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EXPOSURE DRAFT IN PREPARATION

ESRS Oil and Gas

FOR SR TEG DISCUSSION

DISCLAIMER

The exposure draft ESRS *Oil and Gas* is set out in paragraphs X-X and the following Appendices, that have the same authority as the main body of the [draft] Standard.

- Appendix A: Defined Terms;
- Appendix B: Application Requirements;
- Appendix C: List of datapoints that emanate from EU Law; and
- Appendix D: NACE Codes Oil and Gas.

Each Disclosure Requirement is stated in a bold paragraph that illustrates the objective of the disclosures. This exposure draft also uses terms defined in other [draft] ESRS and shall be read in the context of its objective.

Draft] ESRS *Mining, Oil and Gas* is accompanied by the following illustrative non-authoritative appendix:

- Appendix E: Material Sustainability Matters in the *Oil and Gas* sector

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Objective

1. The objective of this [draft] ESRS is to specify disclosure and application requirements that are applicable to any undertaking operating in the *Oil and Gas* sector (the “Sector”) and that are additional to the sector-agnostic ESRS disclosure and application requirements . They address impacts, risks and opportunities not covered, or not sufficiently covered, by sector-agnostic Disclosure Requirements and have to be applied in conjunction with them.
2. This [draft] ESRS covers information enabling users of the sustainability statements to understand the undertaking’s material impacts, as well as its material risks and opportunities, arising with regard to a list of sustainability matters that are considered material for the Sector under this [draft] ESRS.
3. This [draft] ESRS requires therefore the undertaking to disclose:
 - (a) the actual or potential, positive or negative impacts which the undertaking assesses as material in relation to the environmental, social and governance matters that are considered material for the Sector under this [draft] ESRS ;
 - (b) the actions taken to prevent, mitigate or remediate those material actual or potential negative impacts and the result of such actions;
 - (c) the nature, type and extent of the risks and opportunities related to its impacts and dependencies which the undertaking assesses as material in relation to the environmental, social and governance matters that are considered material for the Sector under this [draft] ESRS and how they manage them; and
 - (d) the financial effects on the undertaking over the short-, medium- and long-term time horizons of those material risks and opportunities.
4. This [draft] ESRS specifies disclosure and application requirements as follows:
 - (a) sector-specific additional datapoints and application requirements related to sector-agnostic disclosure requirements are presented under Chapter 1. *Sector-specific datapoints related to sector-agnostic Disclosure Requirements* of the main body of this [draft] ESRS and under Chapter 1. *Application Requirements related to sector-agnostic Disclosure Requirements* of Appendix B to this [draft] ESRS.
 - (b) sector-specific additional Disclosure Requirements are presented under Chapter 2. *Sector-specific Disclosure Requirements* of the main body of this [draft] ESRS and under Chapter 2. *Application Requirements to sector-specific Disclosure Requirements* of Appendix B to this [draft] ESRS.

Sector-specific materiality assessment guidance

5. This [draft] ESRS identifies a list of matters that shall be addressed by the undertaking, irrespective of the outcome of its materiality assessment. The undertaking within the scope of application of this [draft] ESRS shall assume for the purposes of paragraph 31 of ESRS 1 *General Requirements*, that the sustainability matters listed in the table in paragraph XX below **Error! Reference source not found.** are material.
6. The list of material matters for undertakings in the scope of this [draft] sector ESRS shall include:
 - (a) matters listed in paragraph **Error! Reference source not found.** of this [draft] ESRS; and
 - (b) the other matters listed in ESRS 1 Appendix B that are assessed by the undertaking as material as a result of its materiality assessment.
7. When the same matter is included in the list of paragraph **Error! Reference source not found.** of this [draft] ESRS and in Appendix B of ESRS 1, such matter shall be considered by the undertaking as material, irrespective of the outcome of its materiality assessment.
8. Irrespective of the outcome of its materiality assessment, the undertaking shall:

- i. apply the requirements in the main body and in Appendix B of this [draft] ESRS that relate to ESRS E1 *Climate Change* and ESRS 2 *General Disclosures*;
 - ii. apply the requirements in the main body and in Appendix B of this [draft] ESRS that relate to ESRS S1 *Own workforce*, DRs from 1 to 9, if it has 250 or more employees;
 - iii. include the datapoints that emanate from EU law listed in Appendix C of this [draft] ESRS.
9. In relation to each of its material matters, the undertaking shall apply paragraphs 33 to 39 of ESRS 1 *General requirements*.

Scope of application

10. An undertaking is within the scope of application of this [draft] ESRS when *Oil and Gas* is a significant sector according to paragraph 38 (b) and/or (c) of ESRS 2 *General Disclosures*, using the criteria set in AR 12 of ESRS 2 to define a significant sector.
11. [draft] ESRS SEC 1 *Sector classification* defines the aggregation of activities (NACE codes) into sectors for the purposes of applying sector ESRS. The list of NACE codes that pertain to the *Oil and Gas* sector are listed in Appendix D to this [draft] ESRS, consistent with SEC 1.
12. The Oil and Gas sector is composed of Upstream, Midstream, Downstream and Services activities.
13. Oil and Gas Upstream activities include the development, exploration and production of conventional and unconventional oil and gas reserves. Unconventional development includes the mining and extraction of oil sands, shale oil and gas, deep sea exploration and fracking, among other techniques. Activities of developing and/or operating oil and gas fields occur both for on-shore and off-shore reserves. Activities classified under NACE include B.06.10 Extraction of crude petroleum and B.06.20 Extraction of natural gas.
14. Oil and Gas Midstream includes the transportation and storage of natural gas, crude oil, and refined petroleum products. Activities involve gathering, transporting and processing of natural gas as well as transport of crude oil and refined products over land (pipelines, truck and rail) or water (tankers and barges). Includes also storage terminals stocking oil and gas above and below ground. Activities classified under NACE include H.49.50 Transport via pipeline.
15. Oil and Gas Downstream activities include refining and marketing of petroleum products, which includes operating gas stations and convenience stores. Activities classified under NACE include C.19.20 Manufacture of refined petroleum products, G.46.71 Wholesale of solid, liquid and gaseous fuels and related products and G.47.30 Retail sale of automotive fuel in specialised stores.
16. Oil and Gas Services provide support activities and equipment to the Oil and Gas value-chain. Services include activities such as drilling, completing and equipping oil and gas on-shore and off-shore wells, as well as seismic surveying, well cementing, and well monitoring. The provision of equipment comprises selling or renting equipment used in the extraction, storage, and transportation of oil and natural gas. Services are usually provided on a contractual basis, and equipment is either purchased, leased or rented. Activities classified under NACE include B.09.10 Support activities for petroleum and natural gas extraction.
17. Integrated oil and gas undertakings are involved in activities in more than one of the above segments, typically across upstream, midstream and downstream activities.

Presentation of sector-specific disclosures

18. When reporting on policies, actions, metrics and targets to manage material sustainability matters according to this [draft] ESRS, the undertaking shall include the information provided for in ESRS 2, respectively in *DC-P – Policies adopted to manage material*

sustainability matters, DC – M - Metrics in relation to material sustainability matters and DC-T – Tracking effectiveness of policies and actions through targets.

19. When preparing its sustainability statements, the undertaking shall group the disclosures by cross-cutting reporting area and, where applicable, by sustainability matter¹ according to the provisions set out in [draft] ESRS 1 paragraph 117. Disclosures stemming from the [draft] *Oil and Gas* ESRS shall be presented alongside the disclosures required by the corresponding sector-agnostic ESRS.

Sector-specific material sustainability matters

20. The Oil and Gas sector is composed of Upstream, Midstream, Downstream and Services activities.
21. Oil and Gas Upstream activities include the development, exploration and production of conventional and unconventional oil and gas reserves. Unconventional development includes the mining and extraction of oil sands, shale oil and gas, deep sea exploration and fracking, among other techniques. Activities of developing and/or operating oil and gas fields occur both for on-shore and off-shore reserves. Activities classified under NACE include B.06.10 Extraction of crude petroleum and B.06.20 Extraction of natural gas.
22. Oil and Gas Midstream includes the transportation and storage of natural gas, crude oil, and refined petroleum products. Activities involve gathering, transporting and processing of natural gas as well as transport of crude oil and refined products over land (pipelines, truck and rail) or water (tankers and barges). Includes also storage terminals stocking oil and gas above and below ground. Activities classified under NACE include H.49.50 Transport via pipeline.
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25. Integrated oil and gas undertakings are involved in activities in more than one of the above segments, typically across upstream, midstream and downstream activities.
26. This [draft] ESRS sets out Disclosure Requirements related to the sustainability matters considered material to the Oil and Gas sector, listed in the table below. A Detailed descriptions of them is included in Appendix C.

Environmental	Social	Governance
E1: Climate change adaptation (*)	S1: Working conditions (*)	G1: Corporate culture (*)
E1: Climate change mitigation (*)	S1: Equal treatment and opportunities for all (*)	G1: Political engagement and lobbying activities (*)
E1: Energy (*)	S1: Other work-related rights (*)	G1: Management of relationships with suppliers

¹ Defined in Appendix A of ESRS 1.

		including payment practices (*)
E2: Pollution of air (*)	S2: Working conditions (*)	G1: Corruption and bribery (*)
E2: Pollution of water (*)	S2: Equal treatment and opportunities for all (*)	
E2: Pollution of soil (*)	S2: Other work-related rights (*)	
E2: Pollution of living organisms and food resources (*)	S3: Communities' economic, social and cultural rights (*)	
E2: Substances of concern (*)	S3: Communities' civil and political rights (*)	
E2: Substances of very high concern (*)	S3: Particular rights of indigenous communities (*)	
E2: Industrial hazards	S3: Impacts on human rights and environmental defenders	
E3: Water withdrawals (*)	S4: Information-related impacts for consumers and/or end-users (s*)	
E3: Water consumption (*)	S4: Personal safety of consumers and/or end-users (*)	
E3: Water use (*)	S4: Social inclusion of consumers and/or end-users (*)	
E3: Water discharges in water bodies and in the oceans (*)		
E3: Habitat degradation and intensity of pressure on marine resources(*)		
E4: Direct impact drivers of biodiversity loss (*)		
E4: Impacts on the state of species (*)		
E4: Impacts on the extent and condition of ecosystems (*)		
E4: Impacts and dependencies on ecosystem services (*)		
E4: Product innovation		
E5: Resources inflows, including resource use (*)		
E5: Resource outflows related to products and services (*)		
E5: Waste (*)		
(*) Sustainability matter covered by Disclosure Requirements in the topical sector-agnostic		

ESRS (see ESRS 1 Appendix B table in paragraph AR 12.)		
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Reporting boundary

- 27. The undertaking shall include in its sustainability statements the operational sites and assets that are under its financial and operational control. [TO BE CONFIRMED WHETHER THIS SHALL BE APPLICABLE TO E, S AND G]

Navigation table

- 28. The following table provides an indication of which of the Datapoints, Disclosure Requirements and Application Requirements in this [draft] ESRS are applicable to the undertaking operating in the different segments of the Oil and Gas sector.

Placeholder:

1.Sector-specific datapoints related to sector-agnostic Disclosure Requirements

Datapoints related to ESRS 2 SBM-1 Market position, strategy, business model(s) and value chain

- 29. When disclosing according to the sector agnostic ESRS 2 SBM-1, the undertaking shall provide a breakdown of its net revenue (both in monetary amount and as a percentage of its total revenue) per NACE-code activity where it is active for the following NACE-code activities²:
 - (a) B.06.10 Extraction of crude petroleum
 - (b) B.06.20 Extraction of natural gas
 - (c) B.09.10 Support activities for petroleum and natural gas extraction
 - (d) C.19.20 Manufacture of refined petroleum products
 - (e) G.46.71 Wholesale of solid, liquid and gaseous fuels and related products
 - (f) G.47.30 Retail sale of automotive fuel in specialised stores
 - (g) H.49.50 Transport via pipeline.

- 30. Undertakings shall disclose the following activity metrics related to³:

- (a) Upstream undertakings extraction of crude petroleum:

	Current production	Targeted production
Total Crude oil production, of which:	[bbl]	[bbl]
a. Oil sands or other extra heavy oil	[bbl]	[bbl]
b. Shale oil extracted via hydraulic fracturing	[bbl]	[bbl]
c. Crude oil near or in nature sensitive areas	[bbl]	[bbl]

- (b) Upstream undertakings extraction of natural gas:

² This disclosure meets the requirements of (SFDR)
³ This disclosure meets the requirements of (EBA Pillar 3)

	Current production	Targeted production
Total Natural gas production of which:	[Nm ³]	[Nm ³]
a. Natural gas processed into Liquefied natural gas (LNG)	[Nm ³]	[Nm ³]
b. Shale gas extracted via hydraulic fracturing	[Nm ³]	[Nm ³]
c. Natural gas near or in nature sensitive areas	[Nm ³]	[Nm ³]

(c) Midstream undertakings oil products distribution volume:

	Current volumes	Targeted volumes
Total distributed volume	[MI]	[MI]

(d) Downstream undertakings refining volume:

	Current production	Targeted production
Total refined volume, of which:	[bbl]	[bbl]
a. Oil sands or other extra heavy oil	[bbl]	[bbl]
b. Shale oil extracted via hydraulic fracturing	[bbl]	[bbl]

(e) Downstream undertakings power sold in retail stations (EV chargers):

	Current sales	Targeted sales
Total of which,	[MWh]	[MWh]
electricity with a GHG intensity of less than 100 g CO ₂ e/kWh	[MWh]	[MWh]

31. “Targeted” refers to the current reporting year +3.

Datapoints related to ESRS E1-1 Transition plan for climate change mitigation

32. When disclosing according to the sector agnostic ESRS E1-1, the upstream undertaking shall disclose whether it envisages any greenfield projects or expansions of oil and gas production and, if applicable, the geographical location of such greenfield projects⁴.

33. The upstream undertaking shall in addition disclose a breakdown of its Capex by:

- (a) Production of new fossil fuels, further split by:
 - i. undeveloped reserves to bring assets into production (developed producing reserves);
 - ii. non-producing reserves to bring assets into production (developed producing reserves);
 - iii. Investments in developed producing reserves;
- (b) Renewable-energy sources, further split by:
 - i. All sources (by type of source), excluding bioenergy;
 - ii. Bioenergy, including novel biofuel types;

⁴ Note that is a Pillar 3 disclosure [\[legal reference to be added\]](#)

- (c) Carbon Capture Utilization and Storage (CCUS), further split by:
 - i. Fossil Carbon capture and storage;
 - ii. Direct Air Capture and Storage (DACs);
- (d) Nature-based solutions to mitigate climate change; and
- (e) Other research and development initiatives that can address the organization’s risks related to climate change.

