

Procedure for Fossil Fuel Collaboration

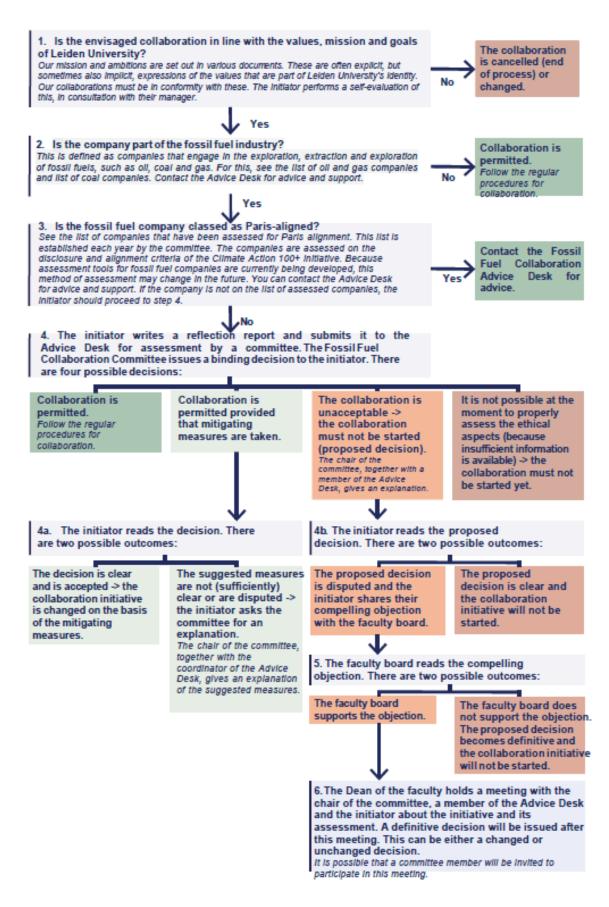
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Executive summary

In 2023 Leiden University decided to look more critically at new collaborations with the fossil fuel industry. On 12 March 2024, the Executive Board of Leiden University therefore adopted a statement on collaboration with the fossil fuel industry, after consultation with a group of experts and deans, and input from the staff and student participation body, the University Council. The guiding principles from this statement were further developed to produce this Procedure for Fossil Fuel Collaboration.

This procedure describes the steps that must be taken to make a clear and substantiated assessment of whether a research project in collaboration with the fossil fuel industry is permitted. In the process of decision-making by a committee, the proportionality of the various aspects relating to collaboration will play an important role. It will therefore not always be possible to completely exclude conflicting interests and values.

Procedure for fossil fuel collaboration



Contents

E	ιecι	utive summary	2						
1	Introduction5								
	Learning organisation								
2		Fossil fuel industry: definition and scope7							
	Fossil fuel industry7								
	Otl	her delineations	7						
3	Guiding principles of the procedure7								
4		Reflection report9							
	4.1	1 Company strategy	9						
	4.2	2 Research project	9						
	4.3	3 Funding of the project	9						
5		Fossil Fuel Collaboration Committee	. 11						
	5.1	1 Composition, recruitment and appointment of the committee members	. 11						
	5.2	2 Tasks and time investment of the chair and academic committee members	. 11						
	5.3	3 Procedure of the committee	. 12						
	5.4	4 Procedure of the Fossil Fuel Collaboration Advice Desk	. 14						
A	nne	ex A – List of fossil fuel companies assessed on Paris alignment	. 15						
	A.1	List of fossil fuel companies assessed on Paris alignment (October 2024)	. 16						
	A.2	.2 Assessment method for classification as Paris-aligned							

1 Introduction

The science is very clear: the climate and biodiversity crises are among the greatest challenges facing our society. To prevent the most serious consequences of climate change and to limit the rise in global temperature to between 1.5 and no more than 2 degrees Celsius, worldwide CO_2 emissions must be halved by 2030 compared with 2019, and reduced to zero by 2050.¹ If fossil fuels continue to be produced at the current level, this limit of 1.5 °C will be exceeded in the future. This means that society has to commit to achieving the transition to a low-carbon future. At the same time, fossil fuel companies have to reduce their production substantially and with immediate effect.²

Universities' collaboration with the fossil fuel industry has recently caused considerable concern both within and outside the university community. The complexity of the issue of collaboration with the fossil fuel industry has divided the community. In addition, widely supported changes are ongoing in such areas as knowledge security and human rights. The solutions to these issues, however, also require different perspectives. In our strategic plan *Innovating and Connecting – 2022-2027* we made the conscious decision to strengthen our connections: between different disciplines, with society and within our academic community. We regard it as an important aspect of scholarship to remain in discussion with partners, even those with whom we may disagree. Nevertheless, it is clear that researchers are expected to reflect more on the possible consequences of research and of attracting collaboration partners to make our research possible.

Leiden University decided in 2023, as a first step, to look more critically at new partnerships with the fossil fuel industry, and to be completely transparent about them. In August 2023 we published a list of current research collaborations with the fossil fuel industry.

