

This paper provides the technical advice from EFRAG SR TEG to the EFRAG SRB, following EFRAG SR TEG's public discussion. The paper does not represent the official views of EFRAG or any individual member of the EFRAG SRB. This paper is made available to enable the public to follow the EFRAG's due process. Tentative decisions are reported in EFRAG Update. EFRAG positions as approved by the EFRAG SRB are published as comment letters, discussion or position papers or in any other form considered appropriate in the circumstances.

ESRS Oil and Gas Exposure Draft

As recommended by EFRAG SR TEG for approval by EFRAG SRB

This paper is the same as Agenda Paper 06-04 for EFRAG SRB meeting of 10 March 2023

DISCLAIMER

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

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

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

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

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

Objective	6
Scope of application	6
Presentation of sector-specific disclosures	7
Sector-specific materiality assessment guidance	7
Sector-specific material sustainability matters	8
Reporting boundary	9
Navigation table	9
1.Sector-specific additional disclosures related to sector-agnostic Disclosure Requirements	12
Disclosure Requirement related to [draft] ESRS 2 SBM-1 Market position, strategy, business model(s) and value chain	12
Disclosure Requirement related to [draft] ESRS 2 IRO 2 Disclosure Requirements in ESRS covered by the undertaking’s sustainability statements.....	13
Disclosure requirement related to [draft] ESRS E1-1 Transition plan for climate change mitigation	13
Disclosure Requirement related to [draft] ESRS E1-4 Targets related to climate change mitigation and adaptation	14
Disclosure Requirement related to [draft] ESRS E1 Methane focus	14
Disclosure Requirement related to [draft] ESRS E1-6 - Gross scope 1,2,3 and Total GHG emissions	15
Disclosure Requirement related to [draft] ESRS E1-9 Potential financial effects from material physical and transition risks and potential climate-related opportunities	15
Disclosure Requirement related to [draft] ESRS E2 Pollution prevention and control focus	16
Disclosure Requirement related to [draft] ESRS E2 Industrial hazards focus.....	16
Disclosure Requirement related to [draft] ESRS E2 Closure of assets focus	17
Disclosure Requirement related to [draft] ESRS E3-1 Policies related to water and marine resources	18
Disclosure Requirement related to [draft] ESRS E4-2, E4-3 and E4-4 Policies, actions and targets related to biodiversity and ecosystems	18
Disclosure Requirement related to [draft] ESRS E4-5 Impact metrics related to biodiversity and ecosystems change.....	18
Disclosure Requirement related to [draft] ESRS E5-1 Policies related to resource use and circular economy	19
Disclosure Requirement related to [draft] ESRS E5-2 Action plans and resources in relation to resource use and circular economy.....	19
Disclosure Requirement related to [draft] ESRS E5-3 Targets related to resource use and circular economy	19
Disclosure Requirement related to [draft] ESRS E5-5 Resource outflows	19
Disclosure Requirement related to [draft] ESRS S1-1, S1-4 and S1-5 Policies, actions and targets related to own workforce.....	20
Disclosure Requirement related to [draft] ESRS S1 – Work-related hazards focus.....	20
Disclosure Requirement related to [draft] ESRS S3 – Indigenous peoples’ rights focus.....	21
Disclosure Requirement related to [draft] ESRS S3-1, S3-4 and S3-5 Policies, actions and targets related to affected communities	21
Disclosure Requirement related to [draft] ESRS S3-2 Processes for engaging with affected communities about impacts.	22
Disclosure Requirement related to [draft] ESRS G1-2 – Management of relationships with suppliers	22
Disclosure Requirement related to [draft] ESRS G1-5 – Political influence and lobbying activities	22
2. Sector-specific Disclosure Requirements	22

Disclosure Requirement OG 1 – Mapping of operational sites.....	22
Disclosure Requirement OG 2 – Oil and gas reserves.....	23
Disclosure Requirement OG 3-E1 - CO ₂ abatement technologies.....	24
Disclosure Requirement OG 4-E1 - GHG emission intensity of energy	24
Disclosure Requirement OG 5-E3 – Water withdrawal	25
Disclosure Requirement OG 6-E3 – Water discharge	25
Disclosure Requirement OG 7-E3 – Marine resources.....	26
Disclosure Requirement OG 8-S1 – Work stoppages.....	26
Disclosure Requirement OG 9-S2 – Health and safety policies for on-site contractors.....	26
Disclosure Requirement OG 10-S3 – Security personnel.....	26
Disclosure Requirement OG 11-S3 - Metrics on affected communities.....	27
Disclosure Requirement OG 12-S3 – Human rights and environmental defenders	27
Disclosure Requirement OG 13-S3 – Resettlement	28
Disclosure Requirement OG 14-S3 – Workforce hired from local communities.....	28
Disclosure Requirement OG 15-G1 – Transparency about contracts with governments.....	28
Disclosure Requirement OG 16-G1 – State-aid and competition.....	28
Disclosure Requirement OG 17-G1 – Cybersecurity [to be discussed]	29
Disclosure Requirement OG 18-G1 – Beneficial owners of business partners [TBD]	29
Disclosure Requirement OG 19-G1 – Oil and gas purchases from governments	29
Appendix A: Defined terms	30
Appendix B: Application Requirements	34
1. Application Requirements related to sector-agnostic Disclosure Requirements	34
Application Requirement related to [draft] ESRS 2 SBM 1 Market position, strategy, business model(s) and value chain	34
Application Requirement related to [draft] ESRS 2 SBM 2 Interests and views of stakeholders.....	34
Application Requirement related to [draft] ESRS 2 SBM 3 Material impacts, risks and opportunities with their interaction with strategy and business model(s).....	34
Application Requirement related to [draft] ESRS 2 GOV4 Statement on sustainability due diligence	34
Application Requirement related to [draft] ESRS 2 IRO 1 - Description of the processes to identify and assess material climate-related impacts, risks and opportunities.....	35
Application Requirement related to [draft] ESRS E1-1 Transition plan for climate change mitigation	35
Application Requirement related to [draft] ESRS E1-4 Targets related to climate change mitigation and adaptation	35
Application Requirement related to [draft] E1 Methane focus.....	35
Application Requirement related to [draft] ESRS E1-6 Gross scope 1,2,3 and Total GHG emissions	36
Application Requirement related to [draft] E2 Pollution prevention and control focus.....	36
Application Requirement related to [draft] E2 Industrial hazards focus	36
Application Requirement related to [draft] ESRS E2 Closure of assets focus	37
Application Requirement related to [draft] ESRS E3-1 Policies related to water and marine resources	37
Application Requirement related to [draft] ESRS E4-2, E4-3, E4-4 Policies, actions and targets related to biodiversity and ecosystems	37
Application Requirement related to [draft] ESRS E4-5 Impact metrics related to biodiversity and ecosystems change.....	38
Application Requirements related to [draft] ESRS E5-5 – Resource outflows	39

Application Requirement related to [draft] ESRS S1-1, S1-4 and S1-5 Policies actions and targets related to own workforce.....	39
Application Requirement related to [draft] ESRS S1 – Work-related hazards focus	39
Application Requirement related to [draft] ESRS S1-11 Social protection	40
Application requirement related to [draft] ESRS S1-13 Training and skills development	40
Application Requirement related to [draft] ESRS S1-Appendix B.1 – Application Requirements for ESRS 2 related disclosures	41
Application Requirement related to [draft] ESRS S1-Appendix B.2 - Application Requirements for ESRS S1-1 Policies related to own workforce	41
Application Requirement related to [draft] ESRS S1-Appendix B.3 – Application Requirements for ESRS S1-4 Taking action on material impacts on own workforce, and approaches to mitigating material risks and pursuing material opportunities related to own workforce, and effectiveness of those actions	41
Application Requirement related to [draft] ESRS S1-Appendix B.4 – Application Requirements for ESRS S1-5 Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities	42
Application Requirement related to [draft] ESRS S3 – Indigenous peoples’ rights focus	42
Application Requirement related to [draft] ESRS S3-1, S3-4 and S3-5 Policies, actions and targets related to affected communities	42
Application Requirement related to [draft] ESRS S3-2 Processes for engaging with affected communities about impacts	43
Application Requirement related to [draft] ESRS S3-3 Processes to remediate negative impacts and channels for affected communities to raise concerns – Closure and post-closure.....	44
Application Requirement related to [draft] ESRS G1-2 Management of relationships with suppliers	44
2. Application Requirements related to sector-specific Disclosure Requirements	44
Application Requirement related to OG 1 – Mapping of operational sites	44
Application Requirement related to OG 2 – Oil and gas reserves	46
Application Requirement related to OG 3-E1 - CO2 abatement technologies	47
Application Requirement related to OG 5-E3 - Water withdrawal.....	47
Application Requirement related to OG 6-E3 - Water discharge.....	47
Application Requirement related to OG 8-S1 – Work stoppages	47
Application Requirement related to OG 10-S3 Security personnel.....	48
Application Requirement related to OG 11-S3 - Metrics on affected communities.....	48
Application Requirement related to OG 12-S3 - Human rights and environmental defenders ..	48
Application Requirement related to OG 14-S3 - Workforce hired from local communities.....	49
Application Requirement related to OG 16-G1- State-aid and competition.....	49
Appendix C: List of datapoints in accordance with EU law	50
Appendix D: NACE codes	51
Appendix E: Material sustainability matters in the oil and gas sector	52

Objective

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

Scope of application

5. An undertaking is within the scope of application of this [draft] ESRS when *Oil and Gas* is a significant sector according to paragraph 38 (b) and/or (c) of ESRS 2 *General Disclosures*, using the criteria set in AR 12 of ESRS 2 to define a significant sector.
6. [draft] ESRS SEC 1 *Sector classification* defines the aggregation of activities (NACE codes) into sectors for the purposes of applying sector ESRS. The list of NACE codes that pertain to the *Oil and Gas* sector are listed in Appendix D to this [draft] ESRS, consistent with SEC 1.
7. The *Oil and Gas* sector is composed of upstream, midstream, downstream and services segments.
8. Oil and Gas upstream activities include the development, exploration and production of conventional and unconventional oil and gas reserves. Unconventional development includes the mining and extraction of oil sands, shale oil and gas, deep sea exploration and fracking, among other techniques. Activities of developing and/or operating oil and gas fields occur both for on-shore and off-shore reserves. Activities classified under NACE include B.06.10 Extraction of crude petroleum and B.06.20 Extraction of natural gas.

