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Exposure Draft ESRS Oil and Gas
As approved by EFRAG SR TEG on 6 June 2024

DISCLAIMER

The [Draft] ESRS *Oil and Gas* is set out in paragraphs 1-130 and the following Appendices, that have the same authority as the main body of the Exposure Draft.

- Appendix A: Defined Terms;
- Appendix B: Application Requirements;
- Appendix C: Application Requirements supporting the assessment of materiality of the information;
- Appendix D: List of datapoints that emanate from EU Law;
- Appendix E: NACE codes: Oil and Gas;
- Appendix F: Description of sustainability matters that are most relevant to *Oil and Gas* sector.

The [Draft] ESRS *Oil and Gas* is accompanied by the non-binding Appendix G: Description of sustainability matters.

This draft also uses terms defined in sector-agnostic ESRS and shall be read in the context of its objective. The terms defined in sector-agnostic ESRS are marked with *italic bold, blue font*.

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Objective and structure of this [draft] standard

1. Consistent with ESRS 1 paragraph 10, the objective of this [draft] ESRS is to specify disclosure and application requirements that enable users of sustainability statements to understand material impacts, **risks** and **opportunities**, that are likely to be material for all undertakings in a specific sector and that are not covered, or not sufficiently covered, by topical standards. This [draft] ESRS covers the **sustainability matters** that are most relevant to the Oil and Gas sector.
2. This [draft] ESRS specifies disclosure and application requirements as follows:
 - (a) additional sector-specific datapoints and/or application requirements related to sector-agnostic disclosure requirements. Additional datapoints are located in the main body of this standard and additional Application Requirements are located in Appendix B. In both cases, these additional datapoints and application requirements are identified by having in their title the relevant disclosure requirement of sector-agnostic ESRS to which they relate (e.g. *ESRS2.IRO2.OG*).
 - (b) sector-specific Disclosure Requirements are presented in the main body of this [draft] standard and are identified by a progressive numbering (OG 1, OG 2, etc.). Their respective Application Requirements are presented in Appendix B.
3. The requirements classified in this [draft] standard as **Policies**, **Actions** and **Targets** are subject to the materiality provisions of paragraph 33 of ESRS 1. Those classified as **Metrics** are subject to the materiality provisions of paragraph 34 of ESRS 1. In relation to additional metrics sector-specific datapoints in this [draft] standard, when assessing the condition of paragraph 34 (b), the undertaking shall refer to the objective of the relevant Disclosure Requirement in the sector agnostic ESRS.

Scope of application

4. An undertaking is within the scope of application of this [draft] ESRS when *Oil and Gas* is a significant sector according to paragraph 40 (b) and/or (c) of ESRS 2 *General Disclosures*, using the criteria set in AR 13 of ESRS 2 to define a significant sector, as well as according to paragraph ## of [Draft] SEC 1.
5. [draft] ESRS SEC 1 *Sector classification* defines the aggregation of activities (NACE codes) into sectors for the purposes of applying sector ESRS. The NACE codes that pertain to the *Oil and Gas* sector are listed in Appendix D to this [draft] ESRS, consistent with [Draft] SEC 1.
6. The *Oil and Gas* sector is composed of *upstream*, *midstream*, *downstream* and *service* sub-sectors. The undertakings operating within these sub-sectors are referred respectively to as **upstream-**, **downstream-**, **midstream-** and **service undertakings**, according to the definitions in Appendix A.
7. Oil and Gas *upstream* sub-sector refer to the undertakings carrying out activities of 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 in this sub-sector are classified under NACE B.06.10 Extraction of crude petroleum and B.06.20 Extraction of natural gas.
8. Oil and Gas *midstream* sub-sector covers undertakings carrying out activities that include 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 in this sub-sector are classified under NACE H.49.50 Transport via pipeline.
9. Oil and Gas *downstream* sub-sector refers to undertakings carrying out activities that include refining (classified under NACE C.19.20) and marketing of petroleum products, including operating gas stations and convenience stores (classified under NACE G.46.71 and G.47.30).
10. Oil and Gas *services* sub-sector refers to undertakings that 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. Services are usually provided on a contractual basis, and equipment is either purchased, leased or rented. Activities in this sub-sector are classified under NACE include B.09.10 Support activities for petroleum and natural gas extraction.

11. Integrated oil and gas undertakings are involved in activities in more than one of the above sub-sectors, typically across upstream, midstream and downstream activities. Such undertakings may need to report disclosure requirements and data points for each of the activities or apply specific disclosure requirements or data points.

Presentation of sector-specific disclosures

12. Disclosures stemming from the [draft] *Oil and Gas* ESRS shall be presented alongside the disclosures required by the corresponding sector-agnostic ESRS and following the provisions prescribed by ESRS 1 paragraph 116 of ESRS 1.

Material matters and materiality of information [SRB tentative decision on 4 June 2024: move to SEC 1 as common to all sectors]

13. The table in paragraph 18 of this [draft] ESRS identifies the list of matters that are most relevant to the sector. This list supports the undertaking’s materiality assessment, in conjunction with the list in paragraph AR 16 of ESRS 1.
14. Irrespective of the outcome of its materiality assessment, the undertaking shall always disclose the information required by this [draft] ESRS that are sector specifications of:
 - (a) ESRS 2 *General Disclosures* (i.e. all the Disclosure Requirements and data points specified in this draft ESRS that are sector specifications of ESRS 2); and
 - (b) of the Disclosure Requirements (including their datapoints) in topical ESRS related to the Disclosure Requirement *IRO-1 Description of the process to identify and assess material impacts, risks and opportunities*, as listed in ESRS 2 *Appendix C Disclosure/Application Requirements in topical ESRS* that are applicable jointly with ESRS 2 *General Disclosures*.
15. The undertaking shall apply paragraphs 33, 34 and 35 of ESRS 1, when determining the information to be reported on a material sustainability matter, prescribed by the requirements in this [draft] ESRS.
16. For metrics prescribed in this [draft] ESRS that are not datapoints in Appendix C: *List of datapoints that emanate from EU Law*; if the undertaking omits information prescribed by either a Disclosure Requirement or a datapoint of a Disclosure Requirement, such information is considered to be implicitly reported as “not material for the undertaking”.

Sustainability matters that are most relevant to the Oil and Gas sector

17. When performing its materiality assessment, the undertaking shall consider the following list of sustainability matters that are considered most relevant to the Oil and Gas sector, in conjunction with the list of sustainability matters in ESRS 1, paragraph AR 16.
18. Appendix F to this [draft] ESRS illustrates the relationship between this list and the one in ESRS 1 paragraph AR 16 and which disclosures are applicable to each matter.

Topic	Sub-Topic	Sub-Sub-Topic
E1 Climate change	Climate change adaptation Climate change mitigation Energy	Methane*, **
E2 Pollution	Pollution of air*, ** Pollution of water*, **	

	<p>Pollution of soil* , **</p> <p>Pollution of living organisms and food resources*</p> <p>Substances of concern*</p> <p>Substances of very high concern*</p>	
E3 Water and marine resources	<p>Water</p> <p>Marine resources</p>	<p>Water withdrawals</p> <p>Water consumption</p> <p>Water use</p> <p>Water discharges in the oceans **</p> <p>Water discharges in inland water bodies**</p> <p>Habitat degradation and intensity of pressure on marine resources**</p>
E4 Biodiversity and Ecosystems	<p>Direct impact drivers on biodiversity loss*</p> <p>Impacts on the state of species*</p> <p>Impacts on the extent and conditions of ecosystems*</p> <p>Impacts and dependencies on ecosystem services*</p>	
E5 Circular economy	<p>Resource inflows, including resource use</p> <p>Resource outflows related to products and services</p> <p>Waste**</p>	
S1 Own workforce	<p>Working conditions</p>	<p>Adequate wages and secure employment</p> <p>Working time and work-life balance</p> <p>Freedom of association and collective bargaining</p> <p>Health and safety*</p>
	<p>Equal treatment and opportunities for all</p>	<p>Training and skills development</p> <p>Measures against violence and harassment in the workplace</p> <p>Diversity, including gender equality and equal pay for work of equal value</p>
	<p>Other work-related rights</p>	<p>Child labour</p> <p>Forced labour</p> <p>Adequate housing</p> <p>Privacy</p>
S2 – Workers in the value chain	<p>Working conditions</p>	<p>Secure employment</p> <p>Working time</p> <p>Adequate wages</p> <p>Social dialogue</p> <p>Freedom of association, including the existence of work councils</p> <p>Collective bargaining</p> <p>Work-life balance</p> <p>Health and safety</p>
	<p>Equal treatment and opportunities for all</p>	<p>Diversity, including gender equality and equal pay for work of equal value</p>
	<p>Other work-related rights</p>	<p>Child labour</p> <p>Forced labour</p> <p>Adequate housing</p> <p>Water and sanitation</p> <p>Privacy</p>
S3 Affected communities	<p>Communities’ economic, social and cultural rights**</p>	<p>Adequate housing</p> <p>Adequate food</p> <p>Water and sanitation</p> <p>Land-related impacts*</p> <p>Security-related impacts</p>
	<p>Communities’ civil and political rights</p>	<p>Freedom of expression</p> <p>Freedom of assembly</p>

		Impacts on human rights defenders
	Particular rights of indigenous peoples, including free, prior and informed consent; self-determination; and cultural rights	Free, prior and informed consent * Self-determination Cultural rights
S4 Consumers and end-users	Information-related impacts for consumers and/or end-users	Access to (quality) information
	Personal safety of consumers and/or end-users	Health and safety
	Social inclusion of consumers and/or end-users	Access to products and services Responsible marketing practices
G1 Business Conduct	Political engagement and lobbying activities Management of relationships with suppliers including payment practices Corruption and bribery Cybersecurity	

19. The items identified with * are expected to be material for the undertaking when the cross-topical sector matter industrial hazard is material for the undertaking.
20. The items identified with ** are expected to be material for the undertaking when the cross-topical sector matter closure of asset is material for the undertaking.
21. The undertaking shall disclose its **policies, actions and targets** in relation to each of the **sustainability matters** in the table above that have been assessed to be material, applying the **minimum disclosure requirements** on **policies, actions and targets** required under ESRS 2.

Disclosure requirements

ESRS 2 General disclosures

ESRS 2.IRO2.OG – Conclusions on material matters and reported information [SRB tentative decision on 4 June 2024: move to SEC 1 as common to all sectors]

22. The undertaking shall disclose the conclusions of its materiality assessment regarding the list of sustainability matters presented in the table in paragraph 18 of this [draft] standard, providing a brief explanation, in relation to the undertaking's specific facts and circumstances, of which matters in the list have been assessed to be material and which have not. Specific facts and circumstances include the undertaking's business model, its specific activities, the location of its sites, its products, and its business relationships. This disclosure may be presented alongside the information prescribed by paragraph 38 of ESRS 2.
23. When the undertaking omits the Disclosure Requirements prescribed by this [draft] ESRS that are applicable to a subsector of activity (refer to the Appendix C of this [draft] ESRS) which the undertaking does not operate, the brief explanation of paragraph 22 does not need to cover the Sustainability Matters which the omitted Disclosure Requirements refer to.
24. The list disclosed following paragraph 56 of ESRS 2 shall include the Disclosure Requirements of this [draft] sector ESRS complied with in preparing the sustainability statement.

ESRS 2.SBM1.OG – Activity indicators

25. In addition to the information provided following 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) into the following NACE-code activities¹:
- (a) B.06.10 Extraction of crude petroleum
 - (b) B.06.20 Extraction of natural gas
 - (c) G.46.71 Wholesale of solid, liquid and gaseous fuels and related products
 - (d) G.47.30 Retail sale of automotive fuel in specialised stores
 - (e) H.49.50 Transport via pipeline
 - (f) other NACE codes
26. The undertaking shall disclose the following activity indicators²:
- (a) **Upstream undertaking** that extracts crude petroleum shall disclose its total crude oil production, in barrels (bbl), with breakdown into:
 - i. oil sands or other extra heavy oil extracted;
 - ii. shale oil extracted via hydraulic fracturing;
 - iii. crude oil extracted **near** or in nature sensitive areas.
 - (b) **Upstream undertaking** that extracts natural gas shall disclose its total natural gas production, in normal cubic meters (Nm³), with breakdown into:
 - i. natural gas extracted and processed into Liquefied Natural Gas (LNG);
 - ii. shale gas extracted via hydraulic fracturing;
 - iii. natural gas extracted **near** or in nature sensitive areas.
 - (c) **Midstream undertaking** that distributes oil products shall disclose its total oil products distribution volume, in megalitres (Ml);
 - (d) **Downstream undertaking** that refines products shall disclose its total refined volume, in barrels (bbl), with breakdown into:
 - i. oil sands or other extra heavy oil;
 - ii. shale oil extracted via hydraulic fracturing
 - (e) **Downstream undertaking** that sells power in retail stations (EV chargers) shall disclose its total, in megawatt hour (MWh), including:
 - i. sales of electricity with a GHG intensity of less than 100 gCO₂e/kWh
27. The undertaking shall disclose its volumes of renewable fuels for fuel blending, by including the following indicators expressed in net volume of barrels of oil equivalent (bbl):
- (a) renewable fuels produced;
 - (b) renewable fuels purchased.
28. The undertaking shall provide an estimation of the total addressable market and the share of market for advanced biofuels and associated infrastructure.
29. The undertaking shall disclose its production targets corresponding to the years specified in its medium- and long-term emission reduction targets disclosed according to E1-4. This disclosure shall include:
- (a) production forecast of crude oil (bbl)
 - (b) production forecast of natural gas (Nm³)

¹ This disclosure requirement is consistent with the requirements included in EBA Pillar 3 ITS Template 1 [Banking book – Climate change transition risk – Credit quality of exposures by sector, emissions and residual maturity](#).