In the statement on collaboration with the fossil fuel industry adopted by the Executive Board on 12-3-2024, we undertook to assess projects with all partners, including those that are aligned with the Paris Agreement. The new understanding is, however, that Paris-aligned companies have already been subjected to such a strict partnership assessment that a separate project-level assessment is not necessary. The statement and the procedure in this document have been changed accordingly:

Statement on collaboration with the fossil fuel industry

- Leiden University will not enter into any new research projects with companies in the fossil fuel industry that are not intensively and demonstrably committed to achieving the goals of the Paris Agreement.
- Exceptions will be made only if a project clearly contributes to the energy transition. In this case, too, the necessity of collaborating with the company will be assessed: a possible reason for collaboration could be, for example, that the company holds data that are essential for the research, or knowledge that contributes in some other way to the energy transition.

This statement served as the starting point for this Procedure for Fossil Fuel Collaboration. Together with the publication of the statement, an <u>explanatory memorandum</u> was published on the university website with an explanation of the statement.

It is possible that this statement, the guiding principles arising from it and this procedure will be strengthened, supplemented or amended in some other way in the future, if this becomes necessary due to societal developments and/or the cases encountered.

¹ https://www.ipcc.ch/report/ar6/syr/

² https://iopscience.iop.org/article/10.1088/1748-9326/ac6228/meta

This Procedure for Fossil Fuel Collaboration describes the steps that must be taken to make a clear and substantiated assessment of whether a research project in collaboration with the fossil fuel industry is permitted. In the process of decision-making, the proportionality of the various aspects relating to collaboration will play an important role. It will therefore not always be possible to completely exclude conflicting interests and values.

Learning organisation

The principle of restricting collaboration with external parties is new territory for our university, and we have limited experience with it. This procedure will therefore involve dilemmas in relation to our broader view of collaboration.

A grey area will also remain in our procedures regarding ethical aspects of research collaboration, which we will have to accept. It will be extremely important in the years ahead for the university to continue to invest in our organisation's learning process in dealing with these issues, raising awareness and developing 'case law'. Ensuring diligence and transparency in the processes and justifying the choices made are crucial here. In line with this, the projects that have been assessed and have subsequently proceeded will therefore be added to the list of collaborations with the fossil fuel industry.

2 Fossil fuel industry: definition and scope

We start out from the following definitions and delineations as the basis for our Procedure for Fossil Fuel Collaboration:

Fossil fuel industry

We define the fossil fuel industry as companies that engage in the exploration, extraction and exploitation of fossil fuels, such as oil, coal and gas. Examples of such companies include Shell and Exxon Mobil. Companies that support the fossil fuel industry (for example, banks and insurance companies) do not fall under the definition as applied in this procedure.

Other delineations

- A **research project** with a company in the fossil fuel industry is a project where funding or a contribution in kind is received to conduct research. This can be either a bilateral project or a broader project (consortium).
- This procedure does not apply to educational activities carried out in collaboration with the fossil fuel industry, such as business fairs, guest lectures and alumni meetings or activities with study associations. Nevertheless, the basic principle is that here, too, it is essential to reflect carefully on the added value of involving the fossil fuel industry in activities of this kind.
- Paris Agreement: In 2016 the European Union, including the Netherlands, signed the Paris Agreement. The agreement aims to keep global warming well below 2 degrees Celsius and to pursue efforts to limit it to 1.5 degrees Celsius. Agreements have been made at the European level to meet the goals of the Paris Agreement. The EU member states have agreed that they will reduce greenhouse gas emissions by at least 55% by 2030. The EU wants to be climate neutral by 2050. This means net zero greenhouse gas emissions by that time. The target of the Netherlands is to reduce its CO₂ emissions by at least 55% by 2030 compared with 1990. To compensate for any setbacks, the government is aiming for a higher target in practice, amounting to approximately 60%. All sectors are being asked for an extra contribution. The size of this contribution is based on the possibilities within the sectors to reduce their CO₂ emissions more rapidly up to 2030.

3 Guiding principles of the procedure

The following guiding principles are important in assessing whether a fossil fuel company's negative contribution outweighs the scientific value of a project.

1 Collaboration partners in the fossil fuel industry are committed to achieving the goals of the Paris Agreement.

The university aims to have a positive impact on people and the environment. The basic principle is to collaborate only with fossil fuel companies that are committed to achieving the Paris Agreement goals. Exceptions will be made if a project demonstrably contributes to the energy transition or to combatting climate change. In this case, too, the necessity of collaborating with the company will be assessed: a possible reason for collaboration could be, for example, that the company holds data that are essential for the research, or knowledge that contributes in some other way to the energy transition.

2 In our research collaborations, we ensure that our research is not used for deception and 'greenwashing' by the fossil fuel collaboration partner, whenever possible.

We want to avoid the possibility of research results being used for purposes that conflict with scientific progress on climate change and the energy transition, in addition to their original purpose; for example, in cases where a project is highly fundamental in nature, is not yet certain to actually contribute to the envisaged future transitions and could possibly be used for deception or 'greenwashing'. Activities of this kind hamper the trust, ambition and action needed for the energy transition and for combatting climate change.

