Topic	**Is IRO event related to specific sub/sub/topic or is the event general to topic?** Example Exposure to litigation is not specific to subtopics but to topic Climate change, fill Climate change. Increased pricing of GHG emmission is related to subtopic Climate change adaptation. If event is related to several, add all
Climate change	

Pollution	
Water and marine resources	

Biodiversity and ecosystems	

Circular economy	

Own workforce	
Workers in the value chain	
Affacted communities	
Consumers and end□users	

Business Conduct	

	IRO type
Positive and negative impacts	
Risks and opportunities	Transition risks and opportunities
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Positive and negative impacts	
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Positive and negative impacts	
Risks and opportunities	Transition risks and opportunities

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Positive and negative impacts	
Risks and opportunities	Physical risks
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Positive and negative impacts	
Risks and opportunities	Transition risks and opportunities
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Positive and negative impacts	
Risks and opportunities	?
	Opportunities
Positive and negative impacts	
Risks and opportunities	
Positive and negative impacts	
Risks and opportunities	Risks
	Risks
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	Opportunities
	Opportunities

Positive and negative impacts	
Risks and opportunities	
Positive and negative impacts	
Risks and opportunities	

IRO sub-type	IRO event
Policy and legal risk	Increased pricing of GHG emissions
Policy and legal risk	Enhanced emissions-reporting obligations
Policy and legal risk	Mandates on and regulation of existing products and services
Policy and legal risk	Exposure to litigation
Technology risk	Substitution of existing products and services with lower emissions options
Technology risk	Unsuccessful investment in new technologies
Technology risk	Costs to transition to lower emissions technology
Market risk	Changing customer behavior
Market risk	Uncertainty in market signals
Market risk	Increased cost of raw materials
Reputation risk	Shifts in consumer preferences
Reputation risk	Stigmatization of sector
Reputation risk	Increased stakeholder concern or negative stakeholder feedback
Reputation risk	Negative stakeholder feedback
Acute risk	Increased severity of extreme weather events such as cyclones and floods
Chronic risk	Changes in precipitation patterns and extreme variability in weather patterns
Chronic risk	Rising mean temperatures
Chronic risk	Rising sea levels
Resource efficiency	Use of more efficient modes of transport
Resource efficiency	Use of more efficient production and distribution processes
Resource efficiency	Use of recycling
Resource efficiency	Move to more efficient buildings
Resource efficiency	Reduced water usage and consumption
Energy source	Use of lower-emission sources of energy
Energy source	Use of supportive policy incentives
Energy source	Use of new technologies
Energy source	Participation in carbon market
Energy source	Shift toward decentralized energy generation
Products and services	Development and/or expansion of low emission goods and services

Products and services	Development of climate adaptation and insurance risk solutions
Products and services	Development of new products or services through R&D and innovation
Products and services	Ability to diversify business activities
Products and services	Shift in consumer preferences
Markets	Access to new markets
Markets	Use of public-sector incentives
Markets	Access to new assets and locations needing insurance coverage
Resilience	Participation in carbon market
?	Resource substitutes/diversification
Policy and legal	Introduction of regulation
Policy and legal	Exposure to sanctions and litigation (e.g., negligence towards ecosystems)
Policy and legal	Enhanced reporting obligations
Technology	Substitution of products or services by products or services with a lower impact
Technology	Transition away from substances of concern
Market	Shifting supply
Market	Demand and financing
Market	Volatility or increased costs of some substances
Reputation	Changing societal, customer or community perceptions as a result of an organisation's role in pollution prevention and control
Acute	Sudden interruption of access to clean water
Acute	Acid rain
Acute	Pollution incidents that are likely to lead to or that have led to pollution with subsequent effects on the environment and society
Resource efficiency	Decrease quantities of substances used or improve efficiency of production process to minimise impacts
Market	Diversification of business activities
Financing	Access to green funds, bonds or loans
Resilience	Diversification of substances used and control of emissions through innovation or technology
Reputation	Positive stakeholder relations as a result of a proactive stance on managing risks
Policy and legal	Introduction of regulation or policy (e.g., changes such as increased water protection, increased quality of water regulations, regulation of flows of water supply)

Policy and legal	Ineffective governance of water bodies or marine resources, in particular across boundaries (e.g., transboundary governance and cooperation) resulting in water or oceans degradation
Policy and legal	Exposure to sanctions and litigation (e.g., non-respect of permits or allocations; negligence towards or killing of threatened marine species)
Policy and legal	Enhanced reporting obligations on marine ecosystems and related services
Technology	Substitution of products or services by products or services with a lower impacton water and marine resources
Technology	Transition to more efficient and cleaner technologies (i.e., with lower impacts on oceans and water), new monitoring technologies (e.g., satellite), water purification, flood protection
Market	Shifting supply, demand and financing
Market	Volatility or increased costs of water or marine resources
Reputation	Changing societal, customer or community perceptions as a result of an organisation's impact on water and marine resources
-	Contribution to systemic risks via its own operations and its upstream and downstream value chain, including the risks that a marineecosystem collapses or the risks that a critical natural system no longerfunctions (e.g., tipping points are reached, summing physical risks)
?	Water quantity (water scarcity, water stress)
?	Water quality
?	Infrastructure decay or unavailability of some marine resources-related commodities (e.g. the rarefaction of some species of fish or other underwater marine living organisms sold as products by the undertaking) leading for instance to the impossibility of running operations in certain geographical areas
Resource efficiency	Transition to more efficient services and processes requiring less water and marine resources
Market	Development of less resource-intense products and services
Market	Diversification of business activities;
Financing	Access to green funds, bonds or loans
Resilience	Diversification of marine or water resources and business activities (e.g., starting a new business unit on ecosystem restoration)
Resilience	Investing in green infrastructures
Resilience	Nature-based solutions

