Please note:

This is a provisional translation of the summary only; a full translation of the report is currently being prepared.

Summary

Introduction

In nine sessions, TU Delft's Moral Deliberation Chamber on Cooperation with the Fossil Fuel Industry examined five forms of cooperation with the fossil fuel industry in scientific research and education. The central question in this series of moral deliberations was whether - and if so, under what conditions - cooperation with the fossil fuel industry is acceptable, desirable and/or necessary, in light of climate change and the role the fossil fuel industry plays in this worldwide.

The research of the moral deliberation chamber not only confirms concerns and questions that exist within TU Delft, it also points to answers to the question of how the university can deal responsibly with the fossil fuel industry. The outcomes can (partly) be translated and/or used by other (technical) universities facing similar moral issues.

At the request of TU Delft, the Moral Deliberation Chamber on Cooperation with the Fossil-Fuel Industry was supervised by Governance & Integrity International (G&I). The results of the research of the deliberation chamber and its elaboration by G&I were laid down in an extensive report. The public version in front of you is a summary of this.

Problem

It is scientifically undisputed that current climate change is caused by humans. Key to this is the emission of CO_2 and other greenhouse gases such as methane (CH_4), nitrous oxide (N_2O) and water vapor (H_2O). Global warming has major consequences for all people in the world, future generations, the most vulnerable people and areas on earth, non-human life forms and the survival of ecosystems.

All universities in the Netherlands work (or have worked) with the fossil fuel industry, but technical universities do so more intensively than general universities. TU Delft sees it as its responsibility 'to build upon its intellectual and innovative power for safeguarding the world population against the risks of climate change, by developing technologies and methods in close collaboration with those companies and organizations that need to implement such measures in practice' (TU Delft, 2022).

Scientific research and innovative technology conducted and developed in cooperation with the fossil fuel industry are, on the one hand, recognized as important (potential) resources in reducing global warming - for example, where they contribute to the energy transition. On the other hand, there are concerns that it is precisely through cooperation that the fossil fuel industry feels supported in its policy of extraction and exploitation of fossil fuels and internationally agreed climate goals, such as the reduction of CO_2 emissions and the limitation of global warming to 1.5°C compared to preindustrial levels are not going to be met.

In early 2024, a consultation by Populytics revealed that employees and students at TU Delft are more concerned than the average in the Netherlands about global warming and the role of the fossil fuel industry (Populytics, 2024). This consultation further shows that many want to attach conditions in one way or another to TU Delft's collaborations with the fossil fuel industry in research and education. There is support for a structure to assess the desirability of collaboration.

Research

The moral deliberation chamber on Cooperation with the Fossil Fuel Industry consisted of twelve members, including professors, lecturers, support staff, PhD students and master and bachelor students from various faculties. They subjected five cases about cooperation with the fossil fuel industry in research and education at TU Delft to a moral examination. They used moral judgment as a method of research. G&I provided basic training in moral judgment for the participants, and supervised all the deliberation chamber's sessions. Furthermore, G&I conducted in-depth research on the cases and formulated recommendations. These recommendations are not only about cooperation between individual fossil fuel companies and TU Delft, but also about dealing with the fossil fuel industry in cooperation with other (technical)

universities, aimed at compliance with the Paris Climate Agreement and the goal of keeping global warming below 1.5°C compared to pre-industrial levels (PIN).

Questions

The moral deliberation chamber examined the following three questions using five concrete collaborations in education and research:

- 1. What are moral principles and guidelines that should guide decisions on whether to collaborate with the fossil fuel industry? What moral principles support collaboration with the fossil fuel industry in the energy transition? What moral principles constrain this cooperation? What conditions should be imposed on cooperation?
- 2. How can TU Delft design and ensure a moral learning process that supports researchers, deans and administrators when considering collaboration with the fossil fuel industry?
- 3. What are important building blocks for the development of an assessment framework that can be used in policy and decision-making on cooperation of TU Delft (and other universities) with the fossil fuel industry?

G&I additionally investigated the following question as a result of the cases studied:

4. How can TU Delft engage with the fossil fuel industry to contribute to protecting the world's population from the effects of climate change and complying with the climate accords and subsequent international agreements to keep global warming below 1.5°C PIN?