In most cases, companies wish to collaborate in order to make a positive contribution to society, but sometimes a company may have alternative strategies behind starting a collaboration initiative. Alternative motives could relate to:^{3,4}

- **Greenwashing** companies can advertise green initiatives to give society the impression that they are making a positive contribution to combatting climate change or promoting the energy transition, while in reality they are serving conflicting interests.
- **Delaying** Companies can start research projects to explicitly emphasise the lack of knowledge, in order to delay enforcement or regulation by local or national authorities.
- **Excluding** companies can exclude other companies or NGOs from developing knowledge, in order to influence laws and regulations on climate change and the energy transition.
- **Red herring strategy** companies can use a technique of deliberately introducing trivial or irrelevant information to distract attention from more harmful core activities.
- **Trust building** fossil fuel companies can invest in charitable activities so that they are perceived more as a reliable partner.
- **Dependency** fossil fuel companies can make research groups financially dependent on them by investing heavily in these groups.
- **Funding** of new research projects to explicitly emphasise the lack of knowledge, in order to delay immediate government regulation or enforcement.

³ <u>14cf92b2-greenwashing-toolkit-doc-1-1.pdf (greenpeace.org)</u>

⁴ Greenwashing – the deceptive tactics behind environmental claims | United Nations

4 Reflection report

If a collaboration partner in the fossil fuel industry is not aligned with the Paris Agreement goals (see Annex A.1), the initiator will write a reflection report and submit it to the Fossil Fuel Collaboration Advice Desk. The reflection report is intended to encourage the initiator to reflect on the project from several perspectives, and it also provides input for the committee's assessment. The report is submitted to the Fossil Fuel Collaboration Advice Desk. The reflection Advice Desk. The committee will then issue a binding decision on whether or not collaboration is permitted. In the process of its decision-making, the committee looks at the social, societal, technological and ecological aspects of the collaboration. The proportionality of the various aspects will play an important role here. It will not always be possible to completely exclude conflicting interests and values.

Parts of the reflection report:

4.1 Company strategy

- 1) Is there a risk that the company will use the research for deception or 'greenwashing'?
- 2) Has the company made a commitment on not engaging in new exploration or drilling for new oil and gas fields?
- 3) Is the company going to reduce its methane emissions to near zero by 2030?
- 4) Does the company have a Climate Transition Action Plan (CTAP) containing:
 - a. a reduction in production volume by 2030 and 2040 and total phasing out of fossil fuels by 2050, in line with the Paris Agreement?
 - b. a reduction in operational emissions by 2030 and 2040, in line with the Paris Agreement?
 - c. % investment in sustainable solutions every five years?
- 5) What is the company's score on the InfluenceMap Performance Band calculated by LobbyMap (if available)?

4.2 Research project

- 1) Describe the research that is proposed in collaboration with the envisaged partner, max. 500 words.
- 2) What are the envisaged scientific and societal impacts and desired results of the collaboration initiative?
- 3) Does the project demonstrably promote the energy transition and/or contribute to combatting climate change? If so, how?
- 4) Have agreements been made with the company about how the results will be used?
- 5) Does the company provide expertise for the project that is not available anywhere else?
- 6) Are there potentially negative consequences of the envisaged research results for science and society, and how can they be prevented? If there are, go to question 7. If not, go to question 8.
- 7) What are the potentially negative consequences of the envisaged research results for science and society, and how can they be prevented?
- 8) Does the collaboration agreement contain 'anti-shelving' provisions for the company in relation to (sustainable) research?
- 9) Does the collaboration agreement contain provisions on dual-use? This is defined as knowledge, information, methods, products or technologies that are developed for legitimate purposes but can be misused for harmful purposes.
- 10) Is there a risk that the project will generate revenue that could be invested in the exploration and/or extraction of fossil fuels?

4.3 Funding of the project

1) Are there any alternative funding possibilities for this collaboration?

2) Who initiated the research project? How were the research question and research design established?

5 Fossil Fuel Collaboration Committee

The following organisation of the committee for assessing collaboration with the fossil fuel industry will be used during the procedure's **pilot phase**. The organisation of the committee is based on the approach established for the Knowledge Security Committee. It is possible that this organisation will change when the procedure is integrated within the generic framework for collaborations, which will work with a single broad-based committee with several chambers.

5.1 Composition, recruitment and appointment of the committee members

- The committee consists of a chair, a permanent section with officers from the Advice Desk and a secretary. In addition, the committee consists of an academic section with (in principle) full professors with a wide range of expertise on ethical (3 experts), societal (3 experts) and sustainability-related (3 experts) aspects of climate change and the energy transition.
- The members will initially be appointed for one year, and may be reappointed for further periods of one year.
- At least three academic committee members, who have knowledge about the case submitted, will be invited to attend the meetings of the committee.
- Depending on the case submitted, it is possible to add specific knowledge from, for example, a lawyer. This knowledge can be obtained during preparation of the committee meeting by the secretary, in the form of information and/or advice, or this specialist can be invited to participate in the meeting.
- The Executive Board appoints the members and chair of the committee, after candidates have been proposed by the Faculty Boards and they have been discussed in the Management Board (meeting of Executive Board and deans). The deans of the faculties are asked to produce a shortlist, on the basis of a brief profile, of at least two academics who have relevant knowledge and can be asked to have a seat on the committee.
- The deans will also be asked to propose a candidate for the role of chair. A selection will be made at the Management Board meeting of 17-10-2024; this person will then be invited by the dean of their faculty (current or former) to attend an interview about this, after being informed about it by email.
- For the role of chair, consideration could be given to an emeritus professor who no longer has an interest in the outcome of the assessments and who has sufficient stature to chair a committee. This person does not need to have a specific area of expertise. The chair will receive a part-time appointment for this task.
- The chair appoints a deputy chair from among the committee members for situations where the chair is unable to fulfil that role.