Resilience	Adopting recycling and circularity mechanisms that reduce the dependencies on water or marine resources
Reputation	Positive stakeholder engagement as a result of a proactive stance on managing nature-related risks (e.g., leading to preferred partner status)
Acute risks	natural disasters exacerbated by loss of coastal protection from ecosystems, leading to costs of storm damage to coastal infrastructure
Acute risks	Disease or pests affecting the species or variety of crop the undertaking relies on, especially in the case of no or low genetic diversity
Acute risks	Species loss and ecosystem degradation
Chronic risks	Loss of crop yield due to decline in pollination services
Chronic risks	Increasing scarcity or variable production of key natural inputs
Chronic risks	Ecosystem degradation due to operations leading to, for example, coastal erosion and forest fragmentation, ocean acidification, land loss to desertification and soil degradation and consequent loss of soilfertility
Chronic risks	Species loss
Policy and legal	Introduction of regulation or policy (e.g. changes such as increased land protection)
Policy and legal	Exposure to sanctions and litigation (e.g. spills of polluting effluents that damage human and ecosystem health; or violation of biodiversity-related rights, permits or allocations; or negligence towards or killing of threatened species)
Policy and legal	Enhanced reporting obligations on biodiversity, ecosystems and related services
Technology	Substitution of products or services by products or services with a lower impacton biodiversity or dependence on ecosystem services
Technology	Lack of access to data or access to poor quality data that hamper biodiversity-related assessments
Technology	Transition to more efficient and cleaner technologies (i.e. with lower impacts on biodiversity)
Technology	New monitoring technologies (e.g. satellite)
Technology	Requirements to use certain technologies (e.g. climate resistant crops, mechanical pollinators, water purification, flood protection);
Market	Shifting supply, demand and financing

Market	Volatility or increased costs of raw materials (e.g., biodiversity-intense inputs for which price has risen due to ecosystem degradation)
Reputation	Changing societal, customer or community perceptions as a result of an organisation's role in loss of biodiversity
Reputation	Violation of nature-related rights through operations
Reputation	Negative media coverage due to impacts on critical species and/or ecosystems
Reputation	Biodiversity-related social conflicts over endangered species, protected areas, resources or pollution
-	Ecosystem collapse risks that a critical natural system no longer functions, e.g., tipping points are reached and the collapse of ecosystems resulting in wholesale geographic or sector losses (summing physical risks)
-	Aggregated risk linked to fundamental impacts of biodiversity loss to levels of transition and physical risk across one or more sectors in a portfolio (corporate or financial)
-	Contagion risks that financial difficulties of certain corporations or financial institutions linked to failure to account for exposure to biodiversity-related risks spill over to the economic system as a whole
Business performance	Resource efficiency
Business performance	Products and services
Business performance	Markets
Business performance	Capital flow and financing
Business performance	Reputational capital
Sustainability performance	Ecosystem protection
Sustainability performance	Restoration and regeneration
Sustainability performance	Sustainable use of natural resources
Policy and legal	Bans on the extraction and use of non-renewable resources
Policy and legal	Regulations on waste treatment
Technology	Introduction on the market of new technologies to replace existing use of products and materials
Market	Shifting supply, demand and financing
Reputation	Changing attitutes of society, customers and communities
?	Depletion of stock and use of virgin and non-virgin renewable resources, and of non-renewable resources
Resource efficiency	Transition to more efficient services and processes requiring less resources

Resource efficiency	Eco-design for longevity, repair, reuse, recycle, by-products, take-back systems
Resource efficiency	Decoupling activity from extraction of materials
Resource efficiency	Intensifying circular material use
Resource efficiency	Creation of a system that allows for dematerialization (e.g., digitisation, improving utilisation rates, weight reduction
Resource efficiency	Practices to ensure products and materials are collected, sorted, and reused, repaired, refurbished, remanufactured
Market	Demand for less resource-intense products and services, and new consumption models such as product-as-a-service, pay-per-use, sharing, leasing
Financing	Access to green funds, bonds or loans
Resilience	Diversification of resources and business activities (e.g., start a new business unit to recycle new materials)
Resilience	Investing in green infrastructures
Resilience	Adopting recycling and circularity mechanisms that reduce thedependencies
Resilience	Capability of the undertaking to safeguard future stocks and flows of resources
Reputation	-
	A general pay cut
	Trainings offered to all employees
Impact related	Reputational or legal exposure
Impact related	Operational risks, where affected communities protest against resettlements or the loss of access to lands, leading to costly delays, boycotts, or lawsuits
Dependency related	Disruption of business operations where indigenous peoples decide to withdraw their consent to a project on their lands, forcing the undertaking to significantly modify or abandon the project
Impact related	More easily financing projects and being a partner of choice for communities, governments and other businesses
Dependency related	Development of positive relationships between the undertaking and indigenous peoples that enable existing projects to expand with strong support