34. The undertaking shall in addition disclose a breakdown of locked-in emissions according to the following categories:

	Proved Reserves
Developed producing reserves	[MtCO2]
Developed non-producing reserves	[MtCO2]
Undeveloped reserves	[MtCO2]

Datapoints related to [draft] ESRS E1-2 – Policies to manage material impacts, risks and opportunities related to climate change mitigation and adaptation, E1-3 Actions and resources in relation to policies to manage climate-related material impacts, risks and opportunities and E1-4 Targets related to climate change mitigation and adaptation

35. The undertaking shall disclose its policies, actions and targets to manage and abate methane emissions, when disclosing according to the following sector agnostic DR:
- (a) *E1-2 – Policies related to climate change mitigation and adaptation;*
 - (b) *ESRS E1-3 – Actions and resources in relation to climate change policies;*
 - (c) *E1-4 – Targets related to climate change mitigation and adaptation.*
36. This disclosure shall include:
- (a) the methods used to monitor and quantify methane emissions, such as the use of Leak Detection & Repair (LDAR) surveys;
 - (b) the frequency of the monitoring;
 - (c) the different methane monitoring technologies, e.g. remote sensing techniques or estimation methods.
 - (d) the actions taken to address the methane leakages found as a result of the regular monitoring surveys;
 - (e) the effectiveness of the actions taken;
 - (f) the geographical location of any significant flaring or venting emissions;
 - (g) the % of routine and non-routine flaring, cases of flaring and efficiency of combustion;
 - (h) the areas for operational improvements;
 - (i) the overall performance of the methane emissions management policy and actions, by source and activity in terms of total absolute emissions and emission intensities.
37. In the absence of policies, actions and targets related to the management and abatement of methane emissions, the undertaking shall explain why such

policies, actions and targets are not in place (see paragraph 60 of ESRS 2 *General Disclosures*).

Datapoints related to ESRS E1-6 Gross scope 1,2,3 and Total GHG emissions

38. When disclosing according to the sector agnostic E1-6 *Gross scope 1,2,3 and Total GHG emissions*, the undertaking shall include:
- (a) a breakdown of its total scope 1 GHG emissions into total CO₂ and CH₄ emissions, in accordance to ESRS E1-6 Application Guidance AG39 to AG50;
 - (b) a breakdown of total scope 1 GHG emissions by type of source, namely
 - i. stationary combustion;
 - ii. flaring;
 - iii. venting, and
 - iv. fugitive.
39. The undertaking shall disclose its Scope 3, Use of sold products emissions, according to the following:
- (a) the integrated undertaking shall separately report Scope 3, Use of sold products emissions associated with the use of its products sold to undertakings in each segment of the value-chain, in accordance to ESRS E1-6, **AR 49**;
 - (b) the undertaking operating in the Services segment shall report the emissions associated with the use of the products they have sold to undertakings in the oil and gas value chain;
40. The undertaking operating in the Services segment shall disclose Scope 3, Leased assets, i.e. the emissions associated with the use of the products they have leased or rented to undertakings in the oil and gas value chain.

Datapoints related to ESRS E1-9 Potential financial effects from material physical and transition risks and potential climate-related opportunities

41. When disclosing according to the sector agnostic E1-9 – *Potential financial effects from material physical and transition risks and potential climate related opportunities*, the undertaking shall disclose how it expect the management of climate change-related risks and opportunities to affect future financial position, including:
- (a) changes in the investment levels dedicated to the development of oil and gas (proven) reserves;
 - (b) change in investments in development of low-carbon products and services or adaptation solutions;
 - (c) oil and gas production volumes for the current reporting period and projected volumes for the next five years.
42. Midstream undertakings shall disclose how climate change-related risks and opportunities affect or are likely to affect the future financial position:
- (a) the development of new infrastructure projects related to fossil fuel transportation and distribution;
 - (b) potential write-offs, that do not meet yet the accounting recognition criteria;
 - (c) early closure of existing assets and impacts on useful life of the existing assets.
43. The undertaking shall disclose the costs the undertaking expects to incur due to closure and rehabilitation of operational sites. The undertaking shall disclose:

- (a) the cost it expects to incur for closure and rehabilitation, per operational site, including environmental and socioeconomic post-closure monitoring and aftercare for mine sites, measured as undiscounted monetary value;
- (b) the methodology used to calculate such cost;
- (c) an illustration of how the expected cost relates to amounts recognised or disclosed in its financial statements; and
- (d) the discount rate applied to measure the liabilities recognised in the financial statements.

Datapoints related to ESRS E2-1 Policies related to pollution

44. When disclosing according to the sector agnostic E2-1 *Policies related to pollution*, the undertaking shall disclose its policies implemented for avoiding, managing and minimising the impact of pollutants release to air, water, soil and organisms from:
- (a) normal operation of its facilities and equipment through its policies on pollution prevention and control, namely its maintenance practices and how it systematically identifies and implements Best Available Technologies; and
 - (b) industrial hazards and accidents.
45. The undertaking shall explain how its implemented policies address:
- (a) spills and loss of containment events for hydrocarbon and other chemicals used in operations;
 - (b) tailings from oil sands mining and in particular the existence of any tailing ponds or dams;
 - (c) use and disposal of substances of concern and substances of very high concern;
 - (d) approach for setting discharge limits for substances of concern or very high concern;
 - (e) maintenance and inspection frequency of critical infrastructure, in particular by disclosing:
 - i. percentage of natural gas pipelines inspected; and
 - ii. percentage of hazardous liquid pipelines inspected.

Datapoints related to ESRS E2-2 Pollution action plans and resources

46. When disclosing according to the sector agnostic E2-2 *Pollution action plans and resources*, the undertaking shall disclose its pollution-related action plans and the resources allocated to their implementation, with regards to:
- (a) normal operation of its facilities and equipment through its policies on pollution prevention and control, namely its maintenance practices and how it systematically identifies and implements Best Available Technologies; and
 - (b) industrial hazards and accidents.
47. In disclosing its action plans and resources related to pollution the undertaking shall disclose actions and resources related to the prevention, mitigation and management of impacts derived from:
- (a) air pollution, including the nitrogen oxides (NO_x), sulphur oxides (SO_x), volatile organic compounds (VOC), particulate matter (PM), carbon monoxide (CO), ozone-depleting substances (ODS), and other air emissions with an environmental impact;
 - (b) oil spills and hydrocarbon substances discharged to soil and water;
 - (c) tailings from oil sands mining;
 - (d) use and disposal of substances of concern or substances of very high concern;

- (e) other types of pollutants from the upstream and downstream value chain.
48. The undertaking shall specify to which layer in the mitigation hierarchy an action plan and resources can be allocated to:
- (a) avoid pollution including any phase out of materials/compounds that have a material negative impact (prevention of pollution at source);
 - (b) reduce pollution (minimisation), including by meeting BAT requirements in the future;
 - (c) restore and regenerate ecosystems where pollution occurred (control of the impacts both from regular activities and incidents);
 - (d) transform ecosystem e.g. through technological, economic, institutional, and social factors and changes in underlying values and behaviours;
 - (e) meet enforcement requirements or future compliance needs such as meeting BAT requirements in the future, or any phase out of materials/compounds; and
 - (f) address failures to comply with Do-No-Significant-Harm criteria for pollution prevention and control according to the EU Taxonomy Regulation and its Delegated Acts.
49. The undertaking shall disclose how it defines significant spills and describe examples of significant spills.

Datapoints related to ESRS E2-3 Targets related to pollution

50. When disclosing according to the sector agnostic E2-3 *Targets related to pollution*, the undertaking shall disclose the pollution-related targets it has adopted with regard to the prevention and control of:
- (a) tailings from oil sands mining;
 - (b) hydrocarbon spills and hydrocarbon substances discharged to soil and water;
 - (c) other types of pollutants.

Datapoints related to ESRS E2-4 Pollution of air, water and soil

51. When providing information under ESRS E2, paragraph 25 to 27, in addition to the pollutants referred to in ESRS E2 AR21 to AR26, the undertaking shall disclose emissions of the following pollutants that have occurred during the reporting period:
- (a) With regards to the air emissions, volumes (in tonnes) of:
 - i. particulate matter (PM10);
 - ii. hydrogen sulphide (H₂S);
 - iii. carbon monoxide (CO);
 - iv. other air emissions with an environmental impact, if applicable.
 - (b) With regards to the water emissions:
 - i. volumes (in tonnes) of: 1) hydrocarbon spills to water; 2) tonnes of other chemical discharges to water.
 - ii. number of hydrocarbon spill events to water;
 - iii. average and distribution of hydrocarbon content (in mg/l) in discharged water for all measurements taken throughout reporting year;
 - iv. Number of incidents of non-compliance with discharge limits related to substances of concern or very high concern.
 - (c) With regards to the soil emissions:
 - i. volumes (in tonnes) of hydrocarbon spills to soil;

- ii. volumes (in tonnes) of other chemical discharges to soil;
 - iii. number of hydrocarbon spill events to soil.
52. The undertaking shall also disclose the:
- (a) Number of reportable pipeline incidents, percentage of significant incidents;
 - (b) Number of accident releases from rail transportation;
 - (c) Number of non-accident releases from rail transportation;
 - (d) Percentage of engines in service that meet Tier 4 compliance for non-road diesel engine emissions.
53. The undertaking shall report on the number of underground storage tanks, including the number of underground storage tanks releases requiring clean-up.

Datapoints related to ESRS E3-1 Policies related to water and marine resources

54. When disclosing the information required in sector agnostic Disclosure Requirement ESRS E3-1 *on policies and targets related to water and marine sources*, the undertakings shall include a description of its interactions with water as a shared resource, particularly in (areas of) high-water stress and where conflicts between different water uses may emerge.

Datapoints related to ESRS E4-2 Policies related to biodiversity and ecosystems

55. When disclosing the information required in sector agnostic Disclosure Requirement ESRS E4-2 *on policies related to biodiversity and ecosystems*, the undertaking shall include how it applies the mitigation hierarchy and international biodiversity standards in its operational planning, from early concept through to decommissioning.
56. The undertaking shall disclose whether if its policies or some aspects of its policies implemented to manage material impacts, risks and opportunities related to biodiversity and ecosystems do not apply to one or more of its sites. In such case, the undertaking shall disclose which policies apply for those operational sites.
57. The undertaking shall disclose whether for sites located in or near protected areas and key biodiversity areas, more stringent policies than the corporate wide policies are applied and, in this case, describe their peculiarities.
58. The undertaking with upstream and midstream operations shall describe if its policies address:
- (a) Avoidance: if it includes a phase-out of existing operations and/or stopping operational investments in areas of key biodiversity value and the artic. In case such policies are not in place, the undertaking shall disclose the policy provisions to minimize biodiversity and ecosystem impacts from current operations in these areas, if they exist
 - (b) Minimisation: if it includes the achievement of no net loss or a net gain to biodiversity on operational sites; and whether these commitments apply to existing and future operations and to operations beyond areas of high biodiversity value.
 - (c) Rehabilitation or restoration: if it includes the closure of operational sites at their end-of-life, including the systematic site decommissioning, rehabilitation or restoration.
59. The undertaking shall explain their process of identifying the sites with protected conservation status or endangered species habitat.

Datapoints related to ESRS E4-3 Actions and resources related to biodiversity and ecosystems

60. When describing biodiversity and ecosystems-related actions and the resources allocated to their implementation according to the sector agnostic Disclosure Requirement E4-3, the undertaking shall explain how the application of the mitigation hierarchy, if applicable, has resulted in:
- (a) areas protected through avoidance measures or offset measures;
 - (b) areas restored through on-site restoration measures or offset measures.
61. The undertaking shall describe its decommissioning activities and if a site restoration plan exists or is foreseen for each of its operational sites. If this is not the case, the undertaking shall disclose the list of sites for which there is no existing or foreseen site restoration plan.

Datapoints related to ESRS E4-4 Targets related to biodiversity and ecosystems

62. When disclosing according to the sector agnostic Disclosure Requirement ESRS E4-4 *Targets related to biodiversity and ecosystems*, the undertaking shall disclose targets related to:
- (a) minimising average disturbed acreage per oil and per gas well;
 - (b) maximising percentage of impacted area rehabilitated or restored.

Datapoints related to ESRS E4-5 Impact metrics related to biodiversity and ecosystems change

- AR 2. When disclosing according to the sector agnostic Disclosure Requirement E4-5, the undertaking shall include an exhaustive list of operational sites owned, leased, managed that are under financial or operational control of the undertaking, that are in or near protected areas and key biodiversity areas.
- AR 3. Per each operational site the undertaking shall disclose:
- (a) a description of the material impacts on biodiversity its exploration has or has had, thereby specifying the impacts to the affected habitats and ecosystems;
 - (b) the total number of IUCN Red list species and national conservation list species with habitats in areas affected by the operations of the organisation and this by level of extinction risk;
 - (c) the approach used to ensure respect for conservation status or endangered species habitat. When the approach is the same for a group of sites or at corporate level, disaggregated disclosure is not required;
 - (d) the percentage of proved and probable reserves in or near sites with protected conservation status or endangered species habitat.
63. The undertaking shall disclose significant impacts on biodiversity with reference to affected habitats and ecosystems:
- (a) average disturbed acreage per oil and per gas well, differentiating between on-shore and off-shore wells;
 - (b) acreage disturbed and percentage of impacted area restored differentiating between on-shore and off-shore operations;
 - (c) total number of IUCN Red List species and national conservation list species with habitats in areas affected by the operations of the organization, by level of extinction risk (Critically endangered / endangered / vulnerable / near threatened / least concern).
64. The undertaking shall report metrics related to material impacts resulting in biodiversity and ecosystem change, following ESRS E4-5, per each operational site located in or near protected areas and key biodiversity areas.

Datapoints related to ESRS E5-1 Policies related to resource use and circular economy

65. When reporting on the policies related to resource use and circular economy according to the E5-1 sector agnostic disclosure, the undertaking shall disclose how its policies to manage material impacts, risks and opportunities address the following areas:
- (a) carrying of decommissioning activities of its offshore and onshore assets, facilities and infrastructures
 - (b) revalorising by-products and waste, with a focus on drilling waste (muds and cuttings, scale, sludges and tailings).

Datapoints related to ESRS E5-2 Action plans and resources in relation to resource use and circular economy

66. When reporting on the action plans and resources in relation to resource use and circular economy according to Disclosure Requirement ESRS E5-2, the undertaking shall disclose its action plans and the resources allocated with regards to:
- (a) Minimising and managing the drilling waste (muds and cuttings), scale, sludges and tailings
 - (b) Decommissioning activities for offshore and onshore assets,
67. Per each decommissioning and associated remediation project, the undertaking shall disclose:
- (a) location, status and brief description of sites and infrastructure;
 - (b) total financial provision made by the undertaking for decommissioning offshore and / or onshore projects and decommissioning facilities and infrastructures.

Datapoints related to ESRS E5-3 Targets related to resource use and circular economy

68. When reporting according to Disclosure Requirement ESRS E5-3, the undertaking shall disclose its targets related to:
- (a) Waste (muds and cuttings), scale, sludges and tailings minimisation;
 - (b) % of materials resulting from decommissioning activities for offshore and onshore assets that are re-used or recycled.