² This disclosure requirement is consistent with the requirements included in EBA Pillar 3 ITS Template 4 [Banking book – Climate change transition risk – Alignment risks](#)

ESRS 2.SBM2.OG

30. When disclosing how the undertaking engages with its **stakeholders** in compliance with ESRS 2 SBM-2, the undertaking shall describe whether it incorporates the OECD Due Diligence Guidance for Meaningful Stakeholder Engagement in the Extractives Sector, Furthermore, the undertaking shall disclose the following:
- (a) the approach to identifying stakeholders within the affected communities;
 - (b) a description of the vulnerable groups that the undertaking has identified within the affected communities by significant operational site, such as women, children, young workers, migrants and their families, indigenous peoples, etc.

Cross-topical sector disclosures

OG 1. Mapping of operational sites

31. **The undertaking shall disclose a list of its significant *operational sites* which are either under its financial, or operational control, with specification of the *sustainability matters* to which they are connected.**

32. The objective of this Disclosure Requirement is to enable an understanding of which significant **operational sites** are connected with specific material **sustainability matters**.

Metrics

33. For each of the **operational sites** in the list, the undertaking shall include:
- (a) basic description, including name and a description of the activities and main characteristics of each site;
 - (b) location (NUTS region in the EU, country + region outside EU);
 - (c) type of control: financial or **operational control**;
 - (d) status of site (active; undergoing closure; closed and rehabilitated; or closed and not rehabilitated);
 - (e) material impacts related to social or environmental matters to which operational site is connected to, including:
 - i. whether the site is located in or **near** the **protected areas** or a **key biodiversity area**. If so, the undertaking shall specify the impacts to the affected habitats and **ecosystems** and describe **biodiversity** management and adaptive management activities in place;
 - ii. whether the undertaking is connected to material impacts on the local community, specifically, in relation to;
 - 1. **indigenous peoples** ;
 - 2. land rights;
 - 3. infrastructure, including housing, food, water and sanitation, and power;
 - 4. **pollution**;
 - 5. **hazardous waste** storage or disposal;
 - 6. voluntary or involuntary resettlements that have been taking place or are ongoing **near** the site, subject to legal restrictions on the disclosure.
 - iii. whether the site is located in or near conflict-affected or high-risk areas; and
 - iv. whether the site is located in **areas at water risk**.
 - (f) the percentage of top management and **employees** recruited from the affected community, including **indigenous people**.

OG 2. Oil and gas reserves

34. **The undertaking shall disclose its proved oil and gas reserves.**
35. The objective of this Disclosure Requirement is to enable an understanding of an undertaking's **proved reserves**.
- Metrics**
36. The undertaking shall disclose the total **proved reserves** of oil (bbl) and gas (Nm³) and the percentage of proved reserves that are:
- (a) in countries with high risks of corruption, money laundering and financing of terrorism
 - (b) in or **near** conflict-affected or high-risk areas;
 - (c) in or **near** the indigenous land;
 - (d) in or **near protected areas** and **key biodiversity areas**; and
 - (e) in areas of **high-water stress**.
37. The undertaking shall disclose for each line item the corresponding countries where it has **reserves**.

OG 3. Industrial hazards

38. **The undertaking shall disclose information related to the industrial hazards.**
39. The objective of this Disclosure Requirement is to enable an understanding of the material impacts, risks and opportunities related to industrial hazards connected to the undertaking's operations, as well as how the undertaking manages them.
- Policies, actions and targets**
40. When reporting according to ESRS E2-1 to E2-3, the undertaking shall disclose its **policies, actions** and **targets** related to the industrial hazards. In this context, it shall consider its **policies, actions** and **targets** related to:
- (a) Spills and loss of containment events for hydrocarbons;
 - (b) Spills and loss of containment events for other chemicals used in operations;
 - (c) Management of **tailings** from oil sands mining and structural safety of tailing ponds or dams.
41. When reporting according to ESRS S1-1, S-4 and S-5, the undertaking shall disclose consider its **policies, actions** and **targets** related to occupational health services. In this context it shall consider **policies, actions** and **targets** that contribute to the minimisation of **impacts and risks** and identification and elimination of hazards; and how it ensures the quality of those services and facilitates workers' access to them.
- ESRS E2 -Metrics**
42. The undertaking shall disclose the following **metrics** related to pollution:
- (a) With regards to **water** pollution:
 - i. total number and volume (in barrels) of **hydrocarbon spills** to water;
 - ii. total number and volume (in m³) of other chemical **spills** to water.
 - (b) With regards to **soil** emissions:
 - i. total number and volume (in barrels) of hydrocarbon spills to soil;
 - ii. total number and volume (in m³) of other chemical **discharges** to soil.
 - (c) Number of spills during transportation, namely:
 - i. pipeline incidents and percentage of significant spills;
 - ii. rail and truck transportation incidents and percentage of significant spills.
 - (d) the total number of significant spills that occurred during the reporting period and volume by substance, as well as how it defines significant spill;

- (e) the number and percentage (compared to the total number of storage tanks) of underground storage tanks requiring clean-up;
43. The undertaking shall disclose the following **metrics** on the process safety events, as defined by the International Association of Oil & Gas Producers (IOGP), including:
- (a) number of Tier 1 process safety events reported separately for each major business activity, such as refining or upstream;
 - (b) 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) explanation of how the undertaking reviews the assessment and management of process safety risks.

ESRS S1 -Metrics

44. The undertaking shall disclose the following information if its workforce is exposed to respectively chemical, physical or ergonomic hazards:
- (a) for chemical hazards, a list of the **substances of very high concern (SVHCs)** that workers are exposed to in its operations and how these affect its workforce;
 - (b) for physical hazards, a list of the factors that contribute to these hazards, such as thermal strain and stress or noise and vibrations and how these affect its workforce; and
 - (c) a description of ergonomic hazards and how these affect its workforce.
45. The undertaking shall disclose the following **metrics** related to health and safety and training:
- (a) health and safety incidents as a result of being exposed to chemicals (including to crystalline silica, hydrogen sulphide, hydrocarbons exposure, harmful or carcinogenic hydrocarbon gases and vapours); and provide a breakdown between **employees** and **non-employee** in **own workforce** for i. and ii. below:
 - i. the number of work-related fatalities,
 - ii. the number of **work-related injuries**; and
 - iii. the number of cases of **recordable work-related ill health** for the undertaking's **employees**.
 - (b) the minimum number of hours of **training** per worker received by its own workforce on health, safety and emergency preparedness, with respect to occupational risks or hazards to which its own workforce is reasonably likely to be exposed. Such information shall be broken down by **employees** and **non-employee**.

OG 4. Closure of assets

46. **The undertaking shall disclose information related to the closure of assets.**
47. The objective of this Disclosure Requirement is to enable an understanding of the material impacts, risks and opportunities related to closure of assets in the undertaking's operations, as well as how the undertaking manages them.
- #### **Policies, actions and targets**
48. When reporting according to ESRS E2-1 to E2-3, the undertaking shall disclose its **policies, actions** and **targets** related to the **closure of assets**. In this context, it shall consider its **policies, actions** and **targets** related to:
- (a) addressing the adoption of closure plans for operational sites;
 - (b) **actions** allocated to the closure of assets.
49. When reporting according to ESRS S1/3-1, S1/3-4 and S1/3-5, the undertaking shall disclose its **policies, actions** and **targets** related to the closure of assets. In this context it shall consider:
- (a) closure, rehabilitation and/or restoration plans for operational sites;

- (b) integrating (future) financial liabilities stemming from the closure, post-closure, and sales of operational sites into the undertaking financial planning;
- (c) consultation on the post-closure plans with **affected communities**;
- (d) closure and rehabilitation of sites, including resources allocated.;

Metrics

- 50. The undertaking shall list the **operational sites** for which there is no existing or foreseen site rehabilitation plan.
- 51. Where applicable, the undertaking shall disclose whether it developed the post-closure plans in consultation with local communities.
- 52. The undertaking shall disclose the material financial liabilities it expects to incur for closure and rehabilitation, for each **operational site**, including environmental and social post-closure monitoring and aftercare for its sites. in particular:
 - (a) monetary amount recognised in the financial statements;
 - (b) undiscounted monetary value of (a) split by time horizon;
 - (c) discount rate used to calculate (a);
 - (d) contingent liabilities that do not meet the accounting recognition criteria at the reporting date; and
 - (e) whether the operational site has been sold to a third party.
- 53. If the relevant information is already disclosed in the financial statements, the undertaking may incorporate by reference to the relevant paragraph in the financial statements.

Environmental disclosures

ESRS E1 – OG Climate change

Policies, actions and targets

- 54. When reporting according to ESRS E1-2, E1-3 and E1-4, the undertaking shall disclose its **policies, actions** and **targets** related to the management and abatement of methane emissions. In this context, it shall consider its **policies, actions** and **targets** related to:
 - (a) implementation of Leak Detection & Repair (LDAR) programmes;
 - (b) addressing the methane leakages found as a result of the regular monitoring surveys;
 - (c) GHG emissions from Scope 3 category 11 “Use of sold products”; and
 - (d) methane emissions.

Metrics

- 55. In addition to the information provided following ESRS E1-1, the undertaking shall provide a breakdown of its CapEx monetary amounts for the reporting period and its forward-looking CapEx plans for the short and medium-term in relation to:
 - (a) development of reserves into production (developed producing reserves), split by CapEx on:
 - i. **undeveloped reserves**;
 - ii. non-producing reserves;
 - iii. **developed producing reserves**;
 - (b) development of new infrastructure projects related to **fossil fuel** transportation and distribution;
 - (c) other CapEx, including capitalized research and development initiatives that can address the undertaking’s **risks** related to climate change;
- 56. The undertaking shall disclose its:

- (a) transition-related R&D monetary expenditures for the reporting year on research and development of technologies, solutions and business models that can address the undertaking's **risks** related to climate change;
 - (b) its definition of transition-related R&D expenditures.
57. The undertaking shall additionally disclose the following financial metrics in monetary amounts:
- (a) Breakdown of its revenues and CapEx pertaining to:
 - i. conventional oil and gas activities;
 - ii. unconventional oil and gas activities;
 - (b) Forward looking CapEx plans to align with IEA Net Zero Emissions 2050;
 - (c) Price of oil barrel used on impairment testing;
 - (d) Accounted provisions for on-going lawsuits, with reference to financial reporting.
58. When disclosing information in accordance with ESRS E1-1 paragraph 16 (d), the undertaking shall disclose a quantitative assessment of **locked-in GHG emissions** related to its **proven reserves**, in MtCO₂, as well as a breakdown of those emissions by the following categories:
- (a) **developed producing reserves;**
 - (b) **developed non-producing reserves;**
 - (c) **undeveloped reserves.**
59. In addition to the information provided following ESRS E1-6, the undertaking shall disclose a breakdown:
- (a) of its total Scope 1 **GHG emissions** into total CO₂ and methane emissions;
 - (b) of total **Scope 1 GHG emissions** by type of source, namely:
 - i. stationary combustion;
 - ii. **flaring;**
 - iii. **venting,** and
 - iv. **fugitive emissions.**
60. In addition to the information provided following ESRS E1-6, the undertaking shall disclose its **GHG emissions** intensity per unit of energy produced:
- (a) upstream undertakings shall disclose the GHG intensity of its energy production (CO₂e/unit of energy)³;
 - (b) undertakings operating refineries shall disclose their CO₂/CWT (Complexity Weighted Tonne);
 - (c) undertakings with marketing activities shall disclose GHG intensity of the final energy it sells (CO₂e/unit of energy).
61. When disclosing under E1-6, the undertaking with integrated operations shall separately report **Scope 3** category, 'Use of sold products emissions' associated with each segment (upstream, midstream, and downstream) of its integrated operations.
62. In addition to the information provided following ESRS E1-6, with regards to its methane emissions, the undertaking shall disclose:
- (a) the geographical location (country) of any significant **flaring** or **venting** emissions;
 - (b) the percentage of routine and non-routine flaring, and the efficiency of combustion.
63. In addition to the information provided following E1-9, the undertaking shall disclose how it expects the management of climate change-related **risks** and **opportunities** to affect

³ This disclosure requirement is consistent with the requirements included in EBA Pillar 3 ITS Template 1 [Banking book – Climate change transition risk – Credit quality of exposures by sector, emissions and residual maturity](#).

the medium and long-term financial position, performance and development. This should include:

- (a) anticipated of changes in the investments from the current levels dedicated to the development of oil and gas **proved reserves**;
 - (b) anticipated changes in investments from the current levels in development of low-carbon products and services or adaptation solutions;
 - (c) the anticipated investments to develop new infrastructure projects related to fossil fuel transportation and distribution;
 - (d) potential write-off situations that do not meet the accounting recognition criteria at the balance sheet date; and
 - (e) anticipated early closure of existing assets and consequent effects on useful life of the existing assets.
64. If the relevant information is already disclosed in the financial statements, the undertaking may incorporate by reference to the relevant paragraph in the financial statements.

