsible for identifying and correcting early on any potential undesirable developments. It shall serve as a coordinating body also for the monitoring and implementation of the audit and control measures.
- The coordinating function of the unit is based on established national mechanisms and regulations. The relevant national legal provisions and national mechanism for monitoring and control shall be applied, including the corresponding reporting obligations. The disbursement of funds for the measures in the recovery and resilience plan to the final recipients shall be carried out in compliance with the legal basis of the general funding guidelines (*Förderrichtlinie*) for the respective measure in accordance with the General Administrative Regulations, and on the basis of individual funding decisions (administrative acts) in favour of the final recipients.
- The coordination unit consists of a team of economists and budgetary and controlling experts with the relevant experience and specialist knowledge. Specialist expertise from other units of the Federal Ministry of Finance or other line Ministries shall be called in as needed. The mandate of the coordinating unit is set out in the distribution-of-business plan of the Federal Ministry of Finance.

2. Arrangements for providing full access by the Commission to the underlying data

The Federal Ministry of Finance, as the central coordinating body for Germany's recovery and resilience plan and its implementation, is responsible for overall coordination and monitoring of the plan. In particular, it acts as a coordinating body for monitoring progress on milestones and targets, for monitoring and, where appropriate, implementing control and audit activities, and for providing reporting and requests for payments. It coordinates the reporting of milestones and targets, relevant indicators, but also qualitative financial information and other data, such as on final recipients. The data encoding is taking place in decentralised IT systems throughout different ministries, which are obliged to report the required data to the Federal Ministry of Finance.

In accordance with Article 24(2) of Regulation (EU) 2021/241, upon completion of the relevant agreed milestones and targets in Section 2.1 of this Annex, Germany shall submit to the Commission a duly justified request for payment of the financial contribution. Germany shall ensure that, upon request, the Commission has full access to the underlying relevant data that supports the due justification of the request for payment, both for the assessment of the request for payment in accordance with Article 24(3) of Regulation (EU) 2021/241 and for audit and control purposes.