9. Oil and Gas midstream includes the transportation and storage of natural gas, crude oil, and refined petroleum products. Activities involve gathering, transporting and processing of natural gas as well as transport of crude oil and refined products over land (pipelines, truck and rail) or water (tankers and barges). Includes also storage terminals stocking oil and gas above and below ground. Activities classified under NACE include H.49.50 Transport via pipeline.
10. Oil and Gas downstream activities include refining and marketing of petroleum products, which includes operating gas stations and convenience stores. Activities classified under NACE include C.19.20 Manufacture of refined petroleum products, G.46.71 Wholesale of solid, liquid and gaseous fuels and related products and G.47.30 Retail sale of automotive fuel in specialised stores.
11. Oil and Gas services provide support activities and equipment to the Oil and Gas value-chain. Services include activities such as drilling, completing and equipping oil and gas on-shore and off-shore wells, as well as seismic surveying, well cementing, and well monitoring. The provision of equipment comprises selling or renting equipment used in the extraction, storage, and transportation of oil and natural gas. Services are usually provided on a contractual basis, and equipment is either purchased, leased or rented. Activities classified under NACE include B.09.10 Support activities for petroleum and natural gas extraction.
12. Integrated oil and gas undertakings are involved in activities in more than one of the above segments, typically across upstream, midstream and downstream activities.

Presentation of sector-specific disclosures

13. When reporting on policies, actions, metrics and targets to manage material sustainability matters according to this [draft] ESRS, the undertaking shall include the information provided for in ESRS 2, respectively in *DC-P – Policies adopted to manage material sustainability matters*, *DC-A - Actions and resources in relation to material sustainability matters*, *DC – M - Metrics in relation to material sustainability matters* and *DC-T – Tracking effectiveness of policies and actions through targets*.
14. When preparing its sustainability statements, the undertaking shall group the disclosures by cross-cutting reporting area and, where applicable, by sustainability matter¹ according to the provisions set out in [draft] ESRS 1 paragraph 117. Disclosures stemming from the [draft] *Oil and Gas* ESRS shall be presented alongside the disclosures required by the corresponding sector-agnostic ESRS.

Sector-specific materiality assessment guidance

15. This [draft] ESRS identifies the list of matters that shall be addressed by undertakings operating in the Sector. Some of them are already listed in AR 12, Appendix B of ESRS 1. The undertaking withing the scope of application of this [Draft] ESRS shall consider, for the purposes of paragraph 31 of ESRS 1 General Requirements, that the sustainability matters listed in the table in paragraph 19 below are material.
16. Irrespective of the outcome of its materiality assessment, the undertaking shall:
 - (a) apply the requirements in the main body and in Appendix B of this [draft] ESRS that relate to ESRS E1 Climate Change and ESRS 2 General Disclosures;
 - (b) apply the requirements in the main body and in Appendix B of this [draft] ESRS that relate to ESRS S1 Own workforce, DRs from 1 to 9, if it has 250 or more employees;
 - (c) include the datapoints that emanate from EU law listed in Appendix C of this [draft] ESRS.
17. In relation to each of its material matters, the undertaking shall apply paragraphs 33 to 39 of ESRS 1 *General requirements*.

¹ Defined in Appendix A of ESRS 1.

Sector-specific material sustainability matters

18. This [draft] ESRS sets out Disclosure Requirements related to the sustainability matters which are commonly applicable to undertakings operating in the Sector, listed in the table below. Some of them are already listed in AR 12, Appendix B or ESRS 1. Detailed descriptions of them are included in Appendix E.

Environmental	Social	Governance: G1
E1: Climate change adaptation (*)	S1: Working conditions (*)	Corporate culture (*)
E1: Climate change mitigation (*)	S1: Equal treatment and opportunities for all (*)	Political engagement and lobbying activities (*)
E1: Energy (*)	S1: Other work-related rights (*)	Supplier relationships (*)
E2: Pollution of air (*)	S2: Working conditions (*)	Corruption and bribery (*)
E2: Pollution of water (*)	S2: Equal treatment and opportunities for all (*)	Anti-competitive behaviour
E2: Pollution of soil (*)	S2: Other work-related rights (*)	Cybersecurity
E2: Pollution of living organisms and food resources (*)	S3: Communities' economic, social and cultural rights (*)	
E2: Substances of concern (*)	S3: Communities' civil and political rights (*)	
E2: Substances of very high concern (*)	S3: Particular rights of indigenous communities (*)	
E2: Industrial hazards	S3: Impacts on human rights and environmental defenders	
E3: Water withdrawals	S4: Information-related impacts for consumers and/or end-users (s*)	
E3: Water consumption (*)	S4: Personal safety of consumers and/or end-users (*)	
E3: Water use	S4: Social inclusion of consumers and/or end-users (*)	
E3: Water discharges in water bodies and in the oceans		
E3: Habitat degradation and intensity of pressure on marine resources(*)		
E4: Direct impact drivers of biodiversity loss (*)		
E4: Impacts on the state of species (*)		
E4: Impacts on the extent and condition of ecosystems (*)		
E4: Impacts and dependencies on ecosystem services (*)		
E5: Resources inflows, including resource use (*)		

E5: Resource outflows related to products and services (*)		
E5: Waste (*)		

(*) Sustainability matter covered by Disclosure Requirements in the topical sector-agnostic ESRS (see ESRS 1 Appendix B table in paragraph AR 12.)

Reporting boundary

19. Without changing the application of the requirements in Chapter 5. Of ESRS 1 *Value chain*, the undertaking shall include in its sustainability statements information about the operational sites and assets that are under its financial and operational control.

Navigation table

20. The following table provides an overview of which disclosure and application requirements of the [draft] ESRS Oil and Gas are applicable to undertakings that operate in one or more segments of the sector.

Name of requirement	Level of disaggregation	Upstream	Midstream	Downstream	Services
Sector-specific Disclosure Requirements related to sector agnostic Disclosure Requirements					
Disclosure Requirement related to ESRS 2 SBM-1 Market position, strategy, business model(s) and value chain	NACE	x	x	x	X
Disclosure Requirement related to ESRS 2 IRO 2 Disclosure Requirements in ESRS covered by the undertaking's sustainability statements		x	x	x	
Disclosure requirement related to ESRS E1-1 Transition plan for climate change mitigation		x			
Disclosure requirement related to ESRS E1-4 Targets related to climate change mitigation		x	x	x	X
Disclosure Requirement related to E1 Methane focus		x	x	x	X
Disclosure Requirement related to ESRS E1-6 Gross scope 1,2,3 and Total GHG emissions		x	x	x	X
Disclosure Requirement related to ESRS E1-9 Potential financial effects from material physical and transition risks and potential climate-related opportunities		x	x	x	
Disclosure Requirement related to E2 Pollution prevention and control focus		x	x	x	X
Disclosure Requirement related to E2 Industrial hazards focus		x	x	x	x

Oil and Gas ED – SR TEG approved

Name of requirement	Level of disaggregation	Upstream	Midstream	Downstream	Services
Disclosure Requirement related to E2 Closure of assets focus		x	x	x	
Disclosure Requirement related to ESRS E3-1 Policies related to water and marine resources		x		x	x
Disclosure Requirement related to ESRS E4-2, 3, 4 Policies, actions and targets related to biodiversity and ecosystems	Operational site	x	x	x	
Disclosure Requirement related to ESRS E4-5 Impact metrics related to biodiversity and ecosystems change	Operational site	x	x	x	
Disclosure Requirement related to ESRS E5-1 Policies related to resource use and circular economy		x	x	x	x
Disclosure Requirement related to ESRS E5-2 Action plans and resources in relation to resource use and circular economy	Operational site	x	x	x	x
Disclosure Requirement related to ESRS E5-3 Targets related to resource use and circular economy		x	x	x	x
Disclosure Requirement related to ESRS E5-5 Resource outflows		x	x	x	x
Disclosure Requirement related to ESRS S1-1, S1-4 and S1-5 Policies, actions and targets related to own workforce		x	x	x	x
Disclosure Requirement related to ESRS S1 Work-related hazards focus		x	x	x	x
Disclosure requirement related to ESRS S3 – Indigenous peoples' rights focus		x	x	x	
Disclosure Requirement related to ESRS S3-1, S3-4 and S3-5 Policies, actions and targets related to affected communities		x	x	x	
Disclosure Requirement related to ESRS S3-2 Processes for engaging with affected communities about impacts		x	x	x	
Disclosure Requirement related to ESRS G1-2 – Management of relationships with suppliers	Operational site (where relevant)	x	x	x	

Oil and Gas ED – SR TEG approved

Name of requirement	Level of disaggregation	Upstream	Midstream	Downstream	Services
Sector specific Disclosure Requirements					
Disclosure Requirement OG 1 - List of operational sites and infrastructure	Operational site	x	x	x	
Disclosure Requirement OG 2 – Oil and gas reserves		x			
Disclosure Requirement OG 3-E1 - CO2 abatement technologies		x	x	x	
Disclosure Requirement OG 4-E1 - GHG emission intensity of energy		x	x	x	
Disclosure Requirement OG 5-E3 – Water withdrawal		x		x	
Disclosure Requirement OG 6-E3 – Water discharge		x		x	
Disclosure Requirement OG 7-E3 – Marine resources		x			x
Disclosure Requirement OG 8-S1 – Work stoppages		x	x	x	x
Disclosure Requirement OG 9-S2 – Health and safety for contractors		x	x	x	
Disclosure Requirement OG 10-S1 – Security personnel		x	x	x	x
Disclosure Requirement OG 11-S3 - Metrics on affected communities	Operational site	x	x	x	
Disclosure Requirement OG 12-S3 – Human rights and environmental defenders		x	x	x	
Disclosure Requirement OG 13-S3 – Resettlement	Operational site	x	x		
Disclosure Requirement OG 14-S3 – Workforce hired from local communities	Operational site	x	x	x	
Disclosure Requirement OG 15-G1 – Transparency about contracts with governments		x	x	x	
Disclosure Requirement OG 16-G1 – State-aid and competition		x	x	x	
Disclosure Requirement OG 17-G1 – Cybersecurity		x	x	x	x
Disclosure Requirement OG 18-G1 – Beneficial owners of business partners		x	x	x	x

Name of requirement	Level of disaggregation	Upstream	Midstream	Downstream	Services
Disclosure Requirement OG 19-G1 – Oil and gas purchases from governments		x	x	x	

1. Sector-specific additional disclosures related to sector-agnostic Disclosure Requirements

Disclosure Requirement related to [draft] ESRS 2 SBM-1 Market position, strategy, business model(s) and value chain

21. In addition to disclosing according to ESRS 2 SBM-1, the undertaking shall provide a breakdown of its net revenue (both in monetary amount and as a percentage of its total revenue) per NACE-code activity where it is active for the following NACE-code activities²:

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

22. Undertakings shall disclose the following activity metrics related to³:

- (a) Upstream undertakings' extraction of crude petroleum:

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

- (b) Upstream undertakings' extraction of natural gas:

	Current production
Total Natural gas production of which:	[Nm ³]
a. Natural gas processed into Liquefied natural gas (LNG)	[Nm ³]
b. Shale gas extracted via hydraulic fracturing	[Nm ³]

² 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](#).

