Criteria and questions to ask when evaluating a collaboration with external partners from the fossil fuel industry

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Index:

0. Background and relevance

While accelerating global warming is a key cause of disasters around the globe and climate systems are approaching tipping points, major fossil fuel companies continue to extract and explore for new oil and gas - in opposition to the goals of the Paris agreement. At the same time, fossil fuel companies with which Dutch universities currently work, such as Shell, Vitol, TotalEnergies and BP, have been involved in human rights abuses, bribery and spreading disinformation[1] and anti-science propaganda to delay climate action. Collaborations with universities serve to polish their image and give the impression that they are working towards a sustainable business model, despite their core investments being in fossil fuels.

The question of fossil fuel industry collaborations is by no means purely philosophical, but is practical. Universities can contribute to, or remove, industry players' social licence to operate. Other than lending legitimacy, there are other ways in which universities' collaborations with the fossil fuel industry have an impact on a global just transition, for example by determining the direction of research and development, biasing research results, or helping recruit their workforce.

While Dutch universities so far followed, rather than led, shifts in public opinion on the tobacco and fossil fuel industries[2], they might consider taking a more leading role in public opinion-forming around health-harming and obstructive industries. For universities that have researchers working on tobacco control, climate obstruction and public health, this could be considered valorisation of their research. Universities might consider creating space for debate, including critical societal voices and voices from health organisations, as well as those familiar with the industry, but without the industry itself.[3]

There is growing concern about collaborations with the fossil fuel industry, illustrated by several university occupations[4] [5] [6] since the end of 2022 and dialogues at almost all Dutch

[1] https://www.gov.ca.gov/2023/09/16/people-of-the-state-of-california-v-big-oil/, https://drilled.media/news/may-disinformation-hearing, https://www.desmog.com/2020/05/14/bottcher-shell-funding-european-climate-science-denial/

[2] L. Knoester, A.Pereira, L. Vanheule, A. Reyes Elizondo, A. Littlejohn and A. Urai, "Academic collaborations and public health: Lessons from tobacco industry partnerships for Dutch universities' fossil fuel ties. Forthcoming.

[3] If the industry is present, it is crucial that discussions are facilitated carefully to ensure a balanced, transparent, and fact-checked exchange of ideas, avoiding undue influence and ensuring that the focus remains on public health and research integrity.

[4] https://www.uu.nl/en/news/concerned-students-occupy-area-in-minnaert-building

[5] https://www.folia.nl/actueel/157114/bezettingen-aan-universiteiten-door-klimaatactivisten

[6] https://www.trouw.nl/binnenland/bezetting-van-universiteit-is-helemaal-terug-als-drukmiddel~b7845a8f/

universities [7] [8] [9]. However, almost all Dutch academic institutions continue to collaborate with oil and gas companies.[10] The VU Amsterdam is the only Dutch university to date which has finalised a policy excluding new research collaborations with fossil fuel industry which do not "demonstrably commit, in the short term, to the objectives of the Paris Climate Agreement".[11] [12] Utrecht University announced in July 2023 its intention to implement a similar policy; however, its assessment framework for fossil fuel industry collaborations is characterised by notable exceptions.[13] Eight other universities have formed or are forming policies for stricter guidelines around fossil collaborations, however, many of them evaluate whether the research topics are desirable rather than assessing the collaboration partners.[14]

Universities face challenges in determining the criteria for evaluating research projects, and critics advocate for assessments at the partner level due to concerns such as the risks of greenwashing[15], steering the direction and conclusions of research and therefore the energy transition[16], and bolstering a social licence to operate for the sector[17]. We note that some researchers and academic institutions do not fully recognise how industries leverage scientific research and academic affiliations to delay policy changes and shape public opinion.

Universities should educate staff and students on the tactics used by health-harming and obstructive industries to deny the harm they cause, spread doubt, and delay regulation and accountability (see 'tobacco tactics'[18] [19]; and 'the disinformation playbook'[20]). Integrating this into mandatory ethics training for researchers would help build awareness and safeguard

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[7] https://web.archive.org/web/20230602094137/https://students.uu.nl/en/news/deep-democracy-sessions-on-collaboration-with-fossil-industry

[8] https://www.tudelft.nl/en/fossilcollaboration

[9] https://www.universiteitleiden.nl/en/collaboration/partnerships/collaboration-with-fossil-fuel-industry/criteria-for-collaboration

[10] www.mappingfossilties.org/Database.html

[11] https://vu.nl/en/news/2023/vu-amsterdam-sets-new-course-on-behalf-of-energy-transition

[12] https://vu.nl/en/about-vu/more-about/vu-fossil-free

[13] https://www.scienceguide.nl/2025/02/utrechts-toetsingskader-voor-fossiele-samenwerkingen-valt-vooral-op-door-uitzonderingen/

[14] https://mappingfossilties.org/Overview.html

[15] https://www.utoday.nl/opinion/73505/een-overwinning-met-kanttekeningen

[16] https://www.scienceguide.nl/2024/04/laat-onderzoekscapaciteit-voor-energietransitie-niet-kapen-door-fossiele-industrie/

[17] M. Blondeel, "Taking away a "social licence": Neo-Gramscian perspectives on an international fossil fuel divestment norm," Global Transitions, vol. 1, pp. 200–209, Jan. 2019. [Online]. Available: https://www.sciencedirect.com/science/article/pii/S2589791819300192

[18] Tobacco Control Research Group, University of Bath, "Tobacco Tactics." https://www.tobaccotactics.org/

[19] "Tobacco industry tactics (white paper)," World Health Organisation https://applications.emro.who.int/docs/FS-TFI-199-2019-EN.pdf

[20] G. Reed, Y. Hendlin, A. Desikan, T. MacKinney, E. Berman, and G. T. Goldman, "The disinformation playbook: how industry manipulates the science-policy process–and how to restore scientific integrity," vol. 42, no. 4, pp. 622–634. https://doi.org/10.1057/s41271-021-00318-6

academic integrity. Climate Obstruction NL offers workshops about the influence of the fossil fuel industry in academia and other topics like climate misinformation and transition bias, read more in this document.

