Current research projects involving collaboration with the fossil industry

Reference date 1 February 2024

What do we mean by fossil industry

The use of products made from fossil resources is woven throughout our society. From the clothes we wear to the buildings we work in, they often incorporate products that originated in fossil fuels. Therefore, to determine whether a research project involves collaboration with the fossil industry, the following delineation was used: "Companies with so-called upstream activities: the exploration and extraction of oil and gas." Collaborations with general chemical and energy companies are not included in this overview.

Compared to the first version of this overview, with reference date 31 May 2023, the more common definition of "upstream" companies has now been chosen. This does not result in substantive changes to this overview and the companies and projects listed therein.

Only current, ongoing projects are included in this overview. An exception is equipment donations (or money for purchase); those dates relate to the past five years. The condition for collaboration in current projects is that the research focuses on developing knowledge to accelerate the energy transition, phase out fossil fuels as soon as possible and/or avoid further CO2 emissions.

The overview was prepared with reference date 1 February 2024 and is a snapshot, which will be updated approximately twice per calendar year. For more details, please see <u>this page</u>.

Compared to the first version of this overview, with reference date 31 May 2023, there are a number of changes. Some projects did not list certain fossil partners, which were listed on the corresponding project website. This has been adjusted. Also, a number of projects were inadvertently not included in the first overview because they were initiated around that time, or because they have little or no substantive relationship with the fossil industry (for example, the VHP4Safety consortium) and were therefore overlooked.

Additionally, five of the original ten bilateral agreements have come to an end in the past months, and one bilateral agreement has been added.

In the overview, we categorize collaborations based on the type of collaboration.

Explanation of types of collaboration agreement

Think Tank

The Sustainable Industry Lab think tank brings together science, business, government and civil society partners to help Dutch industry make the transition to sustainability.

Donation of (funds for) equipment

This involves either a contribution to purchase scientific equipment, or a donation of equipment to conduct research, or providing equipment free of charge for the purpose of experimental research. This involves equipment that is no longer being used by the donating party and is therefore "written off," but is still of value for research at the university.

Consortium

This involves several companies and knowledge institutions conducting joint research. Such a form of collaboration is usually funded by a grant (mainly by NWO, Top Sectors such as ChemistryNL or Energy, and EU grants). The companies involved are often co-financiers of these studies.

Bilateral

This refers to a direct agreement between the university and one company to conduct a specific

research project. Usually these are projects funded by the company involved. In one case, the research is co-financed by ChemistryNL.

Letter of Intent

This is a declaration of intent in which parties express the desire for collaboration. This does not yet involve the implementation of a research program or funding.

Indirect consortium

These are collaborations of the NWO DeepNL program. This NWO research program is made possible by a contribution from the Nederlandse Aardolie Maatschappij (NAM), but it <u>does not</u> <u>involve direct collaboration with the fossil industry</u>. The implementation of DeepNL takes place according to regular NWO procedures and quality standards and is completely independent. NAM is not involved in the decision-making or substantive steering of the program.

Research collaborations fossil industry

* We are consulting with our partners to make this information public. If the information concerns a budget, it <u>has</u> been included in the total sums that were used for the <u>visualisations</u>.

Think tank

Title: Sustainable Industry Lab (SIL) Type of collaboration agreement: Think tank Industry members: Shell, ExxonMobil, BP International, ElementNL Other partners: ± 40 affiliated parties, see <u>https://sustainableindustrylab.nl/members</u> Public funding body: Dutch Ministry of Economic Affairs and Climate Policy Duration: Since January 2020 Total research project budget for all partners: € 800.000 Funding industry partner to UU: €0

Donation of (funds for) equipment

Title: Donation agreement - Thermographic system Type of collaboration agreement: Donation Industry partner: NAM Public funding body: N.A. Total research project budget for all partners: \in 80.677 Funding industry partner to UU: \in 80.677

Title: -Type of collaboration agreement: Donation of equipment use Industry partner: * We are consulting with our partner to make this information public Public funding body:: N.A. Total research project budget for all partners: €0 Funding industry partner to UU: €0