Datapoints related to ESRS E5-4 Resource inflows

69. When reporting on the resource inflows according to the E5-4 sector agnostic disclosure, the undertaking shall include the tonnes of materials recovered from decommissioning activities of offshore and onshore assets,

Datapoints related to ESRS E5-5 Resource outflows

70. When reporting on the resource outflows according to the E5-5 sector agnostic disclosure, the undertaking shall include the following volumes referred to the reporting period:
- (a) volume (in cubic meters) and percent of crude oil and gas that is traded for the following activities:
 - i. petrochemicals;
 - ii. petroleum products;
 - iii. unknown.
 - (b) tonnes oil recovered from oil spills;

- (c) tonnes of drilling waste (muds and cuttings);
- (d) tonnes of scale and sludges;
- (e) tonnes of tailings;
- (f) tonnes of decommissioned materials;

Equipment and machinery assets

71. The undertaking shall describe their efforts to increase the life and efficiency of their equipment and machinery assets. Specifically, the undertaking shall disclose the percentage (by mass) of their existing property and equipment assets that are:
- (a) Second-hand assets;
 - (b) Remanufactured assets;
 - (c) New assets.
72. When reporting resource outflows according to DR E5-5 38 (b), the undertaking shall disclose the amount of machinery and equipment, by weight, that is diverted from disposal by recovery operation type as stipulated under DR E5-5 38 (b) i-iii.

Datapoints related to ESRS S1-1 Policies related to own workforce

73. When reporting according to the requirements of ESRS S1-1, the undertaking shall disclose information related to its policy on housing facilities for own workers and their access to basic services such as clean water, sanitation, and electricity as well as recreational facilities and social spaces.
74. The undertaking shall describe, where applicable, its policy on long and split shifts with regards to working hours and overtime.
75. The undertaking shall also disclose whether it has specific policies on work-life balance for workers in operational locations, specifically for those working in offshore operations.

Datapoints related to ESRS S1-13 Training and skills development

76. When disclosing the training and development indicators defined in [draft] ESRS S1-13, the undertaking shall disclose the following information:
- (a) its general approach or process to ensure the quality of the training services related to work-related hazards, hazardous activities, or hazardous situations which contribute to the identification and elimination of hazards and minimisation of risks for its employees; and
 - (b) the average hours of training related to the health, safety and emergency preparedness of employees, with respect to occupational risks or hazards to which employees are reasonably likely to be exposed; such information shall be broken down by permanent employees, temporary employees and non-guaranteed hours employees.

Datapoints related to ESRS S1-14 Health and safety indicators

77. When reporting on ESRS S1-14, the undertaking shall disclose the following information for its own workforce:
- (a) a description of the substances of very high concern that workers are exposed to in its operations;
 - (b) a description of other dangerous factors in the physical work environment, including:
 - i. noise and vibrations;
 - ii. deep sea diving;

- iii. The undertaking shall provide the following information on health and safety indicators as a result of working with chemicals ((including to crystalline silica, hydrogen sulphide, hydrocarbons exposure, harmful or carcinogenic hydrocarbon gases and vapours), such information shall be broken down between employees and non-employee workers in own workforce:
 - iv. the number of work-related fatalities,
 - v. the number of work-related injuries;
 - vi. the number of cases of work-related ill health as a result of working with chemicals
78. The undertaking shall provide qualitative descriptions of:
- (a) any significant process safety events that occurred during the reporting year;
 - (b) the actions taken in response;
 - (c) lessons learned to prevent recurrence; and
 - (d) its regular review process of the assessment and management of process safety risks.

Datapoints related to ESRS S3-1 Policies related to affected communities

79. When disclosing according to the sector agnostic S3-1 – Policies related to affected communities, the undertaking shall describe its policies related to the land acquisition and involuntary resettlement, as well as the human rights and environmental defenders
- Where applicable, the undertaking shall disclose its policies or approach to recognise legitimate tenure rights holders when acquiring, leading or making other arrangements to sue, or restrict the use of land.
- (a) describe its approach to providing remediation to local communities or individuals subject to involuntary resettlement, such as the process for establishing compensation for loss of assets or other assistance to improve or restore standards of living or livelihoods.
80. With relation to the human rights and environmental defenders, the undertaking shall:
- (a) specify whether it has a policy to respect and protect the human rights and environmental defenders, including regarding attacks against human rights and environmental defenders
 - (b) describe whether the company has a policy commitment regarding attacks against human rights and environmental defenders, and may disclose the nature of that policy commitment, including whether it adopts a zero-tolerance approach for attacks against human rights and environmental defenders, and not to sue for defamation or to participate in strategic lawsuits against public participation (SLAPP).

Datapoints related to ESRS S3-2 Processes for engaging with affected communities about impacts

81. When disclosing according to the sector agnostic ESRS S3-2 *Processes for engaging with affected communities about impacts*, the undertaking shall describe:
- (a) its processes for engaging with human rights and environmental defenders.
82. In relation to closure and post-closure activities of the undertaking, the undertaking shall disclose how the land will be used ex post the closure of the operational site. Where applicable, the undertaking shall disclose whether such post-closure plans have been consulted with the affected communities.

Datapoints related to ESRS S3–4 Taking action on material impacts, and approaches to mitigating material risks and pursuing material opportunities related to affected communities, and effectiveness of those actions and approaches

83. When reporting on ESRS S3-4 on impacts, the undertaking shall disclose the following for its key operational site or group of operational sites within the same geographical area:
- (a) The extent of development of significant infrastructure investments (e.g. transport links, utilities) and services (e.g. community social facilities, health, and welfare centres) supported and whether these investments and services are commercial, in-kind, or pro bono engagements.
 - (b) .

Datapoints related to ESRS G1-1 Corporate culture and business conduct policies

84. When disclosing according to the sector agnostic disclosure requirement ESRS G1-1, the undertaking shall disclose:
- (a) whether and to which extent its processes comply with the International Organisation for Standardisation (ISO) standards;
 - (b) how these have been accredited, audited or found to conform to the ISO standards;
 - (c) the time of the last confirmation or audit procedure of compliance with the ISO standards.

Datapoints related to ESRS G1-2 – Management of relationships with suppliers

85. When disclosing according to the sector agnostic disclosure requirement ESRS G1-2, the undertaking shall disclose the percentage of the procurement budget spent on suppliers local to that operation, when relevant for each operational site, per group of operational sites within the same geographical area.
86. The undertaking may provide a breakdown of suppliers local to the operation that are owned by women or minority groups.

Datapoints related to ESRS G1-5 Political influence and lobbying activities.

87. When providing disclosures in accordance with Disclosure Requirement ESRS G1-5 paragraph 29, the undertaking shall disclose:
- (a) any differences between its main positions identified in [draft] ESRS G1-5 paragraph 29(c), and the positions of the representative associations or committees it supports;
 - (b) what proportion of its communication spend is dedicated to lobbying activities regarding its material impacts, risks and opportunities identified in its materiality assessment in accordance with [draft] ESRS 2.
88. The undertaking shall explain to which extent its corporate communication aligns with globally established targets related to climate neutrality or nature positive economy and how it ensures that its sustainability communication is clear, transparent, substantiated, and specific. If this communication relates to the topics and sub-topics within one of the five environmental agnostic standards, the undertaking shall explain how it ensures consistency with the undertaking's disclosures under the identified standard.
89. The undertaking shall disclose the number of open cases before courts or other competent authorities at the end of the reporting period that concern misleading commercial practices or public communication related to sustainability. It shall also disclose the number of similar cases resolved during the reporting period and the outcomes of such cases.

2. Sector-specific Disclosure Requirements

Disclosure Requirement OG 1 – Mapping of operational sites

90. **The undertaking shall disclose a list of its operational sites with specification of the sustainability matters to which they are connected.**
91. The objective of this Disclosure Requirement is to enable an understanding of which operational sites are connected with specific sustainability matters.
92. The undertaking shall present the list of the operational sites owned or operated under concession, permit or licence, that are under its financial or operational control, for which one or more of the following criteria are met:
- (a) the site is located in or near:
 - i. a key-biodiversity area;
 - ii. conflict affected or high-risk areas; or
 - iii. (areas of) high-water stress;
 - (b) the site is undergoing a closure, has been closed or is under rehabilitation;
 - (c) the site is connected with material impacts related to social or environmental matters in the past 5 years or is expected to be connected with such impacts; or
 - (d) more than 5% of the revenues of the undertaking are dependent on the site.
93. For the purposes of this [draft] ESRS, a site includes operational facilities and supporting areas, linear structures (such as pipelines, roads or rail lines), as well as concession areas under development or production (e.g. oil and gas or mining concessions).
94. For each site in the list, the undertaking shall include information on:
- (a) Type of site:
 - i. concessioned areas for oil and gas exploration
 - ii. concessioned areas for oil and gas production currently under development or in production;
 - iii. tailing dams;
 - iv. LNG & Natural gas processing facilities;
 - v. refinery assets;
 - vi. oil and gas transmission pipelines.
 - (b) Type of control:
 - i. Financial control;
 - ii. Operational control.
 - (c) Status of site:
 - i. active;
 - ii. undergoing closure;
 - iii. closed and rehabilitated; or
 - iv. closed and not rehabilitated.
 - (d) a description of the activities and main characteristics of each site;
 - (e) whether in respect of each site, the undertaking causes or contributes to material impacts on the local community, specifically, in relation to:
 - i. Indigenous peoples;

- ii. land rights;
- iii. infrastructure, including housing, food, water and sanitation, and power;
- iv. pollution;
- v. toxic waste storage or disposal;
- vi. involuntary resettlements taken place near the site and that have been caused or contributed to by the undertaking.

Disclosure Requirement OG 2 – Oil and gas reserves

95. **The undertaking shall disclose its proved oil and gas reserves.**
96. The objective of this Disclosure Requirement is to enable an understanding of an undertaking's proved reserves.
97. The undertaking shall disclose the percentage of proved reserves broken down by:
- (a) Country;
 - (b) In or near areas of conflict;
 - (c) In or near indigenous land;
 - (d) In or near sites protected areas and key biodiversity areas;
 - (e) (areas of) high-water stress.

Disclosure Requirement OG 3-E1 - CO₂ abatement technologies

98. **The undertaking shall disclose its activities related to CO₂ abatement technologies.**
99. The objective of this Disclosure Requirement is to provide an understanding of the extent to which the undertaking is implementing GHG abatement technologies at scale on its own sources or providing it as a service to others. It also enable the understanding of how issues related to potential liabilities for stored CO₂ leakage are being dealt and reported under the scopes defined in DR E1-6.
1. The undertaking shall disclose amounts of CO₂ abated from emissions sources through carbon capture technologies, disaggregated by:
- (a) Transferred inside to the undertaking's organization (e.g. as a CCS service) and:
 - i. Used for internal processes (e.g. synthetic fuels);
 - ii. Permanently sequestered (e.g. CCS technologies);
 - iii. Transported to another organization (e.g. CO₂ transfer through pipeline).
 - (b) Captured inside the undertaking's organization and:
 - i. Transferred outside to the undertaking's organization (e.g. sold as product);
 - ii. Used for internal processes (e.g. synthetic fuels, enhanced oil recovery);
 - iii. Permanently sequestered (e.g. CCS technologies).
2. When disclosing the information on GHG abated under paragraph 46, the undertaking shall report:
- (c) Total CO₂ captured and stored for the reporting period;
 - (d) Total CO₂ stored at the end of the reporting period;

Disclosure Requirement OG 4-E1 - GHG emission intensity of energy

100. **The undertaking shall disclose its GHG emission intensity per unit of energy produced.**
101. The objective of this disclosure is to provide a benchmark metric of full life-cycle GHG impacts of the company activity on a physical intensity basis and how it compares with expected values for the global economy under 1.5°C compatible GHG mitigation scenarios and how it is likely to change under current investment and/or transition plans.
102. An undertaking operating upstream shall disclose the GHG intensity of its energy production (CO₂e/unit of energy)⁵.
103. Undertakings operating refineries shall disclose their CO₂/CWT (Complexity Weighted Tonne).
104. Undertakings producing hydrogen shall disclose the GHG intensity of its overall hydrogen production.
105. Undertakings with marketing activities shall disclose GHG intensity of the final energy it sells (CO₂e/unit of energy);

Disclosure Requirement OG 5-E2 Management of industrial hazards

106. **The undertaking shall disclose its methods and tools used for risk assessment and risk management of industrial hazards.**
107. The objective of this disclosure requirement is to understand how the undertaking prevents and manages industrial hazards.
108. The undertaking shall disclose the following information on process safety events, as defined by the International Association of Oil & Gas Producers (OGP) as a total number of Tier 1 process safety events, including:
- a. number of Tier 1 process safety events reported separately for each major business activity, such as refining or upstream;
 - b. provide qualitative descriptions of any significant process safety events that occurred during the reporting year, including the undertakings' response and lessons learned to prevent recurrence;
 - c. the review assessment and management of process safety risks.

Disclosure Requirement OG 6-E2 – Hydraulic fracturing

109. **The undertaking shall disclose the information regarding the use of hydraulic fracturing wells.**
110. The purpose of this Disclosure Requirement is to enable an understanding of the use of a particular technique which can cause significant water pollution.
111. The undertaking shall disclose the following indicators:
- (a) percentage of hydraulically fractured wells for which there is public disclosure of all fracturing fluid chemicals used;
 - (b) percentage of hydraulic fracturing sites where ground or surface water quality deteriorated compared to a baseline;
 - (c) cubic meters of hydraulic fracturing fluid used

⁵ Pillar 3 disclosure

Disclosure Requirement OG 7-E3 – Water withdrawal

112. **The undertaking shall disclose the freshwater and other water withdrawal for its activities and from what sources the water is withdrawn from.**
113. The objective of this disclosure requirement is to understand the dependency of the undertaking on water withdrawals, as well as potential significant impacts water withdrawals can have on local water resources and use.
114. The undertakings shall disclose the following indicators:
- (a) Total volume of water withdrawn from all areas in thousands of cubic meters (10^3m^3), including a breakdown by:
 - i. Total freshwater divided by:
 - 1. surface water;
 - 2. groundwater.
 - ii. Other water:
 - 1. seawater;
 - 2. produced water and recycled process wastewater;
 - 3. third-party water.
 - (b) Total volume of water withdrawn from water stressed areas in thousands of cubic meters (10^3m^3), including a breakdown by:
 - i. Total Freshwater divided by:
 - 1. surface water;
 - 2. groundwater.
 - ii. Other water:
 - 1. seawater;
 - 2. produced water and recycled process wastewater;
 - 3. third-party water.
 - (c) Contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.

Disclosure Requirement OG 8-E3 – Water discharge

115. **The undertaking shall disclose the volume, the destination, and the impacts of the water it discharges to the environment or exports to third-parties; and the actions it may have taken to improve the quality of the water discharged.**
116. The purpose of this Disclosure Requirement is to provide understanding of the impact of the undertakings' water discharges on local water resources and use.
117. The undertakings shall disclose the following indicators:
- (a) Total water discharged in thousands of cubic meters (10^3m^3) and a breakdown of this total by the following types of destination, if applicable:
 - i. Freshwater bodies, divided by:
 - 1. surface water;
 - 2. groundwater.
 - ii. Other water bodies, divided by:
 - 1. seawater;
 - 2. exported to a third-party for treatment and discharge to the environment;

3. exported to a third-party for re-cycling and re-use.
- (b) Total volume of water discharged to water stressed areas in thousands of cubic meters (10^3m^3), including a breakdown by:
 - i. freshwater;
 - ii. other water.
- (c) volume in thousands of cubic meters (10^3m^3) of produced water and process wastewater discharged.
- (d) the number of occasions on which discharge limits were exceeded
- (e) any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.