Universities may bear in mind that support for a policy may grow after implementing it: support for a smoking ban increased and attitudes changed after the ban on smoking indoors was implemented, and similarly, at the VU Amsterdam, attitudes shifted after cutting research ties to the fossil fuel industry.[21] Universities should consider implementing policies that safeguard academic integrity and uphold university values, even when there is no consensus within the academic community. Clear rationale and open debates around such policies can foster constructive dialogue, promote transparency, and encourage broader support.

1. Aim of this document

This document gives an overview of important criteria to consider by universities and their researchers when evaluating a potential collaboration with a party in the fossil fuel industry. These criteria are formulated with the following goals in mind:

1. research contributes to a just transition and does not hinder it,
2. academic freedom is safeguarded,
3. the university:
    a. protects scientific and academic integrity
    b. fulfils its responsibility to society
    c. minimises greenwashing risk and thus risk to the universities' reputation.

We will first define "fossil fuel industry" and "collaboration" (Section 1) and then look at some topics which have arisen at inter- and intra- university discussions, proposing questions that can be used to evaluate proposed collaborations between a university and the fossil fuel industry (Section 2). We then give recommendations for the process for a commission to deliver advice (Section 3).

2. Definition of the fossil fuel industry and collaboration

It is important to define which external parties and which types of collaboration fall under the scope of the evaluation. **We recommend the following definition**:

External parties from the fossil fuel industry are:

[21] Personal communication between Solid Sustainability Research and Niels Debonne, Assistant Professor at the VU Amsterdam at that time.

1. companies engaged in the exploration, production, and transport (upstream and midstream activities) of fossil fuels including their subsidiaries[22],
2. lobby organisations for the fossil fuel industry[23], and
3. organisations such as think tanks, research organisations and consultancies with close ties to the oil and gas industry and receive a significant part of their funding from those companies[24].

Note: when developing partnership guidelines, it is crucial to consistently review definitions and incorporate subsidiaries and indirect ties. Researchers and academic staff can investigate potential fossil fuel ownership through sources like annual reports, press releases, and company databases to ensure transparency and avoid hidden connections.[25]

The definition **includes** organisations such as think tanks which receive funding from fossil fuel companies, because research shows that industry uses such constructions for university collaborations, especially when direct collaborations are seen as controversial.[26] The definition **includes** engineering companies such as SLB and Fugro which provide engineering services primarily for petrochemical extraction and fossil fuel exploration, though they do not sell oil themselves.

It **does not include** companies that enable fossil fuel extraction through finance e.g. banks or insurers. **Nor does it include** chemical companies or engineering companies that use petroleum products (downstream activities), unless majority owned by a fossil fuel company, (for example SABIC).

2.1 How to determine whether an organisation falls under the definition

For the organisations that engage in the exploration, production, and transport (upstream and midstream activities) of fossil fuels, the lists from Urgewald can be used: the Global Oil and Gas Exit List (GOGEL)[27], and the Global Coal Exit List (GCEL).[28] These are the most comprehensive publically available lists of fossil fuel companies. They are used by a wide range of societal actors, including investors and universities with fossil fuel collaboration policies in place such as pension funds[29].

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[22] For example, NAM (Nederlandse Aardgas Maatschappij) in the Netherlands, which is jointly owned by Shell and ExxonMobil, and The Green Near Future 5 B.V. which is a subsidiary of Shell.
[23] For example, ElementNL (formerly known as NOGEPA)
[24] For example, CONCAWE and IFP Energies Nouvelles, or the Koch network in the US.
[25] I. van den Berg, M. d. Jeu, and H. Boytchev, “Tobacco funded research: how even journals with bans find it hard to stem the tide of publications,” BMJ, vol. 385, p. q1153, May 2024, publisher: British Medical Journal Publishing Group Section: Feature. [Online]. Available: https://www.bmj.com/content/385/bmj.q1153
[26] This is the case for the tobacco industry, see for example this article by Follow the Money.
[27] https://gogel.org
[28] https://www.coalexit.org
[29] See this article for more information.

To find out whether an organisation is a subsidiary of a company, one can often find information online and otherwise one can consult the KvK or companyinfo.nl.

It is not always straightforward to find out whether an organisation receives funding from fossil fuel companies. We suggest that researchers should at least try to find out via the website and the annual report of an organisation and a short web search (keywords for example “[partner name] AND [fossil fuel funding]). We keep a working list of organisations here which researchers and commissions can consult.

2.2. What type of involvement with fossil fuel companies should be evaluated?

This document focuses on new research collaborations, since that is the type of involvement in focus at Dutch universities at the moment. Fossil fuel involvement in academia, however, also includes invited lectures, input into and influence on teaching programs, staff/board members with an additional role for a fossil organisation, externally financed research chairs or research groups, student internships, sponsoring of study associations and presence in career days. These and other elements of fossil fuel company presence on campus could be addressed by the committee too.

It is useful to define what precisely a collaborative project is, since there are some edge cases which may or may not be considered collaboration, e.g.:

- Acquiring data, e.g. Shell or Equinor may have data on wind turbines that they might provide at low or no-cost to certain researchers;
- The course of an academic’s research may require them to interview employees of a fossil fuel company, conduct research on a fossil fuel company’s premises, or use their archives;
- An invited lecture from a researcher who works for a fossil fuel company;
- Participation in an established consortium (e.g. ARC-CBBC) in a project without a fossil fuel partner (but fossil partner is in consortium).

Any decision to set limits on which firms to work with, or which projects to collaborate on, might be viewed by some as unjustifiably limiting academic freedom, or not providing an objective set of criteria by which to evaluate individual firms. For these reasons it makes sense to provide a well-justified set of criteria by which the university leadership could judge whether collaborating with a specific firm is justified. The sections that follow will address this issue.