5.2 Tasks and time investment of the chair and academic committee members

Tasks of the committee chair:

- Sparring partner for the secretary of the committee before the committee meeting
- Preparing assessment requests
- Establishing the list of companies classed as Paris-aligned
- Chairing the discussion on assessment requests
- Formulating a decision

Time investment (indication, depending on the number of requests): eight to twelve hours per quarter.

Tasks of academic committee members:

- Preparing assessment requests
- Establishing the list of companies classed as Paris-aligned
- Discussing the assessment request in a meeting of the committee
- Formulating a decision

Time investment (indication, depending on the number of requests):

Each committee member will spend, on average, an estimated four to six hours per quarter on this role. For the chair, this is expected to be eight to twelve hours per quarter.

This time indication is based on an average of one meeting per quarter. In addition, each member will be expected to participate in a two-hour start meeting, before the committee begins its work, in which the members make each other's acquaintance, discuss the procedure and practise with case studies.

5.3 Procedure of the committee

- The committee's purpose is to assess collaboration initiatives with fossil fuel companies on the basis of information submitted by the initiator. The committee will do this from a broad perspective, taking account of the submitted initiative's ethical, societal and sustainability-related aspects in relation to climate change and the energy transition.
- The committee is also intended to advise on possible changes in the project, in order to serve Leiden University's objectives and to mitigate risks and negative consequences.
- The secretary will remove from the file for the committee any particulars that can be traced back directly to an individual.
- The committee weighs the advantages against the disadvantages of the envisaged collaboration initiative on the basis of the documents submitted by the researcher. The committee can also make use of previously discussed cases that were recorded by the committee and the Advice Desk.
- The committee assesses whether it has the information required to reach a decision. If necessary, the committee can request more information.
- If information is missing, incomplete or outdated, this can be a reason for the committee to give a negative decision.
- The committee decides on the basis of a majority of votes. If the votes cast by the committee members are tied, the chair has the deciding vote. The secretary does not have a substantive vote in the decision.
- The committee can issue the following binding decisions:
 - 1. a positive decision
 - 2. a positive decision with conditions (to take specific mitigating measures)
 - 3. a decision that there is insufficient information to make a proper assessment (provisionally negative decision)
 - 4. a proposed negative decision
- If the initiator has questions about the conditions attached to a positive decision, they can request an explanatory meeting. This meeting will be held in principle by the chair, together with the secretary. Where appropriate, the chair can ask one of the committee members to hold this meeting on the chair's behalf.
- In the case of a proposed negative decision, the initiator can present their compelling argument(s) to the Faculty Board. If the Faculty Board agrees with the argument(s), a meeting will take place between the Dean of the faculty, the chair of the committee, a member of the Advice Desk and the initiator. It is possible that a committee member will also be invited to participate in this meeting. After the meeting, a definitive decision will be made by the committee. This can be either confirmation of the previously proposed decision or an alternative decision.
- The decision is shared with the person who submitted the request. After each meeting, the Faculty Boards and the Executive Board are informed of the fact that an assessment request from their faculty was discussed, together with a short summary of the decision.
- The decisions are not made public, but are documented in anonymised format for the purposes of knowledge building and analysis of cases. The documentation is maintained by the Advice Desk.
- Each year the committee establishes a list of companies that are classed as Paris-aligned (nonexhaustive). During the pilot phase, the list (see Annex A) will be based on the evaluations of the <u>Climate</u> <u>Action 100+</u> initiative from October 2023.

• Allowance should be made for a processing time of four weeks after the requested information has been submitted. If a project is found to be outside the scope of the framework, the request will be handled more quickly by the Advice Desk. For urgent cases, the committee's secretariat, in consultation with the chair, will look at the possibility of a quicker decision.

5.4 Procedure of the Fossil Fuel Collaboration Advice Desk

- The Advice Desk serves as the central hub. In addition to organising and supporting (secretariat) the committee, the Advice Desk brings together expertise in the field of the fossil fuel industry, (further) develops the specific instruments relating to the fossil fuel industry and maintains an internal and external network.
- More themes may be added to this central hub in the future, creating a 'single point of contact' (SPOC) for the faculties if they have questions about other issues in the generic procedure for ethical aspects.
- The Advice Desk works with a mailbox (<u>adviespuntfossiel@bb.leidenuniv.nl</u>), to which questions and cases can be addressed by the initiator of a collaboration. After receiving a request, the Advice Desk will send a confirmation of receipt.
- Depending on the content of the case, at least two officers from the Advice Desk take part in the meeting of the committee, to ensure that the knowledge and expertise of the university-wide research, internationalisation and knowledge security policies (for example, relating to dual-use) are integrated within the assessment process.
- The Advice Desk maintains anonymised documentation on the decisions made by the committee for the purposes of knowledge building and analysis. The committee's decisions will be recorded using one single system.
- At least once a year, the Advice Desk analyses the cases it has received and produces a report highlighting the key themes, which can serve as the basis for identifying and implementing any improvement points in the process.
- When a collaboration initiative receives a positive decision and is started, a summary of the committee's assessment is made public. If the research initiative receives a negative decision, the committee's decision is only recorded anonymously in an annual report, with a summary.
- Each year the Advice Desk updates the list of decisions relating to fossil fuel companies. This draft list is then adopted by the committee.
- If the Advice Desk foresees that additional experts will be needed in the committee, this will be organised by the Advice Desk in consultation with the chair of the committee.
- Before a meeting of the committee, the Advice Desk checks that there are no conflicting interests with regard to including academic committee members. In case of doubt, this will be discussed with the chair of the committee.
- The following officers from the Strategy & Academic Affairs directorate are involved in the Advice Desk:
 - o Team Leader Research
 - Team Leader Internationalisation
 - o Sustainability Coordinator
 - o Secretary