Disclosure Requirement OG 9-E3 – Marine resources

118. **The undertaking which are active in the upstream and services segments shall provide information on marine resources-related activity indicators.**
119. The purpose of this Disclosure Requirement is to provide an understanding of the extent in which undertaking is involved in exploration of oil and gas deposits in the ocean areas.
120. The undertaking active in the activity segments listed in paragraphs 79 shall disclose its ocean footprint by providing information on the sites located at the oceans, including:
 - (a) total number of sites; and
 - (b) total area of the exploitation.

Disclosure Requirement OG 10-S1 – Work stoppages

121. **The undertaking shall disclose the work stoppages during the year.**
122. The objective of this Disclosure Requirement is to enable an understanding of the extent of work stoppages and their impact on the undertaking's operations.
123. The undertaking shall disclose:
 - (a) the number of major work stoppages;
 - (b) for each major work stoppage:
 - i) the percentage of employees involved;
 - i) the number of employees involved;
 - ii) the length in days of each stoppage.
124. In addition, the undertaking may provide a description of the reasons (for example, worker disputes, affected communities' protests) for each major work stoppage and, where applicable, any steps taken to resolve each dispute.

Disclosure Requirement OG 11-S1 – Security personnel

125. The undertaking shall disclose the percentage of security personnel that has received training in the undertaking's human rights policies within own workforce.
126. The objective of this Disclosure Requirement is to enable an understanding of the extent to which the undertaking's personnel are aware of its human rights policies and how these are respected when engaging with affected communities .
127. The undertaking shall disclose:
 - (a) the percentage of security personnel that has received training in the undertaking's human rights policies;

- (b) whether the undertaking has performed internal audits and/or audited or certified by an external party in relation to compliance with its own human rights policies when engaging with affected communities;
 - (c) where applicable, the number of the identified incidents of violations of human rights of indigenous people directly linked to its security personnel and an explanation of the type of violation.
128. The undertaking may explain if the training provided is aligned with the Voluntary Principles on Security and Human Rights.

Disclosure Requirement OG 12-S3 - Impact metrics on affected communities

129. The undertaking shall disclose indicators regarding engagement with affected communities and the performance of its grievance mechanisms.
130. The objective of this Disclosure Requirement is to enable an understanding of the impacts of the undertaking on affected communities.
131. The undertaking shall disclose the following information for the operational sites listed in OG1:
- (a) whether all its operational sites have grievance mechanisms;
- : the number and / or percentage of sites with grievance mechanisms or similar conflict resolution procedures; and
132. The undertaking shall disclose the percentage of operations with implemented local community engagement, impact assessments, and/or development programs, including the use of:
- (a) social impact assessments, including gender impact assessments, based on participatory processes;
 - (b) environmental impact assessments and ongoing monitoring;
 - (c) local community development programs based on local communities' needs;
 - (d) works councils, occupational health and safety committees and other worker representation bodies to deal with impacts;
 - (e) whether the results of environmental and social impact assessments have been made public.
133. The undertaking may describe any collective or individual rights that it has identified that are of particular concern for local communities (including vulnerable groups).

Disclosure Requirement OG 13-S3 – Human rights and environmental defenders

134. **The undertaking shall describe the number of (confirmed) incidents when engaging with human rights and environmental defenders.**
135. The objective of this Disclosure Requirement is to enable an understanding of its performance in relation to respect of human right and engagement with environmental defenders.
136. The undertaking shall provide the number of (confirmed) incidents with human rights and environmental defenders, broken down by vulnerable groups.

Disclosure Requirement OG 14-S3 – Resettlement

137. **The undertaking shall disclose the operational site for which it has caused or contributed to voluntary or involuntary resettlement.**
138. The objective of this Disclosure Requirement is to enable an understanding of the negative impacts that arise from voluntary or involuntary resettlement caused or contributed to by the undertaking on affected communities.

139. The undertaking shall disclose whether it has caused or contributed to voluntary or involuntary resettlement or where such a resettlement is ongoing; in this case the undertaking shall disclose the operational site(s) involved.
140. The undertaking shall describe cases of involuntary resettlement required by its activities (where governments permit disclosure).

Disclosure Requirement OG 15-S3 – Workforce hired from local communities

141. **The undertaking shall disclose for each operational site identified in OG1, the percentage of workers hired from the local community.**
142. The objective if this disclosure requirement is to enable an understanding of the extent to which the undertaking’s workforce comes from its local community. The undertaking shall disclose:
- (a) the percentage of top management that are recruited from the affected community;
 - (b) the percentage of workers hired from the local community, including indigenous communities.

Disclosure Requirement OG 16-G1 – Transparency about contracts with governments

143. **The undertaking shall disclose information about its transparency with respect to agreements with the government for the exploitation of oil and gas resources.**
144. The objective of this Disclosure Requirement is to provide an understanding of the openness of the undertaking about its public contracts concluded about oil and gas resources.
145. The undertaking shall disclose:
- (a) whether such contracts are made publicly available and, if so, which such contracts and licenses are publicly available as well as where they are published; and
 - (b) for those public contracts or licenses not publicly available, the reason for this and, if applicable, actions taken to publish in the future as well as the timetable to do so.

Disclosure Requirement OG 17-G1 – State-aid and competition

146. **The undertaking shall disclose the state aid received and the events of possible anti-competitive behaviour involving the undertaking during the reporting period. publicly announced notifications, preliminary investigations, investigations or proceedings concerning possible anti- competitive agreements, abuse of dominance, concentrations or state aid during the reporting period.**
147. The objective of this disclosure requirement is to provide transparency on publicly announced investigations into or litigation concerning possible anti-competitive behaviour of the undertaking during the reporting period as well as any state aid received.
148. The undertaking shall disclose:
- (a) publicly announced notifications, preliminary investigations, investigations, proceedings or commitments and remedies relating to violations of antitrust and monopoly legislation or the receipt of state-aid where the undertaking was named as a participant by a competent authority;
 - (b) the main outcomes of legal proceedings against the undertaking concluded during the reporting period, including sanctions, fines, commitments and remedies;
 - (c) any fee paid to secure sales to government organisations (or third parties acting on the government’s behalf).

149. Reporting in accordance with paragraph **Error! Reference source not found.** shall also include the following with respect to state aid or financial assistance received from any government on a country-by-country basis:
- (a) tax relief and tax credits;
 - (b) subsidies;
 - (c) funds received through the Just Transition Mechanism of the EU;
 - (d) investment grants, research and development grants, and other relevant types of grants;
 - (e) awards;
 - (f) royalty holidays;
 - (g) financial assistance from Export Credit Agencies (ECAs);
 - (h) financial incentives;
 - (i) other financial benefits received or receivable from any government for any operation.
150. The undertaking shall also report the value of any thresholds that have been applied and any other contextual information necessary to understand how the project-level payments to governments reported have been compiled.

Disclosure Requirement OG 18-G1 – Cybersecurity

151. **The undertaking shall disclose information about its cybersecurity during the reporting period.**
152. The objective this Disclosure Requirement is to provide an overview of the undertaking's policies and management of risks regarding cybersecurity as well as information about failures related to cybersecurity.
153. The undertaking shall disclose:
- (a) its policies relating to cybersecurity;
 - (b) its approach to cybersecurity management for existing operations, projects planned or underway and new locations for business activities, including assessment of threats, vulnerabilities and risks;
 - (c) the number of cybersecurity breaches including the number of operational sites impacted; and
 - (d) whether this involved classified or restricted information.
154. The undertaking shall also describe its approach to security management for existing operations, projects planned or underway and new locations for business activities, including assessment of threats, vulnerabilities and risks.

Disclosure Requirement OG 19-G1 – Beneficial owners of business partners

155. **The undertaking shall disclose how it identifies the beneficial owners of business partners, including joint ventures and suppliers.**
156. The objective of this Disclosure Requirement is to provide an understanding of the undertaking's policy regarding the beneficial owners of its business partners and how these are identified by the undertaking.
157. The undertaking shall disclose how it identifies the beneficial owners of [key] business partners, including joint ventures and suppliers.

158. The undertaking shall disclose its policies and screening processes regarding politically exposed persons ('PEPs') and beneficial owners of business partners, including joint ventures and suppliers

Disclosure Requirement OG 20-G1 – Oil and gas purchases from governments

159. **The undertaking shall provide information about oil and gas purchased from governments or on their behalf during the reporting period.**
160. The objective of this disclosure requirement is to enable transparency about oil and gas purchases from the government and to provide insights into these transactions.
161. For oil and gas purchased from the state or from third parties appointed by the state to sell on their behalf, the undertaking shall disclose:
- (a) volumes and types of minerals purchased;
 - (b) full names of the buying undertaking(s) and the recipient of the payment; and
 - (c) payments made for the purchase.

Appendix A: Defined terms

Term	Description
Accidental releases	An unintentional release of a hazardous substance affecting human health, land, vegetation, waterbodies, and groundwater, that is caused by an unpredicted accident.
Active conflict	Areas identified by the presence of armed conflict, widespread violence, including violence generated by criminal networks, or other risks of serious and widespread harm to people. Armed conflict may take a variety of forms, such as a conflict of international or non-international character, which may involve two or more states, or may consist of wars of liberation, or insurgencies, civil wars.
Biosphere Reserves recognised within the framework of UNESCO’s Man and the Biosphere (MAB) Programme	<p>Biosphere reserves are ‘learning places for sustainable development’. They are sites for testing interdisciplinary approaches to understanding and managing changes and interactions between social and ecological systems, including conflict prevention and management of biodiversity. They are places that provide local solutions to global challenges. Biosphere reserves include terrestrial, marine, and coastal ecosystems. Each site promotes solutions reconciling the conservation of biodiversity with its sustainable use.</p> <p>Biosphere reserves are nominated by national governments and remain under the sovereign jurisdiction of the states where they are located. Biosphere Reserves are designated under the intergovernmental MAB Programme by the Director-General of UNESCO following the decisions of the MAB International Coordinating Council (MAB ICC). Their status is internationally recognized.</p>
Community development program	A plan that details actions to minimise, mitigate or compensate for adverse social and/or economic impacts, and/or to identify opportunities or actions to enhance positive impacts of a project on the community.
Decommissioning activities	<p>1) The action of withdrawing from service the offshore facilities and infrastructure, and the Plugging & Abandonment (P&A) of offshore wells.</p> <p>2) Decommissioning is the process of ending offshore oil and gas operations at an offshore platform and returning the ocean and seafloor to its pre-lease condition.</p>
Developed reserves	<p>1) Proven reserves are such estimated quantities of mineral deposits, at a specific date, as analysis of geologic engineering data demonstrates with reasonable certainty to be recoverable in the future under the same economic and operational conditions.</p> <p>2) Developed oil and gas reserves are reserves of any category that can be expected to be recovered:</p> <p>(i) Through existing wells with existing equipment and operating methods or in which the cost of the required equipment is relatively minor compared to the cost of a new well; and</p> <p>(ii) Through installed extraction equipment and infrastructure operational at the time of the reserves estimate if the extraction is by means not involving a well.</p>
Downstream undertaking(s)	Undertaking operating in the downstream activities.
Drilling waste	<p>1) The main types of wastes that are generated during well construction and operation activities, both onshore and offshore: 1) drill cuttings and associated fluids; 2) interfacial mixtures.</p> <p>2) Oil and gas exploration and production well installation operations typically comprise three stages: Well Drilling and Completion Stage Wastes Produced:</p> <ul style="list-style-type: none"> - Drilling Fluids (drilling muds) - Cuttings

	<ul style="list-style-type: none"> - Produced Water <p>Well Stimulation Stage (hydraulic fracturing)</p> <p>Wastes Produced:</p> <ul style="list-style-type: none"> - Fracturing Fluid Returns - Produced Water <p>Well Production Stage</p> <p>Wastes Produced:</p> <ul style="list-style-type: none"> - Produced Water
Energy recovery	The use of combustible waste as a means to generate energy through direct incineration with or without other waste but with recovery of the heat.
Enhanced Oil Recovery (EOR)	<p>1) Enhanced oil recovery, also called tertiary recovery, is the extraction from an oil field of crude oil that has not already been retrieved through the primary or secondary oil recovery techniques.</p> <p>2) Three major categories of EOR have been found to be commercially successful to varying degrees:</p> <p><u>Thermal recovery</u>, which involves the introduction of heat such as the injection of steam to lower the viscosity, or thin, the heavy viscous oil, and improve its ability to flow through the reservoir. Thermal techniques account for over 40 percent of U.S. EOR production, primarily in California.</p> <p><u>Gas injection</u>, which uses gases such as natural gas, nitrogen, or carbon dioxide (CO₂) that expand in a reservoir to push additional oil to a production wellbore, or other gases that dissolve in the oil to lower its viscosity and improves its flow rate. Gas injection accounts for nearly 60 percent of EOR production in the United States.</p> <p><u>Chemical injection</u>, which can involve the use of long-chained molecules called polymers to increase the effectiveness of waterfloods, or the use of detergent-like surfactants to help lower the surface tension that often prevents oil droplets from moving through a reservoir</p>
Flaring	<p>Gas flaring is the burning of natural gas associated with oil extraction.</p> <p>When gas needs to be disposed of, it may be flared (burned off), or vented (released without being burned).</p> <p>Flaring converts gas to CO₂, while venting releases CH₄ directly to the atmosphere.</p>
Fugitive emissions	<p>Gas leakages directly into the atmosphere through valves and seals, hoses and flexible piping, as well as evaporation from hydrocarbon liquids and from cuttings.</p> <p>Fugitive emissions can never be fully eliminated, but can be minimised by use of good / appropriate materials, equipment and design, as well as through good operating procedures.</p>
High-risk area	<p>High-risk areas are those where there is a high risk of conflict or of widespread or serious abuses as defined in paragraph 1 of Annex II of the OECD Guidance.</p> <p>Such areas are often characterized by political instability or repression, institutional weakness, insecurity, collapse of civil infrastructure, widespread violence, and violations of national or international law.</p>
Hydraulic fracturing fluid	<p>During hydraulic fracturing, hydraulic fracturing fluid is injected down an oil or gas production well and into the targeted rock formation under pressures great enough to fracture the oil- and gas-bearing rock. The hydraulic fracturing fluid usually carries proppant (typically sand) into the newly created fractures to keep the fractures “propped” open. After hydraulic fracturing, oil, gas, and other fluids flow through the fractures and up the production well to the surface, where they are collected and managed.</p>
Hydrocarbon spill	<p>A liquid petroleum hydrocarbon discharged, accidentally or intentionally, that floats on the surface of water bodies as a discrete mass and is carried by the wind, currents and tides. Hydrocarbon spills can be partially controlled by chemical dispersion, combustion, mechanical containment and adsorption. They have destructive effects on coastal ecosystems. (See also accidental and non-accidental release).</p>
Near	<p>A facility, site or asset is near a certain area, if it can have a direct material impact on that area, irrespective of the actual distance that separates the two.</p>