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

c. Natural gas near or in nature sensitive areas	[Nm ³]
--	--------------------

(c) Midstream undertakings' oil products distribution volume:

	Current volumes
Total distributed volume	[M]

(d) Downstream undertakings' refining volume:

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

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

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

23. "Targeted" means the current reporting year plus three years.

24. The undertaking shall disclose its policy in relation to the ISO or CEN-Cenelec recommendations, in particular:

- (a) whether and to which extent its processes comply with the ISO or CEN-Cenelec recommendations relevant for the Sector;
- (b) whether and when these have been reviewed or audited by an external assurance provider and found to conform to the corresponding ISO or CEN-Cenelec recommendations.

Disclosure Requirement related to [draft] ESRS 2 IRO 2 Disclosure Requirements in ESRS covered by the undertaking's sustainability statements

25. In addition to the information required by ESRS 2- IRO 2, when the information required by a Disclosure Requirement of this [Draft] ESRS is omitted as assessed to be not material for the undertaking, the undertaking shall report a brief explanation of the conclusions of its materiality assessment for such Disclosure Requirement. For the Disclosure Requirements of Chapter 1 of this [Draft] ESRS, the brief explanation is expected to also cover the omission of the corresponding Disclosure Requirement in the sector agnostic [draft] ESRS to which the content in Chapter 1 relates. The brief explanation is not required when the undertaking omits a Disclosure Requirement in this [draft] ESRS that is not applicable to the segment of activity in which it operates (see Navigation Table in paragraph 20).

26. In the list of Disclosure Requirements complied with in preparing the sustainability statements, following the outcome of the materiality assessment, to be reported following paragraph 55 of ESRS 2, the undertaking shall also cover the Disclosure Requirements of this Standard.

Disclosure requirement related to [draft] ESRS E1-1 Transition plan for climate change mitigation

27. In addition to the information provided following ESRS E1-1, the undertaking with upstream operations shall disclose whether it envisages any greenfield projects or

expansions of oil and gas production and, if applicable, the geographical location of such greenfield projects.

28. In addition to the information provided following ESRS E1-1, the undertaking with upstream operations shall provide a breakdown of its Capex for the reporting period and its Capex plans for the short and medium-term in relation to:
- (a) Production of oil and gas, further split by:
 - i. undeveloped reserves to bring assets into production (developed producing reserves);
 - ii. non-producing reserves to bring assets into production (developed producing reserves);
 - iii. Investments in developed producing reserves;
 - (b) Renewable-energy sources, further split by:
 - i. All sources (by type of source), excluding bioenergy;
 - ii. Bioenergy, including novel biofuel types;
 - (c) Carbon Capture Utilization and Storage (CCUS), further split by:
 - i. Fossil Carbon capture and storage;
 - ii. Direct Air Capture and Storage (DACs);
 - (d) Nature-based solutions to mitigate climate change; and
 - (e) Other research and development initiatives that can address the organization’s risks related to climate change.

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

	Proved Reserves
Developed producing reserves	[MtCO ₂]
Developed non-producing reserves	[MtCO ₂]
Undeveloped reserves	[MtCO ₂]

Disclosure Requirement related to [draft] ESRS E1-4 Targets related to climate change mitigation and adaptation

30. The undertaking shall disclose its target(s) to reduce GHG emissions in Scope 3 category 11 “Use of sold products”. In case the undertaking has not set a target, it shall explain why and indicate whether and, if so, when it will adopt such a target in accordance to ESRS 2, paragraph 60.
31. The provisions of ESRS E1-4, par. 30 and 32 apply, as appropriate.

Disclosure Requirement related to [draft] ESRS E1 Methane focus

32. In addition to the information provided following ESRS E1-2 to 4 and 6, the undertaking shall disclose its policies, targets and actions related to the management and abatement of methane emissions.
33. The undertaking shall disclose its actions and resources to manage and abate methane emissions. This disclosure shall include:
- (a) whether a Leak Detection & Repair (LDAR) programme exists and a brief description of the programme including;

- i. the frequency of the monitoring;
 - ii. the different methane monitoring technologies, e.g. remote sensing techniques or estimation methods;
 - iii. the actions taken to address the methane leakages found as a result of the regular monitoring surveys;
 - (b) the geographical location of any significant flaring or venting emissions;
 - (c) the percentage of routine and non-routine flaring, cases of flaring and efficiency of combustion.
34. In the absence of policies, actions and targets related to the management and abatement of methane emissions, the undertaking shall explain why such policies, actions and targets are not in place (see paragraph 60 of ESRS 2 *General Disclosures*).

Disclosure Requirement related to [draft] ESRS E1-6 - Gross scope 1,2,3 and Total GHG emissions

35. In addition to the information provided following ESRS 1 E1-6, the undertaking shall provide 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.
36. The undertaking shall disclose its Scope 3, 'Use of sold products emissions' in accordance with ESRS E1-6, AR 44.
37. The undertaking with integrated operations shall separately report Scope 3, 'Use of sold products emissions' associated with each segment of its integrated operations.
38. The undertaking operating in the Services segment shall report the emissions associated with the use of the products they have sold to undertakings in the oil and gas value chain.
39. The undertaking operating in the Services segment shall disclose Scope 3, 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.

Disclosure Requirement related to [draft] ESRS E1-9 Potential financial effects from material physical and transition risks and potential climate-related opportunities

40. 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 the medium and long-term financial position, performance and development.
41. This disclosure shall include:
 - (a) changes in the investment levels dedicated to the development of oil and gas proved reserves;
 - (b) changes in investments in development of low-carbon products and services or adaptation solutions;
 - (c) the development of new infrastructure projects related to fossil fuel transportation and distribution;
 - (d) potential write-off situations that do not meet the accounting recognition criteria; and
 - (e) early closure of existing assets and impacts on useful life of the existing assets.

Disclosure Requirement related to [draft] ESRS E2 Pollution prevention and control focus

42. In addition to the information provided following ESRS E2-1 to 4, the undertaking shall disclose its policies, targets, actions and metrics related to pollution prevention and control in normal operations.
43. When disclosing information provided following ESRS E2-1, paragraph 14(a) and ESRS 2, paragraph 63(a) the undertaking shall:
- (a) indicate if policies relative to equipment, infrastructure and process maintenance; the identification and implementation of Best Available Techniques; and environmental quality monitoring around operational sites are in place; and briefly describe the policies, in accordance with ESRS 2, paragraph 63(b).
 - (b) disclose if the policies related to pollution prevention and control apply to all its operating sites and disclose the name of the sites which are not covered by the general policy.
44. The undertaking shall disclose its actions and resources on:
- (a) maintenance and inspection frequency of critical infrastructure.
 - (b) monitor the quality of the environment around its operational sites, namely the percentage of operational sites that have an environmental monitoring plan in operation.
45. The undertaking shall disclose the number of times it did not comply with respect to regulatory or environmental quality limits in the vicinity of its operational sites.
46. The undertaking shall disclose the following metrics related to hydraulic fracturing:
- (a) The percentage of hydraulically fractured wells for which there is public disclosure of all fracturing fluid chemicals used;
 - (b) percentage of hydraulic fracturing sites where ground or surface water quality deteriorated compared to a baseline;
 - (c) cubic meters of hydraulic fracturing fluid used.

Disclosure Requirement related to [draft] ESRS E2 Industrial hazards focus

47. In addition to the information provided following ESRS E2-1 to 4, the undertaking shall disclose its policies, targets, actions and metrics related to industrial hazards.
48. The undertaking shall explain how its implemented policies address:
- (a) spills and loss of containment events for hydrocarbon and other chemicals used in operations;
 - (b) tailings from oil sands mining and in particular the existence of any tailing ponds or dams.
49. The undertaking shall disclose its actions and resources to the prevention, mitigation and management of:
- (a) hydrocarbon spills and hydrocarbon substances discharged to soil and water;
 - (b) other chemicals spills to soil and water;
 - (c) tailings from oil sands mining.
50. The undertaking shall disclose the pollution-related targets it has adopted with regards to the prevention and control of:
- (a) hydrocarbon spills and hydrocarbon substances discharged to soil and water;
 - (b) other chemicals spills to soil and water;
 - (c) tailings from oil sands mining.
51. The undertaking shall disclose the following pollution metrics:

- (a) With regards to water pollution:
 - i. volumes (in tonnes) and number of hydrocarbon spills to water;
 - ii. volumes (in tonnes) and number of other chemical spills to water.
 - (b) With regards to the soil emissions:
 - iii. volumes (in tonnes) and number of hydrocarbon spills to soil;
 - iv. volumes (in tonnes) and number of other chemical discharges to soil.
 - (c) Number of spills during transportation, namely:
 - v. pipeline incidents and percentage of significant spills;
 - vi. 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 the percentage (compared to total number of storage tanks) of underground storage tanks requiring clean-up.
52. The undertaking shall disclose the following metrics on process safety events, as defined by the International Association of Oil & Gas Producers (IOGP) as a total number of Tier 1 process safety events, including:
- a. number of Tier 1 process safety events reported separately for each major business activity, such as refining or upstream;
 - b. provide qualitative descriptions of any significant process safety events that occurred during the reporting year, including the undertakings' response and lessons learned to prevent recurrence;
 - c. the review assessment and management of process safety risks.
53. The undertaking shall report on financial effects of incidents with environmental impacts related to pollution, such as spills, leakages, uncontrolled discharges or other operational safety event.