Answers: overview

The five cases raised the question of whether it was morally right to enter into cooperation with the fossil fuel industry or whether cooperation should be abandoned.

In three cases, a majority in the deliberation chamber advised that renouncing the cooperation was morally right; in two cases, a majority in the deliberation chamber found that entering into or continuing the cooperation was morally right.

The moral deliberation of the moral deliberation chamber leads to four significant outcomes:

(1) It leads to ten moral principles to guide decisions on cooperation with the fossil fuel industry by TU Delft.

Two tracks

The analysis of the cases further revealed two tracks for TU Delft to follow. The first track is a direct result of the research by the deliberation chamber. The second track follows from the in-depth analysis of the cases by G&I, and is not necessarily supported by the members of the deliberation chamber.

- (2) The first track focuses on conditional cooperation with the fossil fuel industry by TU Delft.
- (3) The second track focuses on acting with other universities to urge the fossil fuel industry to comply with the Paris Climate Agreement and subsequent agreements.
- (4) Finally, the work of the moral deliberation chamber made an important contribution to shaping and securing a moral learning process on climate change and the fossil fuel industry and an assessment framework for decision-making on cooperation with the fossil fuel industry.

Answers: elaboration

Below. each of the above outcomes of the moral deliberation is described in more detail.

(1) Moral principles of just science and climate justice

Right to science and	(1) Right to science and climate justice	These three moral principles relate to
climate justice	(2) Right to scientific education and	the three human rights that are
	climate justice	founding principles of every
	(3) Academic freedom and climate	university. Here they are tailored to

	justice	addressing climate change: the university should attract as many people and resources as possible to conduct scientific research, develop innovative technology and provide education for the energy transition.
Limits to cooperation with fossil fuel industry	(4) Liveable earth (5) Future generations (6) Vulnerable people and areas (7) Non-human life forms (8) Social justice	These five principles set limits to cooperation with the fossil fuel industry: - The right to a sustainable and livable earth for all. - The right of future generations to a dignified life on a livable planet. - The right to a fair and proportionate distribution of climate burdens. - The recognition of the protectability of non-human life forms. - The right to the protection of political, social and economic human rights. The university must work to ensure that these rights are not violated through collaboration with the fossil fuel industry and are actively protected through collaboration with other universities.
Conditions for cooperation	(9) Reliable and independent science (10) Due diligence and reliable partnership	These two principles apply as prerequisites for cooperation with the fossil fuel industry. First, ensuring independent science and avoiding complicity in greenwashing and deception. Second, the principle that decisions on cooperation are based on sound due diligence.

(2) Track I - Collaboration with the fossil fuel industry.

Track I is about whether or not to enter into collaborations with companies from the fossil fuel industry in research and education at TU Delft. The main insights from the moral deliberation chamber are summarized below.

- 1. Collaboration with a company from the fossil fuel industry is permitted or even required if it serves the energy transition, the rights of those involved (such as current generations, future generations, vulnerable people and areas, and non-human life forms) are not violated as a result of the collaboration and the collaboration does not contribute to non-climate related human rights violations. Cooperation aimed at the exploitation of fossil fuels must be rejected. Cooperation aimed at the energy transition should bring together as many researchers, knowledge and expertise as possible, as well as financial resources.
- 2. The paramount consideration in decisions to engage in cooperation is the obligation not to cause harm to present and future generations, vulnerable communities and territories, and non-human life forms. 'Harm' means violation of one or more human rights to life, liberty, health, livelihood or safe and clean energy and/or other political, social and economic rights.
- 3. The decision on whether to enter into cooperation is best made on a project basis rather than a corporate basis. Nevertheless, certain companies may be excluded. This requires business-oriented due diligence.
- 4. When deciding whether or not to enter into a collaboration, TU Delft should always examine how to limit or compensate for damages to those directly and indirectly involved.
- 5. A successor to the moral deliberation chamber can advise and support the Executive Board, faculties and staff in decisions about cooperation with the fossil fuel industry. New decisions about cooperation should be evaluated for their moral rightness. Decisions about collaboration with the fossil fuel industry should be made by the Executive Board. In addition, moral learning about cooperation with the fossil fuel industry is needed in the faculties. Finally, it is important to consider moral education and climate change ethics in undergraduate education.
- 6. Valid and reliable information obtained about a company from the fossil fuel industry is essential to make sound judgments about whether a collaboration is morally right or should be rejected. It is further important to encourage the fossil fuel industry to fulfill its climate commitments. Principle-driven and science-based due diligence is indispensable. The deliberation chamber has provided building blocks to this end.