Near miss	An unplanned incident in which no property or environmental damage or personal injury occurred, but where damage or personal injury easily could have occurred but for a slight circumstantial shift.
Non-accidental releases	An unintentional release of a hazardous substance affecting human health, land, vegetation, waterbodies, and groundwater that is not caused by collision, leakage, or other accident.
Throughput	The amount of product that moves through a particular facility during a given period of time.
Other water	Surface water that is not fresh water, and water from other sources
Produced water	Water (brine) obtained from the hydrocarbon bearing formation strata during the extraction of oil and gas. This can include formation water, injection water, and any chemicals added downhole or during the oil/ water separation process.
Proved reserves	Proved reserves (or P1) are the amount of oil or natural resources contained under a piece of land with a 90% or greater probability of profitable extraction.
Recycled and remanufactured materials	Waste materials that have been reprocessed or treated by means of production or manufacturing process and made into a final product or made into a component for incorporation into a product.
Reserves	Part of a mineral deposit which could be economically and legally extracted or produced at the time of the reserve determination.
Resources	“Undiscovered, technically recoverable resources” estimated to exist based on geologic knowledge and theory.
Scale and sludges	<p>1) Thick, soft, wet mud or a similar viscous mixture of liquid and solid components.</p> <p>2) Sludge is composed of dissolved solids which precipitate from produced water as its temperature and pressure change. Sludge generally consists of oily, loose material often containing silica compounds, but may also contain large amounts of barium.</p> <p>Scales are normally found on the inside of piping and tubing. American Petroleum Institute found that the highest concentrations of radioactivity are in the scale in wellhead piping and in production piping near the wellhead. Concentrations were as high as tens of thousands of picocuries per gram. However, the largest volumes of scale occur in three areas:</p> <ul style="list-style-type: none"> – Water lines associated with separators, (separate gas from the oil and water). – Heater treaters (divide the oil and water phases). – Gas dehydrators, where scale deposits as thick as four inches may accumulate.
State aid	<p>State aid is defined as an advantage in any form whatsoever conferred by national public authorities to undertakings on a selective basis. Therefore, subsidies granted to individuals or general measures open to all enterprises are not covered by this prohibition and do not constitute State aid (examples include general taxation measures or employment legislation).</p> <p>To be State aid, a measure needs to have these features:</p> <ul style="list-style-type: none"> • there has been an intervention by the State or through State resources which can take a variety of forms (e.g. grants, interest and tax reliefs, guarantees, government holdings of all or part of a company, or providing goods and services on preferential terms, etc.); • the intervention gives the recipient an advantage on a selective basis, for example to specific companies or industry sectors, or to companies located in specific regions • as a result, competition has been or may be distorted; • the intervention is likely to affect trade between Member States. <p>Despite the general prohibition of State aid, in some circumstances government interventions are necessary for a well-functioning and equitable economy. Therefore, the Treaty leaves room for a number of policy</p>

	<p>objectives for which State aid can be considered compatible. These exemptions can be found in legislation relevant to State aid.</p> <p>For non-EU countries, state aid refers to financial assistance received from any government.</p>
Surface water	<p>Surface water, including rainwater, water from wetlands, rivers and lakes. Water that is naturally occurring water on the Earth's surface in ice sheets, ice caps, glaciers, icebergs, bogs, ponds, lakes, rivers and streams, and has a low concentration of dissolved solids.</p>
Tailings	<p>Oil sands tailings are a mixture of water, sand, fine silts, clay, residual bitumen and lighter hydrocarbons, inorganic salts and water-soluble organic compounds.</p>
Tier safety events	<p>A Tier 1 process safety event is defined by API RP 754 as an unplanned or uncontrolled loss of primary containment (LOPC) release of any material, including non-toxic and non-flammable materials, such as steam, hot condensate, nitrogen or compressed air, from a process that results in one or more of the following consequences</p> <p>A Tier 2 process safety event is defined similarly but with less severity than the Tier 1 criteria above. See API RP 754 and IOGP's Report 456 for detailed definitions and guidance.</p> <p>Tier 3 "challenges to safety systems." 1.1 The entity shall refer to the terms, definitions, and guidance from the ANSI/API RP-754 (Section 7.2). Tier 3 indicators may alternatively be referred to as "near miss" events or "high learning value" events. Tier 4 indicators are metrics developed by the entity-specific to its facilities, operations, and safety priorities- that measure leading, proactive measures to maintain and improve safety and manage risk.</p>
Upstream undertaking(s)	<p>Undertaking operating in the upstream activities.</p>
Underground storage tank	<p>An Underground Storage Tank (UST) system is a tank (or a combination of tanks) and connected underground piping having at least 10 percent of their combined volume underground. The tank system includes the tank, underground connected piping, underground ancillary equipment, and any containment system.</p>
Undeveloped reserves	<p>Undeveloped oil and gas reserves are reserves of any category that are expected to be recovered from new wells on undrilled acreage, or from existing wells where a relatively major expenditure is required for recompletion.</p> <p>(i) Reserves on undrilled acreage shall be limited to those directly offsetting development spacing areas that are reasonably certain of production when drilled, unless evidence using reliable technology exists that establishes reasonable certainty of economic producibility at greater distances.</p> <p>(ii) Undrilled locations can be classified as having undeveloped reserves only if a development plan has been adopted indicating that they are scheduled to be drilled within five years, unless the specific circumstances, justify a longer time.</p> <p>(iii) Under no circumstances shall estimates for undeveloped reserves be attributable to any acreage for which an application of fluid injection or other improved recovery technique is contemplated, unless such techniques have been proved effective by actual projects in the same reservoir or an analogous reservoir, or by other evidence using reliable technology establishing reasonable certainty.</p>
Venting	<p>Emissions from various processes in a facility and routed to the atmosphere as a result of planned and selected operational solutions. Emissions usually happens through dedicated pipe systems where the natural gas is discharged at a safe place. Venting (direct emissions) as a solution may be selected for several reasons; safety issues, high levels of inert gases (mainly nitrogen) in the gas, pressure conditions of the facility or purely cost-related preferences (very expensive to eliminate/reduce emissions relative to the amount of emissions) or a combination of this. In many cases venting can be avoided by good design. The options may be recycling of gas or flaring.</p>

Appendix B: Application Requirements

This Appendix is an integral part of the proposed [draft] ESRS Oil and Gas. It supports the application of the requirements set for in paragraphs AR.1 to AR.69 and has the same authority as the other parts of the [draft] Standard.

1. Application Requirements related to sector-agnostic Disclosure Requirements

Application Requirement related to ESRS 2 SBM 2 Interests and views of stakeholders

AR 4. When disclosing how the undertaking engages with its stakeholders in compliance with ESRS 2 SBM-2, the undertaking shall describe how it incorporates the OECD Due Diligence Guidance for Meaningful Stakeholder Engagement in the Extractives Sector, and in particular how it engages with affected stakeholders. Furthermore, the undertaking shall disclose the following:

- (d) the approach to identifying stakeholders within local communities;
- (e) a description of the vulnerable groups that the organisation has identified within local communities by mine site.

Application Requirement related to ESRS 2 SBM 3 Material impacts, risks and opportunities with their interaction with strategy and business model(s)

AR 5. When disclosing the undertaking’s impacts on its own workforce and the local community, it shall consider, where applicable, the undertaking’s policies, actions and targets to help own workers and non-employee workers manage the adverse impacts arising from the closure of its operational site(s).

AR 6. The undertaking shall consider the labour transition plans in place to help workers manage the transition to a post-closure phase of operations (e.g., redeployment, assistance with redeployment, resettlement, and redundancy payments, training and skills programmes).

AR 7. The undertaking shall also consider the collaborative efforts, projects and programs that are set up to manage the socio-economic impact of closure and restoration programs and disclose these.

AR 8. The undertaking shall also consider how it engages with worker and other stakeholders in informing the closure plans, as well as notice periods regarding closure.

Application Requirement related to ESRS 2 GOV4 Statement on sustainability due diligence

AR 9. When disclosing a mapping of the information provided in its sustainability statements about the sustainability due diligence process, the undertakings operating in the areas of severe human rights risks shall also map the core elements from the OECD Due Diligence Guidance for Meaningful Stakeholder Engagement in the Extractive Sector in addition to the UN Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises mentioned in the agnostic disclosure.

AR 10. The undertaking shall include procurement in its mapping as well as and environmental factors. This may be presented in a table in a similar form to the table below.

Core elements	Paragraphs in the sustainability statements
OECD Guidelines for Multinational Enterprises	

Establish strong company management system	
Identify and assess risk in the supply chain	
Design and implement a strategy to respond to identified risks	
Carry out independent third-party audit of supply chain due diligence at identified points in the supply chain.	
Report on supply chain due diligence	

Application Requirement related to ESRS E1-1 Transition plan for climate change mitigation

- AR 11. When disclosing according to this sectors’ Disclosure Requirement to ESRS E1-1 – Transition plan for climate change mitigation, the undertaking may further detail these categories to align OPEX and CAPEX plans with the EU taxonomy.
- AR 12. When disclosing information on sector agnostic Disclosure Requirement E1-1[16(d)] on potential locked-in GHG emissions from the undertaking’s assets and products, the undertaking shall consider the emissions potential of proven (P1) and probable (P2) reserves of their oil and gas assets and shall calculate this potential considering the recommendations in [Russel, Stephen (2016) “A recommended methodology for estimating and reporting the potential greenhouse gas emissions from fossil fuel reserves”, World Resource Institute, 2016].

Application Requirement related to ESRS E1-4 Targets related to climate change mitigation and adaptation

- AR 13. When disclosing the information required under DR E1-4 on targets related to climate change mitigation, the undertaking shall consider disclosing the mandatory legislation the goals and targets are aligned with or contribute to.

Application Requirement related to ESRS E1-6 Gross scope 1,2,3 and Total GHG emissions

- AR 14. When disclosing its Scope 3, Use of sold products emissions, in accordance to this sector Disclosure Requirement to ESRS E1-6 – Gross scope 1,2,3 and Total GHG emissions, paragraph 38:
- (a) upstream undertakings shall consider only the physical trading of crude oil and gas products and exclude financial trading volumes. Physical trading is all trading of crude oil and gas that actually involved the physical delivery of the product. An Upstream undertaking may report on financial trading of crude oil and gas but in this case it shall present it separately;
 - (b) midstream undertakings shall consider the CO2 emissions of the throughput through the facilities under their financial or operational control during the reporting period, even if the oil and gas products are not owned by the undertaking;
 - (c) downstream undertakings shall consider the physical sales of finished products. In case they integrate both (refining NACE) and (marketing NACE) activities, the volume to consider shall be the largest throughput of the two activities.

Application Requirement related to ESRS E2-2 Pollution action plans and resources

- AR 15. The undertaking shall consider disclosing what technologies does it use to manage its impact on air quality, such as technologies that remove or treat combustion emissions in operations or fuel products.
- AR 16. When disclosing examples of significant spills, as determined by the company according to the paragraph 60 of this sector specific Disclosure Requirements, the undertaking may consider descriptions of the following:

- (a) the criteria on establishing the significance;
- (b) the cause of the spill and volume of spill recovered;
- (c) the undertaking's response measures to address immediate and long-term effects;
- (d) any secondary effects on local communities and stakeholders;
- (e) the undertaking's stakeholder engagement;
- (f) incident investigation findings, if available, including root-causes; and
- (g) actions that were taken to prevent recurrence and share lessons.

Application Requirement related to ESRS E3-1 Policies related to water and marine resources

AR 17. When disclosing the information required in sector agnostic Disclosure Requirement E3-1 on policies and targets related to water and marine sources, the undertakings may include the following:

- (a) a description of how the organization interacts with water, including how and where water is withdrawn, consumed, and discharged, and the water-related impacts the organization has caused or contributed to, or that are directly linked to its operations, products, or services by its business relationships (e.g., impacts caused by runoff);
- (b) a description of the approach used to identify water-related impacts, including the scope of assessments, their timeframe, and any tools or methodologies used;
- (c) a description of how water-related impacts are addressed, including how the organization works with stakeholders to steward water as a shared resource, and how it engages with suppliers or customers with significant water-related impacts;
- (d) an explanation of the process for setting any water-related goals and targets that are part of the organization's approach to managing water and effluents, and how they relate to public policy and the local context of each area with water stress;
- (e) an overview of water use across the organization's value chain
- (f) a list of specific catchments where the organization causes significant water-related impacts.

AR 18. When compiling the information about (areas of) high-water stress, the reporting organization shall consider using publicly available and credible tools and methodologies for assessing water stress in an area.

AR 19. When disclosing the indicators of water discharge, undertakings may present the internal standards they may have established for the management of water discharge-related impacts. The undertakings may give a description of any minimum standards set for the quality of effluent discharge, and how these minimum standards were determined, including:

- (a) how standards for facilities operating in locations with no local discharge requirements were determined;
- (b) any internally developed water quality standards or guidelines;
- (c) any sector-specific standards considered;
- (d) whether the profile of the receiving waterbody was considered

Application Requirement related to ESRS E4-2 Policies related to biodiversity and ecosystems

AR 20. When disclosing its policies implemented to manage its material impacts, risks and opportunities related to biodiversity and ecosystems, the undertakings with upstream and midstream operations may include how the undertaking applies the mitigation hierarchy

and international biodiversity standards in its operational planning, from early concept through to decommissioning.

Application Requirement related to ESRS E4-3 Actions and resources related to biodiversity and ecosystems

AR 21. The undertaking shall provide examples of operating areas where it has put biodiversity management activities and adaptive management in place.

AR 22. Site restoration plans should address the following objectives:

- (a) the long-term stability and sustainability of the landforms, soils and hydrology of the site;
- (b) the partial or full repair of ecosystem capacity to provide habitats for biota and services for people;
- (c) the prevention of pollution of the surrounding environment.

AR 23. In the description of its site restoration plans, the undertaking shall consider including:

- (a) a baseline assessment of the local environment pre-activities, which should include:
 - i. the affected ecosystems types;
 - ii. the affected ecosystem size in hectares;
 - iii. the affected ecosystem initial condition;
 - iv. the affected species names;
 - v. the affected species extinction risk;
 - vi. a list of the significant ecosystem services and beneficiaries that will be affected by the undertaking's operations;
 - vii. an explanation of how the ecosystem services and beneficiaries will be affected;

standards, methodologies, assumptions use to make this assessment.
- (b) a description of the risks for biodiversity and ecosystems;
- (c) a description of real impacts on biodiversity and ecosystems, which should include:
 - i. the size in hectares and the type of natural ecosystem converted since the cut off date or reference date;
 - ii. the current state of the ecosystem;
 - iii. the current state of species.
 - iv. standards, methodologies, assumptions use to make this assessment.
- (d) A description of the goal of the restoration plan (converting the area to a safe and stable condition, restoring the area to pre-mining conditions as closely as possible, near-natural restored ecosystem, reinstating ecosystem functionality or land productivity, etc.);
- (e) a description of restoration activities and their implementation;
- (f) monitoring performance of the restoration activities;
- (g) results of the restoration activities.
- (h) additional actions to offset negative impacts and transformative actions, including additional conservation actions by the undertaking.