Disclosure Requirement related to [draft] ESRS E2 Closure of assets focus

54. In addition to the information provided following ESRS E2-1 to 6, the undertaking shall disclose its policies, targets, actions, metrics and financial effects related to closure of assets.
55. When disclosing information provided following ESRS E2-1, the undertaking shall indicate if it has a policy addressing the adoption of closure plans for operational sites addressing decommission, rehabilitation or restoration and monitoring of sites.
56. The undertaking shall disclose its pollution-related closure actions and resources, including whether a closure plan exists or is foreseen for each of its operational sites that have already reached the end of its operational life. If this is not the case, the undertaking shall disclose the list of sites for which there is no existing or foreseen site rehabilitation plan.
57. The undertaking shall disclose information about how it manages its responsibilities related to closure and post-closure of operational sites.
58. The undertaking shall disclose the material financial liabilities it expects to incur for closure and rehabilitation, per operational site, including [environmental and social] post-closure monitoring and aftercare for mine sites, in particular:
- (a) amount recognized in the financial statements;
 - (b) undiscounted monetary value of a) split by relevant time bucket;
 - (c) discount rate used to calculate a);

- (d) potential additional liabilities that do not meet the recognition criteria at the reporting date; and
- (e) whether the operational site has been sold to a third party.

Disclosure Requirement related to [draft] ESRS E3-1 Policies related to water and marine resources

59. In addition to disclosing the information required in Disclosure Requirement ESRS E3-1 *Policies and targets related to water and marine sources*, the undertakings shall include a description of its interactions with water as a shared resource, particularly in areas at water risk and where conflicts between different water uses may emerge.

Disclosure Requirement related to [draft] ESRS E4-2, E4-3 and E4-4 Policies, actions and targets related to biodiversity and ecosystems

60. In addition to disclosing its policies implemented to manage its material impacts, risks and opportunities related to biodiversity and ecosystems, the undertaking shall describe if and how its policies address:
- (a) a phase-out of existing operations and/or stopping operational investments in or near key biodiversity areas. In case such policies are not in place, the undertaking shall disclose the policy provisions to minimize biodiversity and ecosystem impacts from current and future operations in or near these areas;
 - (b) the achievement of no net loss or a net gain to biodiversity on operational sites, whether these commitments apply to existing and future operations and whether they apply to operations other than those in or near key biodiversity areas;
 - (c) closure of operational sites at their end-of-life, including the implementation of site rehabilitation or restoration plans.
61. The undertaking shall disclose whether its policies or some aspects of its policies implemented to manage material impacts, risks and opportunities related to biodiversity and ecosystems, according to ESRS E4-2, do not apply to one or more of its sites. In such cases, the undertaking shall disclose which policies apply for those operational sites and, when for sites located in or near key biodiversity areas, if they are more stringent than the corporate wide policy.
62. The undertaking shall explain how the application of the mitigation hierarchy has resulted in:
- (a) areas protected through avoidance measures or offset measures;
 - (b) areas restored through on-site restoration measures or offset measures.
63. The undertaking shall disclose its biodiversity- related closure activities, including whether a site rehabilitation or restoration plan exists or is foreseen for each of its operational sites. If this is not the case, the undertaking shall disclose the list of sites for which there is no existing or foreseen site rehabilitation or restoration plan.
64. In addition to disclosing according to the Disclosure Requirement ESRS E4-4 *Targets related to biodiversity and ecosystems*, the undertaking shall disclose targets related to:
- (a) minimising average direct land-use change per oil and gas well;
 - (b) minimising direct land-use change from oil sands mining activity; and
 - (c) maximising the percentage of impacted area rehabilitated or restored.

Disclosure Requirement related to [draft] ESRS E4-5 Impact metrics related to biodiversity and ecosystems change

65. The undertaking shall disclose significant impacts on biodiversity and ecosystems change:

- (a) average land-use change per oil and per gas well, 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 protected areas and 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 organisation and this by level of extinction risk.
66. 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 protected areas and in key biodiversity areas.

Disclosure Requirement related to [draft] ESRS E5-1 Policies related to resource use and circular economy

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

Disclosure Requirement related to [draft] ESRS E5-2 Action plans and resources in relation to resource use and circular economy

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

Disclosure Requirement related to [draft] ESRS E5-3 Targets related to resource use and circular economy

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

Disclosure Requirement related to [draft] ESRS E5-5 Resource outflows

71. In addition to reporting on the resource outflows according to the E5-5 sector agnostic disclosure, the undertaking shall include the following volumes referred to the reporting period:

- (a) volume (in cubic meters) and percent of crude oil and gas that is traded for the following activities:
 - i. petrochemicals;
 - ii. petroleum products;
 - iii. unknown.
- (b) tonnes oil recovered from oil spills;
- (c) tonnes of drilling waste (muds and cuttings);
- (d) tonnes of sludges;
- (e) tonnes of tailings;
- (f) tonnes of decommissioned materials;

Equipment and machinery assets

- 72. The undertaking shall describe their efforts to increase the life and efficiency of their equipment and machinery assets.
- 73. In addition to reporting resource outflows according to DR E5-5 38 (b), the undertaking shall disclose the amount of machinery and equipment, by weight, that is diverted from disposal by recovery operation type as stipulated under DR E5-5 38 (b) i-iii.

Disclosure Requirement related to [draft] ESRS S1-1, S1-4 and S1-5 Policies, actions and targets related to own workforce

- 74. In addition to reporting according to the requirements of ESRS S1-1, S1-4 and S1-5 the undertaking shall disclose information related to working conditions for own workers. Specifically, the undertaking's policy, 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.

Disclosure Requirement related to [draft] ESRS S1 – Work-related hazards focus

- 75. In addition to reporting on ESRS S1-1, 4 and 5 and ESRS S1-13 and 14, the undertaking shall provide information in relation to work-related hazards whose own workforce is exposed to in its operations.
- 76. The undertaking shall provide the following information:
 - (a) for chemical hazards, a description of the substances of very high concern that workers are exposed to in its operations;
 - (b) for physical hazards, a description of the factors that contribute to these hazards, such as thermal strain and stress or noise and vibrations; and
 - (c) a description of ergonomic hazards.
- 77. The undertaking shall provide the following information in relation to policies, actions and targets in relation to:
 - (a) its occupational health services that contribute to the minimisation of risks and identification and elimination of hazards;
 - (b) how it ensures the quality of occupational health services and facilitates workers' access to them; and
 - (c) occupational health and safety training provided to workers, including the minimum number of hours per worker, on specific work-related hazards, hazardous activities, or hazardous situations.
- 78. The undertaking shall provide the following information in relation to metrics:

- (a) on health and safety indicators 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 workers in own workforce:
 - i. the number of work-related fatalities,
 - ii. the number of work-related injuries; and
 - iii. the number of cases of work-related ill health.
 - (b) the minimum number of hours of training per worker received by its own workforce on health, safety and emergency preparedness of employees, with respect to occupational risks or hazards to which its own workforce are reasonably likely to be exposed. Such information shall be broken down by employees and non-employee workers
79. The undertaking shall provide a qualitative description of any significant process safety events that occurred during the reporting year.

Disclosure Requirement related to [draft] ESRS S3 – Indigenous peoples’ rights focus

80. In addition to reporting on ESRS S3-1 to ESRS S3-5, the undertaking shall provide information in relation to the indigenous peoples’ rights.
81. The undertaking shall disclose:
- (a) its general approach to identifying indigenous peoples who are or could be affected by the undertaking’s activities; and
 - (b) how it seeks to ensure safe and equitable gender participation when engaging with indigenous peoples.
82. The undertaking shall disclose whether the affected indigenous peoples are engaged throughout the tailings facility lifecycle in building the knowledge and in decisions that may have a bearing on public safety.
83. The undertaking shall disclose the following metrics in relation to seeking free, prior and informed consent (FPIC):
- (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 is to be provided for 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.

Disclosure Requirement related to [draft] ESRS S3-1, S3-4 and S3-5 Policies, actions and targets related to affected communities

84. In addition to reporting according to the requirements of ESRS S3-1, the undertaking shall provide information on specific impacts that the undertaking can cause or contribute to on affected communities in relation to land and resources rights, including resettlement and closure of operational sites, and engagement with human rights and environmental defenders.
85. The undertaking shall disclose its policies, actions and targets in relation to land and resource rights and, specifically, on:
- (a) The recognition of legitimate tenure rights holders when acquiring, leasing or making other arrangements to use, or restrict the use of land;

- (b) addressing involuntary resettlement, and the process for establishing compensation for loss of assets or other assistance to improve or restore standards of living or livelihoods;
 - (c) the use of the land after the closure of the operational site.
86. The undertaking shall disclose its policies, actions and targets in relation to human rights and environmental defenders and, specifically, on:
- (a) respecting and protecting the human rights and environmental defenders,
 - (b) preventing attacks against human rights and environmental defenders.

Disclosure Requirement related to [draft] ESRS S3-2 Processes for engaging with affected communities about impacts.

87. In addition to disclosing according to the sector agnostic ESRS S3-2 Processes for engaging with affected communities about impacts, the undertaking shall describe its processes for engaging with human rights and environmental defenders.
88. Where applicable, the undertaking shall disclose whether post-closure plans have been consulted with the affected communities.

Disclosure Requirement related to [draft] ESRS G1-2 – Management of relationships with suppliers

89. In addition to disclosing according to the sector agnostic disclosure requirement ESRS G1-2, the undertaking shall disclose its policy with respect to the percentage of its procurement spending on suppliers local to that operation, when relevant for each operational site, or per group of operational sites within the same geographical area.

Disclosure Requirement related to [draft] ESRS G1-5 – Political influence and lobbying activities

90. When providing disclosures in accordance with Disclosure Requirement ESRS G1-5 paragraph 29, the undertaking shall disclose what it spent (as a reporting entity) on lobbying activities regarding its material impacts, risks and opportunities identified in its materiality assessment in accordance with [draft] ESRS 2.
91. The undertaking shall also disclose the number of open cases before courts or other competent authorities at the end of the reporting period that concern misleading commercial practices or public communication related to sustainability. It shall also disclose the number of similar cases resolved during the reporting period and the outcomes of such cases.