Annex A – List of fossil fuel companies assessed on Paris alignment

The following list (Annex A.1) is based on the assessments published in October 2023 by the Climate Action 100+ initiative. In 2023 this organisation assessed 40 large companies in the fossil fuel industry in terms of performance on combatting climate change and promoting the energy transition. For classification as Paris-aligned, it looked at indicators relating to disclosure and alignment. For the methodology used, see Annex A.2 and <u>Methodologies</u> <u>| Climate Action 100+</u>. Each of these indicators consists of 1-3 sub-indicators, which in turn are divided into 1-3 criteria. The assessments were conducted by the Carbon Tracker Initiative (CTI), the Rocky Mountain Institute (RMI) and InfluenceMap.

A.1 List of fossil fuel companies assessed on Paris alignment (October 2024)

The table below was compiled on the basis of the data elaborated by the Climate Action 100+ initiative. The complete database can be found here and is based on data from October 2023.

			Disclosure assessment criteria			Alignment assessment criteria					
	I	I -	5. Decarb- onisation Strategy	6. Capital Allocation	Engagement	Climate Accounting & Audit	Capital Allocation				Climate Policy Engagement
Company name:	HQ location	Paris- aligned?	Overall assessment:	Overall assessment:	Overall assessment:		Indicator 1	Indicator 2	Indicator 3	Indicator 4	
BP plc	United Kingdom	No	Partial	Partial	Partial	Partial	Not incompatible with APS (1.7°C)	57% incompatible with APS (1.7°C)	Exceeds NZE (1.5°C) not incompatible production by 0- 50%	Not incompatible with APS (1.7°C)	С
Canadian Natural Resources Ltd.	Canada	No	N	N	N	Partial	Not incompatible with APS (1.7°C)	34% incompatible with APS (1.7°C)	Exceeds NZE (1.5°C) not incompatible production by 0- 50%	Oil price forecast is not disclosed	D-
Chevron Corp.	USA	No	Partial	Partial	N	N	7% of the CapEx (\$150 million) is incompatible with NZE (1.5°C) and APS (1.7°C)	40% incompatible with APS (1.7°C)	Exceeds NZE (1.5°C) not incompatible production by >50%	Oil price forecast is not disclosed	D-
China National Offshore Oil Corp. (CNOOC) Ltd.	China	No	N	N	N	N	Not incompatible with APS (1.7°C)	38% incompatible with APS (1.7°C)	Exceeds NZE (1.5°C) not incompatible production by 0- 50%	Oil price forecast is not disclosed	C-
China Petroleum & Chemical Corp. (Sinopec)	China	No	N	N	N	N	15% of the CapEx (\$1,400 million) is incompatible with NZE (1.5°C) and APS (1.7°C)	53% incompatible with APS (1.7°C)	Exceeds NZE (1.5°C) not incompatible production by >50%	Oil price forecast is not disclosed	Data not available
China Shenhua Energy Co. Ltd.	China	No	Partial	Partial	N	Data not available	Data not available	Data not available	Data not available	Data not available	Data not available

Coal India Ltd.	India	No	N	Ν	Ν	Data not available	Data not available	Data not available	Data not available	Data not available	Data not available
ConocoPhillips	USA	No	N	N	Partial	N	Not incompatible with APS (1.7°C)	70% incompatible with APS (1.7°C)	Exceeds NZE (1.5°C) not incompatible production by >50%	Oil price forecast is not disclosed	D-
Ecopetrol SA	Colombia	No	Partial	Partial	N	Partial	100% of the CapEx (\$80 million) is incompatible with NZE (1.5°C) and APS (1.7°C)	57% incompatible with APS (1.7°C)	Exceeds NZE (1.5°C) not incompatible production by 0- 50%	Incompatible with APS (1.7°C)	D+
ENEOS Holdings Inc.	Japan	No	Partial	Partial	N	Partial	No new recent investments identified	Data not available	Not incompatible with NZE (1.5°C)	Oil price forecast is not disclosed	D
Eni SpA	Italy	No	Partial	Partial	Partial	Partial	54% of the CapEx (\$3,800 million) is incompatible with NZE (1.5°C) and APS (1.7°C)	78% incompatible with APS (1.7°C)	Exceeds NZE (1.5°C) not incompatible production by 0- 50%	Not incompatible with APS (1.7°C)	C-
Equinor ASA	Norway	No	Partial	Partial	Partial	Partial	1% of the CapEx (\$13 million) is incompatible with NZE (1.5°C) and APS (1.7°C)	38% incompatible with APS (1.7°C)	Exceeds NZE (1.5°C) not incompatible production by >50%	Not incompatible with APS (1.7°C)	C-
Exxon Mobil Corp.	USA	No	N	N	Partial	N	Not incompatible with APS (1.7°C)	70% incompatible with APS (1.7°C)	Exceeds NZE (1.5°C) not incompatible production by >50%	Oil price forecast is not disclosed	D-
Formosa Petrochemical Corp.	Taiwan	No	N	N	N	N	Data not available	Data not available	Data not available	Data not available	Data not available
Imperial Oil Ltd.	Canada	No	N	N	N	N	Not incompatible with APS (1.7°C)	100% incompatible with APS (1.7°C)	Exceeds NZE (1.5°C) not incompatible production by 0- 50%	Oil price forecast is not disclosed	D-
Marathon Petroleum Corp.	USA	No	Ν	N	Partial	N	Data not available	Data not available	Data not available	Data not available	E-
Occidental Petroleum Corp.	USA	No	N	N	N	N	No new recent investments identified	60% incompatible with APS (1.7°C)	Exceeds NZE (1.5°C) not incompatible production by >50%	Oil price forecast is not disclosed	D