Title: -Type of collaboration agreement: Donation of equipment Industry partner: * We are consulting with our partner to make this information public Public funding body: N.A. Total research project budget for all partners: €0 Funding industry partner to UU: €0

Consortium

Title: LOSS Type of collaboration agreement: Consortium Industry partners: NAM Other partners: ± 18 partners in total, see <u>https://nwa-loss.nl/en/consortium/partners/</u> Public funding body: NWO (ORC programme) Duration: Feb 2020 – March 2027 Total research project budget for all partners: € 4.624.480 Funding industry partner to UU: €0

Title: Return-ACT Type of collaboration agreement: Consortium Industry partners: Shell, EBN, BP International, Neptune Energy, ENI, Lundin, Harbour Energy, Equinor, Wintershall Other partners: ± 18 partners in total, see <u>https://return-act.eu/consortium</u> Public funding body: Accelerating CCS Technologies (ACT) Duration: Dec 2021 – March 2025 Total research project budget for all partners: € 7.400.000 Funding industry partner to UU: * We are consulting with our partners to make this information public

Title: Improving reservoir property prediction and producing a database of Dutch geothermal plays Type of collaboration agreement: Consortium Industry partner: EBN Other partners: 6 partners in total, see <u>https://projecten.topsectorenergie.nl/projecten/improvingreservoir-property-prediction-and-producing-a-database-of-dutch-geothermal-plays-36866</u> Public funding body: TKI Energie Duration: Sept 2021 – Dec 2025 Total research project budget for all partners: € 495.298 Funding industry partner to UU: €0

Title: SUNER-C Type of collaboration agreement: Consortium Industry partner: TotalEnergies, Engie Other partners: \pm 26 partners in total, see <u>cordis.europa.eu/project/id/101058481</u> Public funding body: EU Duration: June 2022 – May 2025 Total research project budget for all partners: \in 4.026.403,75 Funding industry partner to UU: \in 0

Title: ARC-CBBC Type of collaboration agreement: Consortium Industry partner: Shell Other partners: ± 10 partners in total, see <u>https://arc-cbbc.nl/founding-partners</u> Public funding body: NWO, Ministry of Economic Affairs and Climate Policy (EZK), ChemistryNL Duration: May 2016 – May 2026 Total research project budget for all partners: * We are consulting with our partners to make this information public Funding industry partner to UU: * We are consulting with our partners to make this information public

Title: BatteryNL Type of collaboration agreement: Consortium Industry partner: Shell Other partners: ± 36 partners in total, see <u>https://www.batterynl.nl/consortium/</u> Public funding body: NWO Duration: Sept 2022 – Sept 2030 Total research project budget for all partners: € 9.686.201 Funding industry partner to UU: € 25.657

Title: RELEASE Type of collaboration agreement: Consortium Industry partner: Shell Other partners: ± 38 partners in total, see <u>https://nwo-release.nl/consortium</u> Public funding body: NWO Duration: Sept 2020 – Sept 2026 Total research project budget for all partners: € 10.226.127 Funding industry partner to UU: € 39.109 Title: CATlight Type of collaboration agreement: Consortium Industry partners: Shell, ExxonMobil Other partners: BASF, Toyota, DENSsolutions, CL solutions Public funding body: NWO Duration: to be decided Total research project budget for all partners: € 1.631.887 Funding industry partner to UU: € 41.363 Title: Groeifondsproject GroenvermogenNL and GroenvermogenII Type of collaboration agreement: Consortium Industry members: Shell, BP Other partners: ± 35 partners in total, see https://www.nationaalgroeifonds.nl/overzicht-lopendeprojecten/thema-energie-en-duurzame-ontwikkeling/groenvermogen-ll Public funding body: Ministerie van Economische Zaken en Klimaat Duration: 8 - 10 years Total research project budget for all partners: still under development, € 73 million allocated so far Funding industry partner to UU: €0 Title: Virtual Human Platform for Safety Assessment (VHP4Safety) Type of collaboration agreement: Consortium Industry partners: Shell Other partners: ± 33 partners in total, see https://www.nwo.nl/en/cases/virtual-human-platformwill-eventually-render-animal-experiments-obsolete Public funding body: NWO Duration: June 2021 - May 2026 Total research project budget for all partners: € 10.500.000 Funding industry partner to UU: $\in 0$ Title: WadSED Type of collaboration agreement: Consortium Industry partners: NAM Other partners: ± 22 partners in total, see https://www.nwo.nl/en/researchprogrammes/perspectief/perspectief-grants/wadsed-wadden-seaand-estuaries-system-dynamics-and-sediment-management-under-climate-change