2. Sector-specific Disclosure Requirements

Disclosure Requirement OG 1 – Mapping of operational sites

92. **The undertaking shall disclose a list of its operational sites with specification of the sustainability matters to which they are connected.**
93. The objective of this Disclosure Requirement is to enable an understanding of which operational sites are connected with specific sustainability matters.
94. The undertaking shall present the list of the operational sites under its financial or operational control where either:
- (a) the site is among its top 20 sites;
 - (b) the site connected with material actual impacts or material potential negative impacts.
95. 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) tailing dams;
 - (c) LNG & Natural gas processing facilities;
 - (d) refinery assets; or
 - (e) oil and gas transmission pipelines.
96. For each of the operational sites in the list, the undertaking shall include:
- (a) basic description including name and location (region); a description of the activities and main characteristics of each site;
 - (b) type of control: financial or operational control
 - (c) status of site: active; undergoing closure; closed and rehabilitated; or closed and not rehabilitated;
 - (d) whether the operational site is connected with impacts related to social or environmental matters, including:
 - i. whether the site is located in or near to a protected areas or a key-biodiversity area, specifying the impacts to the affected habitats and ecosystems and describing biodiversity management and adaptive management activities in place.
 - i. whether the undertaking causes or contributes 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. toxic waste storage or disposal;
 - 6. involuntary resettlements have been caused or contributed to by the undertaking have been taken place near the site.
 - ii. whether the site is located in near conflict affected or high-risk areas; and
 - iii. whether the site is located in areas at water risk.

Disclosure Requirement OG 2 – Oil and gas reserves

97. **The undertaking shall disclose its proved oil and gas reserves.**
98. The objective of this Disclosure Requirement is to enable an understanding of an undertaking's proved reserves.
99. The undertaking shall disclose the percentage of proved reserves that are:
- (a) in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index;
 - (b) in or near areas of conflict;
 - (c) in or near indigenous land;
 - (d) in or near sites protected areas and key biodiversity areas; and
 - (e) in areas at water risk.
100. The undertaking shall disclose for each line item the corresponding countries where it has reserves.

Disclosure Requirement OG 3-E1 - CO₂ abatement technologies

101. **The undertaking shall disclose its activities related to CO₂ abatement technologies.**
102. The objective of this Disclosure Requirement is to provide an understanding of the extent to which the undertaking is implementing GHG abatement technologies at scale on its own sources or providing it as a service to others. It also enables the understanding of how issues related to potential liabilities for transported and stored CO₂ leakage are being dealt and reported under the scopes defined in DR E1-6.
103. The undertaking shall disclose amounts of CO₂ abated from emissions sources through carbon capture technologies, disaggregated by:
- (a) Transferred inside to the undertaking's organization (e.g. as a CCS service) and:
 - i. Used for internal processes (e.g. synthetic fuels);
 - ii. Permanently sequestered (e.g. CCS technologies);
 - iii. Transported to another organization (e.g. CO₂ transfer through pipeline).
 - (b) Captured inside the undertaking's organization and:
 - i. Transferred outside to the undertaking's organization (e.g. sold as product);
 - ii. Used for internal processes (e.g. synthetic fuels, enhanced oil recovery);
 - iii. Permanently sequestered (e.g. CCS technologies).
104. The undertaking shall describe how the risk of non-permanence storage is managed, including determining and monitoring leakage and reversal events.
105. When disclosing the information on GHG abated under paragraph 46, 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.

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

106. **The undertaking shall disclose its GHG emission intensity per unit of energy produced.**
107. The objective of this disclosure is to provide a benchmark metric of full life-cycle GHG impacts of the company activity on a physical intensity basis and how it compares with expected values for the global economy under 1.5°C compatible GHG mitigation scenarios and how it is likely to change under current investment and/or transition plans.
108. An undertaking operating upstream shall disclose the GHG intensity of its energy production (CO₂e/unit of energy)⁴.
109. Undertakings operating refineries shall disclose their CO₂/CWT (Complexity Weighted Tonne).
110. Undertakings producing hydrogen shall disclose the GHG intensity of its overall hydrogen production.
111. Undertakings with marketing activities shall disclose GHG intensity of the final energy it sells (CO₂e/unit of energy).

⁴ 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](#).

Disclosure Requirement OG 5-E3 – Water withdrawal

112. **The undertaking shall disclose the freshwater and other water withdrawal for its activities and from what sources the water is withdrawn from.**
113. The objective of this disclosure requirement is to understand the dependency of the undertaking on water withdrawals, as well as potential significant impacts water withdrawals can have on local water resources and use.
114. The undertakings shall disclose the following indicators:
- (a) Total volume of water withdrawn from all areas in thousands of cubic meters (10^3m^3), including a breakdown by:
 - i. Total freshwater divided by:
 - 1. surface water;
 - 2. groundwater.
 - ii. Other water.
 - (b) Total volume of water withdrawn from areas at water risk in thousands of cubic meters (10^3m^3), including a breakdown by:
 - i. Total freshwater divided by:
 - 1. surface water;
 - 2. groundwater.
 - ii. Other water.
 - (c) Contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.
 - (b) The undertaking shall report on which operational sites the mining activities have a significant impact on groundwater level and environmental-flows and what measures are put in place to counteract these effects.

Disclosure Requirement OG 6-E3 – Water discharge

115. **The undertaking shall disclose the volume, the destination, and the impacts of the water it discharges to the environment or exports to third parties; and the actions it may have taken to improve the quality of the water discharged.**
116. The purpose of this Disclosure Requirement is to provide understanding of the impact of the undertakings' water discharges on local water resources and use.
117. The undertakings shall disclose the following indicators:
- (a) total volume of water discharged to areas at water risk in thousands of cubic meters (10^3m^3), including a breakdown by:
 - i. freshwater;
 - ii. other water.
 - (b) volume in thousands of cubic meters (10^3m^3) of produced water and process wastewater discharged;
 - (c) disclose the number of non-compliances with respect to local regulatory or permitting discharge limits and for which parameters; and
 - (d) any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.
118. The undertaking shall report in which water basin its oil and gas 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 counteract these effects.

Disclosure Requirement OG 7-E3 – Marine resources

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

Disclosure Requirement OG 8-S1 – Work stoppages

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

Disclosure Requirement OG 9-S2 – Health and safety policies for on-site contractors

126. **The undertaking shall disclose any policy it has concerning the health and safety of workers of undertakings contracted to perform construction or maintenance work on its sites.**
127. The objective of this Disclosure Requirement is to enable an understanding of whether the undertaking has a policy concerning the health and safety of workers of undertakings contracted to perform work on its sites and, if so, its content.
128. The undertaking shall describe its policy in relation to:
- (a) health and safety and performance of potential contractors in the selection process;
 - (b) the applicability of its own health and safety management system to workers of contractors performing work on site; and
 - (c) monitoring health and safety metrics for the contractor's workers while working on site.

Disclosure Requirement OG 10-S3 – Security personnel

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

131. 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 an explanation of the type of violation.

Disclosure Requirement OG 11-S3 - Metrics on affected communities

132. The undertaking shall disclose metrics regarding engagement with affected communities and the performance of its grievance mechanisms.
133. The objective of this Disclosure Requirement is to enable an understanding of the impacts of the undertaking on affected communities.
134. The undertaking shall disclose the number of sites with grievance mechanisms or similar conflict resolution procedures for the operational sites listed in OG1. following information for the operational sites listed in OG1. 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.
135. The undertaking shall disclose the percentage of operational sites that have: with implemented local community engagement, impact assessments, and/or development programs, including the use of:
- (a) implemented affected community engagement;
 - (b) been subject to 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;

In addition, for (b) above, the undertaking shall disclose whether the results of environmental and social impact assessments have been made public.

136. The undertaking shall disclose the following for the operational sites listed in OG1 and disclose at country level for material investments:
- (a) The extent of development of significant infrastructure investments (e.g. transport links, utilities) and services (e.g. community social facilities, health, and welfare centres) supported; and
 - (b) whether these investments and services are commercial, in-kind, or pro bono engagements.

Disclosure Requirement OG 12-S3 – Human rights and environmental defenders

137. **The undertaking shall describe the number of (confirmed) incidents when engaging with human rights and environmental defenders.**
138. The objective of this Disclosure Requirement is to enable an understanding of its performance in relation to respect of human right and engagement with environmental defenders.
139. The undertaking shall provide the number of (confirmed) incidents with human rights and environmental defenders and identify those that relate to vulnerable groups.

Disclosure Requirement OG 13-S3 – Resettlement

140. **The undertaking shall disclose the operational site for which it has caused or contributed to voluntary or involuntary resettlement.**
141. The objective of this Disclosure Requirement is to enable an understanding of the negative impacts that arise from voluntary or involuntary resettlement caused or contributed to by the undertaking on affected communities.
142. The undertaking shall disclose whether it has caused or contributed to voluntary or involuntary resettlement or where such a resettlement is ongoing; in this case the undertaking shall disclose the operational site(s) involved.
143. The undertaking shall describe cases of involuntary resettlement required by its activities (where governments permit disclosure).

Disclosure Requirement OG 14-S3 – Workforce hired from local communities

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

Disclosure Requirement OG 15-G1 – Transparency about contracts with governments

147. **The undertaking shall disclose information about its transparency with respect to agreements with governments for the exploitation of oil and gas resources.**
148. The objective of this Disclosure Requirement is to provide an understanding of the openness of the undertaking about its public contracts concluded about oil and gas resources.
149. The undertaking shall disclose for material contracts, concessions and licenses:
- (a) whether such contracts are made publicly available and where they can be found;
 - (b) for those public 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.

Disclosure Requirement OG 16-G1 – State-aid and competition

150. **The undertaking shall disclose the state aid received and the events of possible anti-competitive behaviour involving the undertaking during the reporting period.**
151. The objective of this disclosure requirement is to provide transparency on publicly announced investigations into or litigation concerning possible anti-competitive behaviour of the undertaking during the reporting period as well as any state aid received.
152. The undertaking shall disclose:
- (a) publicly announced notifications, preliminary investigations, investigations, proceedings or commitments and remedies relating to violations of antitrust and monopoly legislation or the receipt of state-aid where the undertaking was named as a participant by a competent authority; and
 - (b) the main outcomes of legal proceedings against the undertaking concluded during the reporting period, including sanctions, fines, commitments and remedies.