OG 5. Carbon capture and storage

65. **The undertaking shall disclose its activities related to CO₂ abatement technologies.**

66. The objective of this Disclosure Requirement is to provide an understanding of the extent to which the undertaking is implementing CO₂ abatement technologies at scale (e.g. Carbon Capture and Storage - CCS) on its own sources or providing it as a service to others. It also enables the understanding of how issues related to potential liabilities for transported and stored CO₂ leakage are being dealt and reported following Disclosure Requirement E1-6.

Policies, actions and targets

67. When reporting according to ESRS E1-2, E1-3 and E1-4, the undertaking shall disclose its **policies**, **actions** and **targets** related to the CO₂ abatements. In this context it shall consider its **policies**, **actions** and **targets** related to addressing the risk of non-permanence of carbon capture and storage, including determining and monitoring the leakage and reversal events.

Metrics

68. The undertaking shall disclose the total 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 to outside 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).

69. When disclosing its amounts of CO₂ abated, the undertaking shall report:

- (a) total CO₂ captured and stored for the reporting period;
- (b) total CO₂ stored at the end of the reporting period;
- (c) total CO₂ leakage from transport and storage of CO₂ in the reporting period (tCO₂);
- (d) total energy use associated with CO₂ abatement activities.

70. The undertaking shall disclose the source of CO₂ it stored in reporting period, by providing a breakdown of total CO₂ storage into:

- a) Percentage of CO₂ emissions captured from the stack

- b) Percentage of CO₂ emissions captured from the well
- c) Percentage of CO₂ derived from Direct Air Capture (DAC)
- d) other

ESRS E2 – OG Pollution

Policies, actions and targets

71. When reporting according to the ESRS E2-1 to E2-3, the undertaking shall disclose its **policies**, **actions** and, if applicable, **targets** related to pollution. In this context, it shall consider its policies, actions and targets related to:
- (a) inspecting and maintaining critical infrastructure (e.g., pipelines and valves);
 - (b) monitoring the quality of the environment around its **operational sites**;
 - (c) identifying and implementing Best Available Techniques;

Metrics

72. The undertaking shall disclose the number of non-compliances with Environmental Quality Standards (defined by local regulation or permitting conditions) **near** its operational sites in the reporting period.
73. In addition to the information provided following ESRS E2-4, the undertaking shall disclose the following **metrics** related to hydraulic fracturing:
- (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 are deteriorated compared to a baseline;
 - (c) volume of **hydraulic fracturing fluid** used in cubic meters.

ESRS E3 – OG Water and marine resources

Policies, actions and targets

74. When reporting according to the ESRS E3-1 to E3-3, the undertaking shall disclose its **policies**, **actions** and **targets** related to the water and marine resources. In this context it shall consider its policies, actions and targets related to:
- (a) management of water as a shared resource, particularly in areas at water risk and where conflicts between different water uses may emerge;
 - (b) improving the quality of the water discharged.

OG 6. Water and marine resources metrics

Metrics

75. **The undertaking shall disclose its water withdrawals, discharges, and the metrics related to exploration of deposits in the ocean areas.**
76. The objective of this disclosure requirement is to enable an understanding of the **water withdrawals** and water **discharges** and, for undertakings active in upstream and services sub-sectors, of the extent to which the undertaking is involved in exploration of oil and gas deposits in ocean areas.
77. The undertaking shall disclose the total volume of **water withdrawals** and **water discharges**, disaggregated into:
- (a) surface water;
 - (b) groundwater;
 - (c) other water.

78. With regards to the **water withdrawals** disclosed according to paragraph 77 points (a), (b) and (c), the undertaking shall disclose the share (percentage) of water withdrawn from the **areas at water risk**.
79. The undertaking shall disclose the number of non-compliances in the reporting period with respect to local regulatory or discharge limits and indicate exceeded parameters.
80. The undertaking shall report on which **operational sites** referred to in OG 1. Mapping of operational sites its activities have a significant impact on groundwater level and environmental-flows and what measures are put in place to counteract these effects.
81. The undertaking shall report in which water basin its operations significantly impact hydrological conditions (e.g. drainage flows, hydrogeology, etc) and in which water basin these have or are likely to have a material impact on groundwater level and environmental-flows and what measures are put in place to mitigate these effects.
82. The undertaking shall disclose:
- (a) the volume of the water it discharges to the environment or exports to third parties;
 - (b) the destination of the volume disclosed in (a) and the impacts arising from it;
83. The undertaking that is active in the upstream and services sub-sectors shall provide information on marine resources-related activity indicators, namely disclosing 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.

ESRS E4 – OG Biodiversity and ecosystems

Policies, actions and targets

84. When reporting according to the ESRS E4-1 and E4-4, the undertaking shall disclose its **policies, actions** and **targets** related to biodiversity and ecosystems. In this context, it shall consider its policies, actions and targets related to:
- (a) phasing-out existing operations and/or stopping operational investments in or near key biodiversity areas;
 - (b) minimising biodiversity and ecosystem impacts from current and future operations in or near key biodiversity areas; c)
 - (c) achieving no net loss or achieve a net gain to biodiversity on operational sites;
 - (d) managing average direct land-use change of oil and gas wells ;
 - (e) managing direct land-use change from oil sands mining activity;
 - (f) managing percentage of impacted area rehabilitated or restored.

Metrics

85. The undertaking shall disclose significant impacts on **biodiversity** and **ecosystems** change:
- (a) average **land-use change** per oil and per gas well site, differentiating between on-shore and off-shore wells;
 - (b) percentage of land-use change area rehabilitated or restored during the reporting period differentiating between on-shore and off-shore operations and the percentage of land-use change area rehabilitated or restored in the **protected areas** and the **key biodiversity areas**;
 - (c) the total number of IUCN Red list species and national conservation list species with habitats in areas affected by the operations of the undertaking, by level of extinction risk.
86. The undertaking shall report **metrics** related to material **biodiversity** and **ecosystem** change impacts in accordance with ESRS E4-5, per each operational site located in or **near** the **protected areas** and in **key biodiversity areas** that is listed according to the disclosure OG 1. *Mapping of operational sites*.

ESRS E5 – OG Circular economy

Policies, actions and targets

87. When reporting according to the ESRS E5-1, E5-2 and E5-3, the undertaking shall disclose its **policies, actions and targets** related to circular economy. In this context, it shall consider its policies, actions and targets related to:
- (a) application of circular economy principles to equipment and machinery assets,
 - (b) drilling waste (muds and cuttings, scale, sludges) and tailings,
 - (c) materials resulting from decommissioning activities for offshore and onshore assets, facilities and infrastructure.

Metrics

88. In addition to reporting on the resource outflows following ESRS E5-5, the undertaking shall disclose the percentage of materials resulting from decommissioning activities for offshore and onshore assets, facilities and infrastructure that are re-used or recycled.
89. The undertaking shall also disclose 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;
 - (d) tonnes of sludges;
 - (e) tonnes of **tailings**;
 - (f) tonnes of decommissioned materials.
90. In addition to reporting resource outflows according to Disclosure Requirement E5-5 (paragraph 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 Disclosure Requirement E5-5 37 (b) i-iii.

Social disclosures

ESRS S1 – OG. Own workforce

Policies, actions and targets

91. When reporting according to ESRS S1-1, S1-4, S1-5, the undertaking shall disclose its **policies, actions and targets** related to its **own workforce**. In this context, it shall consider its **policies, actions and targets** related to:
- (a) 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;
 - (b) working time and **work-life balance** when operating round-the-clock or in remote locations.

OG 7. Work stoppages

92. **The undertaking shall disclose the number of major work stoppages during the year, including number of employees involved and their length.**
93. The objective of this Disclosure Requirement is to enable an understanding of the extent of major work stoppages and their effects on the undertaking.

Policies, actions and targets

94. When reporting according to ESRS S1-1, S1-4, S1-5, the undertaking shall disclose its **policies, actions** and, if applicable, **targets** related to major work stoppages. In this context, the undertaking shall consider its **policies** to address the cause of major work stoppages and **actions** to resolve potential disputes (for example worker disputes or protests by affected communities).

Metrics

95. The undertaking shall disclose the following **metrics** related to major work stoppages:
- (a) the number of major work stoppages;
 - (b) for each major work stoppage
 - i. the number of employees involved
 - ii. the length in days of the stoppage.

ESRS S2 – OG. Workers in the value chain

Policies, actions and targets

96. When reporting according to ESRS S2-1, S2-4, S2-5, the undertaking shall disclose its **policies, actions and targets** related to **value chain workers**⁴ health and safety. In this context the undertaking shall consider :
- (a) the health and safety performance of potential **value chain workers** in its selection process ,
 - (b) the applicability of its own health and safety management system to workers of **value chain workers** performing work on site and
 - (c) the monitoring health and safety metrics for the **value chain workers** while working on site.

ESRS S3 – OG. Affected communities

Policies, actions and targets

97. When reporting according to ESRS S3-1, S3-4, S3-5, the undertaking shall disclose its **policies, actions** and **targets** related to the engagement with **indigenous peoples, including** through the tailings facility lifecycle. In this context it shall consider its **policies, actions** and **targets** related to:
- (a) engagement with **indigenous peoples**, including through the tailings facility lifecycle in building knowledge and in decisions that may have a bearing on public safety;
 - (b) land and resources rights: the recognition of legitimate tenure rights holders when acquiring, leasing or making other arrangements to use, or restrict the use of land, including involuntary resettlement, and the process for establishing compensation for loss of assets other assistance to improve or restore standards of living or livelihoods; and the use of the land after the closure of the **operational site**;
 - (c) respecting and protecting **environmental** and **human rights defenders**;
 - (d) preventing attacks against **environmental** and **human rights defenders**.

Policies, actions, targets

Metrics

98. The undertaking shall disclose the following **metrics** in relation to seeking **free, prior and informed consent (FPIC)**:

⁴ ESRS S1 *Own Workforce* includes employees and non-employees (individual contractors supplying labour to the undertaking, and people provided by undertakings primarily engaged in 'employment activities' (NACE Code N78)). Workers not in scope of *Own Workforce* are considered workers in the value chain (and are defined as individuals performing work in the value chain of the undertaking, regardless of the existence or nature of any contractual relationship with the undertaking).

- (a) whether it has been involved in a process of seeking FPIC from *indigenous peoples* for any of its activities;
- (b) if the undertaking has been involved in such processes, the following information for each of the operational sites in question:
 - i. whether the process has been mutually accepted by the undertaking and the affected *indigenous peoples*; and
 - ii. whether an agreement has been reached, and if so, if the agreement is publicly available.

OG 8. Security personnel

99. **The undertaking shall disclose the percentage of security personnel within *own workforce* that has received *training* about the undertaking's human rights *policies*.**

Metrics

100. The objective of this Disclosure Requirement is to enable an understanding of the extent to which the undertaking's security personnel are trained on the undertaking's human rights *policies* and an understanding of how these are respected when engaging with *affected communities*.
101. 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 of its security personnel 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 a description of the type of violation.

OG 9. Engagement with affected communities and grievance mechanisms

Metrics

102. **The undertaking shall disclose *metrics* regarding engagement with *affected communities* and the performance of its grievance mechanisms.**
103. The objective of this Disclosure Requirement is to enable an understanding of the engagement with *affected communities* and grievance mechanisms on impacts connected to the undertaking.
104. The undertaking shall disclose the number of sites with grievance mechanisms or similar conflict resolution procedures for the operational sites listed in OG 1, Mapping of operational sites. If the undertaking does not operate local grievance mechanisms at the operational site level as these are at group or company level, it may fulfil this requirement by stating this to be the case. It may disclose its plans to develop grievance mechanisms at operational site level.
105. The undertaking shall disclose the percentage of operational sites that have implemented development programs and/or the following:
- (a) affected community engagement;
 - (b) impact assessments, including:
 - i. social impact assessments, including gender impact assessments, based on participatory processes;
 - ii. environmental impact assessments and ongoing monitoring.
 - (c) works councils, occupational health and safety committees and other worker representation bodies to deal with impacts.
106. In addition, for (b) above, the undertaking shall disclose whether the results of environmental and social impact assessments have been made public.

107. The undertaking shall disclose for the operational sites listed in OG 1 and at aggregated level per each country where it has material investments, 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.

OG 10. Environmental and human rights defenders

Metrics

108. **The undertaking shall disclose the number of *incidents* in which environmental and human rights defenders were involved.**
109. The objective of this Disclosure Requirement is to enable an understanding of the undertaking's engagement with and respect for ***environmental*** and ***human rights defenders*** and the extent to which ***incidents*** occur.
110. The undertaking shall provide the number of ***incidents*** related to ***environmental and human rights defenders*** and identify those that relate to vulnerable groups.