Oil & Natural Gas Corp. Ltd.	India	No	N	Ν	N	N	23% CapEx (\$120 million) is incompatible with both NZE (1.5°C) and APS (1.7°C)	76% incompatible with APS (1.7°C)	Exceeds NZE (1.5°C) not incompatible production by 0- 50%	Oil price forecast is not disclosed	с
OMV AG	Austria	No	Partial	Partial	Partial	Partial	No new recent investments identified	74% incompatible with APS (1.7°C)	Exceeds NZE (1.5°C) not incompatible production by 0- 50%	Not incompatible with APS (1.7°C)	D-
Origin Energy Ltd.	Australia	No	Partial	Partial	Partial	Partial	No new recent investments identified	Data not available	Not incompatible with NZE (1.5°C)	Oil price forecast is not disclosed	C-
PetroChina Co. Ltd.	China	No	Partial	Partial	N	N	Not incompatible with APS (1.7°C)	48% incompatible with APS (1.7°C)	Exceeds NZE (1.5°C) not incompatible production by 0- 50%	Oil price forecast is not disclosed	D+
Petróleo Brasileiro S.A. (Petrobras)	Brazil	No	N	N	N	Partial	Not incompatible with APS (1.7°C)	71% incompatible with APS (1.7°C)	Exceeds NZE (1.5°C) not incompatible production by >50%	Incompatible with APS (1.7°C)	C-
Petróleos Mexicanos (PEMEX)	Mexico	No	N	N	N	Partial	No new recent investments identified	78% incompatible with APS (1.7°C)	Exceeds NZE (1.5°C) not incompatible production by >50%	Oil price forecast is not disclosed	D-
Phillips 66	USA	No	N	N	N	N	Data not available	Data not available	Data not available	Data not available	E-
PT Bumi Resources Tbk	Indonesia	No	N	Ν	Ν	Data not available	Data not available	Data not available	Data not available	Data not available	
PTT Public Co. Ltd.	Thailand	No	N	Ν	Ν	N	Not incompatible with APS (1.7°C)	71% incompatible with APS (1.7°C)	Exceeds NZE (1.5°C) not incompatible production by 0- 50%	Oil price forecast is not disclosed	D
Reliance Industries Ltd.	India	No	N	N	N	N	No new recent investments identified	0% incompatible with APS (1.7°C)	Exceeds NZE (1.5°C) not incompatible production by 0- 50%	Oil price forecast is not disclosed	С
Repsol S.A.	Spain	No	Partial	Partial	Partial	Partial	Not incompatible with APS (1.7°C)	47% incompatible	Exceeds NZE (1.5°C) not incompatible	Not incompatible	D

								with APS (1.7°C)	production by 0- 50%	with APS (1.7°C)	
Santos Ltd.	Australia	No	Partial	Partial	Partial	Partial	Not incompatible with APS (1.7°C)	95% incompatible with APS (1.7°C)	Exceeds NZE (1.5°C) not incompatible production by 0- 50%	Incompatible with APS (1.7°C)	D-
Sasol Ltd.	South Africa	No	Partial	Partial	Partial	Partial	No new recent investments identified	Data not available	Not incompatible with NZE (1.5°C)	Incompatible with APS (1.7°C)	С
Saudi Arabian Oil Company (Aramco)	Saudi Arabia	No	Ν	Ν	Ν	Ν	Not incompatible with APS (1.7°C)	88% incompatible with APS (1.7°C)	Exceeds NZE (1.5°C) not incompatible production by 0- 50%	Oil price forecast is not disclosed	E+
Shell plc	Netherlands	No	Partial	Partial	Partial	Partial	28% CapEx (\$1,900 million) is incompatible with NZE (1.5°C) and APS (1.7°C)	70% incompatible with APS (1.7°C)	Exceeds NZE (1.5°C) not incompatible production by 0- 50%	Not incompatible with APS (1.7°C)	C-
SK Innovation Co. Ltd.	South Korea	No	N	N	N	N	Data not available	Data not available	Data not available	Data not available	D+
Suncor Energy Inc.	Canada	No	N	Ν	N	Partial	No new recent investments identified	54% incompatible with APS (1.7°C)	Exceeds NZE (1.5°C) not incompatible production by 0- 50%	Incompatible with APS (1.7°C)	D+
TotalEnergies SE	France	No	Partial	Partial	Partial	Partial	42% CapEx (\$2,800 million) is incompatible with NZE (1.5°C) and APS (1.7°C)	73% incompatible with APS (1.7°C)	Exceeds NZE (1.5°C) not incompatible production by 0- 50%	Not incompatible with APS (1.7°C)	C-
Valero Energy Corp.	USA	No	Partial	Partial	N	N	Data not available	Data not available	Data not available	Data not available	E
Woodside Energy Group Ltd.	Australia	No	N	N	Partial	Partial	No new recent investments identified	85% incompatible with APS	Exceeds NZE (1.5°C) not incompatible production by 0-	Incompatible with APS (1.7°C)	D-