AR 24. To report on long-term quality of the restoration process, the undertaking shall consider disclosing:

- (a) its legacy policy on restoration;

- (b) the quality of the restoration plan in relation to local communities;
- (c) long-term liabilities, describing the continuation of the restoration plan if the area is sold or leaves the undertaking's possession.

AR 25. The undertaking may also provide metrics such as:

- (a) number of projects contributing to forestry maintenance, educational activities, research and development to reduce biodiversity impact and land use, conservation measures (planting trees);
- (b) development and sales of new products that conform with new regulations on biodiversity;
- (c) Number of incidents (fines, suspension or rejection of permission or license, litigations) due to violation of laws and regulations related to biodiversity.

Application Requirement related to ESRS E4-5 Impact metrics related to biodiversity and ecosystems change

AR 26. When disclosing according to the sector agnostic Disclosure Requirement E4-5, the undertaking shall consider impacts deriving from both direct impact on land and sea use; indirect impacts; as well as impacts from industrial hazards (e.g. spills, other risk events).

AR 27. When disclosing the percentage of proven reserves that are located in or near high-risk areas according to the paragraph 92, the percentage of proved reserves shall be calculated as the amount of proved reserves located in or near areas of high risk divided by the total amount of proved reserves

AR 28. The undertaking may separately identify reserves in areas with additional ecological, biodiversity, or conservation designations such as those listed by the A-Z Guide of Areas of Biodiversity Importance prepared by the United Nations Environment Programme's World Conservation Monitoring Centre (UNEP-WCMC).

AR 29. The undertaking may discuss reserves that are located in protected areas or endangered species habitat, but present low risk to biodiversity or ecosystem services; the undertaking may provide similar discussion for reserves located in areas with no official designation of high biodiversity value but that present high biodiversity or ecosystem services risks.

AR 30. Reserves are considered to be in areas of protected conservation status if they are located within:

- (a) International Union for Conservation of Nature (IUCN) Protected Areas (categories I-VI)
- (b) Ramsar Wetlands of International Importance
- (c) UNESCO World Heritage Sites
- (d) Biosphere Reserves recognized within the framework of UNESCO's Man and the Biosphere (MAB) Programme
- (e) Natura 2000 sites
- (f) Sites that meet the IUCN's definition of a protected area: "A protected area is a clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values"
- (g) These sites may be listed in the World Database of Protected Areas (WDPA) and mapped on Protected Planet

AR 31. Reserves are considered to be in endangered species habitat if they are in or near areas where IUCN Red List of Threatened Species that are classified as Critically Endangered (CR) or Endangered (EN) are extant.

AR 32. A species is considered extant in an area if it is a resident, present during breeding or non-breeding season, or if it makes use of the area for passage.

AR 33. For the purposes of disclosure, "passage" is defined as all areas of land or water that a migratory species inhabits, stays in temporarily, crosses or overflies at any time on its normal migration route.

Application Requirements related to ESRS E5-5 – Resource outflows

AR 34. When describing the undertakings' efforts to increase the life and efficiency of their equipment and machinery assets the E5-4 – Resource outflows, the undertaking shall consider including information, such as:

- (a) whether assets were procured following circular approaches such as: leasing, procuring second-hand or remanufactured assets and whether new assets have been designed for longevity, reusability, repairability, etc.,.
- (b) whether the undertaking has agreements or policies in place for the end-of-use of existing equipment that would enable recirculation in practice.

AR 35. The information provided under the paragraph 64 should be reflecting the total weight of the outflow material in its original state, without data modification, such as reporting on a "dry weight" basis.

Application Requirement related to ESRS S3-1 Policies related to affected communities

AR 36. When disclosing its policies related to land acquisition and involuntary resettlement, the undertaking may disclose if it has included a gender perspective in them.

Application Requirement related to ESRS S1-1 Policies related to own workforce

AR 37. When disclosing whether the undertaking has a health and safety management system, it may include a description of the occupational health services functions that contribute to the identification and elimination of hazards and minimisation of risks and an explanation when such information has not been considered in sector-agnostic..

Application Requirement related to ESRS S1-11 Social protection

AR 38. In addition to disclosing how its own workers are covered against loss of income due to major life events in [draft] ESRS S1-11, the undertaking may disclose whether all workers in its own workforce are covered by non-occupational medical healthcare services through public programs or through benefits offered by the undertaking.

AR 39. For the workers who do not have their non-occupational medical healthcare services through public programs the undertaking may disclose:

- (a) how the undertaking facilitates workers' access to non-occupational medical and healthcare services, including the scope of their access;
- (b) a description of voluntary health promotion services and programs offered to workers that address major non-work-related health risks and how the organisation facilitates workers' access to these services and programs.

AR 40. Voluntary health promotion programs and services may include:

- (a) smoking cessation programs
- (b) dietary advice
- (c) offering of healthy food in the canteen
- (d) stress-reducing programs
- (e) provision of a gym or
- (f) fitness programs.

AR 41. A program or service is voluntary when it does not set mandatory personal targets, and if incentives are provided, these are not associated with the undertaking's decisions regarding employment or engagement of workers.

AR 42. When describing how it facilitates workers' access to voluntary health promotion services and programs, the undertaking may consider disclosing whether it allows workers to make use of these during paid working hours. The undertaking can also report if these services and programs are available for family members of workers.

Application Requirement related to ESRS S1-14 Health and safety indicators

AR 43. In the case of workers who perform tasks in offshore platforms, incidents occurred while commuting to these (e.g. by helicopter) are considered to be work-related.

AR 44. The undertaking may provide qualitative descriptions of:

- 162. any significant process safety events that occurred during the reporting year;
- 163. the actions taken in response;
- 164. lessons learned to prevent recurrence; and
- 165. its regular review process of the assessment and management of process safety risks.

Application Requirement related to ESRS S3-2 Processes for engaging with affected communities about impacts -

AR 45. The undertaking shall consider listing the vulnerable groups, including any indigenous peoples, that it has identified within local communities and the approach to engaging with those vulnerable groups, including:

- (a) how it seeks to ensure meaningful engagement; and
- (b) how it seeks to ensure safe and equitable gender participations, namely how it seeks to ensure Indigenous women can participate safely and equitably.

AR 46. When disclosing the engagement with human rights and environmental defenders, the undertaking shall consider its processes for engaging with human rights and environmental defenders as part of its due diligence processes, including on managing allegations of retaliations, threats and direct/indirect attacks (physical and legal – including all forms of judicial harassment) against defenders.

AR 47. The description of how an undertaking engages with local communities shall also consider an explanation on how the land will be used ex post the closure of the operational site. Where applicable, the undertaking shall develop such post-closure plans in consultation with local communities.

AR 48. At the end of their commercial use, operational sites such as oil and gas fields and other facilities are expected to be decommissioned or closed by the undertaking in an orderly way. Closure and rehabilitation of oil and gas fields can include:

- (a) Removal and final disposal of hazardous substances and chemicals;
- (b) Capping or plugging abandoned wells;
- (c) Dismantling structures and reusing, recycling or disposing materials.
- (d) Management of waste;
- (e) Surface water and groundwater quality issues resulting from spills and leaks;
- (f) And restoration of lands to a condition or economic value equivalent to the pre-development state.
- (g) Closing oil sands mining sites also involves managing tailings ponds

AR 49. The operational life of operational sites may last for several decades a regularly updated restoration plan is essential. For this reason, the undertaking may update its closure and restoration plan annually and such disclosure shall be considered by the undertaking.

AR 50. When describing responding to ESRS S3-2, the undertaking shall consider:

- (a) its due diligence practices and procedures with respect to indigenous rights of communities in which it operates or intends to operate, specifically: upholding internationally recognized rights of Indigenous peoples, including but not limited to those recognized by the UN declaration on the Rights of Indigenous Peoples, and the ILO Convention No. 169;
- (b) the use of free, prior, and informed consent (FPIC) (or consultation) processes as per the United Nations Declaration on the Rights of Indigenous Peoples;
- (c) The undertaking shall also consider the governance mechanisms that has been put in place to ensure that its policies and practices followed by the undertaking.

AR 51. The undertaking may include how practices apply to business partners, such as contractors, sub-contractors, suppliers, and joint venture partners. Where practices do not apply to business partners, the undertaking may discuss factors that prevent the application of such practices.

Application Requirement related to ESRS S3-3 Processes to remediate negative impacts and channels for affected communities to raise concerns – Closure and post closure

AR 52. When disclosing its processes to remediate negative impacts following [draft] ESRS S3-3, the undertaking shall consider how it engages with local communities and other relevant stakeholders on its closure and post-closure planning and implementation, including post-exploitation land-use, to limit the actual and potential adverse impacts (e.g. unemployment, people moving out affecting the liveability of remaining supporting activities such as local shops, schools).

Application Requirement related to ESRS S3-4 Taking action on material impacts, and approaches to mitigating material risks and pursuing material opportunities related to affected communities, and effectiveness of those actions and approaches

AR 53. The undertaking shall consider the impacts on affected communities that stem from the undertaking's impacts on biodiversity when disclosing the actions that are planned or underway to address negative impacts on these affected communities.

AR 54. If the undertaking has an operation site in or near indigenous lands as listed in OG 1 the undertaking shall consider:

- (a) its interactions with indigenous peoples, including but not limited to means of communication, language used, frequency;
- (b) where applicable, the co-ownership programs developed for indigenous peoples and local communities. This includes equity shares acquired by communities and their value;
- (c) the most recent examples of involvement in the process of seeking free, prior, and informed consent from indigenous peoples to any of the undertakings' activities, and whether an agreement has been reached and if it is publicly available.

AR 55. In addition, the undertaking may disclose the approach taken in recognising the legitimate tenure rights holders when acquiring, leasing or making other arrangements to use, or restrict the use of, land as well as to providing remediation following involuntary resettlement either through monetary or asset compensation.

AR 56. The undertaking may disclose how it addresses any risks related to free, prior, and informed consent from indigenous peoples in countries without regulation or processes in place. It may disclose whether it performs a *Risk assessment for new country entry* before the subscription of a contract in a new country of operations and if so, it may disclose the results of that assessment.

AR 57. When disclosing under paragraph 115, the undertaking shall consider the principles in the Nagoya Protocol and the Montreal Agreement. The undertaking may refer to how the actions that are planned or underway are aligned to these frameworks.

Application Requirement related to ESRS S1-Appendix B.2 - Application Requirements for ESRS S1-1 Policies related to own workforce

AR 58. When disclosing the requirements in ESRS S1 Own workforce for policies related to the own workforce the undertaking shall consider the following datapoints:

Social and human rights matters	Examples of policies
Secure employment	Policies on the use of posted workers
Working time	Policies on advance notice of scheduling, multi-day away-from-home assignments, and evening, night and weekend work
Adequate wages	Policies for housing allowances
Freedom of association/ collective bargaining including the rate of workers covered by collective agreements	% of workers affected by work stoppages

Application Requirement related to ESRS S1-Appendix B.1 – Application Requirements for ESRS 2 related disclosures

AR 59. When disclosing the requirements in ESRS S1 Own workforce for ESRS 2 related disclosure the undertaking shall consider the following datapoints:

Social and human rights matters	Non-exhaustive list of factors to consider in Materiality Assessment
Secure employment	% of posted workers in own workforce
Working time	% of workers regularly working multi-day away-from-home assignments % of workers regularly working evening shifts % of workers regularly working night shifts % of workers regularly working on Saturdays and/or Sundays
Adequate wages	Allowances for housing for away-from-home assignments
Freedom of association/ collective bargaining including the rate of workers covered by collective agreements	% of workers affected by work stoppages

Application Requirement related to ESRS S1-Appendix B.3 – Application Requirements for ESRS S1-4 Taking action on material impacts on own workforce, and approaches to mitigating material risks and pursuing material opportunities related to own workforce, and effectiveness of those actions

AR 60. When disclosing the requirements in ESRS S1 Own workforce for actions related material impacts on own workforce the undertaking shall consider the following datapoints:

Social and human rights matters	Examples of actions
----------------------------------------	----------------------------

Secure employment	Reducing the percentage of posted workers
Working time	Increased percentage of workers with regular schedules Increased advance notice of scheduling Reducing percentage of multi-day away-from-home assignments, and evening, night and weekend work
Adequate wages	Increasing housing allowances
Freedom of association/ collective bargaining including the rate of workers covered by collective agreements	Percentage of workers affected by work stoppages

Application Requirement related to ESRS S1-Appendix B.4 – Application Requirements for ESRS S1-5 Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities

AR 61. When disclosing the requirements in ESRS S1 *Own workforce* for targets related to managing material negative impacts the undertaking shall consider the following datapoints:

Social and human rights matters	Examples of targets
Secure employment	Reducing the percentage of posted workers
Working time	<ul style="list-style-type: none"> Increased percentage of workers with regular schedules Increased advance notice of scheduling Reducing percentage of multi-day away-from-home assignments, and evening, night and weekend work
Adequate wages	Adequate housing allowances
Freedom of association/ collective bargaining including the rate of workers covered by collective agreements	Percentage of workers affected by work stoppages

Application Requirement related to ESRS G1-2 Management of relationships with suppliers

AR 62. Suppliers local to an operation are undertakings operating and registered in the same geographic market as the operation. The undertaking shall consider “local” to be the specific country market where its operation is located. The geographical definition of ‘local’ can include the community surrounding operations, a region within a country, or a country. The undertaking shall report any deviations from the suggested definition of “local”.

AR 63. The Undertaking may describe how the procurement process helps or encourages its first level of suppliers and contractors to source locally.

AR 64. The Undertaking may use case studies to illustrate how its local procurement policies, programmes and procedures are implemented locally, including results and lessons learned.

AR 65. The Undertaking may describe further activities designed to assist supplier development, such as engagement in collaborative groups (e.g. with other companies or chambers of commerce) to promote local enterprise and economic development.

Application Requirement related to ESRS G1-5 Political influence and lobbying activities

AR 66. When reporting in accordance with ESRS G1-5 - *Political influence and lobbying activities*, the undertaking shall calculate financial political contributions in compliance with national accounting rules, where these exist.

2. Application Requirements related to sector-specific Disclosure Requirements

Application Requirement related to OG 1 – Mapping of operational sites

Operational control

AR 1. The undertaking shall determine on the basis of the specific facts and circumstances which asset is under operational control.

AR 2. The following are examples of transactions where the undertaking has operational control:
Frequent

- (a) the asset is operated by the company, whether for itself, or under a contractual obligation to other owners or participants in the asset (for example, in a joint venture or other such commercial arrangement); or
- (b) the asset is owned by a joint venture (or equivalent commercial arrangement), and operated by a joint venture partner, in respect of which the company can determine management and board level operational decisions of the joint venture.