Governance disclosures

ESRS G1 - OG. Business conduct

Policies, actions and targets

111. When reporting according to ESRS G1-2 and G1-6, the undertaking shall disclose its ***policies, actions and targets*** related to the ***management of relationships with suppliers and payment practices*** with respect to the proportion of the procurement spending on local suppliers.
112. The undertaking shall adopt an appropriate level of disaggregation to reflect the level of similarities existing, such as disaggregating at operational site level, or per group of operational sites, or per geographical area, as applicable.

Metrics

113. When reporting according to ESRS G1-5 paragraph 29, the undertaking shall disclose:
- (a) what it spent (as a reporting entity) during the reporting period on ***lobbying activities*** with contents covering its material impacts, ***risks*** and ***opportunities*** identified in its ***materiality*** assessment;
 - (b) the number of open cases before courts or other competent authorities at the end of the reporting period that concern claims about misleading commercial practices or public communication related to sustainability;
 - (c) the number of similar cases resolved during the reporting period and the outcomes of such cases.

OG 11. Transparency about contracts and licenses

114. **The undertaking shall provide information about the transparency with respect to contracts and licenses with governments setting the terms and conditions for the exploitation of *oil and gas resources*.**
115. The objective of this Disclosure Requirement is to provide an understanding of the transparency of the undertaking about its contracts concluded and licences received.

Metrics

116. For any material ***contract*** or ***license*** the undertaking shall disclose:
- (a) whether these are made publicly available and where they can be found;
 - (b) for those ***contracts*** or ***licenses*** not publicly available, the reason for this and, if applicable, ***actions*** taken to publish in the future and the timetable to do so.

OG 12. State-aid and competition

117. **The undertaking shall provide information concerning possible anti-competitive behaviour, the abuse of dominance, or the receipt of state aid during the reporting period.**

118. The objective of this Disclosure Requirement is to enable an understanding of possible anti-competitive behaviour of the undertaking during the reporting period, as well as any **state aid** received.

Metrics

119. The disclosure shall include the following information:

- (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; and
- (b) the main outcomes of legal proceedings against the undertaking concluded during the reporting period, including sanctions, fines, commitments and remedies;
- (c) the total amount received with respect to **state aid** or financial assistance received from any government on a country-by-country basis.

OG 13. Beneficial ownership

120. **The undertaking shall provide information about its beneficial ownership and how it identifies the beneficial owners of business partners, including joint ventures and suppliers.**

121. The objective of this Disclosure Requirement is to provide transparency about the undertakings beneficial owner(s) and to provide an understanding of its **policy** regarding the beneficial owners of its business partners and how these are identified.

Policies, actions and targets

122. When reporting according to ESRS G1-1 and G1-3, the undertaking shall disclose its **policies, actions and targets** related to the **prevention and detection of corruption and bribery**. In this context, it shall consider its policies, actions and targets, covering guidelines and screening processes regarding politically exposed persons ('PEPs') and beneficial owners of business partners, including joint ventures and suppliers.

Metrics

123. The undertaking shall disclose a list of its beneficial owner(s) (as defined in article 3(6) of Directive (EU) 2015/849).

OG 14. Oil and gas purchased from states

124. **The undertaking shall provide information about oil and gas purchased from states or a third party appointed on the behalf of such states during the reporting period.**

125. The objective of this disclosure requirement is to enable transparency about oil and gas purchases from **the state** and to provide insights amounts paid to the state under such transactions.

Metrics

126. 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 oil and gas purchased from the state;
- (b) full names of the buying undertaking(s) and the recipient of the payment; and
- (c) payments made for the purchase.

OG 15. Cybersecurity

127. **The undertaking shall provide information about the management of its cybersecurity as well as on cyber incidents during the reporting period.**

128. The objective of this Disclosure Requirement is to enable an understanding of the undertaking's policies and management of risks regarding **cybersecurity** and to provide transparency on failures related to cybersecurity.

Policies, actions and targets

129. When reporting according to ESRS G1-1 the undertaking shall disclose its **policies, actions and targets** reflecting its approach to **cybersecurity**. In this context it shall consider its policies, actions and targets related to cybersecurity and cyber related incident management for existing operations, projects planned or underway and new locations for business activities, including assessment of threats, vulnerabilities and related **risks**.

Metrics

130. For the incidents that were made public, the undertaking shall disclose:

- (a) the number of incidents, during the reporting period;
- (b) the number of operational sites impacted; and
- (c) whether this involved restricted or **classified information**.

Appendix A: Defined terms [ITEMS IN BLUE TO BE MOVED TO SEC 1]

This appendix is an integral part of this Exposure Draft and has the same authority as the other parts of this Exposure Draft.

Term	Description
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>
Conflict-affected and high-risk areas	<p>Areas in a state of armed conflict or fragile post-conflict as well as areas witnessing weak or non-existent governance and security, such as failed states, and widespread and systematic violations of international law, including human rights abuses.</p>
Contract	<p>The full text of any contract, concession, production-sharing agreement or other agreement granted by, or entered into by, the government which provides the terms attached to the exploitation of mineral resources or coal.</p> <p>The full text of any annex, addendum or rider which establishes details relevant to the exploitation rights described above or the execution thereof.</p> <p>The full text of any alteration or amendment to the documents described above.</p>
Cyber security	<p>Cyber security relates to activities necessary to protect network and information systems, the users of such systems and other persons affected by cyber threats. It constitutes a comprehensive framework encompassing tools, policies, security concepts, safeguard measures, guidelines, risk management approaches, actions, training, best practices, assurance, and technologies that can be used to protect the cyber environment, the organisation and user's assets.</p> <p>Organisation and user's assets encompass a broad spectrum, including connected computing devices, personnel, infrastructure, applications, services, telecommunication systems, and all transmitted and/or stored information within the cyber environment .</p>
Decommissioning activities	<ol style="list-style-type: none"> 1) The action of withdrawing from service the offshore facilities and infrastructure, and the Plugging & Abandonment (P&A) of offshore wells. 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.
Developed non-producing reserves	<p>Shut-in and behind-pipe Reserves. Shut-in Reserves are expected to be recovered from (1) completion intervals that are open at the time of the estimate but which have not yet started producing, (2) wells which were shut-in for market conditions or pipeline connections, or (3) wells</p>

	<p>not capable of production for mechanical reasons. Behind-pipe Reserves are expected to be recovered from zones in existing wells that will require additional completion work or future re-completion before start of production with minor cost to access these reserves. In all cases, production can be initiated or restored with relatively low expenditure compared to the cost of drilling a new well.</p>
Developed producing reserves	<p>Expected quantities to be recovered from completion intervals that are open and producing at the effective date of the estimate. Improved recovery Reserves are considered producing only after the improved recovery project is in operation.</p>
Downstream undertaking(s)	<p>Undertakings active in refining and marketing of petroleum products, including operation of gas stations and convenience stores (NACE codes C.19.20, G.46.71 and G.47.30). As such, the downstream undertakings referred to in this standard shall be understood differently from downstream value chain actors (e.g. customers) used to describe business relationships.</p>
Drilling waste	<p>Extractive residues commonly generated during exploration and production of oil and gas, both onshore and offshore. The main types of drilling waste include drilling cuttings, drilling fluids and interfacial mixtures. Drill cuttings are particles of crushed rock sand, silt and clay produced by the action of the rotary drill bit as it penetrates into the earth. Drilling fluids, also referred to as 'muds', and are mixtures of fine-grained solids, inorganic salts, and organic compounds dissolved or dispersed/suspended in in a 'continuous phase' (the base fluid) which may be water (water-based muds) or an organic liquid (non-aqueous muds, which can be oil-based or synthetic-based). Interfacial mixtures are more commonly referred to as 'slops'. Slop water or slop mud are produced when the drilling fluid becomes contaminated with water; or an aqueous fluid (such as a completion brine) becomes contaminated with NADF or reservoir hydrocarbons.</p>
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>
Environmental defenders	<p>The term "environmental defenders" refers to individuals and groups who, in their personal or professional capacity and in a peaceful manner, strive to protect and promote human rights relating to the environment, including water, air, land, flora and fauna. Land and environmental rights are interlinked and are often inseparable. As a result, the two broad categories of defenders advocating for the environment and for land rights are often characterized as "land and environmental rights</p>

	defenders”, “environmental rights defenders”, or just “environmental activists”.
Flaring	Gas flaring is the burning of natural gas associated with oil extraction. When gas needs to be disposed of, it may be flared (burned off), or vented (released without being burned). Flaring converts gas to CO ₂ , while venting releases CH ₄ directly to the atmosphere.
Fugitive emissions	Gas leakages directly into the atmosphere through valves and seals, hoses and flexible piping, as well as evaporation from hydrocarbon liquids and from cuttings. 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.
High-risk area(s)	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. 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.
Hydraulic fracturing fluid	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.
Hydrocarbon spill(s)	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).
Human right defenders	The term “human rights defenders” refers to individuals, groups and organs of society that promote and protect universally recognised human rights and fundamental freedoms. Human rights defenders seek the promotion and protection of civil and political rights as well as the promotion, protection and realisation of economic, social and cultural rights. Human rights defenders also promote and protect the rights of members of groups such as indigenous communities. The definition does not include those individuals or groups who commit or propagate violence.
Licence	The full text of any license, lease, title or permit by which a government confers on an undertaking(s) or individual(s) rights to exploit mineral resources or coal. The full text of any annex, addendum or rider that establishes details relevant to the exploitation rights described above or the execution thereof. The full text of any alteration or amendment to the documents described above.

Local supplier	Suppliers in the community surrounding operations, a region within a country, or a country.
Midstream undertaking(s)	Undertakings active in the transportation and storage of natural gas, crude oil and refined petroleum products (NACE code H.49.50)
Migrant worker	A person who is to be engaged, is engaged or has been engaged in a remunerated activity in a state of which they are not nationals.
Near	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.
Oil and gas resources	“Undiscovered, technically recoverable resources” estimated to exist based on geologic knowledge and theory.
Operational site	Means the site geographical area where the business activities are performed, whether these are owned or operated by the undertaking, and includes the land, structures and any other surrounding areas and equipment. For the purpose of example, a site may be a platform where a multiple wells are operated.
Other water	Surface water that is not fresh water, and water from other sources
Politically Exposed Persons (PEP)	An individual entrusted with a prominent public function.
Posted workers	A worker who, for a limited period, carries out his work in the territory of a Member State other than the State in which he normally works.
Probable reserves	Probable reserves (or P2) are those additional reserves which are less likely to be recovered than proved reserves (<90%) but more certain to be recovered than possible reserves (>50%).
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.
Reserves	Part of a mineral deposit which could be economically and legally extracted or produced at the time of the reserve determination.
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. 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: 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.</p>

Service undertaking(s)	Undertakings active in support activities and provision of equipment to oil and gas value chain (NACE code B.09.10)
Significant spills	Spills that are included in the organization's financial statements, for example due to resulting liabilities, or is recorded as a spill by the organization.
Spills	Accidental releases of hazardous substances such as chemicals, oils, fuels and other substances. They can affect water, soil and air quality as well as biodiversity and human health.
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: 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> <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 objectives for which State aid can be considered compatible. These exemptions can be found in legislation relevant to State aid. For non-EU countries, state aid refers to financial assistance received from any government.</p>
Surface water	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.
Tailing(s)	Oil sands tailings are a mixture of water, sand, fine silts, clay, residual bitumen and lighter hydrocarbons, inorganic salts and water-soluble organic compounds.
Throughput	The amount of product that moves through a particular facility during a given period of time.
Tier (1/2/3) 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: 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.</p> <p>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>

<p>Transmission pipelines</p>	<p>Pipelines 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 transport 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.</p>
<p>Transmission pipelines</p>	<p>Pipelines 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 transport 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.</p>
<p>Underground storage tank(s)</p>	<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>
<p>Undeveloped reserves</p>	<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>
<p>Upstream undertaking(s)</p>	<p>Undertakings active in development, exploration and production of conventional and unconventional oil and gas reserves (NACE codes B.06.10 and B.06.20). As such, the upstream undertakings referred</p>

	to in this standard shall be understood differently from upstream value chain actors (e.g. suppliers) used to describe business relationships.
Venting	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.
Work stoppage	Work stoppages include strikes, defined as a temporary work stoppage, and lockouts, defined as the total or partial temporary closure of one or more places of employment or the hindering of the normal work activities of employees, which one or more groups of workers carry out with a view to enforcing or resisting demands or expressing grievances, or supporting other workers in their demands or grievances.

Appendix B: Application Requirements

This Appendix is an integral part of the proposed [draft] ESRS Oil and Gas and has the same authority as the other parts of the Standard.