Key for disclosure assessment of	Key for disclosure assessment criteria						
Green - Yes, meets criteria	At the overall assessment level, the company receives a 'Yes' on all Sub-indicators and Metrics that make up the Indicator. At the Sub-indicator level, the company receives a 'Yes' on all Metrics that make up the Sub-indicator.						
Amber - Partial, meets some criteria	At the overall assessment level, the company receives a 'Yes' on at least one Metric that makes up the Indicator. At the Sub-indicator level, the company receives a 'Yes' on at least one Metric that makes up the Sub-indicator.						
Red - No, does not meet criteria	At the overall assessment level, the company receives a 'No' for all Sub-indicators or Metrics that make up the Indicator. At the Sub-indicator level, the company receives a 'No' for all Metrics that make up the Sub-indicator.						
Grey	Data not available						

Key for alignment assessment of	Key for alignment assessment criteria					
Capital Allocation: Indicator	1					
Green - Yes, meets criteria	Text indicates that the company's investment approach is not incompatible with the NZE (1.5°C) scenario, as only projects with a breakeven price lower than the NZE threshold price were sanctioned in the past year. Companies may also receive a green assessment where no new recent investments have been identified.					
Amber - Partial, meets some criteria	Text indicates that the company's investment approach is not incompatible with the APS (1.7°C) scenario, as only projects with a breakeven price lower than the APS threshold price were sanctioned in the past year.					
Red - No, does not meet criteria	Text indicates that the company's investment approach is incompatible with both the NZE (1.5°C) and the APS (1.7°C) scenario, as projects with a breakeven price higher than the APS were sanctioned in the past year. The percentage of a company's upstream CapEx on projects incompatible with the APS scenario is included within the 'No' score.					
Grey	Data not available					

Key for alignment assessment criteria Capital Allocation: Indicator 2					
Green - Yes, meets criteria	Text shows that the company's potential future investment (CapEx) in new upstream oil and gas projects is not incompatible with the NZE (1.5°C) scenario.				
Amber - Partial, meets some criteria	Amber assessments are allocated where <50% of the company's potential future investment (CapEx) in new upstream oil and gas projects is not incompatible with the APS (1.7°C) scenario. To support this assessment, the exact % of CapEx incompatible with APS is included within the description of the assessment.				

	Red assessments are allocated where 50-100% of the company's potential future investment (CapEx) in new upstream oil and gas projects is incompatible with both NZE (1.5°C) and APS (1.7°C) scenarios. To support this assessment, the exact % of CapEx incompatible with APS is included within the description of the assessment.
Grey	Data not available

Key for alignment assessment of	Key for alignment assessment criteria					
Capital Allocation: Indicator	3					
Green - Yes, meets criteria Text indicates that the company's future production from a business-as-usual investment approach does not exceed that from projects assessed incompatible with the NZE.						
Amber - Partial, meets some criteria	Text indicates that the company's potential business-as-usual investment approach is not more than 50% more than that from NZE-compatible projects.					
Red - No, does not meet criteria	Text indicates that the production resulting from a company's potential business-as-usual investment is more than 50% higher than that from NZE- compatible projects.					
Grey	Data not available					

Key for alignment assessment of	Key for alignment assessment criteria					
Capital Allocation: Indicator	4					
Green - Yes, meets criteria	Text shows the company's price forecast curve shape [this is displayed in the square brackets] and identifies that it is not incompatible with the forecast predicted in the NZE (1.5°C). scenario. Supplementary text provides the maximum price forecasted by the company and the date upon which this forecast was made.					
Amber - Partial, meets some criteria	Text shows the company's price forecast curve shape [this is displayed in the square brackets] and identifies that it is not incompatible with the forecast predicted in the APS (1.7°C) scenario. Supplementary text provides the maximum price forecasted by the company and the date upon which this forecast was made.					
Red - No, does not meet criteria	Text shows the company's price forecast curve shape [this is displayed in the square brackets] and identifies that it is incompatible with both the forecast predicted in the APS (1.7°C) scenario and the NZE (1.5°C) scenario. Supplementary text provides the maximum price forecasted by the company and the date upon which this forecast was made.					
Grey	Data not available					

A.2 Assessment method for classification as Paris-aligned

To assess whether a company is Paris-aligned, the following <u>Climate Action 100+ disclosure and alignment</u> <u>indicators</u> are examined (Tables 1 and 2).