153. The undertaking shall also include the total received with respect to state aid or financial assistance received from any government on a country-by-country basis.
154. The undertaking shall also report the value of any thresholds that have been applied and any other contextual information necessary to understand how the project-level payments to governments reported have been compiled.

Disclosure Requirement OG 17-G1 – Cybersecurity [to be discussed]

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

Disclosure Requirement OG 18-G1 – Beneficial owners of business partners [TBD]

159. **The undertaking shall provide information about its beneficial ownership and how it identifies the beneficial owners of business partners, including joint ventures and suppliers.**
160. 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, how these are identified and managed by the undertaking.
161. The undertaking shall list its beneficial owner(s) (as defined in article 3(6) of Directive (EU) 2015/849) and shall disclose its policies and screening processes regarding politically exposed persons ('PEPs') and beneficial owners of business partners, including joint ventures and suppliers.

Disclosure Requirement OG 19-G1 – Oil and gas purchases from governments

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

Appendix A: Defined terms

This appendix is an integral part of the [draft] Exposure draft and has the same authority as the other parts of the [draft] Exposure draft.

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

Oil and Gas ED – SR TEG approved

Term	Description
	<ul style="list-style-type: none"> – Produced Water Well Production Stage Wastes Produced: <ul style="list-style-type: none"> – Produced Water
Energy recovery	The use of combustible waste as a means to generate energy through direct incineration with or without other waste but with recovery of the heat.
Enhanced Oil Recovery (EOR)	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. 2) Three major categories of EOR have been found to be commercially successful to varying degrees: <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. <u>Gas injection</u> , which uses gases such as natural gas, nitrogen, or carbon dioxide (CO ₂) 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. <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
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.
Greenfield	Agreement between a union and a new employer that does not yet have employees
High-risk area	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	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).
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.
Near miss	An unplanned incident in which no property or environmental damage or personal injury occurred, but where damage or personal injury easily could have occurred but for a slight circumstantial shift.

Oil and Gas ED – SR TEG approved

Term	Description
Non-accidental releases	An unintentional release of a hazardous substance affecting human health, land, vegetation, waterbodies, and groundwater that is not caused by collision, leakage, or other accident.
Throughput	The amount of product that moves through a particular facility during a given period of time.
Other water	Surface water that is not fresh water, and water from other sources
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.
Recycled and remanufactured materials	Waste materials that have been reprocessed or treated by means of production or manufacturing process and made into a final product or made into a component for incorporation into a product.
Reserves	Part of a mineral deposit which could be economically and legally extracted or produced at the time of the reserve determination.
Resources	“Undiscovered, technically recoverable resources” estimated to exist based on geologic knowledge and theory.
Scale and sludges	<p>1) Thick, soft, wet mud or a similar viscous mixture of liquid and solid components. 2) Sludge is composed of dissolved solids which precipitate from produced water as its temperature and pressure change. Sludge generally consists of oily, loose material often containing silica compounds, but may also contain large amounts of barium.</p> <p>Scales are normally found on the inside of piping and tubing. American Petroleum Institute found that the highest concentrations of radioactivity are in the scale in wellhead piping and in production piping near the wellhead. Concentrations were as high as tens of thousands of picocuries per gram. However, the largest volumes of scale occur in three areas:</p> <ul style="list-style-type: none"> – Water lines associated with separators, (separate gas from the oil and water). – Heater treaters (divide the oil and water phases). – Gas dehydrators, where scale deposits as thick as four inches may accumulate.
State aid	<p>State aid is defined as an advantage in any form whatsoever conferred by national public authorities to undertakings on a selective basis. Therefore, subsidies granted to individuals or general measures open to all enterprises are not covered by this prohibition and do not constitute State aid (examples include general taxation measures or employment legislation).</p> <p>To be State aid, a measure needs to have these features:</p> <ul style="list-style-type: none"> • there has been an intervention by the State or through State resources which can take a variety of forms (e.g. grants, interest and tax reliefs, guarantees, government holdings of all or part of a company, or providing goods and services on preferential terms, etc.); • the intervention gives the recipient an advantage on a selective basis, for example to specific companies or industry sectors, or to companies located in specific regions; • as a result, competition has been or may be distorted; • the intervention is likely to affect trade between Member States. <p>Despite the general prohibition of State aid, in some circumstances government interventions are necessary for a well-functioning and equitable economy. Therefore, the Treaty leaves room for a number of policy objectives for which State aid can be considered compatible. These exemptions can be found in legislation relevant to State aid.</p> <p>For non-EU countries, state aid refers to financial assistance received from any government.</p>

Oil and Gas ED – SR TEG approved

Term	Description
Suppliers local to that operation	The definition of 'suppliers local to that operation' can include the community surrounding operations, a region within a country, or a country.
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.
Tailings	Oil sands tailings are a mixture of water, sand, fine silts, clay, residual bitumen and lighter hydrocarbons, inorganic salts and water-soluble organic compounds.
Tier safety events	<p>A Tier 1 process safety event is defined by API RP 754 as an unplanned or uncontrolled loss of primary containment (LOPC) release of any material, including non-toxic and non-flammable materials, such as steam, hot condensate, nitrogen or compressed air, from a process that results in one or more of the following consequences:</p> <p>A Tier 2 process safety event is defined similarly but with less severity than the Tier 1 criteria above. See API RP 754 and IOGP's Report 456 for detailed definitions and guidance.</p> <p>Tier 3 "challenges to safety systems." 1.1 The entity shall refer to the terms, definitions, and guidance from the ANSI/API RP-754 (Section 7.2). Tier 3 indicators may alternatively be referred to as "near miss" events or "high learning value" events. Tier 4 indicators are metrics developed by the entity—specific to its facilities, operations, and safety priorities— that measure leading, proactive measures to maintain and improve safety and manage risk.</p>
Upstream undertaking(s)	Undertaking operating in the upstream activities.
Underground storage tank	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.
Undeveloped reserves	<p>Undeveloped oil and gas reserves are reserves of any category that are expected to be recovered from new wells on undrilled acreage, or from existing wells where a relatively major expenditure is required for recompletion.</p> <p>(i) Reserves on undrilled acreage shall be limited to those directly offsetting development spacing areas that are reasonably certain of production when drilled, unless evidence using reliable technology exists that establishes reasonable certainty of economic producibility at greater distances.</p> <p>(ii) Undrilled locations can be classified as having undeveloped reserves only if a development plan has been adopted indicating that they are scheduled to be drilled within five years, unless the specific circumstances, justify a longer time.</p> <p>(iii) Under no circumstances shall estimates for undeveloped reserves be attributable to any acreage for which an application of fluid injection or other improved recovery technique is contemplated, unless such techniques have been proved effective by actual projects in the same reservoir or an analogous reservoir, or by other evidence using reliable technology establishing reasonable certainty.</p>
Venting	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.

Appendix B: Application Requirements

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

1. Application Requirements related to sector-agnostic Disclosure Requirements

Application Requirement related to [draft] ESRS 2 SBM 1 Market position, strategy, business model(s) and value chain

AR 2. For the purpose of this Disclosure Requirement, 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 adaptation.

AR 3. The undertaking may disclose:

- (a) whether and to which extent its processes comply with the general-purpose ISO or CEN-Cenelec recommendations; and
- (b) whether and when these have been reviewed or audited by an external assurance provider and found to conform to the corresponding ISO or CEN-Cenelec recommendations.

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

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

- (a) the approach to identifying stakeholders within local communities;
- (b) a description of the vulnerable groups that the organisation has identified within local communities by operational site, such as women, children, migrants and their families, indigenous peoples, etc.

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

AR 5. 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.

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

AR 6. When disclosing a mapping of the information provided in its sustainability statements about the sustainability due diligence process, the undertakings operating in the areas of severe human rights risks shall also map the core elements from the OECD Due Diligence Guidance for Meaningful Stakeholder Engagement in the Extractive Sector in addition to the UN Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises mentioned in the agnostic disclosure.

AR 7. The undertaking shall include procurement in its mapping as well as and environmental factors. This may be presented in a table in a similar form to the table below.

Core elements	Paragraphs in the sustainability statements
OECD Guidelines for Multinational Enterprises	
Establish strong company management system	
Identify and assess risk in the supply chain	
Design and implement a strategy to respond to identified risks	
Carry out independent third-party audit of supply chain due diligence at identified points in the supply chain.	
Report on supply chain due diligence	

Application Requirement related to [draft] ESRS 2 IRO 1 - Description of the processes to identify and assess material climate-related impacts, risks and opportunities

AR 8. When the undertaking is conducting its materiality assessment on affected communities, the undertaking 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. 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 which would in turn be part of its double materiality assessment.

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

AR 9. When disclosing according to this sectors' Disclosure Requirement to ESRS E1-1 – Transition plan for climate change mitigation, the undertaking may further detail these categories to align OPEX and CAPEX plans with the EU taxonomy.

AR 10. When disclosing information on sector agnostic Disclosure Requirement E1-1[16(d)] on potential locked-in GHG emissions from the undertaking's assets and products, the undertaking shall consider the emissions potential of proven (P1) and probable (P2) reserves of their oil and gas assets and shall calculate this potential considering the recommendations in [Russel, Stephen (2016) "A recommended methodology for estimating and reporting the potential greenhouse gas emissions from fossil fuel reserves", World Resource Institute, 2016].

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

AR 11. When disclosing the information required under DR E1-4 on targets related to climate change mitigation, the undertaking shall consider disclosing the mandatory legislation the goals and targets are aligned with or contribute to.

Application Requirement related to [draft] E1 Methane focus

AR 12. When disclosing under paragraph [29, methane targets] 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).

AR 13. When disclosing under paragraph [30, methane actions] the undertaking may disclose if it participates in any partnership programme on methane management, such as the [Oil & Gas Methane Partnership 2.0](#).

AR 14. For purposes of calculating the % of routine 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 % 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-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 Partnership](#).

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

AR 15. When disclosing its Scope 3, Use of sold products emissions, in accordance to this sector Disclosure Requirement to ESRS E1-6 – Gross scope 1,2,3 and Total GHG emissions, paragraph 38:

- (a) upstream undertakings shall consider only the physical trading of crude oil and gas products and exclude financial trading volumes. Physical trading is all trading of crude oil and gas that actually involved the physical delivery of the product. An Upstream undertaking may report on financial trading of crude oil and gas but in this case, it shall present it separately;
- (b) midstream undertakings shall consider the CO₂ emissions of the throughput through the facilities under their financial or operational control during the reporting period, even if the oil and gas products are not owned by the undertaking;
- (c) downstream undertakings shall consider the physical sales of finished products. In case they integrate both (refining NACE) and (marketing NACE) activities, the volume to consider shall be the largest throughput of the two activities.