(3) Track II - The universities and the fossil fuel industry

By cooperating with companies from the fossil fuel industry in research and education, TU Delft can contribute to the energy transition. However, actively contributing to addressing climate change requires more from the university than follows from our analysis of the five cases studied. This 'more' concerns the question of what universities, as institutions of scientific research and education, can and must jointly contribute to keep the fossil fuel industry committed to the Paris Climate Agreement and related agreements.

Inspired by the methodology of the Intergovernmental Panel on Climate Change, a new Interuniversity Panel on Climate Change and Fossil Fuel Industries could periodically conduct an impact analysis fossil fuel industries: a study that identifies the climatic, meteorological, economic and social impact of the fossil fuel industry on climate change and global warming. Such a study analyzes the fossil fuel industry's efforts toward meeting the Paris Climate Agreement and subsequent international commitments to keep global warming below 1.5°C PIN. In doing so, it also develops scenarios for what the fossil fuel industry should do to reduce the exploitation, distribution and consumption of fossil fuels as a sector.

(4) The moral learning process and a review framework

The moral deliberation chamber leads to three key insights about securing and designing the moral learning process on climate justice, climate change and academic freedom.

- Moral deliberation helps when making decisions about collaboration with the fossil fuel industry. At the same time, the work of the deliberation chamber teaches that improvement is needed in areas.
- From the work of the moral deliberation chamber, an assessment framework can be derived that shapes academic freedom when collaborating with the fossil fuel industry in everyday scientific work.
- Permanent moral education of students on the role of the scientist and engineer in a just energy transition and structural embedding of this in education is essential.

Recommendations

This report makes the following ten recommendations. The first eight recommendations follow from the work of the deliberation chamber; the last two recommendations are in the spirit of the work of the moral deliberation chamber, but are for the account of G&I.

Recommendations to the moral principles of just science and climate justice

 Accept the moral principles of just science and climate justice as guiding decisions about cooperation with the fossil fuel industry and make them part of a moral learning process about the fossil fuel industry, energy transition and climate justice.

Recommendations to Track I: Collaborating with the fossil fuel industry

- 2. Give the moral deliberation chamber a permanent status and the task of advising and supporting decisions about engaging in research and education collaboration with the fossil fuel industry.
- 3. Develop and improve the moral learning process of a future deliberation chamber, drawing on experience gained now with regard to composition, training and methods of operation of the deliberation chamber.
- 4. Make a survey of all collaborations with the fossil fuel industry and ancillary positions of employees with the fossil fuel industry.
- 5. Examine existing and new forms of collaborations with the fossil fuel industry. Subject a selection of existing collaborations with the fossil fuel industry to moral judgment. Examine all new collaborations for their moral rightness, to advise deans and the Executive Board.
- Make climate justice and a just energy transition part of a broader moral learning process about academic freedom.
 Ensure that staff have the appropriate competencies to participate in moral deliberation about collaborations with the fossil fuel industry.
- 7. Make climate change ethics even more part of students' moral education and curriculum. Actively prepare students for their role as responsible scientists and citizens who can contribute to addressing climate change.
- Develop science-informed and developmentally appropriate due diligence informed by the principles of just science and climate justice with respect to all fossil fuel industry partners.

Recommendations to Track II: Universities and the fossil fuel industry.

9. Together with Dutch and foreign (technical) universities, develop a strategy aimed at keeping global warming caused by the fossil fuel industry below 1.5°C PIN.

10.	Work with Dutch and foreign technical universities and scientists on an impact analysis fossil fuel industries according to the model of the IPCC.		