5 Decarbonisation Strategy						
Indicator	Sub-indicators					
5.1 The company has a decarbonisation strategy that explains how it intends to meet its medium- and long-term greenhouse gas (GHG) reduction targets.	 a. The company identifies the set of actions it intends to take to achieve its GHG reduction targets over the targeted timeframes. These actions clearly refer to the main sources of the company's GHG emissions, including Scope 3 emissions (where assessed). b. The company quantifies the contribution of individual decarbonisation levers to achieving its medium- and long-term GHG reduction targets, including Scope 3 GHG reduction targets where assessed (e.g., changing technology or product mix, supply chain measures). c. If the company chooses to employ offsetting and negative emission technologies to meet its medium- and long-term GHG reduction targets, it discloses the quantity of offsets, type of offsets, offset certification and the negative emission technologies it is planning to use. 					
5.2 The company's decarbonisation strategy specifies the role of climate solutions (i.e., technologies and products that will enable the economy to decarbonise).	a. The company discloses the revenue OR production it already generates from climate solutions and discloses its share in overall sales.b. The company has set a target to increase revenue OR production from climate solutions in its overall sales.					

Table 1 Disclosure assessment criteria

6 Capital Allocation (assessment conducted by Carbon Tracker Initiative)		
Indicator	Sub-indicators	
6.1 The company is working to decarbonise its capital expenditures.	 a. The company explicitly states that it has phased out or is planning to phase out capital expenditure in new unabated carbon-intensive assets or products by a specified year. b. The company discloses the stated value of its capital expenditure that is going towards unabated carbon-intensive assets or products. 	
6.2 The company explains how it intends to invest in climate solutions (i.e., technologies and products that will enable the economy to decarbonise).	a. The company discloses the stated value of its capital expenditure allocated towards climate solutions in the last reporting year.b. The company discloses the stated value of its capital expenditure that it intends to allocate towards climate solutions in the future.	

7 Climate Policy Engagement (assessment conducted by InfluenceMap)		
Indicator	Sub-indicators	

7.1 The company commits to conducting its policy engagement activities in accordance with the goals of the Paris Agreement.	 a. The company has a specific public commitment / position statement to conduct all of its lobbying in line with the goals of the Paris Agreement. b. The company commits to advocate for Paris-aligned lobbying within the trade associations of which it is a member. c. The company's public commitment / position statement to conduct all of its lobbying in line with the goals of the Paris Agreement specifies the goal of restricting global temperature rise to 1.5°C above pre-industrial levels.
7.2 The company reviews its own and its trade associations' climate policy engagement positions / activities.	 a. The company publishes a review of its climate policy positions' alignment with the Paris Agreement and discloses how it has advocated for these positions through its climate policy engagement activities. The company discloses the stated value of its capital expenditure that it intends to allocate towards climate solutions in the future. b. The company publishes a review of its trade associations' climate positions / alignment with the Paris Agreement and discloses what actions it took as a result.

Table 2 Alignment assessment criteria

Cli	Climate Accounting and Audit (assessment conducted by Carbon Tracker Initiative)			
Ind	licator	Sub-indicators		
1.	The audited financial statements (including the notes thereto) incorporate material climate-related matters.	 a. The financial statements demonstrate how material climate-related matters are incorporated. b. The financial statements disclose the quantitative climate-related assumptions and estimates. c. The financial statements are consistent with the company's other reporting. 		
2.	Theauditreportdemonstratesthattheauditorconsideredtheeffectsofmaterialclimate-relatedmattersn tableits audit.	 a. The audit report identifies how the auditor has assessed the material impacts of climate-related matters. b. Any inconsistencies between the financial statements and 'other information' are identified in the audit report, where applicable. 		
3.	The audited financial statements (including the notes thereto) incorporate the material impacts of the global drive to net zero greenhouse gas (GHG) emissions by 2050 (or sooner), which for the purpose of this assessment is considered to be equivalent to achieving the Paris Agreement goal of limiting global warming to no more than 1.5°C.	 a. The financial statements use, or disclose sensitivity analysis/analyses to, assumptions and estimates that are aligned with achieving net zero GHG emissions by 2050 (or sooner). b. The audit report identifies that the assumptions and estimates that the company used in the financial statements or sensitivity analysis/analyses were aligned with achieving net zero GHG emissions by 2050 (or sooner), or provides sensitivity analysis/analyses on the potential implications. 		

Capital Allocation (assessment conducted by Carbon Tracker Initiative⁵)

Indicator

- a. **Recent investments:** Compatibility of the company's recent upstream oil and gas investment with a Parisaligned pathway.
- b. **Future investments:** Compatibility of the company's potential future investment in new upstream oil and gas projects with a Paris-aligned pathway.
- c. **Future production sensitivity:** Compatibility of the company's future upstream oil and gas production with a Paris-aligned pathway.
- d. Commodity (oil) prices: Compatibility of the company's oil price forecasts with a Paris-aligned pathway.

⁵ 2023-CTI-Oil-and-Gas-Methodology.pdf (climateaction100.org)

Climate Policy Engagement – Paris alignment (assessment conducted by InfluenceMap)		
Indicator	Sub-indicators	
Climate policy engagement	 a. The company's direct engagement is supportive of the climate policy required to achieve the Paris Agreement goals. b. Indirect climate policy engagement via industry associations (relationship score): the company's industry associations are supportive of the climate policy required to achieve the Paris Agreement goals. 	
Accuracy of climate policy engagement disclosure	 a. The company has published a detailed and accurate account of its climate policy positions and engagement activities. b. The company has published a detailed and accurate account of the climate policy positions and engagement activities of the industry associations of which it is a member. 	
Review processes	The company has robust, high-quality review processes to identify, report on and address specific cases of misalignment between its climate policy engagement activities (direct and indirect via industry associations) and the Paris Agreement.	