Application Requirements related to ESRS 2 General disclosures

ESRS 2 GOV-4

- AR 1. If the undertaking carries out activities concerned by the *OECD Due Diligence Guidance for Meaningful Stakeholder Engagement in the Extractive Sector*, it may disclose a mapping of the information provided in its sustainability statement to this OECD Guidance.
- AR 2. The undertaking may disclose procurement practices, as well as environmental factors in its mapping. 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	

ESRS 2.SBM.1.OG – Activity indicators

- AR 3. For the purpose of this Disclosure Requirement paragraph 20, net revenue shall be understood as being aligned with the Taxonomy Regulation (EU) 2020/852 including any delegated regulations related to climate change mitigation and climate change adaptation.
- AR 4. When disclosing under paragraph 27:
- (a) the renewable fuels produced shall include biofuel, cellulosic biofuel, ethanol, advanced biofuels, and other renewable fuels for use in fuel blending. The undertaking may additionally provide further breakdowns of its total production capacity into specific categories, such as advanced biofuel, cellulosic biofuel and others; .
 - (b) net volumes of renewable fuels are understood as volumes produced or purchased for use in fuel blending, less amounts sold to independent third parties.
- AR 5. When disclosing according to paragraph 28:
- (a) the advanced biofuels shall be understood as biofuels other than ethanol derived from corn starch (kernels) and having 50% lower lifecycle greenhouse gas emissions relative to gasoline;
 - (b) the total addressable market for advanced biofuels and associated infrastructure is understood as potential revenue, should the entity capture 100% of the market share of the product category. The market share shall be calculated as revenue from the advanced biofuels and associated infrastructure, divided by the total addressable market. When disclosing its estimations on the total addressable market, the undertaking may additionally provide a projection of growth for this market, as well as the targeted market share that the undertaking plans to address.

ESRS 2 SBM-3

- AR 6. The undertaking may consider disclosing which impacts on *affected communities* are specific to vulnerable groups such as children, women, *migrant workers*, *indigenous peoples* or any other vulnerable group, as applicable.

ESRS 2 IRO-1

- AR 7. When the undertaking is conducting its materiality assessment of impacts, risks and opportunities in relation to affected **communities**, it shall consider how it addresses any risks related to free, prior, and informed consent from **indigenous peoples** in countries without regulation or processes in place.
- AR 8. It may disclose whether, as part of its materiality assessment, it performs a risk assessment for new country entry before the subscription of a contract in a new country of operations.
- AR 9. When conducting its materiality assessment on topics related to E2, E3 and E4, the undertaking may consider the first three phases of LEAP approach, also known as:
- (a) Phase 1. Locate where in the undertaking's own operations and along its upstream and downstream value chain the interface with nature takes place
 - (b) Phase 2: evaluate the dependencies and impacts
 - (c) Phase 3: assess the material risks and opportunities

Application Requirements related to cross-topic disclosures

OG 1. Mapping of operational sites

- AR 10. The mapping of operational sites concerned by this disclosure includes both those that are under the undertaking's financial control and those under **operational control**. The site is significant for the undertaking, if it meets one or both of the following criteria:
- (a) the site is among its major sites;
 - (b) it is connected with material actual impacts or material potential negative impacts.
- AR 11. For the purposes of this disclosure, the following are operational sites:
- (a) concessioned areas for oil and gas production currently under development or in production;
 - (b) concessioned areas for oil sands with tailing dams or ponds;
 - (c) LNG & Natural gas processing facilities;
 - (d) refinery assets; or
 - (e) oil and gas transmission pipelines.
- AR 12. Workers hired from **affected 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.
- AR 13. The geographical definition of 'affected' can include the community surrounding operations, a region within a country, or a country. The undertaking shall consider its definition of local when preparing this disclosure and disclose it.
- AR 14. The undertaking may disclose whether it has assessed or identified potential negative **impacts** in the local communities caused or contributed by its hiring **policy**.
- Operational control**
- AR 15. The undertaking shall determine on the basis of the specific facts and circumstances which asset is under **operational control**. The following are examples of transactions where the undertaking has **operational control**:
- (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 arrangement (or equivalent commercial arrangement), and operated by a partner, in respect of which the company can determine management and board level operational decisions of the joint venture.
- AR 16. Examples include mobile assets, such as vehicles or ships. The information about material impacts, **risks** and **opportunities** includes these mobile assets when owned and operated by

the reporting undertaking. However, if 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 17. In relation to paragraph 63 of ESRS 1, operations and assets under “**operational control**” shall not be considered as part of the upstream or downstream value chain, but as part of own operations.

AR 18. 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 <i>near</i>			Contribution to local community material impacts
	KBA	Conflict-affected or <i>high-risk areas</i>	Areas at water risk	
	[Yes/No]	[Yes/No]	[Yes/No]	[Narrative]

OG 2. Oil and gas reserves

AR 19. When disclosing under the Disclosure Requirement *OG 2. Oil and gas reserves*, paragraph 36 and 37, 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 20. With reference to paragraph 36 (a), the countries identified as high-risk are:

- (a) countries or jurisdictions identified in the Financial Action Task Force ‘black list’; or
- (b) countries that have the 20 lowest rankings in Transparency International Corruption Perception Index

AR 21. 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 22. 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 23. The undertaking may present the information in tabular format, as per the following table:

	Oil (million bbl)	Gas (million Nm ³)	Countries
TOTAL, of which %			
in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index;	%	%	Country A, Country B, Country C
in or near conflict-affected or high-risk areas;	%	%	Country D, Country B,
in or near indigenous land;	%	%	Country E, Country F, Country C
in or near sites protected areas and key biodiversity areas; and	%	%	Country A, Country B, Country C
in areas at water risk.	%	%	Country D, Country B

AR 24. With reference to the reserves located in or near conflict-affected or high-risk areas, referred to in paragraph 36 (b):

- (a) Reserves shall be considered to be in or near a conflict-affected or high-risk **area** 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 areas.

AR 25. With reference to the reserves located in or **near** indigenous land, referred to in paragraph 36 (c), indigenous lands are considered those occupied by **indigenous peoples**.

AR 26. With reference to the reserves in or **near** the **protected areas** and the **key biodiversity areas**, referred to in paragraph 37 (d), the undertaking may calculate the percentage 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 percentage which overlaps with a key biodiversity area and allocating reserves based on that percentage. The undertaking may also clarify to what extent proved reserves are developed or undeveloped, given the potential differential impact risk between them.

AR 27. With reference to the reserves in areas at high water stress, referred to in paragraph 36 (e), the undertaking may calculate the % of reserves by proportionality, this is, by computing of their proved reserves in a concession area and determining the percentage which overlaps with areas at water risk and allocating reserves based on that percentage.

OG 3. Industrial hazards

AR 28. For the purpose of disclosure in paragraph 42 (c), a pipeline incident is an event in a pipeline for which the operator must make a report to the authority. Main causes include corrosion, aging pipelines, natural disasters, and excavation.

AR 29. When disclosing metrics on the process safety events according to paragraph 43, the undertaking may also:

- (a) provide the number of Tier 2 process safety events, reported separately for each major business activity, such as refining or upstream;

- (b) describe how it assesses, monitors and reviews the process safety and well control risk control barriers;
- (c) describe its approach and application of Tier 3 and 4 **metrics**;
- (d) describe how it incorporates cultural and human factors into process safety, including leadership, risk awareness and **employee** development;
- (e) state any commitments or **targets** it has 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.

AR 30. 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 31. The undertaking may disclose the following information in relation to **actions** related to land and resources rights

- (a) lessons learned to prevent recurrence; and
- (b) its regular review process of the assessment and management of process safety risks.

AR 32. The undertaking may specify whether sexual harassment is considered among psychosocial factors.

AR 33. In relation with the health and safety management system, the undertaking may disclose whether it takes into consideration specific differences for female workers (for example, in the equipment provided, or whether occupational health services and facilities take into consideration specific health-related concerns, etc.). (ESRS S1-1)

OG 4. Closure of assets

Policies, actions and targets

AR 34. For the purpose of this disclosure, the undertaking shall consider a closure plan as a plan addressing the aspects of decommissioning, rehabilitation or restoration and long-term monitoring of the site-level pollution. Closure plans also address aspects related to landscaping and **biodiversity** rehabilitation or restoration.

AR 35. When disclosing its **policies, actions** and **targets**, the undertaking shall consider the following related to closure of **operational sites**:

- (a) how it helps **employees** and **non-employee** workers manage the adverse impacts arising from the closure of its operational site(s);
- (b) 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);
- (c) the collaborative efforts, projects and programs that are set up to manage the socio-economic impact of closure and restoration programs and disclose these;
- (d) how it engages with worker and other **stakeholders** in informing the closure plans, as well as notice periods regarding closure.

AR 36. When disclosing on the material financial liabilities according to paragraph 52, the undertaking shall also consider the costs necessary to address:

- (a) adverse impacts of closure of the operational site on **own workers, non-employee** workers and their communities (Disclosure Requirement related to ESRS 2 SBM-3); and
- (b) the restoration of material impacts to **biodiversity** and **ecosystems** around the closed operational site (Disclosure Requirement related to ESRS E4-2).

AR 37. The description of how an undertaking engages with local communities shall consider an explanation on how the land will be used after the closure of the operational site.

- AR 38. 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) waste management;
 - (e) surface water and groundwater quality issues resulting from spills and leaks; and
 - (f) 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 39. The operational life of **operational sites** may last for several decades, therefore 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 40. When disclosing its processes to remediate negative impacts following 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).
- AR 41. The undertaking may disclose whether, in relation to closure and post-closure, it has addressed potential access-barriers faced by **affected communities**, particularly by vulnerable groups, to reach the channels in place (e.g., understandable language, technological resources, accessible to children).

Application Requirements related to environmental disclosures

ESRS E1 – OG Climate change

Policies, actions, targets

- AR 42. When reporting the information required under Disclosure Requirement E1-4 on **targets** related to **climate change mitigation**, the undertaking may disclose the mandatory legislation the goals and targets are aligned with or contribute to.
- AR 43. When reporting according to ESRS E1-2, E1-3 and E1-4, when a LDAR programme exists, the undertaking may provide a brief description of the programme including: the frequency of the monitoring; the different methane monitoring technologies, e.g. remote sensing techniques or estimation method.

Metrics

- AR 44. When reporting according to this sectors' Disclosure Requirement ESRS E1-OG Climate change related to ESRS E1-1, the undertaking may further detail these categories to align OpEx and CapEx plans with the EU Taxonomy.
- AR 45. CapEx referred to in paragraph 55 means Capital Expenditure and, in accordance with Commission Delegated Regulation (EU) 2021/2178 of 6 July 2021, it shall cover costs that are accounted based on:
- (a) IAS 16 Property, Plant and Equipment, paragraphs 73, (e), point (i) and point (iii);
 - (b) IAS 38 Intangible Assets, paragraph 118, (e), point (i);
 - (c) IAS 40 Investment Property, paragraphs 76, points (a) and (b) (for the fair value model);
 - (d) IAS 40 Investment Property, paragraph 79(d), points (i) and (ii) (for the cost model);
 - (e) IFRS 16 Leases, paragraph 53, point (h).

- AR 46. When disclosing the potential **locked-in GHG emissions** according to sector agnostic Disclosure Requirement E1-1 paragraph 16 (d) from the undertaking's assets and products,

the undertaking shall consider the emissions potential of proven (P1) reserves of their oil and gas assets and shall calculate this potential considering the recommendations of the World Resource Institute⁵.

AR 47. With reference to paragraph 59, the undertaking may disclose also locked-in emissions of probable (P2) reserves.

AR 48. When disclosing the breakdowns of revenues and CapEx invested into conventional and unconventional oil and gas activities according to paragraph 57 (a):

- (a) conventional oil and gas activities shall be understood as activities associated with exploitation of geological formations that concentrate hydrocarbons into discrete accumulations or pools, which typically have high porosity and permeability which allows for simple extraction of the resource. Examples of conventional oil and gas activities include crude oil and natural gas extraction by using, among others, vertical well bore or draglines.
- (b) unconventional oil and gas activities are associated with formations that are diffusely distributed with low porosity and permeability and/or where recovering the resources requires application of specialised techniques. Examples of unconventional oil and gas include offshore production, oil sands, shale gas, tight gas and coal bed methane extraction using techniques such as steam-assisted gravity drainage or hydraulic fracking, as well as arctic oil and gas or ultra-deepwater extraction.

AR 49. When reporting according to ESRS E1-6, the **Service undertaking** shall consider its **Scope 3 category** 13 'Leased assets', i.e. the emissions associated with the use of the assets they have leased to undertakings in the oil and gas value chain.

AR 50. When reporting its **Scope 3 category** 11, 'Use of sold products emissions' in accordance with ESRS E1-6, AR 46, the undertaking shall consider:

- (a) for **upstream undertakings**, 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 involves 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) for **midstream undertakings**, 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) for **downstream undertakings**, 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;
- (d) for **service undertakings**, the emissions associated with the use of the products they have sold.

AR 51. When disclosing its methane emissions, the undertaking may consider the *Guidelines for Methane emissions target setting* issued by GIE (Gas Infrastructure Europe), IOGP (International Association of Oil & Gas Producers) and MARCOGAZ (Technical association of the European gas industry)⁶.

AR 52. When disclosing its methane emissions, the undertaking may disclose if it participates in any partnership programme on methane management, such as the Oil & Gas Methane Partnership 2.0⁷.

AR 53. For purposes of calculating the percentage of routine flaring referred to in paragraph 62 (b), the undertaking shall consider the total number of hours of routine flaring and divide them by the number of hours in a year (8760). The percentage of non-routine flaring is calculated in a similar way. Routine flaring occurs on a regular basis due to the normal operations of a facility. Non-routine flaring is distinguished from routine flaring by the magnitude, frequency and duration of flaring events, being characterized by infrequent occurrence, high-emission rates, short-event durations and usually the result of operating conditions outside normal steady-

⁵ [A recommended methodology for estimating and reporting the potential greenhouse gas emissions from fossil fuel reserves, World Resource Institute, 2016](#)

⁶ [Guidelines for Methane emissions target setting, GIE, IOGP, MARCOGAZ](#)

⁷ [The Oil & Gas Methane Partnership 2.0](#)

state plant process or equipment operations. While non-routine flaring is considered unavoidable due to safety of operations, routine flaring can be eliminated entirely. More information can be found in the World Bank Global Gas Flaring Reduction Partnership⁸.