Our recommendations:

- *If data or equipment is required from a fossil fuel company, this can be bought or rented from them. A customer-vendor relationship is thus not classified as a “collaboration” and no extra conditions or services should be offered from the university to the fossil fuel company. It may be necessary to sign a non-disclosure agreement (NDA).*

- *Interviewing or surveying employees at fossil fuel companies as the subject of research need not be classified as a collaboration (though it may fall under other ethical frameworks for working with human subjects).*
- *Involvement of fossil partners in a broader consortium should be counted as a collaboration and should be considered by the committee in a similar manner as a direct (co)financing of a project.*

3. Questions to ask when evaluating a collaboration

3.1. What end does collaboration with industry serve at your university, and who is a logical partner?

Collaboration with an external partner should enrich the research. Reasons for including an industrial or societal partner in a research project might be their expertise in real-world applications, the use of materials, equipment or data, or their intention to bring the research into practice (i.e. valorisation). Financial support alone is not a good reason to enter a collaboration.

Several universities have chosen to enact an assessment framework that evaluates projects rather than (only) partners.[30] Nevertheless, there can be reasons for excluding certain partners, as the TU Delft moral deliberation chamber concluded.[31] For example, association with a partner known for spreading disinformation, involved in human rights abuses, crime, or unethical business practices could be a danger for the university's credibility.

Where a company's business model actively resists the transition to a low-carbon economy (e.g. by investing in new oil and gas projects), projects that seem to contribute to climate mitigation on the surface may not align with the company's core activities and are likely to be deprioritised or abandoned (shelved). In this case the company's reputation benefits from the collaboration with the university, and the project serves only as advertising for the company (greenwashing). This can be damaging for the university's reputation.

We therefore strongly recommend assessing the proposed fossil fuel partner in each project proposal. Partner-based exclusion is straightforward: a list of excluded parties can be made, based on existing methodologies and datasets, similar to the approach of pension funds such as ABP, PFZW and PME[32]. This can also be easier for researchers, who can check

[30] https://www.mappingfossilties.org/Overview.html

[31] https://filelist.tudelft.nl/Websections/Dialooginitiatievn/Advies_CvB_samenwerking_fossiele_brandstofindustrie_v2.1_EN.pdf

[32] See for example https://financialexclusionstracker.org/ for a full list of companies that are excluded by financial institutions for reasons ranging from human rights violations to environmental impact and other sustainability issues.

potential collaboration partners against a list of excluded parties, and does not put the burden of proof on a committee and on individual scientists.

Recommended questions to ask:

- *Why did the researcher choose to work with the proposed partner in this specific project?*
- *What is the potential added value of the collaboration; what are the potential desired and undesired consequences of the collaboration with respect to scientific and/or societal impact? (To evaluate potential societal impact, the definition of societal impact used by NWO for applicants can be used.)*[33]
- *What specific, unique resources or expertise does the proposed partner bring to this project that are not available from other potential partners, and how are these resources or expertise essential to achieving the project's research goals?*
- *Does the collaboration and the potential consequences fit with the mission and strategy of the university, specifically their sustainability strategy?*[12]
- *Is there enough support within the relevant organisational unit to enter into the collaboration with the external partner?*[12]
- *Would it be more appropriate if a consultancy would do this research? i.e. what benefit to the public or the research community is served by this research?*
- *Does the direct and wider goal of the project align with the business strategy of the proposed partner? If not, why is the partner interested in the project?*
- *What could be the range of benefits for the proposed partner from working on this project?*
- *Does the proposed partner have a proven track record of contributing to the transition or society and are they a trustworthy partner?*
- *Is there another party which would be a more logical partner for the project, for example because they are more likely to put the research results into practice?*

3.2. Weighing academic freedom against safeguarding academic integrity and university values

It is imperative to prioritise **academic freedom** - the freedom to research and teach whatever an academic chooses:

- Requiring projects to “contribute towards the energy transition” as decided by a committee can be seen as an infringement upon academic freedom. On the other hand, academic freedom does not include the freedom to work with whomever an academic chooses, according to the definition the KNAW uses.
- At the same time, university researchers represent the institution at which they are employed - this institution has values and a reputation to uphold. Greenwashing and the excessive influence of corporations put this in danger.

[33] These considerations are taken or adapted from NWO’s framework for third-party collaboration

- Limiting reliance on third party financing can make academics freer to research the topics they consider to be important and valuable for the transition: 10% of surveyed researchers experienced unwanted pressure by companies.
- Academic freedom is sometimes (mis)used to focus exclusively on the freedom to attract external funding from a senior researcher to the detriment of the freedom of the junior researcher to work in a fossil-free project or fossil-free academic environment. We have heard examples of young researchers who find it hard to speak out if they don't want to work with fossil partners, being afraid for their career or ability to secure funding.

Besides upholding academic freedom, it is important that the university **safeguards academic integrity and its values**. Partners from the fossil fuel industry have been complicit in spreading disinformation around climate science and the dangers of their products[34]. Honesty, transparency and responsibility are three of the principles of the Netherlands Code of Conduct for Research Integrity[35], which also requires that researchers consider societal interests and ensure that "research is not determined by non-scientific, commercial or political interests, arguments, or preferences. Research assignments should only be accepted if they can be conducted according to these standards. Although collaboration partners of Dutch universities are not formally bound by this Code of Conduct, the code states that its principles … must also be leading for them."[36]

The **risk to scientific integrity** comes in the form of biased results or skewed research direction.

Research outcome bias

- A meta-study of research on natural gas found that research funded by the fossil fuel industry was more favourable towards natural gas.
- BP-sponsored studies downplayed the environmental impact of the Deepwater Horizon oil spill, in stark contrast with U.S. authorities' findings.
- A survey by a Dutch newspaper found that 10% of researchers experienced unwanted pressure from companies.

Research direction bias

- By collaborating with universities, companies may influence the research topics that are being addressed towards those which benefit their business interests, such as gas or carbon capture and storage (diverting resources from other topics), and may influence research design in a way that aligns with their interests. At Maastricht University, Aramco was given the option to choose from four research projects. They chose a project on biobased materials, over others, including one on degrowth.