AR 3. Examples include mobile assets, such as vehicles or ships. The information about material impacts, risks and opportunities include them when they are owned and operated by the reporting unit. However, if they are owned by others and leased or chartered to the undertaking, the following shall be considered:

- (a) vehicles, aircraft or rail rolling stock not owned by the undertaking but contractually dedicated to exclusive business use by the undertaking are generally included as operated assets for reporting. This excludes 'spot' charters that are available for regular business use by other parties;
- (b) when considering marine vessels, an asset would typically be included when the reporting unit holds the International Safety Management Code Document of Compliance (DOC).

AR 4. Paragraph 67 also establishes that the reporting undertaking provided in the sustainability statements shall be extended to include information on the material impacts, risks and opportunities connected to the undertaking through its direct and indirect business relationships in the upstream and/or downstream value chain ("value chain information"). In this case, operations and assets consolidated under "operational control" shall not be considered as part of the value chain, but as part of own operations.

AR 5. In the classification of sites by type, the undertaking shall refer to the following guidance:

- (a) Exploration concession: [To be added]
- (b) Production concession: [To be added]
- (c) Tailing dams: [To be added]
- (d) Refineries: [To be added]
- (e) Oil and gas transmission pipelines: Transmission pipelines are used to transport crude oil and natural gas from their respective gathering systems to refining, processing, or storage facilities. Transmission pipelines also transport refined

petroleum products and natural gas to customers, for use or for further distribution. With very few exceptions, transmission pipelines are dedicated to the transportation of crude oil, refined petroleum products, or natural gas. Transmission pipeline systems include all of the equipment and facilities necessary to effect the transportation of the products. This includes the pipe, valves, pumps or compressors, breakout tanks, storage tanks, refining and processing facilities and other equipment and facilities. Transmission pipelines are constructed from steel pipe and can range in size from several inches to several feet in diameter. Depending on the product being transported, transmission pipeline systems can be designed to operate from relatively low pressures to high pressures. They can range in length from hundreds of feet to hundreds of miles.

AR 6. The undertaking may consider disclosing the list of operational sites and infrastructure in the following format.

Site name	Site type	Control	Operational status	Description
	[exploration concession; production concession; tailing dam; LNG & natural gas processing facility; refinery; pipeline]	[Financial; Operational]	[active; undergoing closure; closed and rehabilitated; closed and not rehabilitated]	

Site name	Located in or near			Contribution to local community material impacts
	KBA	Conflict affected or high-risk areas	(areas of) high-water stress	
	[Yes/No]	[Yes/No]	[Yes/No]	[Narrative]

Application Requirement related to OG 2 – Oil and gas reserves

AR 7. When disclosing under the Disclosure Requirement OG 2, the undertaking shall calculate the reserves as the amount of reserves located in the indicated area, divided by the total amount of proved reserves.

AR 8. When disclosing on its reserves, the undertaking shall follow guidance published by the U.S. Securities and Exchange Commission (SEC) in its Oil and Gas Reporting Modernization (Regulation S-X Section §210.4-10) for the classifying of reserves as proved and probable.

AR 9. When disclosing under the Disclosure Requirement OG 2, the undertaking may consider disclosing the percentage of net probable reserves broken down as indicated in the paragraphs of this disclosure. In such case, the percent of proved reserves and probable reserves are to be calculated and reported separately.

AR 10. With reference to country breakdown, disclosure only needs to be provided for countries that represent >5% of reserves.

AR 11. With reference to the reserves located in or near areas of conflict:

- (a) Reserves shall be considered to be in or near an area of active conflict if they are located in the same country as the active conflict.

- (b) If the undertaking can demonstrate that a conflict is contained to a region, state, or designated area that is not proximate to its reserves, then it may exclude these from the scope of disclosure.
- (c) If reserves are located in a country, region, or state adjacent to an active conflict and/or can be reasonably expected to be operationally impacted by the conflict, then these reserves shall be included in the scope of disclosure.
- (d) Active conflict is defined according to the Uppsala Conflict Data Program (UCDP) definition as: a conflict, both state-based and non-state, is deemed to be active if there are at least 25 battle-related deaths per calendar year in one of the conflict's dyads

AR 12. With reference to the reserves located in or near indigenous land, indigenous lands are considered those occupied by indigenous people which are defined in ESRS S3 as: "indigenous peoples are generally identified as 1) tribal peoples in independent countries whose social, cultural and economic conditions distinguish them from other sections of the national community, and whose status is regulated wholly or partially by their own customs or traditions or by special laws or regulations; 2) peoples in independent countries who are regarded as indigenous on account of their descent from the populations which inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonisation or the establishment of present state boundaries and who, irrespective of their legal status, retain some or all of their own social, economic, cultural and political institutions

AR 13. With reference to the reserves in or near sites protected areas and key biodiversity areas companies may calculate the % of reserves in protected areas and key biodiversity areas by proportionality, this is, by computing of their proved reserves in a concession area and determining the % which overlaps with a key biodiversity area and allocating reserves based on that %. Companies may also want to clarify to what extent proved reserves are developed or undeveloped, given the potential differential impact risk between them.

AR 14. With reference to the reserves in (areas of) high-water stress companies may calculate the % of reserves by proportionality, this is, by computing of their proved reserves in a concession area and determining the % which overlaps with (areas of) high-water stress and allocating reserves based on that %.

Application Requirement related to OG 4-E1 - GHG emission intensity of energy

[To be provided]

Application Requirement related to OG 5 - E2 Industrial risk management

AR 15. When disclosing under paragraph 68 of the Disclosure Requirement OG 5-E2 Industrial risk management, the undertaking may also provide metrics on:

- a. Number of Tier 2 process safety events, reported separately for each major business activity, such as refining or upstream.
- b. Describe how you assess, monitor and review process safety and well control risk control barriers.
- c. Describe your approach and application of Tier 3 and 4 metrics
- d. Describe how you incorporate cultural and human factors into process safety, including leadership, risk awareness and employee development.
- e. State any commitments or targets you have that relate to process safety and report your progress.
- f. Report process safety event rates
- g. Report number of Level 1, 2 and 3 well control incidents and separately describe any Level 1 incidents.

Application Requirement related to OG 7 - E3 Water withdrawal

AR 16. The undertaking may follow the table shown below when disclosing information required in DR OG8-E3 – Water withdrawals:

Water withdrawals	From water stressed areas	Total
Fresh water		
Surface water		
Groundwater		
Other water		
Seawater		
Produced water and recycled process wastewater		
Third-party water		

Application Requirement related to OG 8 - E3 Water discharge

AR 17. The undertaking may follow the table shown below when disclosing information required in DR OG 7-E3 – Water discharge:

Water discharge	From water stressed areas	Total
Fresh water		
Surface water	NA	
Groundwater		
Other water		
Seawater	NA	
Exported to a third-party for treatment and discharge to the environment		
Exported to a third-party for recycling and re-use by a third party		

Application Requirement related to OG 11 - S3 Security personnel

AR 18. The undertaking shall consider the content of the trainings offered (e.g., differentiate between trainings related to security issues and trainings on human rights policies) and also if it addresses the protection of vulnerable and marginalised groups, especially women, children and indigenous populations.

AR 19. The undertaking may disclose information on its processes of tendering and contracting with security providers. It may also disclose whether requirements related to the undertaking’s human rights policies are included in private security.

Application Requirement related to OG 12-S3 - Impact metrics on affected communities

AR 20. When disclosing the number and type of grievances from affected communities identified, the undertaking may disclose:

- (a) percentage of the grievances that were addressed and resolved;
- (b) percentage of the grievances that were resolved through remediation;

- (c) data on the types of concerns raised via engagement or grievance mechanisms, supported by qualitative information on how it has addressed concerns, including where appropriate elevation to corporate management.

Application Requirement *related to OG 13 - S3 Human rights and environmental defenders*

- AR 21. When describing the procedures and management of public or private security providers, the undertaking shall refer to training provided on company policies or international standards focused on safeguarding human rights as well as guidelines on the use of physical force and reporting procedures. It may also refer to screening and assessment processes, cost reimbursement and the use of company facilities.
- AR 22. When calculating the number of incidents in paragraph 107, the undertaking shall consider official sources such as policy reports or other reports issued by governmental organisations. The undertaking shall not consider unofficial sources e.g social media.

Application Requirement *related to OG 15-S3 Workforce hired from local communities*

- AR 23. Workers hired from local communities include those individuals either born or who have the legal right to reside indefinitely (such as naturalized citizens or permanent visa holders) in the same geographic market as the operation. The geographical definition of 'local' can include the community surrounding operations, a region within a country, or a country.

Application Requirement *related to OG 17-G1 State-aid and competition*

- AR 24. When reporting in accordance with paragraph 146, the undertaking may include the following revenue streams in the breakdown:
- (a) The host government's production entitlement;
 - (b) National state-owned company production;
 - (c) Royalties;
 - (d) Dividends;
 - (e) Bonuses (e.g., signature, discovery, and production bonuses);
 - (f) License fees, rental fees, entry fees; and other considerations for licenses or concessions; and
 - (g) Any other significant payments and material benefits to government.
- AR 25. When providing the information in , the undertaking shall also report the value of any thresholds that have been applied and any other contextual information necessary to understand how the project-level payments to governments reported have been compiled.
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Appendix C: List of datapoints in accordance with EU law

This Appendix is an integral part of the [draft] ESRS *Oil and Gas* and has the same authority as the main body of the [draft] Standard:

The table below illustrates the datapoints that emanate from other EU legislation. These are to be reported irrespective of the outcome of the materiality assessment.

Disclosure Requirement and related datapoint	Pillar 3 reference
DR related to ESRS 2-SBM 1 Market position, strategy, business model(s) and value chain, paragraph Error! Reference source not found.	Article 449a Capital Requirements Regulation – CRR – Template 1: Banking book – Climate change transition risk: Credit quality of exposures by sector, emissions and residual maturity
DR MIN 1 – List of operational sites, paragraph Error! Reference source not found.	Article 449a Capital Requirements Regulation – CRR – Template 1: Banking book – Climate change physical risk – Exposures subject to physical risk
DR related to ESRS E1-6 – Gross scopes 1, 2, 3 and total GHG emissions, paragraph Error! Reference source not found.	Article 449a Capital Requirements Regulation – CRR – Template 1: Banking book – Climate change transition risk: Credit quality of exposures by sector, emissions and residual maturity
DR related to ESRS E1-6 – Gross scopes 1, 2, 3 and total GHG emissions, paragraph Error! Reference source not found.	Article 449a Capital Requirements Regulation – CRR – Template 3 – Banking book – Climate change transition risk – Alignment risks

Appendix D: NACE codes

This Appendix set the list of NACE codes that are covered by this [draft] sector ESRS. All undertakings for which one or more of these NACE codes represent a significant sector according to paragraphs 38 (a) and (b) of ESRS 2, shall report according to this [draft] sector ESRS.

Appendix E is an integral part of the [draft] sector ESRS and has the same authority as the other parts of the [draft] ESRS *Oil and Gas*.

- C.19.20 Manufacture of refined petroleum products
- G.46.71 Wholesale of solid, liquid and gaseous fuels and related products
- G.47.30 Retail sale of automotive fuel in specialised stores
- H.49.50 Transport via pipeline
- B.06.10 Extraction of crude petroleum
- B.06.20 Extraction of natural gas
- B.09.10 Support activities for petroleum and natural gas extraction.

Appendix E: Material sustainability matters in the oil and gas sector

This Appendix presents a description of the sustainability matters that are material for undertakings in the Oil and Gas sector. For the sustainability matters that are also listed in paragraph AR12 of Appendix B of [draft] ESRS 1, this Appendix provides a description of how such matters materialise in this specific sector.

This Appendix is provided for illustrative purposes and is non-authoritative.

ENVIRONMENT

E1: Climate

Climate change adaptation

The sector is exposed to a range of risks from the current and future climate variability. Those risks may include, for example, reduced window of time for tundra travel due to the permafrost melting, increased lightning strikes in northern latitudes, coastal erosion leading to degradation of barriers, increased storms and wave loading on offshore facilities, changes in precipitation patterns affecting the water management or flooding, and reduced certainty regarding efficiency of equipment. Thorough risk evaluation and assessment as well as working towards resilience across the whole value chain, including surrounding communities and infrastructure, are essential to manage risk and opportunities related to the matters of climate change adaptation.

Climate change mitigation

Sector's GHG emissions, such as CO₂ and CH₄ are major contributor to climate change. Depending on the activity specifics, actions to reduce emissions may cover areas of fugitive methane emissions, flaring of natural gas, but also mitigation of other GHG releases such as N₂O, HFCs, PFCs, SF or NF. Climate transition efforts for the sector extend across the whole value chain, including the Scope 3 emissions. Change to a low-carbon economy is linked to multiple aspects of climate change mitigation (emissions management, long-term decline in demand, presence of stranded assets) and investments in renewable energy, technologies to remove CO₂ from the atmosphere, as well as implementation of nature-based solutions, such as reforestation, afforestation, coastal and wetland restoration.

Energy

The oil and gas sector represents an energy-intensive industry and hence energy efficiency and savings are essential to the industry's operations. Examples of energy-consuming equipment used within the sector may include boilers, fired heaters, waste incinerators, gas turbines, gas engines and diesel engines. On-site generation of non-fossil energy, new sources of electric power or other non-combustion energy sources can represent an opportunity for managing the energy transition. The energy efficiency and energy consumption factors remain critical matters to be managed to minimise negative climate impacts of the industry.

E2: Pollution

Pollution of air

Air emissions from oil and gas operations may contribute to local or regional impacts and affect human health, flora and fauna or cultural heritage sites. While the impacts associated with greenhouse gas emissions are taken in account as a part of the climate mitigation topic, other significant air pollutants from regular sector activities are relevant to consider and may include, but are not limited to SO_x, NO_x, H₂S, VOCs, PM. Monitoring and management of the impacts related

to the air quality, as well as an innovative approaches to improve performance in this regard are significant matters for the industry.

Pollution of water

Sector activities may result in water discharges, such as hydrocarbon liquids, acids, biocides or muds. Water contamination can also occur from the injection of drilling fluids into wells and flowback from hydraulic fracturing. Inefficient treatment of water discharges, oil spills from transportation accidents, ruptured pipelines or seepage, or failure of an oil sands tailings dam can cause severe impacts on water quality. Pollution can result from regular activities or can be related to incidental spills and industrial hazards connected to operations, infrastructure decommissioning or abandoned assets. Such incidents, events and catastrophes may result in severe environmental and social consequences and trigger significant financial liabilities, reputational damage and can be especially acute in areas of experienced water stress.