AR 54. When reporting according to E1-9, the undertaking shall consider among as a source of financial effects, the financial risks associated with a narrower access to finance as a consequence to investors and lenders adopting investment policies to limit or phase-out the exposure to fossil fuel.

OG 5. Carbon capture and storage

AR 55. In case of leakages in transport and storage of CO₂, the undertaking shall account for the respective emissions in accordance with the provision of ESRS E1-6.

AR 56. For the purpose of disclosing metrics related to CO₂ abated in paragraphs 68 and 69, permanent carbon storage shall be understood as the set of activities, that under normal circumstances and using appropriate management practices stores atmospheric carbon or biogenic carbon for several centuries.⁹

ESRS E2 – OG Pollution

AR 57. For the purpose of paragraph 72, the Environmental Quality Standards refer to legally binding policy instruments that are imposed to remedy the environmental impact of pollutants emitted to air, water and land. They can be imposed by regulations – e.g., regulation imposing air quality limits such as 2008/50/EC (under revision) – or by conditions in permits to operate. They are usually accompanied by obligations to monitor with a certain frequency the specified parameters in the natural environment to ensure the environmental quality standards can still be observed in the surroundings of the pollution source(s).

AR 58. When disclosing on its policies, actions and targets related to pollution, the undertaking may disclose the technologies it uses to manage and monitor its impact on air quality, such as technologies that remove or treat combustion emissions in operations or fuel products.

AR 59. When disclosing its policies, actions and targets on monitoring the quality of the environment around its operational sites, the undertaking may disclose the percentage of operational sites that have an environmental monitoring plan in operation.

AR 60. When reporting its policies, actions and targets on pipeline inspections the undertaking may disclose the percentage of natural gas pipelines inspected and the percentage of hazardous liquid pipelines inspected.

AR 61. When disclosing under E2-6 Anticipated financial effects from pollution-related impacts, risks and opportunities, the undertaking shall consider the **financial effects** of **incidents** with environmental impacts related to pollution, such as spills, leakages, uncontrolled discharges or other operational safety events.

AR 62. **Financial effects** include the liabilities from pollution events, namely the costs of remedial action, as defined in Directive 2004/35/CE on environmental liability with regard to the prevention and remedying of environmental damage.

AR 63. Undertakings shall refer to the Commission Notice 2021/C 118/01¹⁰ for further guidance on environmental damage liabilities.

ESRS E3 – OG Water and marine resources

Policies, actions and targets

AR 64. When disclosing the information required in E3-1 on **policies** and E3-2 **targets** related to water and marine sources, the undertakings may include the following:

⁸ [World Bank Global Gas Flaring Reduction Partnership](#)

⁹ [Proposal for a Regulation of the European Parliament and of the Council establishing a Union certification framework for carbon removals, 30 November 2022](#)

¹⁰ Guidelines providing a common understanding of the term 'environmental damage' as defined in Article 2 of Directive 2004/35/EC of the European Parliament and of the Council on environmental liability with regard to the prevention and remedying of environmental damage (2021/C 118/01)

- (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 at water risk**;
- (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 65. When compiling the information about areas at water risk, the undertaking shall use publicly available and credible tools and methodologies for assessing water risk in an area.

OG 6. Water and marine resources metrics

Metrics

AR 66. When disclosing its water withdrawals and discharges according to paragraph 75, the undertaking may follow the table shown below:

Water withdrawals	Total water withdrawn (m3)	% withdrawn from areas at water risk	Total water discharged (m3)
Surface water			
Groundwater			
Other water			

AR 67. When disclosing the indicators of **water discharge**, the undertaking may disclose the internal standards it may have established for the management of water discharge-related impacts. The undertaking 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.

AR 68. The undertaking shall disclose volume in thousands of cubic meters (10³m³) of **produced water** and process **wastewater discharged**.

ESRS E4 – OG Biodiversity and ecosystems

Policies, actions and targets

AR 69. When disclosing its **policies, actions and targets** implemented to manage its material impacts, **risks** and **opportunities** related to **biodiversity** and **ecosystems**, the upstream undertakings and midstream undertakings may include how the undertaking applies the mitigation hierarchy and international biodiversity standards in its operational planning, from early concept through to decommissioning.

AR 70. 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 71. The undertaking may disclose if it uses any recognised standard as a basis for site rehabilitation or restoration plans on what concerns **biodiversity** impacts.

Metrics

AR 72. When disclosing according to paragraph 85 (a) with regards to the offshore wells, the land-use change refers to the marine equivalent of the term (sea use change)

AR 73. 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 74. 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 75. The undertaking may provide information about 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 information for reserves located in areas with no official designation of high biodiversity value but that present high biodiversity or ecosystem services risks.

AR 76. The undertaking may also provide:

- (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.

AR 77. 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 definition of the **protected area**.
- (g) the areas that are listed in the World Database of Protected Areas (WDPA) and mapped on Protected Planet

AR 78. 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 79. 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 80. 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.

ESRS E5 – OG Circular economy

Policies, actions and targets

AR 81. When describing the undertakings' efforts to increase the life and efficiency of their equipment and machinery assets under E5-5 Resource outflows, the undertaking may disclose information such as:

- (a) whether assets were procured following *circular economy* 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.

Metrics

AR 82. The information related to the volumes shall reflect the total weight of the outflow material in its original state, without data modification, such as reporting on a 'dry weight' basis.

Application Requirements related to social disclosures

ESRS S1 – OG Own workforce

AR 83. In relation to working time and *work-life balance* information, round-the-clock working measures could relate to long or split shifts for continuous operations and multi-day assignments for remoted locations. When disclosing its *policies, actions* and *targets* on housing facilities and access to basic services, the undertaking may specify whether it takes into consideration the specific needs of female workers.

AR 84. In addition to disclosing how its *own workers* are covered against loss of income due to major life events in 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 85. 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 86. 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 87. 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 88. In addition, voluntary health promotion services and programs complement but cannot be a substitute for occupational health and safety services, programs and systems that prevent harm and protect workers from recordable *work-related injuries* and *ill health*. Voluntary health promotion and occupational health and safety may be managed jointly by the undertaking, as part of an overall approach to ensuring the health and safety of workers.

AR 89. When describing how it facilitates workers' access to voluntary health promotion services and programs, the undertaking may disclose 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.

AR 90. When disclosing according to ESRS S1-13, the undertaking may disclose whether the **trainings** it provides to its **own workforce** include prevention against sexual harassment and **discrimination**.

AR 91. When disclosing according to the requirements of ESRS S1 Own workforce, the undertaking may refer to the table below for examples of policies, actions and targets:

Social and human rights matters:	Non-exhaustive list of factors to consider in Materiality Assessment:	Examples of policies:	Examples of actions:	Examples of targets:
Secure employment	% of posted workers in own workforce % of migrant workers in own workforce	Policies on the use of non-employee workers in the workforce; Policies on the use of migrant workers in the workforce	Reducing the percentage of non-employee workers in its own workforce; Ensuring that the migrant workers are engaged on equivalent terms and conditions to non-migrant workers	Reducing the percentage of non-employee workers in its own workforce; Ensuring that the migrant workers are engaged on equivalent terms and conditions to non-migrant workers
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	Policies on advance notice of scheduling, multi-day away-from-home assignments, and evening, night and weekend work	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	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	Allowances for housing for away-from-home assignments	Policies for housing allowances	Increasing housing allowances	Adequate housing allowances
Freedom of association/ collective bargaining including the rate of workers covered by collective agreements	% of posted workers in own workforce	% of workers affected by major work stoppages	Percentage of workers affected by major work stoppages	Percentage of workers affected by major work stoppages

AR 92. In relation to the downstream sub-sector, the undertaking shall consider the specific impacts to which workers in gas stations and in convenience stores that are attached to gas stations are exposed. This includes, among others, security and protection from harassment or sexual assault, especially during night shifts, and the use of young workers on long hours.

OG 7. Work stoppages

AR 93. The information on the number of persons in **own workforce** involved in a major work stoppage, an absolute number of persons or FTE is to be used. A major work stoppage is defined as a work stoppage involving 100 or more **employees** and/ or **non-employee** workers in **own workforce**.

AR 94. The information required by paragraph 95 (b) (ii) shall be the sum of the products of the number of persons in its **own workforce** (FTE) involved and the total duration (in workdays) of each major work stoppage. Where exact figures are not available, the undertaking may provide an estimate according to ESRS 1.

AR 95. The scope of this Disclosure Requirement includes work stoppages due to disputes between labour and management, including strikes and lockouts. The work stoppages may also arise due to community protests.

ESRS S3 – OG Affected communities

AR 96. When describing responding to ESRS S3-2, the undertaking shall consider the following aspects:

- (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 recognised 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;

Policies, actions and targets

AR 97. When disclosing its **policies, actions and targets** related to land acquisition and involuntary resettlement, the undertaking may disclose if it has considered or addressed potential negative impacts that are specific to women and children; health and livelihood.

Taking action on material impacts, risks and opportunities

AR 98. In relation to its disclosure on the **policies, actions and targets** related to preventing attacks on **environmental** and **human rights defenders**, the undertaking may disclose whether it adopts a zero-tolerance approach for attacks against **environmental** and **human rights defenders**, and not to sue for defamation or to participate in strategic lawsuits against public participation (SLAPP).

AR 99. If the undertaking has an operation site in or near the **indigenous peoples** lands as listed in OG 1 Mapping of operational sites 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 100. 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 101. 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; and, where applicable, it shall consider the principles in the Nagoya Protocol and the Montreal Agreement¹¹. The undertaking may refer to how the actions that are planned or underway are aligned to these frameworks.

AR 102. The undertaking may list 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 103. When disclosing the policies in relation to engagement with **environmental** and **human rights defenders**, the undertaking shall consider its processes for engaging with

¹¹ Refers to the COP 15 Convention on Biological Diversity of December 2022, not yet ratified.

environmental and **human rights 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 104. The undertaking may describe any collective or individual rights that it has identified that are of particular concern for local communities (including vulnerable groups).

OG 8. Security personnel

AR 105. 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 106. Human rights **training** for security personnel aims at ensuring human rights respect with regards to their interaction with **stakeholders** including local communities, ensuring a non-discriminatory approach to women and minorities, not exacerbating social conflict, how to collaborate with public and private security providers, processes relating to detention of persons, undue use of force which includes ensuring that force is used only when necessary. 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.

AR 107. When describing the procedures and management of public or private security providers, the undertaking shall refer to **training** provided on its 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 108. The undertaking may disclose information on its processes of tendering and contracting with security providers. It may also disclose whether compliance with the undertaking's human rights **policies** by the private security are part of the process.

OG 9. Engagement with affected communities and grievance mechanisms

AR 109. Social impact assessment includes the processes of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (**policies**, programs, plans, projects) and any social change processes invoked by those interventions.

AR 110. Environmental impact assessment includes the processes of identifying, describing and assessing in an appropriate manner, in the light of each individual case, the direct and indirect significant effects of a project on the following factors: (a) population and human health; (b) **biodiversity**, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC; (c) land, soil, water, air and climate; (d) material assets, cultural heritage and the landscape; (e) the interaction between the factors referred to in points (a) to (d). The effects on these factors shall include the expected effects deriving from the vulnerability of the project to **risks** of major accidents and/or disasters that are relevant to the project concerned.

AR 111. When disclosing the extent of development of significant infrastructure investments and services supported, the undertaking may disclose whether any of these seek to address specific needs of women and children in the **affected communities**.

OG 10. Environmental and human rights defenders

AR 112. When calculating the number of **incidents** in paragraph 110, the undertaking shall consider official sources such as policy reports or other reports issued by governmental organisations. The undertaking shall also consider information raised by legitimate representatives or credible proxies from **indigenous people**, as well as reports issued by local, national and international NGOs. The undertaking shall not consider unofficial sources e.g social media when preparing this disclosure.

AR 113. When disclosing the number of **incidents** broken down by vulnerable groups, the undertaking may disclose whether the threats and attacks identified are different depending on

the particular group affected (e.g., sexual violence on female **environmental and human rights defenders**).

AR 114. of

Application Requirements related to governance disclosures

ESRS G1 – OG Business conduct

AR 115. The undertaking shall report its definition used of 'local suppliers' in cases where it deviates from the suggested definition in Appendix A.

AR 116. When providing information about its policy the undertaking may include details on how suppliers are categorised. Such categorisation may be based on geographic location, such as proximity to the site.

OG 13. State-aid and competition

AR 117. When determining the total of **state aid** or of financial assistance received from any government, the undertaking shall include the following:

- (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.

Appendix C. Application Requirements supporting the assessment of materiality of the information

This appendix is an integral part of [draft] ESRS Oil and Gas and has the same authority as the other parts of this Standard.