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[34] https://www.gov.ca.gov/2023/09/16/people-of-the-state-of-california-v-big-oil/

[35] https://www.universiteitenvannederland.nl/files/publications/Netherlands%20Code%20of%20Conduct%20for%20Research%20Integrity%202018.pdf

[36] https://www.volkskrant.nl/columns-opinie/opinie-de-universiteit-heeft-wel-degelijk-een-moreel-kompas-en-dat-wijst-samenwerking-met-fossiel-af~b7775aa6/

- There is a risk of “transition bias”, when certain climate mitigation strategies get more attention than others, while other, potentially more effective, strategies get less attention. See 2.3.2 Transition bias for more information.
- The risk of false solutions - e.g. blue hydrogen, LNG or biomass power generation, which either create lock-in to fossil fuel infrastructure and/or are not significantly better for the climate (and sometimes worse) than the technologies they replace.[37]

Recommended questions to ask (scientific integrity):

- *Who initiated the collaboration and what influence or feedback was there from the external partner in the research topic and design?*
- *Has the proposed partner been involved in the spread of disinformation or undermining of scientific consensus, either by itself or represented by an industry association?*[38]
- *Does the researcher feel confident and comfortable publishing results which would potentially go against the interests of the proposed partner?*
- *What happens with IP and how will results be shared? Could this be more open and public with another partner?*

Recommended questions to ask (safeguarding university values)

- Is the partner complicit in human rights abuses[39] or criminal activities?
    - The Financial Exclusions Tracker[40] can be used, which lists companies that have been publicly excluded by financial institutions, for reasons ranging from human rights violations to environmental impact and other sustainability issues.
    - The report of Greenpeace about proven crimes and credible allegations against fossil fuel industry can be used, or the same methodology applied to find newer cases.[41]

[37] https://drilled.media/news/ccs; https://pointer.kro-ncrv.nl/vloeibaar-gas-is-niet-veel-schoner-dan-steenkool,
[38] https://www.gov.ca.gov/2023/09/16/people-of-the-state-of-california-v-big-oil/, https://drilled.media/news/may-disinformation-hearing, https://www.desmog.com/2020/05/14/bottcher-shell-funding-european-climate-science-denial/
[39] see for example https://www.amnesty.org/en/latest/press-release/2017/11/investigate-shell-for-complicity-in-murder-rape-and-torture/, https://www.amnestyusa.org/chevron-found-guilty-in-8-billion-ecuadorian-human-rights-and-environmental-case/ , https://fossilgame.org/references.html
[40] https://financialexclusionstracker.org
[41] https://www.greenpeace.org/static/planet4-netherlands-stateless/2023/03/f9f5d5b6-inventory-of-crimes.pdf

3.3. Ensuring research projects contribute towards a (just) transition, or at least do not hinder it

It is difficult to judge whether an individual collaborative project contributes towards a just transition, because it depends on:

- the partners' (or another party's) ability and willingness to **bring the research into practice** and - in the case of a company - incorporate it into their core business. It is especially difficult because the point of research is to explore research avenues which are uncertain to make a real-world impact;
- Whether the proposed climate solution **delays or distracts** from other, more effective solutions;
- Whether the proposed project bolsters the **social licence to operate (SLO) of a company whose core business is detrimental to the environment**. Both companies and universities are aware of the need for SLO, and we have observed it to be a consideration in the decision of fossil fuel companies to work with Dutch universities.[42]

Researchers need to be aware that collaborating with an organisation from the fossil fuel industry on an energy transition or sustainability project raises a conflict of interest.

3.3.1 Conflict of interest

Almost all Dutch universities say to only work with the fossil fuel industry when it is on projects contributing to the energy transition. However, one should consider the conflict of interest that the oil and gas industry has in this. Our research shows that research projects involving fossil fuel partners largely concentrate on technological solutions that sustain reliance on oil, gas, and coal—such as CCS/CCUS, blue hydrogen, and biofuels—rather than exploring systemic shifts away from fossil fuels[43].

It is a striking difference in stance that collaborations with the fossil fuel industry on energy transition projects is not seen as a conflict of interest, while with regard to the tobacco industry, it is widely acknowledged that "There is a fundamental and irreconcilable conflict between the tobacco industry's interests and public health policy interests."[44]

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[42] https://www.solid-sustainability.org/how-do-cooperations-with-fossil-fuel-companies-influence-the-direction-of-research-at-universities

[43] Publication forthcoming

[44] "WHO Framework Convention on Tobacco Control: guidelines for implementation. Article 5.3; Article 8; Articles 9 and 10; Article 11; Article 12; Article 13; Article 14 – 2013 edition." World Health Organization, Tech. Rep., 2013. [Online]. Available: https://apps.who.int/iris/bitstream/handle/10665/80510/9789241505185_eng.pdf

3.3.2 Greenwashing

When the project is ‘green’ but the external partner is not, the risk of greenwashing is substantial. By misleading the public to believe that a company or other entity is doing more to protect the environment than it is, greenwashing promotes false solutions to the climate crisis that distract from and delay concrete and credible action.[45]

All Dutch universities have a sustainability policy and aim to make a positive contribution to society and the world.[46] Fossil fuel companies are losing their credibility - their ‘social licence to operate’ - among the public and investors[47] about their willingness and actions to transition. When the university is still working with fossil fuel companies, there is a risk of the public, students and staff seeing the sustainability goals of the university as greenwashing and therefore poses a reputational risk. The recent case of technical universities supporting the KLM lobby for ‘sustainable flying’ through innovation and against necessary measures to shrink aviation is a case in point.[48]

A high risk of greenwashing is a reason not to support the proposed research project, or to propose to find a more credible and trustworthy partner.