Public funding body: NWO Duration: June 2023 – June 2029 Total research project budget for all partners: € 2.925.750 Funding industry partner to UU: € 0

Title: WarmingUP GOO (follow up on WarmingUP consortium) Type of collaboration agreement: Consortium Industry partners: Shell Geothermal Other partners: 14, see <u>https://projecten.topsectorenergie.nl/projecten/warmingup-geothermieen-opslag-opschaling-37622</u> Public funding body: RVO Duration: March 2023 – Feb 2027 Total research project budget for all partners: \in 5.441.101 Funding industry partner to UU: \notin 0

Title: AquaConnect Type of collaboration agreement: Consortium Industry partners: Shell Other partners: ± 47 partners in total, <u>https://www.aquaconnect.nu/aquaconnect-consortium/</u> Public funding body: NWO Duration: July 2021 – June 2025 Total research project budget for all partners: €5.141.647 Funding industry partner to UU: € 0

Bilateral

A total of six research projects fall under the category 'Bilateral', which are so-called bilateral contracts. This concerns two research projects with TotalEnergies, one with Concawe consortium, one with SABIC, one with BP and one with Shell. In one of the six projects, there is also a public funding body in addition to the industry partner, namely ChemistryNL. The total amount that actually ends up at UU through these six bilateral contracts and is directly funded by the industry partners is € 2.787.656.

Title: Processing of bio-derived and renewable feedstocks Type of collaboration agreement: Bilateral Industry partner: B.P. International Limited Duration: 2023 - 2028 Total budget range : \in 1.5M - 1.75M Funding industry partner to UU: \in 1.5M - 1.75M

Title: Evolution of the mechanical and transport properties of rock salt under simulated cavern wall conditions during cyclical hydrogen storage Type of collaboration agreement: Bilateral Industry partner: Shell Global Solutions Duration: December 2025 Total budget range and Funding industry partner to UU: * We are consulting with our partners to make this information public

Title: Sustainable biomass feedstock supply chains for advanced biofuels Type of collaboration agreement: Bilateral Industry partner: Concawe Duration: March 2025

Total budget range and Funding industry partner to UU: * We are consulting with our partners to make this information public

For the other bilateral agreements, the exact amounts and duration per project cannot be shared for now, because the nature and/or contracts of those collaborations prevent disclosing this competition sensitive information. We are in contact with our partners to make this information public by mutual agreement. When possible, we will (incrementally) add the information at later times. All budgets of the bilateral contracts have been included in the total sums that were used for the <u>visualisations</u>.

Letter of intent

Titel / Title: ETCA Type of collaboration agreement: Letter of intent Industry partner: Shell Other partners: ± 24 partners in total, see <u>https://www.energytransitioncampus.com/why-join-us.html</u> Duration: - (no collaboration as of yet) Total research project budget for all partners: €0 (no collaboration as of yet) Funding industry partner to UU: €0

Indirect consortium

Title: DeepNL (15 <u>subprojects</u>) Type of collaboration agreement: Indirect consortium Public funding body: NWO Duration: variable per sub-project, longest running project runs until April 2026 Total research project budget for all partners: € 5.411.796 Funding industry partner to UU: €0

In December 2023, 3 DeepNL projects were granted in which Utrecht University is the coordinator, and 2 in which Utrecht University is a partner. For these projects, the precise budget is still unknown. This will be included in a future update.

* We are consulting with our partners to make this information public. If the information concerns a budget, it <u>has</u> been included in the total sums that were used for the <u>visualisations</u>.