Pollution of soil

Activities within the sector can result in release of harmful substance, vibration or other contaminant into sand, silts, shells and gravel, as well as the underlying sediments and groundwater resources. Such pollutants can include cuttings, muds, hydrocarbon liquids or fluids from drilling, as well as non-hydrocarbon substances, which result from regular activities or can be related to incidental spills and industrial hazards connected to operations, infrastructure decommissioning or abandoned assets. Consequent pollution incidents and catastrophes may result in severe environmental and social consequences and trigger significant financial liabilities and reputational damage.

Pollution of living organisms and food resources

Living organisms and food resources can be at risk of exposure to potential contamination with pollutants present in the sector's value chain. Hydrocarbon and other types of pollution may negatively impact development of soils and plants and cause severe effects on marine and other living organisms, impacting availability of food resources. Monitoring and management of pollution sources is therefore essential for avoiding negative environmental, social and economic consequences for the industry.

Substances of concern

Multiple activities in oil and gas may involve a large range of substances of concern which need to be managed. The use of these substances is currently regulated and overseen under REACH regulation due to their human health and environmental impact.

Substances of very high concern

Certain activities in oil and gas may also involve a large range of substances of very high concern (SVHC) which need to be managed by undertakings. Those substances are currently regulated and overseen under REACH regulation due to their human health and environmental impact.

E3: Water and marine resources

Water withdrawals

Oil and gas activities have significant impacts on water availability. Specific sector activities may withdraw large water quantities for extraction or processing methods, including the hydraulic fracturing or oil sands mining. The scale of water withdrawals can vary depending on the activity, but reinjection and reuse is playing critical role in minimizing the negative impacts. Given that the large proportion of industrial activities takes place in the areas of high water stress, marked by increased competition for water resources, management of risks along the whole supply chain is essential for the sector to avoid significant environmental and social impacts connected with water availability and quality.

Water consumption

The amounts of water that are not returned to the environment are relevant sustainability matter within the sector and are referred as to consumed water. Impacts related to water consumption within oil and gas industry may refer to water converted to waste, evaporated, transpired, or being polluted to the point of being unusable by other users, which prevents it from being released back to surface water, groundwater, seawater, or a third party over the course of the reporting period.

Water use

Oil and gas sector can use relatively large quantities of water depending on their size and the complexity of the processes. This exposes the undertakings to the risk of reduced water availability, depending on their location, and related costs. Usage of water from water-stressed regions may also create tensions with local communities. Sustainable management of water often require wastewater treatment and disposal, often via on-site wastewater treatment plants before discharge. Reducing water use and contamination through recycling, other water management strategies, and use of non-toxic fracturing fluids could create operational efficiency for companies and lower their operating costs. Such strategies could also minimize the impacts that regulations, water supply shortages, and community-related disruptions have on operations.

Water discharges in water bodies and in the oceans

The oil and gas industry handles large quantities of water, process wastewater and stormwater, which can be then discharged to surface water, groundwater or seawater. These are normally treated to remove contaminants before being discharged, in compliance with regulatory requirements. Subsequent to that, water can be discharged into the receiving waterbody either at the defined discharge points or dispersed in an undefined manner, it also can be authorized or unauthorized. The quality of its discharges can have impacts on ecosystems and people. Constituents or measures for discharges may include chemical oxygen demand (COD), sulphides, ammonia, phenols, total suspended solids (TSS), or non-aqueous drilling fluids discharged).

Habitat degradation and intensity of pressure on marine resources

Leaks, accidental discharges, pipeline rights-of-way, and open easements over ecologically sensitive land could impact ecosystems in several ways, including natural habitat loss and changes in species movement. Impacts on the habitat degradation and intensity of pressure on marine resources can result also from decommissioning offshore structures when elements that should be removed become part of benthic communities and habitats. In some cases, decommissioning can occur in situ and structures may be left in place. When this happens, impacts can include marine pollution from corrosion, ecosystem changes, damage to fishing equipment, and navigational hazards to shipping.

E4: Biodiversity and ecosystems**Direct impact drivers of biodiversity loss**

High impact activities in the sector include, but are not limited to land clearance, seismic testing, drilling of exploration wells, infrastructure establishing, transportation, water and waste discharges, spills and leaks. Such activities may result in contamination of air, soil and water, soil erosion, and sedimentation of waterways, contributing to degradation of biodiversity and ecosystems. Considering that biodiversity-related risks are likely to increase within the sector with progressing resources depletion and moving of activities into new, more remote areas, it is essential to monitor and manage the direct, indirect and cumulative impacts, within both short and long term.

Impacts on the state of species

Impacts on the state of species can include animal mortality or increased vulnerability to predators, habitat fragmentation and conversion, as well as the introduction of invasive species and

pathogens, land degradation, or soil sealing. Severe effects from activities can be exacerbated when activities occur in protected areas or areas of high biodiversity value and may extend well beyond the closure and rehabilitation of operational sites or geographic boundaries of activities.

Impacts on the extent and condition of ecosystems

Due to its multiple potential direct and indicated impacts, sector activities can lead to significant land degradation (e.g. due to pollution) and soil sealing (e.g. due to road construction, increased local economic activity, etc), impacts that occur by same pressures that drive land-use change.

Impacts and dependencies on ecosystem services

Sector activities may affect ecosystems' ability to regulate water flow, water quality, and hazards like fires and floods, provide a suitable habitat for pollinators (who in turn provide a service directly to people and economies), and sequester carbon (in terrestrial, freshwater and marine realms). Monitoring of direct, indirect and cumulative impacts on biodiversity in long and short term is therefore of essential importance to environment, but is also vital to human health, food security, economic prosperity, and mitigation of climate change and adaptation to its impacts.

E5: Resource and circular economy

Resources inflows, including resource use

The oil and gas sector activities are based on inflow of geologically stored fossil fuels. Optimising resource exploitation, improving resource efficiency and implementing effective ways of materials management are therefore critical to minimize local risks to the environment and communities, as well as improve the cost efficiency. The opportunities for efficient use of materials include renewable and alternative energy generation, implementing responsibly produced materials in supply chain and undertaking circularity measures that aim at reusing or recycling materials (for example, recycling of construction materials, oil regeneration, recycling of plastic waste).

Resource outflows related to products and services

Resource outflows refer to materials, products and services coming out of the sector, including petroleum products put on the market and their packaging. Opportunities aimed to enhance circular economy can include prevention of post-consumer waste, design to recycle and all the activities to increase material recirculation and minimise disposal.

Waste

Regular activities, development of new facilities, as well as decommissioning of infrastructure typically generates high volumes of waste, including hazardous waste. The waste streams can consist of drilling muds and cuttings, tailings, scale or sludges, which may contain high amounts of pollutants and carry the risks of environment contamination. Waste streams that cannot be reduced, or diverted from disposal, are typically stored, treated or disposed through various methods. Undertaking's infrastructure and approach to waste management is therefore critical to avoid severe environmental impacts.

SOCIAL

S1: Own workforce

Working conditions

The sector's continuous operation results in many jobs having complex shift patterns, including long shifts and/or night shifts, which may create health and safety risks for the workforce. Examples of work that may result in extended shifts include fly-in fly-out arrangements (FIFO) to operational sites or works at marine vessels. Irregular work shifts and schedules, time spent away from families, and potentially limited communication facilities can further impact workers' physical,

psychological, and/or social health. The job security is also a concern for the sector, linked to potential job loss due to oil price drops or changing business models, including work automation. Organizations in the sector can support workers by planning for a just transition and developing their skills to improve employability in other sectors.

Equal treatment and opportunities for all

The required conditions, locations, skills, and types of work associated with the oil and gas sector can be a barrier for entry, hinder employee diversity and result in discrimination. Discriminatory practices can limit access to jobs, as well as lead to inequalities in treatment, remuneration, and benefits. Cases of discrimination in the sector may include race, colour, sex, gender, disability, religion, national extraction, and worker status. Recruitment bias and unequal pay may also create disadvantage for local communities. The sector features significant gender imbalance, showing especially in senior management positions. Limited parental leave, extended work arrangements, social or cultural biases, or specific country-laws preventing women from working in hazardous or arduous occupations may also increase the barriers to job access.

Other work-related rights

The sector's business relationships, including relations with state-owned enterprises in countries where violations of human rights occur, may result in incidents of forced labour and modern slavery. Some oil and gas resources are in countries where collective bargaining and trade unions are restricted. Regardless of location, limitations of collective bargaining and trade unions may significantly limit worker representations and result in unfair treatment. In specific conditions, organizations in the oil and gas sector may employ alternative means of worker representation and engagement. Large group in the sector is represented by contract workers, often excluded from collective bargaining agreements and facing less favourable employment and remuneration conditions.

S2: Workers in the value chain

Working conditions

While the sector generates employment across all its value chain, its practices may also be associated with negative impacts, such as disparities in working conditions for contract workers, ineffective labour-management consultations and job insecurity. Outsourcing activities is common in the industry, resulting in reduced labour costs and avoiding collective agreements. It may cause less favourable conditions for contract workers, lower remuneration, less training, higher accident rates, diminished job security, lack of social protection or access to the grievance mechanisms, as well as unequal terms between different groups of workers. Lack of relevant skills, knowledge, or accessible training programs may also restrict local communities from accessing employment opportunities created by the sector.

Equal treatment and opportunities for all

The conditions, locations, necessary skills, and types of work associated with the oil and gas sector can be a barrier for entry, hinder employee diversity, and result in discrimination. Discriminatory practices can impede access to jobs and career development, as well as lead to inequalities in treatment, remuneration, and benefits. Documented cases of discrimination in the oil and gas sector concern race, color, sex, gender, disability, religion, national extraction, and worker status. The sector's widespread use of contract workers, often with differing terms of employment, can also be conducive to discrimination.

Other work-related rights

The sector is exposed to risks of violations of human rights and other ways of exploitation in its supply chain, which may include organizations that operate in the countries with low rates of enforcement of human rights. Activities at risk can include work at oil fields and offshore platforms,

such as in catering, cleaning, construction, maintenance and waste management, as well as in marine and land transportation activities. Operations aboard ships registered in countries other than the country of the ship's beneficial owner may create increased risks of human rights violations linked to external crewing companies and obscured accountability. Offshore work may bring risk of forced labour due to isolated locations and challenges in enforcing appropriate measures. Selection of suppliers using social criteria is essential to mitigate negative impacts.

S3: Affected communities

Communities' economic, social and cultural rights

The sector positive impacts may include investment and income for local communities, local employment and procurement, community education and training, leading to increased purchasing power and local business development. Depending on the organization practices, the industry can also cause negative impacts related to potential economic disparities, increased dependence of local suppliers and vulnerability of local groups. For example, an influx of external workers may increase pressure on housing, infrastructure and public services. Local communities may also need to cope with environmental legacy costs of sector activities. The transition to a low-carbon economy is expected to decrease the activity in the oil and gas, making communities that depend on the sector more vulnerable to the resulting economic downturn.

Communities' civil and political rights

Oil and gas activities may trigger local conflict or intensify existing ones, especially in the areas characterized by social and political instability. Possible causes to conflicts may include negative environmental impacts, inadequate engagement of stakeholders and indigenous people in decision-making, uneven or disproportionate distribution of economic benefits or disputes over the use of land and natural resources. Such conflict can heighten the need to engage security personnel, increasing the risks for violations of human rights, such as the rights to freedom of association and freedom of speech, as well as lead to violence, injuries, or deaths. Organizations in the sector have responsibility to ensure security practices consistent with protection of human rights and facilitating communication to address the sources of conflict.

Particular rights of indigenous communities

Sector's proximity to communities can present economic opportunities and benefits for indigenous peoples through employment, training, and community development programs. However, it can also disrupt indigenous peoples' cultural, spiritual, and economic ties to their lands or natural environments, on which they may be dependent. Sector's activities may risk compromising indigenous peoples' social cohesion, rights, safety and well-being, cause displacement or limit access to water for those communities. Some negative impacts may affect indigenous women more severely than men. Indigenous peoples have often a special legal status and before initiating development on lands or resources that indigenous peoples use or own, organizations are expected to seek free, prior, and informed consent (FPIC).

S4: Consumers and/or end-users

Information-related impacts for consumers and/or end-users

The undertakings in the sector have unique access to information channels and mainstream media which are shaping narratives around sustainability matters. Oil and gas companies are also facing significant pressure from stakeholders to provide transparent and comprehensive information on their environmental and social performance. In the past, the sector has faced multiple controversies around information practices and the alignment of its corporate communication with globally established climate and social targets remains an important sustainability matter.

Personal safety of consumers and/or end-users

Consumer safety is an important part of the safety management within the retail part of the sector. The retail sale of automotive fuel is typically realised under multiple safeguards that prevent potential threats of fires at the gas pumps and allow safe dispensing and handling of fuels. Entities in the sector need to identify and manage any actual and potential impacts on the personal safety of consumers, implementing policies related to keeping safe from fire and explosion hazards, emissions of carbon monoxide, safe storage and disposal of fuels, but also theft, violence or slip and fall accidents.

Social inclusion of consumers and/or end-users

Through its activity related to the fuels production, the sector is in the value chain of mobility, which in some areas can have an impact on social inclusion.

GOVERNANCE

G1: Business conduct

Corporate culture

Given the wide sustainability impacts of oil and gas sector, as well as its dynamics and complexity, a system of shared values and norms are essential to provide a clear expectation on behaviours for stakeholders across the whole value chain. The corporate culture is essential to manage the risks related to governance and it typically envelops code of conduct and ethics within the organization, policies related to dialogue with stakeholders, as well as the governance bodies influencing organization.

Political engagement and lobbying activities

The oil and gas sector can exert significant influence on government policies and is among the sectors with the largest lobbying expenditures. In regions where activities generate significant revenues, organizations in the sector may obtain better representation amongst government representatives and increased power over public policy decisions. Strong political influence creates risks of disruption to the policies and regulations, unequal distribution of governmental subsidies or setting commodity prices that do not reflect the full costs of products. Monitoring and management of political engagement of the sector is essential for effective allocation of national resources towards the low-carbon economy transition, sustainable development and decreasing dependence on the fossil fuels.

Management of relationships with suppliers including payment practices

Organizations in the oil and gas sector deal with many complex financial transactions, including payments to suppliers and governments. The fair behaviour with suppliers is essential to avoid supply chain disruption, especially in context of dealing with small and medium enterprises, which can be particularly vulnerable to late payments. Transparency of payments to governments, reporting country-level and project-level payments can also help distinguish the economic importance of the oil and gas sector to countries, enable public debate, and inform government decision-making. It can also enable governments to address tax avoidance and evasion, correct information asymmetry and level the playing field for governments when negotiating contracts.

Corruption and bribery

Corruption in the oil and gas sector can occur throughout the value chain and has been linked to various negative impacts, such as misallocation of resources revenues, damage to the environment, abuse of democracy and human rights, and political instability. Due to its characteristics of interactions and complexity of financial transactions, the oil and gas sector faces higher risks of corruption in comparison with other sectors. To combat corruption and prevent the negative impacts that stem from it, organizations in the oil and gas sector are expected by the marketplace, international norms, and stakeholders to demonstrate their adherence to integrity,

governance, and responsible business practices. Responsible business conduct of the sector also includes the anti-competitive behaviour practices as well as beneficial ownership.