Recommended questions to ask to determine the risk of greenwashing:

- *Does the company comply in practice and in the short term with the Paris Agreement?* The most convincing way to assess Paris compliance is by looking at the current investments and investment plans in new fossil fuel projects. Energy scientists and the International Energy Agency (IEA) agree that plans to expand the extraction of oil and gas are incompatible with the 1.5 degree goal of the Paris Agreement.[49] Academic research on fossil fuel reserves even shows that the majority of fossil fuel reserves from existing extraction sites needs to be left where it is when seeking to meet our climate goals.[50] Publicly available data that can be used (note that data and metrics should be evaluated yearly to ensure that the data used is up-to-date, well-researched and independent):
    - The annual report of the company where investment plans are reported
    - The ‘IEA NZE expansion overshoot’ metric from GOGEL[51], plus all companies deriving >20% of revenues of coal = the whole GCEL list[52]

[45] https://www.un.org/en/climatechange/science/climate-issues/greenwashing
[46] See www.mappingfossilties.org
[47] Pension funds such as ABP, PME and the Church of England have divested from fossil fuel industry, reasoning: “Recent reversals of previous commitments, most notably by BP and Shell, has undermined confidence in the sector’s ability to transition” https://www.churchofengland.org/media/press-releases/church-england-pensions-board-disinvests-shell-and-remaining-oil-and-gas
[48] See https://advalvas.vu.nl/student-maatschappij/twents-protest-tegen-greenwashing-klm/
[49] See for instance: https://www.science.org/doi/10.1126/science.adn6533 and https://www.iea.org/reports/net-zero-by-2050
[50] https://www.nature.com/articles/s41586-021-03821-8
[51] https://gogel.org
[52] www.coalexit.org

- The ‘Oil and Gas Company Climate Alignment & Transition Risk Ranking’ from Carbon Tracker (see Figure)[53]
- The ‘Capital Allocation’ metric from the Climate Action 100+[54]
- TPI ‘carbon performance 2025’ metric[55]
- The proposed partner has, within the last 5 years, been a defendant in a civil case where a court has ruled that the firm’s climate ambitions are insufficient, using the category ‘GHG emissions reduction’ of the Climate Change Litigation Database[56]
- The ‘Net Zero Greenwash’ metric of InfluenceMap[57].

Company	*Individual Unweighted Scores (all out of 4)*						Overall Grade
	Investment Options	Recent Sanctions	Production Plans	GHG Targets	Methane Targets	Executive Remuneration	
Repsol	2	2	3	2	2	1	D
Harbour Energy	2	2	3	0	1	1	E
EQT	2	4*	1	0	2	2	E
Eni	2	1	0	3	2	1	E
Expand Energy	2	4*	1	0	2	1	F
Shell	2	2	0	1	2	2	F
TotalEnergies	2	1	0	2	2	1	F
bp	2	0	0	2	2	1	F
Equinor	2	1	0	1	2	2	F
CNRL	2	3	1	0	0	1	F
Cenovus	1	4*	1	0	1	1	F
Chevron	1	1	1	1	2	1	F
Occidental	0	1	1	1	2	3	F
Saudi Aramco	3	2	0	0	1	0	F
Suncor	0	4*	1	1	0	2	F
Devon Energy	1	4*	1	0	0	1	G
PetroChina	2	1	1	0	1	0	G
CNOOC	2	2	1	0	0	0	G
Coterra	2	0	1	0	1	1	G
EOG	2	1	1	0	0	1	G
ADNOC	2	2	0	0	2	0	G
Ovintiv	0	4*	1	0	1	1	G
Petronas	2	1	1	0	0	0	G
Petrobras	0	3	1	0	2	0	G
Qatar Energy	2	1	0	0	1	0	G
ExxonMobil	1	2	0	0	1	1	G
ConocoPhillips	0	2	0	0	2	1	H
KPC	2	0	0	0	0	0	H
Sonatrach	2	0	0	0	0	0	H
PEMEX	0	0	2	0	0	0	H
Weight	*25%*	*10%*	*25%*	*20%*	*10%*	*10%*	-

Figure 1. From ‘Paris Misaligned III’ (Carbon Tracker, 2025).

[53] https://carbontracker.org/reports/paris-maligned-iii/
[54] https://www.climateaction100.org/whos-involved/companies/
[55] https://www.transitionpathwayinitiative.org/sectors
[56] https://climatecasechart.com/non-us-case-category/ghg-emissions-reduction/. You can find for example verdicts like this one https://climatecasechart.com/non-us-case/milieudefensie-et-al-v-royal-dutch-shell-plc/.
[57] https://influencemap.org/briefing/The-State-of-Net-Zero-Greenwash-24402

- *Has the company engaged or still engages in climate obstruction*[58]? The fossil fuel industry has been one of the main drivers of obstructing effective climate policy from the late 1980s. Starting with the financing of science denialist campaigns in the 1990s, the industry now engages more in delayism (slowing down the transition) and false solutionism (lobbying for 'solutions' such as CCS and hydrogen that prolong the use of fossil fuels, see below, 2.3.3 Dual Use).[59] Specific criteria and data sources:
    - The proposed partner has publicly sought to contradict or undermine the findings of the IPCC during the last 5 years. The main academic source for climate obstruction in Europe is Brulle et al. (2024) *Climate obstruction across Europe*[60]. In the Netherlands, researchers of, and publications about, climate obstruction can be found via the Climate Obstruction NL research network. International academics who write about this are, for example, Naomi Oreskes and Geoffrey Supran. Journalist platforms who write about this topic are Drilled Media (Amy Westervelt), DeSmog and in the Netherlands Platform Authentieke Journalistiek.
    - The proposed partner has financially supported lobby groups that have spread climate misinformation or have sought to block or slow legislation aimed at preventing further climate change during the last 5 years. Data from LobbyMap can be used[61].
- *Has the company been found guilty in court or by advertisement agencies (Reclame Code Commissie) of false and/or misleading advertising in the last five years?* Shell, for instance, uses (research into) biofuels, electric transport and windmills to present itself as a company that is engaged in 'powering progress'. However, a closer inspection reveals that only 3% of its investment portfolio is dedicated to renewable energy[62], while its climate goals for reducing oil production have been scaled back, investments in gas are increasing, and investments in renewables are decreasing[63]. As such, it has been found guilty of false and/or misleading advertising on numerous occasions.