This table provides application requirements to support the determination of which disclosures prescribed in this [draft] standard are material for an undertaking reflecting its specific circumstances.

The first column refers to the pertinent disclosure in this [draft] standard; the second column reports the sustainability matter pertaining to that disclosure; the third illustrates the factors to be considered when determining whether the information stemming from a Disclosure Requirement are material to the undertaking and therefore to be included, when the corresponding sustainability matter is material; the last four columns illustrates which Disclosure Requirements are applicable to undertakings that operate in a given sub-sector of activity within the sector.

The factors to consider in the third column illustrate in which circumstances the undertaking should be able to conclude that the information prescribed by a metric in this standard is not material and therefore is omitted. For example, the undertaking includes the information prescribed in the Disclosure Requirement OG 4 – Closure of assets when it has ongoing or anticipated decommissioning of facilities.

Disclosure Requirement	Sustainability matter	Factors to consider in Materiality Assessment	Applicable sub-sector of activity			
			Upstream	Midstream	Downstream	Services
ESRS 2.IRO2.OG Conclusions on material matters and reported information	-		✓	✓	✓	✓
ESRS 2.SBM1.OG Activity indicators	-		✓	✓	✓	✓
ESRS 2.SBM2.OG			✓	✓	✓	

Disclosure Requirement	Sustainability matter	Factors to consider in Materiality Assessment	Applicable sub-sector of activity			
			Upstream	Midstream	Downstream	Services
OG 1. Mapping of operational sites	-		✓	✓	✓	✓
OG 2. Oil and gas reserves	-	Existence of oil and gas reserves (paragraph 36)	✓			
OG 3. Industrial hazards	Industrial hazards	Actual or potential occurrence of accidental releases of hazardous substances from operations (paragraph 42 to 43). Health and safety incidents (i.e., fatalities, injuries, and ill-health cases) amongst its workforce (paragraph 44 to 45).	✓	✓	✓	✓
OG 4. Closure of assets	Closure of assets	The existence of ongoing or planned closure of assets / sites. Absence of planning related to site rehabilitation (paragraph 50) Ongoing or anticipated decommissioning of facilities (paragraph 52)	✓	✓	✓	
ESRS E1 – OG Climate change	Climate change mitigation	Activities in development, exploration and production of oil and gas reserves (paragraph 55) Actual or anticipated investment in solutions with high climate impact (paragraph 56) Presence of locked-in emissions (paragraph 58) Operation of refineries and marketing of petroleum products (paragraph 60 (b) and (c)) Integrated oil and gas operations (paragraph 60 (c))	✓	✓	✓	✓
	Methane	Methane emissions and GHG emissions related to them (paragraph 59) Actual or anticipated flaring or venting activities, operation of wells, compressor stations or pipelines, actual and potential methane leakages (paragraph 62)	✓	✓	✓	
	Energy	Energy production (paragraph 60 (a)) and energy sales (paragraph 60 (c));	✓	✓	✓	✓

Disclosure Requirement	Sustainability matter	Factors to consider in Materiality Assessment	Applicable sub-sector of activity			
			Upstream	Midstream	Downstream	Services
		Refinery operations (paragraph 60 (b))				
OG 5. Carbon capture and storage	Climate change mitigation	Utilisation of carbon capture and storage technologies (paragraphs 68, 69 and 70)	✓	✓	✓	✓
ESRS E2 – OG Pollution	Pollution	Management of dangerous substances (paragraph 72) Actual or anticipated hydraulic fracturing activities (paragraph 73)	✓	✓	✓	✓
ESRS E3 – OG Water and marine resources	Water and marine resources	-	✓	✓	✓	✓
OG 6 – Water and marine resources metrics	Water and marine resources	Ongoing or anticipated activities with actual or potential impact on local water and land resources (paragraphs 77-82)	✓	✓	✓	✓
OG 6 – Water and marine resources metrics	Marine resources	Activities related to exploration of deposits in the ocean areas (paragraph 83)	✓			✓
ESRS E4 – OG Biodiversity and ecosystems	Biodiversity and ecosystems	Ongoing or anticipated activities resulting in disturbed land (paragraphs 85-86)	✓	✓	✓	
ESRS E5 – OG. Circular economy	Resources outflows related to products and services	Ongoing or anticipated decommissioning of facilities (paragraph 88, 89 (f)) Crude oil and gas trading (paragraph 89 (a)) Recovery of oil spills (paragraph 89 (b)) Presence of oil and gas specific waste streams paragraphs 89 (c) to (e))	✓	✓	✓	✓
ESRS E5 – OG. Circular economy	Waste	Operation of heavy machinery and equipment (paragraph 90)	✓	✓	✓	✓
ESRS S1 – OG Own workforce			✓	✓	✓	✓

Disclosure Requirement	Sustainability matter	Factors to consider in Materiality Assessment	Applicable sub-sector of activity			
			Upstream	Midstream	Downstream	Services
OG 7 – Work stoppages	Work stoppages	Work stoppages involving more than 100 workers of the undertaking, that have taken place during the year. If this is the case, <ul style="list-style-type: none"> Number of major work stoppages (paragraph 95 a))Length of major work stoppages and percentage of employees involved (paragraph 95 b)) 	✓	✓	✓	✓
ESRS S3 – OG Affected communities – indigenous people	Rights of indigenous peoples	Proximity of operations/sites to indigenous peoples, including tailings facilities. (paragraph 98) Ongoing process of seeking FPIC from indigenous peoples and agreements reached (paragraph 98).	✓	✓	✓	
OG 8 – Security personnel	Security-related impacts	Use of private, government security personnel to safeguard the undertaking's operations/site and consideration to be given to conflict-affected or high-risk areas). Human rights' training performed on security personnel (paragraph 101 a) Cases of human rights' violations connected with the security personnel (paragraph 101 b). Incidents of violations of human rights of indigenous people directly linked to the undertaking's security personnel (paragraph 101 c))	✓	✓	✓	
OG 9 – Engagement with affected communities and grievance mechanisms	Affected communities	Existence and implementation of grievance mechanisms (paragraph 105) and engagement activities with the affected communities at operational site level (paragraph 106) Percentage of operational sites that have been subject to environmental and social impact assessments (paragraph 105 b) c) and paragraph 106) Infrastructure investments (paragraph 107)	✓	✓	✓	
OG 10 – Environmental and human rights defenders	Impacts on human rights defenders	Prevalence of attacks on environmental and human rights defenders and the number of incidents when engaging with environmental and human rights defenders (paragraph 110)	✓	✓	✓	

Disclosure Requirement	Sustainability matter	Factors to consider in Materiality Assessment	Applicable sub-sector of activity			
			Upstream	Midstream	Downstream	Services
ESRS G1 – OG. Business conduct	Management of relationship with suppliers including payment practices	Proximity of suppliers to the operational site (paragraph 113).	✓	✓	✓	
	Political engagement and lobbying activities	Participation in advocacy and lobbying and associated expenditures aiming to exert influence on government policies (paragraph 113 (a)). Commercial practices or public communication related to sustainability (paragraph 113 (b), (c)).	✓	✓	✓	✓
OG 11. Transparency about contracts and licenses	Management of relationship with suppliers including payment practices	Presence of government contracts and licences that are subject to public consultation (paragraph 105).	✓	✓	✓	
OG 12. State aid and competition	Corruption and bribery	Ongoing activities in jurisdictions where instances of cartels, monopolistic practices, and related abuse of such positions have been documented (paragraph 119 (a)). Legal actions relating to violations of antitrust and monopoly legislation. (paragraph 119 (b)). Eligible to or recipient of state aid or of financial assistance (paragraph 119 (c)).	✓	✓	✓	
OG 13. Beneficial ownership	Corruption and bribery	Identification of individuals that classify as politically exposed persons ('PEPs') (paragraph 123). Availability of the identity of the natural person who has a control ownership interest in - and/or can exercise control over a legal entity used by the business partners, including joint ventures and suppliers (paragraph 123).	✓	✓	✓	✓

Disclosure Requirement	Sustainability matter	Factors to consider in Materiality Assessment	Applicable sub-sector of activity			
			Upstream	Midstream	Downstream	Services
OG 14. Oil and gas purchased from states	Management of relationship with suppliers including payment practices	Ongoing transactions generating revenue directly for states or through third parties acting on behalf of states (paragraph 126).	✓	✓	✓	
OG 15. Cybersecurity	Cybersecurity	Dependency on technology to manage the facility operations (paragraph 130). Managing restricted or classified information on digital platforms (paragraph 130 (c)).	✓	✓	✓	✓

Appendix D: List of datapoints in accordance with EU law

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

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	Pillar 3 reference
ESRS 2.SBM1.OG – Activity indicators	Article 449a Capital Requirements Regulation – CRR – Template 1: Banking book – Climate change transition risk: Credit quality of exposures by sector, emissions and residual maturity
ESRS 2.SBM1.OG – Activity indicators	Article 449a CRR – Template 1: Banking book – Climate change transition risk: Credit quality of exposures by sector, emissions and residual maturity Template 3 – Banking book – Climate change transition risk – Alignment risks
ESRS 2.SBM1.OG – Activity indicators	Article 449a CRR – Template 3 – Banking book – Climate change transition risk – Alignment risks
ESRS 2.SBM1.OG – Activity indicators	Article 449a CRR – Template 3 – Banking book – Climate change transition risk – Alignment risks

Appendix E: 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 40 (a) and (b) of ESRS 2, shall report according to this [draft] sector ESRS.

- 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 is an integral part of this Exposure Draft and has the same authority as the other parts of the Exposure Draft ESRS *Oil and Gas*.

Appendix F: Sustainability matters mostly relevant in the oil and gas sector

This appendix is an integral part of [draft] *Oil and Gas* ESRS and has the same authority as the other parts of the Standard.

When performing its **materiality** assessment, the undertaking shall consider the list of **sustainability matters most relevant to the** Oil and Gas sector identified with the letter B in the table below. The table below illustrates how to use this list in conjunction with the list of matters in ESRS 1 AR 16. In particular:

- the items identified with an “A” are also present in AR 16. The disclosure requirements applicable to them are those in the topical ESRS, integrated by the additional sector-specific datapoints and/or application requirements related to sector-agnostic disclosure requirements, as identified in paragraph 2 (a) of this [draft] ESRS;
- the items identified with a “B” do not have corresponding disclosure requirements topical ESRS and, as such, are covered by disclosure requirements prescribed by this [draft] ESRS, as identified by paragraph 2 (b) of this [draft] ESRS;
- the items identified with a “C” are items presented in ESRS 1 AR 16 that are not identified in this table as most relevant to the Oil and Gas sector. However, they can still be material to an undertaking operating in this sector, reflecting its specific facts and circumstances. They are covered by disclosures in topical standards.

Topic	Sub-Topic	Sub-Sub-Topic
E1 Climate change	Climate change adaptation (A) Climate change mitigation (A) Energy (A)	Methane (B)
E2 Pollution	Pollution of air (A) Pollution of water (A) Pollution of soil (A) Pollution of living organisms and food resources (A) Substances of concern (A) Substances of very high concern (A) Microplastic (C)	
E3 Water and marine resources	Water (A) Marine resources (A)	Water withdrawals (A) Water consumption (A) Water use (A) Water discharges in the oceans (A) Water discharges in water bodies (B) Habitat degradation and intensity of pressure on marine resources (B) Extraction and use of marine resources (C)
E4 Biodiversity and Ecosystems	Direct impact drivers on biodiversity loss (A) Impacts on the state of species (A) Impacts on the extent and conditions of ecosystems (A) Impacts and dependencies on ecosystem services (A)	
E5 Circular economy	Resource inflows, including resource use (A) Resource outflows related to products and services (A) Waste (A)	
S1 Own workforce	Working conditions (A)	Adequate wages and secure employment (A)

		Working time and work-life balance (A) Freedom of association and collective bargaining (A) Health and safety (A)
	Equal treatment and opportunities for all (A)	Training and skills development (A) Measures against violence and harassment in the workplace (A) Diversity, including gender equality and equal pay for work of equal value (A)
	Other work-related rights (A)	Child labour (C) Forced labour (C) Adequate housing (A) Privacy (C)
S2 Workers in the value chain	Working conditions (C)	Secure employment (C) Working time (C) Adequate wages (C) Social dialogue (C) Freedom of association, including the existence of work councils (C) Collective bargaining (C) Work-life balance (C) Health and safety (A)
	Equal treatment and opportunities for all (C)	Diversity, including gender equality and equal pay for work of equal value (C)
	Other work-related rights (C)	Child labour (C) Forced labour (C) Adequate housing (C) Water and sanitation (C) Privacy (C)
S3 Affected communities	Communities' economic, social and cultural rights (B)	Adequate housing (C) Adequate food (C) Water and sanitation (B) Land-related impacts (B) Security-related impacts (B)
	Communities' civil and political rights (B)	Freedom of expression (B) Freedom of assembly (B) Impacts on human rights defenders (B)
	Particular rights of indigenous communities, including free, prior and informed consent; self-determination; and cultural rights (B)	Free, prior and informed consent (A) Self-determination (A) Cultural rights (A)
S4 Consumers and end-users	Information-related impacts for consumers and/or end-users (C)	Access to (quality) information (C)
	Personal safety of consumers and/or end-users (C)	Health and safety (C)
	Social inclusion of consumers and/or end-users (C)	Access to products and services (C) Responsible marketing practices (B)
G1 Business Conduct	Corporate culture (C) Protection of whistle-blowers (C) Animal welfare (C) Political engagement and lobbying activities (A) Management of relationships with suppliers including payment practices (A) Corruption and bribery (A) Cybersecurity (B)	

Cross-topic sustainability matters

The undertaking shall also consider the following, sector-specific cross-topic sustainability matters. When a cross-topic sustainability matter is material for the undertaking, the matters identified in the table below as connected to the cross-topic sustainability matter are also expected to be material for the undertaking.