Application Requirement related to [draft] E2 Pollution prevention and control focus

AR 16. The undertaking shall consider disclosing what technologies does it use to manage its impact on air quality, such as technologies that remove or treat combustion emissions in operations or fuel products.

AR 17. When reporting on pipeline inspection the undertaking shall consider disclosing the percentage of natural gas pipelines inspected and the percentage of hazardous liquid pipelines inspected.

Application Requirement related to [draft] E2 Industrial hazards focus

AR 18. When disclosing examples of significant spills, as determined by the company according to the paragraph [47, spills] of this sector specific Disclosure Requirements, the undertaking may consider descriptions of the following:

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

AR 19. When disclosing under paragraph 48 the undertaking may also provide metrics on:

- (a) Number of Tier 2 process safety events, reported separately for each major business activity, such as refining or upstream.
- (b) Describe how you assess, monitor and review process safety and well control risk control barriers.
- (c) Describe your approach and application of Tier 3 and 4 metrics.

- (d) Describe how you incorporate cultural and human factors into process safety, including leadership, risk awareness and employee development.
- (e) State any commitments or targets you have that relate to process safety and report your progress.
- (f) Report process safety event rates
- (g) Report number of Level 1, 2 and 3 well control incidents and separately describe any Level 1 incidents.

Application Requirement related to [draft] ESRS E2 Closure of assets focus

AR 20. In providing the Disclosure Requirement related to ESRS E2-6, the undertaking shall consider the costs necessary to address:

- (a) Adverse impacts of closure of the operational site on own workers, non-employee workers and their communities (DR related to ESRS2 SBM 3); and
- (b) Restoration of material impacts to biodiversity and ecosystems around the closed operational site (DR related to ESRS E4-2).

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

AR 21. When disclosing the information required in E3-1 on policies and targets related to water and marine sources, the undertakings may include the following:

- (a) a description of how the organization interacts with water, including how and where water is withdrawn, consumed, and discharged, and the water-related impacts the organization has caused or contributed to, or that are directly linked to its operations, products, or services by its business relationships (e.g., impacts caused by runoff);
- (b) a description of the approach used to identify water-related impacts, including the scope of assessments, their timeframe, and any tools or methodologies used;
- (c) a description of how water-related impacts are addressed, including how the organization works with stakeholders to steward water as a shared resource, and how it engages with suppliers or customers with significant water-related impacts;
- (d) an explanation of the process for setting any water-related goals and targets that are part of the organization's approach to managing water and effluents, and how they relate to public policy and the local context of each area 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 22. When compiling the information about areas at water risk, the reporting organization shall consider using publicly available and credible tools and methodologies for assessing water risk in an area.

Application Requirement related to [draft] ESRS E4-2, E4-3, E4-4 Policies, actions and targets related to biodiversity and ecosystems

AR 23. When disclosing its policies implemented to manage its material impacts, risks and opportunities related to biodiversity and ecosystems, the undertakings with upstream and midstream operations may include how the undertaking applies the mitigation hierarchy and international biodiversity standards in its operational planning, from early concept through to decommissioning.

AR 24. 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 25. The undertaking shall consider including disclosing if it uses any recognised standard as a basis for site rehabilitation or restoration plans on what concerns biodiversity impacts.

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

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

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

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

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

AR 30. The undertaking may also provide metrics such as:

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

AR 31. Reserves are considered to be in areas of protected conservation status if they are located within:

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

- AR 32. 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 33. 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 34. For the purposes of disclosure, "passage" is defined as all areas of land or water that a migratory species inhabits, stays in temporarily, crosses or overflies at any time on its normal migration route.

Application Requirements related to [draft] ESRS E5-5 – Resource outflows

- AR 35. When describing the undertakings' efforts to increase the life and efficiency of their equipment and machinery assets the E5-4 – Resource outflows, the undertaking shall consider including information, such as:
- (a) whether assets were procured following circular approaches such as: leasing, procuring second-hand or remanufactured assets and whether new assets have been designed for longevity, reusability, repairability, etc.
 - (b) whether the undertaking has agreements or policies in place for the end-of-use of existing equipment that would enable recirculation in practice.
- AR 36. The information provided under the paragraph 64 should be reflecting the total weight of the outflow material in its original state, without data modification, such as reporting on a "dry weight" basis.

Application Requirement related to [draft] ESRS S1-1, S1-4 and S1-5 Policies actions and targets related to own workforce

- AR 37. In relation to working time and work-life balance information, examples of round-the-clock working relate to long or split shifts for continuous operations and multi-day assignments for remoted locations.
- AR 38. 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 39. When disclosing its policies, actions and targets on housing facilities and access to basic services, the undertaking may specify whether it takes into consideration specific needs for female workers.

Application Requirement related to [draft] ESRS S1 – Work-related hazards focus

- AR 40. 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 41. The undertaking may disclose the following information in relation to paragraph 81:
- (a) the actions taken in response;
 - (b) lessons learned to prevent recurrence; and

- (c) its regular review process of the assessment and management of process safety risks.

AR 42. The undertaking may specify whether sexual harassment is considered among psychosocial factors.

AR 43. 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.)

Application Requirement related to [draft] ESRS S1-11 Social protection

AR 44. In addition to disclosing how its own workers are covered against loss of income due to major life events in [draft] ESRS S1-11, the undertaking may disclose whether all workers in its own workforce are covered by non-occupational medical healthcare services through public programs or through benefits offered by the undertaking.

AR 45. 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 46. 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 47. 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 48. 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 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 49. When describing how it facilitates workers' access to voluntary health promotion services and programs, the undertaking may consider disclosing whether it allows workers to make use of these during paid working hours. The undertaking can also report if these services and programs are available for family members of workers.

Application requirement related to [draft] ESRS S1-13 Training and skills development

AR 50. The undertaking may disclose whether the trainings it provides to its own workforce include prevention against sexual harassment and discrimination.

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

AR 51. These application requirements support the application of the requirements from ESRS 2 described in paragraphs 15-19. It provides a non-exhaustive list of the factors to be considered by the undertaking when complying with ESRS 2 SBM-2 and ESRS 2 SBM-3.

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

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

AR 52. These application requirements support the application of the requirements from ESRS S1-1. It provides examples to be considered when complying with the aforementioned Disclosure Requirement.

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

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

AR 53. These application requirements support the applications of the requirements of ESRS S1-4. It provides examples to be considered when complying with the aforementioned Disclosure Requirement:

Social and human rights matters	Examples of actions
Secure employment	<ul style="list-style-type: none"> Reducing the percentage of posted workers

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

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

AR 54. When These application requirements support the applications of the requirements of ESRs S1-4. It provides examples to be considered when complying with the aforementioned Disclosure Requirement.

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

Application Requirement related to [draft] ESRS S3 – Indigenous peoples’ rights focus

AR 55. When describing responding to ESRS S3-2, the undertaking shall consider:

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

Application Requirement related to [draft] ESRS S3-1, S3-4 and S3-5 Policies, actions and targets related to affected communities

Policies

AR 56. When disclosing its policies 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.

AR 57. In relation to its disclosure on the policies of preventing attacks on human rights and environmental defenders, the undertaking may disclose whether it adopts a zero-tolerance approach for attacks against human rights and environmental defenders, and not to sue for defamation or to participate in strategic lawsuits against public participation (SLAPP).

Taking action on material impacts, risks and opportunities

AR 58. 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 Agreement⁵. The undertaking may refer to how the actions that are planned or underway are aligned to these frameworks.

AR 59. If the undertaking has an operation site in or near indigenous lands as listed in OG 1 the undertaking shall consider:

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

AR 60. 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.

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

AR 61. The undertaking shall consider listing the vulnerable groups, including any indigenous peoples, that it has identified within local communities and the approach to engaging with those vulnerable groups, including:

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

AR 62. When disclosing the engagement with human rights and environmental defenders, the undertaking shall consider its processes for engaging with human rights and environmental defenders as part of its due diligence processes, including on managing allegations of retaliations, threats and direct/indirect attacks (physical and legal – including all forms of judicial harassment) against defenders.

AR 63. The description of how an undertaking engages with local communities shall also consider an explanation on how the land will be used ex post the closure of the operational site. Where applicable, the undertaking shall develop such post-closure plans in consultation with local communities.

AR 64. The undertaking may describe any collective or individual rights that it has identified that are of particular concern for local communities (including vulnerable groups).

⁵ Refers to the COP 15 Convention on Biological Diversity of December 2022, not yet ratified.

AR 65. At the end of their commercial use, operational sites such as oil and gas fields and other facilities are expected to be decommissioned or closed by the undertaking in an orderly way. Closure and rehabilitation of oil and gas fields can include:

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

AR 66. The operational life of operational sites may last for several decades a regularly updated restoration plan is essential. For this reason, the undertaking may update its closure and restoration plan annually and such disclosure shall be considered by the undertaking.

AR 67. The undertaking may include how practices apply to business partners, such as contractors, sub-contractors, suppliers, and joint venture partners. Where practices do not apply to business partners, the undertaking may discuss factors that prevent the application of such practices.

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

AR 68. When disclosing its processes to remediate negative impacts following [draft] ESRS S3-3, the undertaking shall consider how it engages with local communities and other relevant stakeholders on its closure and post-closure planning and implementation, including post-exploitation land-use, to limit the actual and potential adverse impacts (e.g. unemployment, people moving out affecting the liveability of remaining supporting activities such as local shops, schools).

AR 69. The undertaking may disclose whether 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 Requirement related to [draft] ESRS G1-2 Management of relationships with suppliers

AR 70. Suppliers local to an operation are undertakings operating and registered in the same geographic market as the operation. The undertaking shall consider “local” to be the specific country market where its operation is located. The geographical definition of ‘local’ can include the community surrounding operations, a region within a country, or a country. The undertaking shall report any deviations from the suggested definition of “local”.

2. Application Requirements related to sector-specific Disclosure Requirements

Application Requirement related to OG 1 – Mapping of operational sites

Operational control

AR 71. The undertaking shall determine on the basis of the specific facts and circumstances which asset is under operational control.