[58] Climate obstruction is an umbrella term for various obstacles which stand in the way of effective climate mitigation. According to Ekberg et al. (2022), these range from 'literal denial of anthropogenic climate change to the opposition, delay or dismissal of effective climate policies, at corporate, governmental, societal and individual levels (…).'
[59] The main academic source for climate obstruction in Europe is Brulle et al (2024) *Climate obstruction across Europe*. Oxford University Press, https://cssn.org/wp-content/uploads/2024/05/Climate-Obstruction-in-Europe.pdf. The main source of uptodate journalistic insight is LobbyMap: https://lobbymap.org/
[60] The main academic source for climate obstruction in Europe is Brulle et al (2024) *Climate obstruction across Europe*. Oxford University Press, https://cssn.org/wp-content/uploads/2024/05/Climate-Obstruction-in-Europe.pdf. The main source of uptodate information about lobby efforts is LobbyMap: https://lobbymap.org/.
[61] Data from the website 'Influence Map' can be used to make an objective determination as to whether a firm has engaged in lobbying that goes against the objectives of the Paris Agreement. Any firm that has received a score of C during the last 5 years, or has financially supported an organisation that receives a score of C or lower during the last 5 years is deemed to have spread climate misinformation and/or attempted to slow legislation aimed at preventing climate change.
[62] https://www.ftm.nl/artikelen/miljardenwinst-shell-versus-investeringen-in-duurzame-energie
[63] https://www.offshore-technology.com/news/shell-scraps-climate-target-waters-down-others/

- The category ‘Misleading advertising’ of the Climate Change Litigation Database can be consulted.[64]
- The verdicts of the Reclame Code Commissie can be consulted.[65]

3.3.3 Transition bias

The IPCC states that rapid and far-reaching transitions across all sectors and systems are necessary to secure a liveable and sustainable future for all. Our preliminary analysis shows that certain climate mitigation strategies get more research funding than others, while other, potentially more effective, strategies get less attention. This in turn shapes the direction of the transition. Our analysis of Dutch research projects shows that the fossil fuel industry mostly funds climate mitigation strategies that best suit their business strategy, such as CCS, hydrogen and biofuels.[66] If researchers are engaged in projects that sustain the fossil fuel industry, there is less focus on research that can bring about structural change which may be disruptive to the fossil fuel industry.

The commission can keep an eye on the variety of climate mitigation strategies that the university works on, ensuring there is a diverse research portfolio and no undue focus on certain solutions to the detriment of others. Also, the commission can take a step back and zoom out to take a systemic and interdisciplinary approach, and challenge some of the assumptions on which the effectiveness of the proposed solutions are based.

Recommended questions to ask (transition bias):

- *Have past research projects on similar topics led to implementation and advanced climate mitigation? If not, why not?*
- *Which sectoral/societal transition does the researcher intend to contribute to?*
  - *Can you think of other research approaches that could potentially have a larger added value?*
  - *Could you collaborate with researchers of other disciplines and other societal partners to increase the potential added value of your project?*
- *Does the project contribute to increasing the diversity of climate mitigation solutions studied at the university?*

[64] https://climatecasechart.com/non-us-case-category/misleading-advertising/. You can find for example verdicts like this one https://climatecasechart.com/non-us-case/asa-ruling-on-shell-uk-ltd-following-a-complaint-by-adfree-cities/.
[65] For verdicts of the Reclame Code Commissie see: https://www.reclamecode.nl/uitspraken/shell/
[66] LinkedIn post about research themes of fossil-involved research at the TU Eindhoven: https://www.linkedin.com/feed/update/urn:li:activity:7232359133327339522; LinkedIn post about Shell’s research collaborations: https://www.linkedin.com/pulse/first-dive-shells-decarbonisation-research/

3.3.4 Dual use

The risk of 'dual use'[67] is an important criterion to evaluate research with consequences for military operations and international security. Applied to the evaluation of fossil fuel collaborations, with consequences of aggravating the climate crisis, it is a relatively new notion. More than a strict definition, the criterion has to be developed iteratively taking some of the main research areas into account that the industry has selected as beneficial to a fossil fuel-oriented mitigation agenda:

- Carbon Capture and Storage (CCS) is a controversial technological "fix" based upon the idea of capturing emissions from industrial processes and injecting them underground. It has been promoted by the fossil fuel industry as a climate 'solution' for over thirty years. However, dating back to the early 1970s, the technology has been used in Enhanced Oil Recovery (EOR): using Carbon Dioxide to displace hydrocarbons from underground.[68] As long as a fossil fuel company in question is involved in EOR, every CCS research project has a dual use risk as insights into better capturing and re-injecting CO2 can lead to more emissions through EOR. An estimated 83% of the world's current CCS capacity features EOR, and roughly 40% of the injected carbon leaks back into the atmosphere in the process, according to a recent publication.[69]
- While green hydrogen (hydrogen obtained from by electrolysis using renewable energy) is a renewable fuel, blue hydrogen (obtained from fossil gas, with CCS) is not, and may have more global warming potential than fossil gas itself[70]. In 2017, fossil fuel companies established the lobby organisation Hydrogen Europe which pushes for inflated production goals. Projects involved in blue hydrogen are fossil fuel projects, and projects focussed on hydrogen infrastructure may therefore be considered to have a dual use in fossil fuels.
- Methane emissions monitoring systems/algorithms such as a recent project at TU Delft with Shell can be framed as stopping greenhouse gas emissions, but in fact contribute to the improvement of gas drilling operations, for which Shell has lobbied.

Recommended questions to ask (dual use):

- *Can applications of this research be identified which could contribute to increased fossil fuel exploration, extraction or usage? If so, what safeguards are in place to prevent such applications?*

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[67] Dual-use research refers to well-intentioned research that can also be misused. For example, the research aim could be to contribute to the energy transition, while a non-stated dual use could be applications in oil and gas.

[68] https://www.desmog.com/2023/09/25/how-carbon-capture-and-storage-projects-are-driving-new-oil-and-gas-extraction-globally/

[69] https://news.mongabay.com/short-article/global-carbon-capture-and-storage-potential-way-overblown-study-finds/

[70] R.W. Howarth, M.Z. Jacobson, "How green is blue hydrogen?" Energy Science and Engineering, 2021

3.3.5 Shelving

A project with a “green” focus can still be obstructive of the energy transition, if the industrial partner does not wish to pursue the technology but has the rights to prevent publication (thus preventing others from further developing the technology) or to patent the technology (thus also preventing others from using it, known as “shelving”).