The same matter can be material for the undertaking either because it is connected to a cross-topic matter or in isolation (when the cross-topic matter is not material).

Cross-topic sustainability matter	Connected sustainability matters
Industrial hazards	Methane (B) Pollution of air (A) Pollution of water (A) Pollution of soil (A) Pollution of living organisms and food resources (A) Substances of concern (A) Substances of very high concern (A) Direct impact drivers on biodiversity loss (A) Impacts on the state of species (A) Impacts on the extent and conditions of ecosystems (A) Impacts and dependencies on ecosystem services (A) Waste (A) Health and safety (A) Training and skills development (A) Communities' economic, social and cultural rights (A)
Closure of assets	Methane (B) Pollution of air (A) Pollution of water (A) Pollution of soil (A) Water discharges in water bodies (B) Water discharges in the oceans (A) Habitat degradation and intensity of pressure on marine resources (B) Waste (A) Health and safety (A) Communities' economic, social and cultural rights (A)

Appendix G: Description of sustainability matters

This Appendix complements the [draft] ESRS Oil and Gas and presents a non-binding description of the sustainability matters that are most relevant for undertakings in the Oil and Gas sector.

For the sustainability matters that are also listed in paragraph AR16 of ESRS 1, this Appendix provides a description of how such matters materialise in this specific sector.

Industrial hazards

Oil and gas operations are highly prone to incidents and accidents with disastrous impacts on environmental resources (extreme contamination of air, water and soil, habitat degradation, harm to species), surrounding communities and infrastructures (e.g., damage to economic activities and food resources), workers (e.g., injuries, ill health, fatalities), as well as undertaking's assets, leading to critical financial repercussions. Some examples of industrial hazards include well blowout and explosions due to the manipulation of volatile and combustible chemicals, unintended leaks and failed containment of hazardous and highly reactive substances (e.g., hydrocarbons, hydraulic fracturing fluids) spills. The establishment of a system and a culture of safety, including through emergency preparedness and control, may help undertakings to reduce the risk of such hazards.

Closure of assets

Site-specific extractive operations such as those in oil and gas are subject to closure due to finite resources and/or economic viability. At the end-of-life of an operation, the expectation is that the site will be restored to pre-development ecological functionality and setting or at least stabilized to prevent persistent environmental and social impact associated with geomorphological changes, increased contamination, and deteriorated safety conditions. Decommissioning planning, including financial allocation, is critical to ensure detrimental effects to environmental and social values are fully addressed and mitigated. As such, corporate financial disclosure for decommissioning is essential to demonstrate public accountability for businesses in the extractives sector. The term asset in this definition does not relate to resources that would meet the financial accounting definition of asset.

E1: Climate change

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 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, SF₆ or NF₃. 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.

Methane

Methane is one of the main greenhouse gases responsible for climate change. It can be emitted from different activities within oil and gas industry. Examples of operations that can lead to its releases are operations of wells, oil and gas platforms, transmission through the pipelines, storage, refining or distribution activities. The methane emissions can be originating from the intentional methane burning (flaring), intentional releases directly into the air (venting) or fugitive emissions. Overall methane emissions in the industry can be significantly reduced thanks to the use of available technologies, as well as dedicated leak detection and repairs programmes.

E2: Pollution

Pollution of air

Oil and gas operations (intentional, e.g., venting and flaring; or unintentional, e.g., fugitive emissions from incidents or evaporation losses) contribute to air emissions that decrease air quality at local and regional levels, resulting in negative impacts that acutely affect human health (e.g., neurological damage), flora (e.g., impairing photosynthesis) 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 oil and gas sectoral activities are relevant to consider and may include (but are not limited to) SO_x, NO_x, H₂S, VOCs (contributing to the formation of smog, and containing air toxics), 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

Oil and gas 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 and long-term impacts on (ground, surface, sea) 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 high-water stress.

Pollution of soil

Activities within the oil and gas sector (e.g., production and drilling), as well as pollution incidents and catastrophes (e.g., accidental ore oil spills), can result in releases of harmful substance, vibration or other contaminant into sand, silts, shells and gravel, as well as the underlying sediments and groundwater resources. These contaminants lead to changes in the geotechnical properties of soils (e.g., decreased permeability due to oil spills) and are persistent in the environment, resulting in increasing soil toxicity over time, subsequently affecting pollutants accumulation in habitats and organisms. Such pollutants can include heavy metals, 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.

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 value chain of the oil and gas sector. Releases of hydrocarbons and other types of contaminants into the air, water and soil may negatively impact the healthy development of soils and plants and cause severe effects on marine and other living organisms which depend on natural resources for survival, additionally impacting the 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 the oil and gas sector 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 the REACH and CLP regulations due to their human health and environmental impact. Some examples of key substances in oil and gas operations include diesel particulate matter (e.g., powering drilling equipment), hydrocarbon gases and vapours, crystalline silica (respirable).

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. Some examples of key hazardous substances used during oil and gas exploration and extraction are oilfield chemicals, drilling fluids and fracking fluids (containing a variety of compositions of chemicals, potentially including endocrine disruptors), hydrogen sulfide, and naturally occurring radioactive material (e.g. contaminated pipes and equipment containing pipe scales and drilling mud and sludge).

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, as well as on the extensive use of other materials (steel and other metals, cement and concrete), including environmental resources. 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 (e.g., recycled or biobased raw materials; easily reusable, disassemblable or repairable materials or components) and optimisation of resources (e.g., advanced methane detection).

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, as well as used equipment and machinery resulting from decommissioning activities. Opportunities aimed to enhance circular economy can include, for instance, the increase in recirculation of tools from disused structures or the reuse of facilities and assets that were removed from oil and gas operativity.

Waste

Regular oil and gas activities, the 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 (e.g., oil sands mining generated during the separation process of bitumen from sand), scale or sludges, which may contain high amounts of pollutants (e.g., heavy metals, hydrocarbons, chemical additives, naturally radioactive material) and carry the risks of environmental contamination (e.g., tailing ponds leaking substances). Undertaking's infrastructure and approach to waste management, including waste recovery for beneficial use (e.g., recycling of materials from disused facilities such as concrete and steel, plastic recycling, oil regeneration), is, therefore, critical to avoid severe environmental impacts.

S1: Working time and work-life balance

Many operations in the oil and gas sector are typically operated in a manner that involves irregular working hours for a large portion of the own workforce concerned. Operations such as production and refining are operated continuously (around-the-clock, including on weekends). Shift work longer than eight hours, and evening, night and weekend work are typically used in these types of operations. Exploration, development and production frequently is done far away from populated areas ("remote locations"), and undertakings often resort to arrangements whereby workers will rotate between multi-day or multi-week periods on site, with few work breaks, and periods with time off off-site ("fly-in fly-out" arrangements). In such remote locations adequate housing, access to water and sanitation and health care are often material matters.

Research has demonstrated an association between extensive irregular working hours and time without family, recreation, and leisure and negative impacts on physical and psychological health and work-life balance. Extensive use of irregular working hours may make it difficult for undertakings to retain their workers and recruit new workers.

S1: Adequate wages and secure employment

Many undertakings in the oil and gas sector make extensive use of non-employee workers, typically referred to as 'contractors' - that is, self-employed workers contracting directly with the undertaking or supplied by employment agencies as well as migrant workers. Many of these workers are utilized for extended periods of time for regular operations, and perform work which is the same or similar to the work that employees do. However, these workers lack the employment security and, frequently, the wages and benefits that employees receive. Secure employment is also particularly material for the oil and gas sector as non-employee workers may have fewer rights to unemployment and early retirement benefits and access to retraining than employees when it comes to the closure of oil and gas sites. Migrant workers could also lack employment security or have less protection under national laws.

Another factor contributing to the materiality of these matters is the extensive contracting-out of oil and gas operations. Contracting-out arrangements have relevance for the security of employment, since workers for such operators frequently have temporary contracts.

S1: Freedom of association and collective bargaining

The oil and gas sector in many countries has a higher rate of trade union representation and collective bargaining coverage than the economy-wide national average. However, freedom of

association may be at risk, particularly in locations where these are not guaranteed by national legislation and/or where enforcement is weak. Many oil and gas operations are located in countries where the rule of law has broken down (ten of the 148 countries rated in the 2022 ITUC Rights Index), where labour rights are not guaranteed (34 countries) or where there are systematic violations of labour rights (39 countries). Offshore operations may be particularly challenging for collective bargaining arrangements. The proportion of self-employed workers ('contractors') whose working conditions are determined by a collective bargaining agreement (the 'collective bargaining coverage rate') is typically lower than that of employees.

S1: Training and skills development

Training and skills development are particularly significant in the oil and gas sector along a number of dimensions. Oil and gas can be both technically difficult and dangerous and it is therefore imperative that the workers are properly trained and have the skills and capabilities to handle the risks entailed. Health and safety-related training, including the proper operation of equipment and hazardous chemicals, is key to reduce the risk of accidents and occupational diseases.

Some oil and gas operations are placed in the middle or close to conflict-affected or high-risk areas. They may also be the subject of controversy which leads to the necessity of security personal. Thus, this sustainability matter also includes training of security personal in human rights and humanitarian law.

S1: Measures against violence and harassment in the workplace

The oil and gas sector has a high proportion of male workers. The risk of sexual harassment at the workplace is particularly high in 'male dominated' sectors and at remote locations.

Negative publicity on this issue can have a negative impact on the reputation of specific undertakings as well as on the industry as a whole, and can make it more difficult to retain existing and recruit new female workers.

Measures against violence and harassment at the workplace include clear policies on these issues, workforce training and an effective grievance procedure.

S1: Diversity, including gender equality and equal pay for work of equal value

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.

S1: 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.

S1/S2: Health and safety

Many oil and gas operations are both strenuous and dangerous and are associated with high degree of risk on a number of health and safety matters. Injuries may be caused by accidents with heavy equipment or transport to remote areas such as offshore oil rigs. Workers' health may be impaired by prolonged exposure to hazardous substances. This sector has higher than average rates of fatalities, injuries, lost workdays and occupational diseases. Worker injuries, illnesses, and fatalities can lead to regulatory penalties, negative publicity, low worker morale and productivity, and increased healthcare and compensation costs.

This sustainability matter covers the undertakings policies regarding health and safety, critical incident risk management, as well as workforce health, wellbeing, and safety. Moreover, considering the recent covid-19 pandemic, the sustainability matter also covers pandemic preparedness and the undertaking's response within its value chain.

The sector is characterized by the extensive use of on-site contractors for construction and maintenance. The relationship with these contractors is typically extensive given the large capital investments involved and the length of time these contractors will be working on-site (for example, oil rigs may take a year or more to construct and may cost tens or even hundreds of millions of euros to construct). The health and safety risks faced by own workforce thus extend to the workers of these contractors (the ILO has noted that health and safety risks are particularly high for contract workers in this sector).

S2: 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.

S2: Diversity, including gender equality and equal pay for work of equal value

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, colour, 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.

S2: 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: 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. Local communities may also be affected by land acquisitions, which can lead to a loss of livelihood. Oil and gas activities can sometimes result in the displacement of other land users, restricting their access to resources and involuntary resettlement of local communities. This resettlement can lead to physical and economic displacement, impacting local communities' livelihoods and human rights.

S3: 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.

S3: Particular rights of indigenous communities, including free, prior and informed consent; self-determination; and cultural rights

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: 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.

S4: 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. Undertakings 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.

S4: Social inclusion of consumers and/or end-users

Consumers are at the centre of the EU energy policy and there is a wide range of EU actions and measures aim at protecting and empowering energy consumers. Access to energy at affordable prices has been and is a priority of the EU with a number of government actions, including direct subsidies to consumers, being taken to ensure stable petrol prices during the energy crisis in Europe.

G1: Business conduct

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.

G1: 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.

G1: 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.

G1: 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.

G1: Cyber security

Cyber security addresses security in “cyber space”. Oil and gas sector encompasses high critical infrastructure and has also embraced new technologies in the various aspects of their activities in the past few years. The industry widely uses digital control systems, such as SCADA, to automate the industrial, physical processes taking place in exploration facilities, refineries and oil and gas pipelines. The systems are used to automating, controlling and monitoring equipment such as valves, pumps or centrifuges.

This digital transformation goes hand in hand with an increased reliance on trustworthy and stable information and network systems. However, this evolution amplifies the vulnerability and exposure to cyber threats. Cyberattacks can cause serious damage to the undertaking’s assets, impair property and divulge sensitive information. Moreover, they can disrupt operations, services to clients and supply chain interactions. All this might lead to financial costs and losses as well as adverse impact on people and environment.