AR 72. 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 venture (or equivalent commercial arrangement), and operated by a joint venture partner, in respect of which the company can determine management and board level operational decisions of the joint venture.

AR 73. Examples include mobile assets, such as vehicles or ships. The information about material impacts, risks and opportunities includes these when owned and operated by the reporting unit. 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 74. Paragraph 67 also establishes that the reporting undertaking provided in the sustainability statements shall be extended to include information on the material impacts, risks and opportunities connected to the undertaking through its direct and indirect business relationships in the upstream and/or downstream value chain (“value chain information”). In this case, operations and assets consolidated under “operational control” shall not be considered as part of the value chain, but as part of own operations.

AR 75. In the classification of sites by type, the undertaking shall refer to the following guidance:
 Oil and gas transmission pipelines: Transmission pipelines are used to transport crude oil and natural gas from their respective gathering systems to refining, processing, or storage facilities. Transmission pipelines also transport refined petroleum products and natural gas to customers, for use or for further distribution. With very few exceptions, transmission pipelines are dedicated to the transportation of crude oil, refined petroleum products, or natural gas. Transmission pipeline systems include all of the equipment and facilities necessary to 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.

AR 76. The undertaking may consider disclosing the list of operational sites and infrastructure in the following format.

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

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

Application Requirement related to OG 2 – Oil and gas reserves

AR 77. When disclosing under the Disclosure Requirement OG 2, the undertaking shall calculate the reserves as the amount of reserves located in the indicated area, divided by the total amount of proved reserves.

AR 78. 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 79. When disclosing under the Disclosure Requirement OG 2, the undertaking may consider disclosing the percentage of net probable reserves broken down as indicated in the paragraphs of this disclosure. In such case, the percent of proved reserves and probable reserves are to be calculated and reported separately.

AR 80. With reference to country breakdown, disclosure only needs to be provided for countries that represent more than 5% of reserves.

AR 81. With reference to the reserves located in or near areas of conflict:

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

AR 82. With reference to the reserves located in or near indigenous land, indigenous lands are considered those occupied by indigenous people which are defined in ESRS S3 as: "indigenous peoples are generally identified as 1) tribal peoples in independent countries whose social, cultural and economic conditions distinguish them from other sections of the national community, and whose status is regulated wholly or partially by their own customs or traditions or by special laws or regulations; 2) peoples in independent countries who are regarded as indigenous on account of their descent from the populations which inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonisation or the establishment of present state boundaries and who, irrespective of their legal status, retain some or all of their own social, economic, cultural and political institutions

AR 83. With reference to the reserves in or near sites protected areas and key biodiversity areas companies 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 . Companies may also want to clarify to what extent proved reserves are developed or undeveloped, given the potential differential impact risk between them.

AR 84. With reference to the reserves in areas at water risk companies 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.

Application Requirement related to OG 3-E1 - CO2 abatement technologies

AR 85. 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.

Application Requirement related to OG 5-E3 - Water withdrawal

AR 86. The undertaking may follow the table shown below when disclosing information required in DR OG8-E3 – Water withdrawals:

Water withdrawals	From areas at water risk	Total
Fresh water		
Surface water		
Groundwater		
Other water		

Application Requirement related to OG 6-E3 - Water discharge

AR 87. The undertaking may follow the table shown below when disclosing information required in DR OG 9-E3 – Water discharge:

Water discharge	On areas at water risk	Total
Fresh water		
Other water		

AR 88. When disclosing the indicators of water discharge, undertakings may present the internal standards they may have established for the management of water discharge-related impacts. The undertakings may give a description of any minimum standards set for the quality of effluent discharge, and how these minimum standards were determined, including:

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

Application Requirement related to OG 8-S1 – Work stoppages

AR 89. The undertaking shall disclose the information on the number of persons in own workforce involved in a major work stoppage as an absolute number of persons or FTE persons. A major work stoppage is defined as a work stoppage involving 100 or more employees and/ or non-employee workers in own workforce.

AR 90. The information required by paragraph 122 (b) 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.

AR 91. Where exact figures are not available, the undertaking may provide an estimate according to ESRS 1.

AR 92. The scope of this Disclosure Requirement includes work stoppages due to disputes between labour and management, including strikes and lockouts.

Application Requirement related to OG 10-S3 Security personnel

- AR 93. 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 94. 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.
- AR 95. The undertaking may disclose information on its processes of tendering and contracting with security providers. It may also disclose whether requirements related to the undertaking's human rights policies are included in private security.

Application Requirement related to OG 11-S3 - Metrics on affected communities

- AR 96. 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 97. 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 98. 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.

Application Requirement related to OG 12-S3 - Human rights and environmental defenders

- AR 99. 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.
- AR 100. 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 defenders", "environmental rights defenders", or just "environmental activists".
- AR 101. When describing the procedures and management of public or private security providers, the undertaking shall refer to training provided on company policies or international standards focused on safeguarding human rights as well as guidelines on the use of physical force and reporting procedures. It may also refer to screening and assessment processes, cost reimbursement and the use of company facilities.

- AR 102. When calculating the number of incidents in paragraph 107, the undertaking shall consider official sources such as policy reports or other reports issued by governmental organisations. The undertaking shall 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 103. 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 human rights and environmental defenders).
- AR 104. The undertaking may disclose if it has any initiatives or projects underway to support the actions or causes human rights and environmental defenders strive for.

Application Requirement related to OG 14-S3 - Workforce hired from local communities

- AR 105. Workers hired from local communities include those individuals either born or who have the legal right to reside indefinitely (such as naturalized citizens or permanent visa holders) in the same geographic market as the operation.
- AR 106. The geographical definition of 'local' 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 107. The undertaking may disclose whether it has assessed or identified potential negative risks in the local communities caused or contributed by its hiring policy.

Application Requirement related to OG 16-G1- State-aid and competition

- AR 108. 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.
- AR 109. When reporting in accordance with paragraph 150, the undertaking may include the following revenue streams in the breakdown:
- (a) The host government's production entitlement;
 - (b) National state-owned company production;
 - (c) Royalties;
 - (d) Dividends;
 - (e) Bonuses (e.g., signature, discovery, and production bonuses);
 - (f) License fees, rental fees, entry fees; and other considerations for licenses or concessions; and
 - (g) Any other significant payments and material benefits to government.

Appendix C: List of datapoints in accordance with EU law

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

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

Disclosure Requirement	Pillar 3 reference
DR related to ESRS 2-SBM 1 Market position, strategy, business model(s) and value chain	Article 449a Capital Requirements Regulation – CRR – Template 1: Banking book – Climate change transition risk: Credit quality of exposures by sector, emissions and residual maturity
DR related to ESRS E1-6 – Gross scopes 1, 2, 3 and total GHG emissions	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
DR related to ESRS E1-1 Transition plan for climate change mitigation	Article 449a CRR – Template 3 – Banking book – Climate change transition risk – Alignment risks
DR OG 5 – GHG emission intensity of energy	Article 449a CRR – Template 3 – Banking book – Climate change transition risk – Alignment risks

Appendix D: NACE codes

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

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

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

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

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

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

ENVIRONMENT

Climate change adaptation

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

Climate change mitigation

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

Energy

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

E2: Pollution

Pollution of air

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

Pollution of water

Sector activities may result in water discharges, such as hydrocarbon liquids, acids, biocides or muds. Water contamination can also occur from the injection of drilling fluids into wells and

flowback from hydraulic fracturing. Inefficient treatment of water discharges, oil spills from transportation accidents, ruptured pipelines or seepage, or failure of an oil sands tailings dam can cause severe impacts on water quality. Pollution can result from regular activities or can be related to incidental spills and industrial hazards connected to operations, infrastructure decommissioning or abandoned assets. Such incidents, events and catastrophes may result in severe environmental and social consequences and trigger significant financial liabilities, reputational damage and can be especially acute in areas of high-water stress.

Pollution of soil

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

Pollution of living organisms and food resources

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

Substances of concern

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

Substances of very high concern

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

E3: Water and marine resources

Water withdrawals

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

Water consumption

The amounts of water that are not returned to the environment are relevant sustainability matter within the sector and are referred as to consumed water. Impacts related to water consumption within oil and gas industry may refer to water converted to waste, evaporated, transpired, or being

polluted to the point of being unusable by other users, which prevents it from being released back to surface water, groundwater, seawater, or a third party over the course of the reporting period.

Water use

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

Water discharges in water bodies and in the oceans

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

Habitat degradation and intensity of pressure on marine resources

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

E4: Biodiversity and ecosystems

Direct impact drivers of biodiversity loss

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

Impacts on the state of species

Impacts on the state of species can include animal mortality or increased vulnerability to predators, habitat fragmentation and conversion, as well as the introduction of invasive species and pathogens, land degradation, or soil sealing. Severe effects from activities can be exacerbated when activities occur in protected areas or areas of high biodiversity value and may extend well beyond the closure and rehabilitation of operational sites or geographic boundaries of activities.

Impacts on the extent and condition of ecosystems

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

Impacts and dependencies on ecosystem services

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

E5: Resource and circular economy

Resources inflows, including resource use

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

Resource outflows related to products and services

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

Waste

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

SOCIAL

S1: 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. 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.

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 active conflict 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 work days 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, color, sex, gender, disability, religion, national extraction, and worker status. The sector's widespread use of contract workers, often with differing terms of employment, can also be conducive to discrimination.

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.

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. Entities in the sector need to identify and manage any actual and potential impacts on the personal safety of consumers, implementing policies related to keeping safe from fire and explosion hazards, emissions of carbon monoxide, safe storage and disposal of fuels, but also theft, violence or slip and fall accidents.

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

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

GOVERNANCE:

Corporate culture

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

Political engagement and lobbying activities

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

Management of relationships with suppliers including payment practices

Organizations in the oil and gas sector deal with many complex financial transactions, including payments to suppliers and governments. The fair behaviour with suppliers is essential to avoid supply chain disruption, especially in context of dealing with small and medium enterprises, which can be particularly vulnerable to late payments. Transparency of payments to governments, reporting country-level and project-level payments can also help distinguish the economic importance of the oil and gas sector to countries, enable public debate, and inform government

decision-making. It can also enable governments to address tax avoidance and evasion, correct information asymmetry and level the playing field for governments when negotiating contracts.

Corruption and bribery

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