Recommended questions to ask:

- *Does the partner want the right to delay or prevent publication, either directly or indirectly* (e.g. by refusing to provide data that is necessary for publication)?
- *Does the partner want preferred usage rights?*
- *Does the partner want the rights to patent the technology? If so, are there anti-shelving measures in place?*

4. Process considerations

Like outlined earlier, putting together an exclusion list on partner-level is straightforward, easier to use for researchers and does not limit researchers in the content of their project proposal. However, many universities have chosen to evaluate projects (also) on a project-level. For this end, they installed commissions who will evaluate project proposals. In this chapter we give recommendations for the selection of commission members and the evaluation process.

4.1. Criteria evaluation process

When evaluating research projects involving fossil fuel industry partners, it is crucial for university policy officers and commissions to rigorously assess both the opportunities and risks. This should be done with a clear understanding of the potential consequences for the university’s academic integrity, sustainability goals, and public reputation. It is important not to assume that opposing viewpoints always hold equal weight (the fallacy of the middle ground). A project with potential negative consequences may not be justified by balancing it with a seemingly equivalent positive outcome. Instead, focus on the nature and severity of risks posed by the partnership.

We therefore recommend that if the evaluation process reveals any of the following risks, the project should be adjusted or reconsidered:

- **Violating academic integrity**: Ensure that the research is independent and free from undue industry influence.
- **Misalignment with university values**: The project and proposed partner must align with the university's stated mission, particularly around sustainability and social responsibility.
- **Greenwashing**: Avoid projects that allow the fossil fuel partner to enhance their public image without committing to real environmental progress.

- **Transition bias**: Ensure the universities' research portfolio does not overly focus on fossil fuel-aligned strategies like carbon capture or hydrogen, at the expense of more effective, transformative climate solutions.
- **Dual use**: Guard against research that may inadvertently contribute to further oil and gas extraction or production.
- **Shelving and obstruction:** Evaluate whether the partner may suppress or delay unfavourable research findings.

If any of the above risks are identified, the project should be redesigned to either eliminate or significantly mitigate them. Since preserving academic freedom is essential, minimal changes in the project design itself should be proposed. Instead, consider whether there are alternative external partners whose mission and values are better aligned with the university's sustainability strategy or whether the project could be executed without an external partner.

If the project is so specialised that no other partner can be found, and external partnership is required for funding, this dependency should be carefully documented. The university should then take steps to:

- **Recognise and mitigate dependence**: Acknowledge the risks of dependence on fossil fuel partners and develop strategies to reduce this over time, possibly by fostering partnerships with renewable energy companies or other more sustainable industries.
- **Strengthen internal funding options**: Where possible, increase internal funding capacity, specifically for sustainability projects, to reduce reliance on external partners with potentially conflicting values.
- **Engage with the national funding body and the government**: The university should actively engage with national research funding bodies and government agencies to advocate for increased support for independent research in sustainability, renewable energy, and other fields that align with the university's values. By influencing public funding priorities, the university can help shape a future where sustainable industries are better funded, and reliance on fossil fuel partners is reduced.

4.2. Selection of commission members

It is important that the commission has credibility both within and outside the university. **We recommend to include:**

- People with relevant knowledge and experience:
    - Knowledge of pros and cons of collaboration with societal partners
    - Awareness of risks related to fossil fuel industry or other controversial industries
    - Experience in project evaluation
    - Knowledge of sustainability transitions
- Diversity of members
    - Different faculties
    - Different age groups
    - Different genders

    - Different levels of experience in the academic world (i.a. consider including young researchers, students)
    - Different economic and geographical backgrounds
- Independence of members, no conflict of interest
    - For example, the UT has a criterion that the commission members should not have received funding from the fossil fuel industry in the last 2 years

We would also recommend considering that commission members evaluating a specific project should not have personal ties to those behind the project, because it is difficult to give a negative advice to someone you know.

4.3. Commission process

Recommendations:

- The process and evaluation criteria should be communicated clearly with all faculties and relevant people.
- Research proposals should be shared with the commission in advance (a timeline of 6 weeks is a reasonable amount), including a report explaining the choice of partner (according to 2.1).
- Following advice, the research should be allowed one amendment iteration after which the commission re-evaluates the proposal.
- The advice of the commission should be binding. The researcher should be able to appeal to another body.
- If the commission's advice cannot be binding, the faculty member who overrules the advice should provide an explanation, which should be made public and a copy sent to the university council (UR).
- Any projects that go ahead with fossil fuel partners should contain an exit clause in case there is any indication that the situation with respect to the evaluation criteria has changed after the start of the research project.
- An anonymised report is published twice a year about the advice of the commission, including a trend overview which can inform more specific criteria.
- Feedback is requested from the university community on the process and evaluation criteria, for example once a year in a survey and once a year in an open discussion.

4. Relevant literature

From the Mapping Fossil Ties Coalition:

- FAQ on e.g. ‘why do uni-fossil ties exist?’ and ‘what is the debate?’ https://mappingfossilties.org/FAQ.html
- Overview of news articles about fossil ties of Dutch universities: https://mappingfossilties.org/News.html
- How do cooperations with fossil fuel companies influence the direction of research at universities? https://www.solid-sustainability.org/how-do-cooperations-with-fossil-fuel-companies-influence-the-direction-of-research-at-universities
- How associating with a university bolsters organisations' Licence to Operate: the acceptance of their activities by society. https://x.com/solid_research/status/1727609755483390019
- More research results and activities of the Mapping Fossil Ties Coalition can be found here: https://www.solid-sustainability.org/category/mapping-fossil-ties-en

Scientific articles:

- Hiltner, S., Eaton, E., Healy, N., Scerri, A., Stephens, J. C., & Supran, G. (2024). Fossil fuel industry influence in higher education: A review and a research agenda. *WIREs Climate Change*, e904. https://doi.org/10.1002/wcc.904
- Almond, D., Du, X. & Papp, A. Favourability towards natural gas relates to funding source of university energy centres. *Nat. Clim. Chang.* 12, 1122–1128 (2022). https://doi.org/10.1038/s41558-022-01521-3
- Dyke, J.G. & Monbiot, G. (2024) What is the role of universities at a time of climate and ecological crisis? *Geo: Geography and Environment*, 11, e00146. Available from: https://doi.org/10.1002/geo2.146
- Legg, T., Hatchard, J., & Gilmore, A. B. (2021). The science for profit model—How and why corporations influence science and the use of science in policy and practice. PLoS One, 16(6), e0253272. https://doi.org/10.1371/journal.pone.0253272
- Lamb, W. F., Mattioli, G., Levi, S., Roberts, J. T., Capstick, S., Creutzig, F., ... & Steinberger, J. K. (2020). Discourses of climate delay. Global Sustainability, 3, e17: https://www.cambridge.org/core/journals/global-sustainability/article/discourses-of-climate-delay/7B11B722E3E3454BB6212378E32985A7
- Stoddard, I., Anderson, K., Capstick, S., Carton, W., Depledge, J., Facer, K., ... & Williams, M. (2021). Three decades of climate mitigation: why haven't we bent the global emissions curve?. Annual Review of Environment and Resources, 46(1), 653-689:https://www.annualreviews.org/content/journals/10.1146/annurev-environ-012220-011104
- Plets, G., & Kuijt, M. (2022). Gas, Oil and Heritage: Well-oiled Histories and Corporate Sponsorship in Dutch Museums (1990-2021). BMGN: Low Countries Historical Review, 137(1).:https://bmgn-lchr.nl/article/view/7028

Books:

- Oreskes, N., & Conway, E. M. (2011). Merchants of doubt: How a handful of scientists obscured the truth on issues from tobacco smoke to global warming. Bloomsbury Publishing USA.: https://www.amazon.nl/-/en/Naomi-Oreskes/dp/1596916109
    - Also available to watch online as a film: https://ww17.0123movie.net/movie/merchants-of-doubt-5223.html
- Brulle, R. J., Roberts, J. T., & Spencer, M. C. (Eds.). (2024). Climate Obstruction across Europe. Oxford University Press: https://cssn.org/wpcontent/uploads/2024/05/Climate-Obstruction-in-Europe.pdf
    - Duineveld, M., Dix, G., Plets, GJ, Huzier, V. (2024) 'Climate Obstruction in the Netherlands: Strategic and systemic obstruction of Dutch climate policies (1980-present)' in Brulle, J. T. Roberts and M.C. Spencer (Eds.) Climate Obstruction across Europe, Oxford University Press: https://cssn.org/wp-content/uploads/2024/05/Climate-Obstruction-in-Europe.pdf
- Jan Paul van Soest (2014), De twijfelbrigade: Waarom de klimaatwetenschap wordt afgewezen en de wereldthermostaat 4 graden hoger gaat. Uitgeverij mauritsgroen. Mgmc: https://www.bol.com/nl/nl/p/detwijfelbrigade/9300000083136888/

Journalistic pieces:

- We don't need the fossil industry for a fossil-free future. https://www.tue.nl/en/news-and-events/news-overview/14-03-2024-we-dont-need-the-fossil-industry-for-a-fossil-free-future
- Betaalde hooglerarenpost stoelpoot voor innovatie, maar er klinkt ook kritiek. https://fd.nl/samenleving/1468232/betaalde-hooglerarenpost-stoelpoot-voor-innovatie-maar-er-klinkt-ook-kritiek
- Fossil Fuels Fund Academia. Now What? https://drilled.media/news/delay-universities
- Research or Lobbying? New Documents Reveal What Fossil Fuel Companies Are Really Paying for at Top Universities. https://drilled.media/news/hearingdocs-universities
- Big Oil Helped Shape Stanford's Latest Climate-Research Focus. https://www.chronicle.com/article/big-oil-helped-shape-stanfords-latest-climate-research-focus
- Slick operator: BP's grip on science following the world's largest oil spill. https://www.ftm.eu/articles/bp-research-liability-deepwater-horizon-oil-spill
- Documents, Whistleblowers, and Public Comments Are Clear: Oil Companies Know Carbon Capture Is Not a Climate Solution. https://drilled.media/news/ccs
- Fossil fuel recruiters banned from three more UK universities. https://www.theguardian.com/environment/2022/dec/01/fossil-fuel-recruiters-banned-from-three-more-uk-universities
- BP Was Warned Gas-Driven Climate Change Could Cause 'Unprecedented Famine'. https://www.desmog.com/2024/05/03/bp-was-warned-gas-driven-climate-change-could-cause-unprecedented-famine-us-congressional-investigation/

- Revealed: Fossil Fuel Giants Have Committed £40.4 Million to UK Universities Since 2022. https://www.desmog.com/2023/10/04/fossil-fuel-giants-shell-bp-41-million-uk-universities-2022/
- Beunder, A., Joosten, T., Keizer, P. (2020), 'Klimaatsceptisch Nederland profiteert nog altijd van netwerk en geld uit fossiele industrie'. Follow The Money: https://www.ftm.nl/artikelen/clintel-klimaatscepticifossiele-industrie

Other:

- Webinar: SDG Academy by Amsterdam Sustainability Institute: How to go fossil free? The journey of VU: https://m.youtube.com/watch?v=j78RZrP4QVM
- A Pipeline of Ideas. How the Rotterdam School of Management facilitates climate change by collaborating with the fossil fuel industry. https://changerism.com/portfolio/a-pipeline-of-ideas/
- History of university collaboration with industry by Dr. Jorrit Smit. https://www.solid-sustainability.org/panel-discussion-cutting-ties-between-universities-and-the-fossil-fuel-industry-why-and-how#jorrit_smit
- Survey: Ongewenste inmenging in wetenschappelijk onderzoek. https://static.nrc.nl/2018/enquete-onderzoeksgeld/uitslagNederlands.pdf
- American Petroleum Institute (API). (1998). Global Climate Science Communications—Action Plan. https://perma.cc/LJ33-LSEB