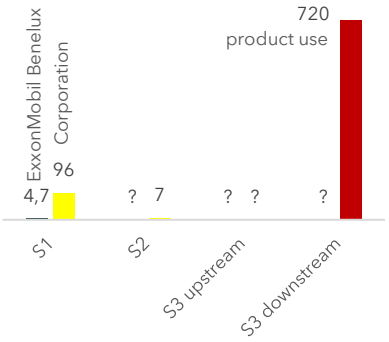
ExxonMobil Benelux

Sector	Revenue	Emissions	Pledge	Transparency	Integrity
Oil and gas	€ 271.6 bn (Corporation, 2022)	823 $MtCO_2e$ (Corporation, 2022) 4.7 $MtCO_2e$ (Benelux, S1, 2022)	Net-zero emissions from operated assets (S1 & S2) by 2050	Very low	Very low

1. Tracking & disclosure of emissions

Transparency & Integrity

823 $MtCO_2e$ (Corporation, 2022) 4.7 $MtCO_2e$ (S1, Benelux, 2022)	🟡	Unclear if subsidiaries are covered for all scopes.
Major emissions sources		Emissions from product use likely account for at least 84% of total emissions, but disclosure is not transparent.
Disclosure		Incomplete and untransparent. Benelux emissions only available through national GHG registries for S1. For ExxonMobil Corporation, S1 and S2 are disclosed, but there are no subsidiary data and zero data on S3 emissions other than product use.



2. Setting emission reduction targets

		Transparency	Integrity
Headline target or pledge	ExxonMobil aims to achieve net-zero operated S1 and S2 greenhouse gas emissions by 2050		
Short- & medium-term targets (up to 2030)	ExxonMobil Benelux is covered by ExxonMobil Corporation's 2030 targets (vs 2016 levels). - S1 & S2 corporate-wide operated assets: 20-30% intensity reduction (approx. 20% absolute) and 40-50% intensity reduction in Upstream (approx. 30% absolute) - No targets for S3.	Moderate	Low
Scope coverage	1 2 3		
Own emission reductions (compared to full value chain in 2019)	? by 2030		
	The expected (not targeted) absolute emission reduction of 20% would imply a 3% reduction across the full value chain compared to 2019 levels. Well below global and sectoral benchmarks.		
Long-term vision (beyond 2030)	Net-zero pledge for S1 and S2 not further detailed through specific emission reduction targets.	Low	Low
Scope coverage	1 2 3		
Own emission reductions (compared to full value chain in 2019)	? by 2050		
	Given that S3 emissions are excluded, a maximum of 16% of value chain emissions are covered. Again, well below 2050 1.5°C trajectories.		

3. Reducing own emissions		Transparency	Integrity
Emissions reduction measures	CCS projects planned in Rotterdam and Antwerp and further consideration of large-scale blue hydrogen production in Rotterdam. No further details for the Benelux. Moreover, ExxonMobil plans to improve efficiency and electrify operations globally, but no plans for S3 emissions and no phase-out of (new) fossil fuel infrastructure.	Low	Low
Renewable electricity procurement	No disclosure on (renewable) electricity on any level. ExxonMobil Corporation's reporting mentions use of RECs/GOOs and PPAs (in the future), but includes no further information.	Low	Low

4. Climate contributions & offsetting		Transparency	Integrity
Responsibility for unabated emissions	No information identified on how the company takes responsibility for unabated emissions.	Moderate	Low
Climate contributions	- No climate contributions identified.	N/A	Low
Offsetting claims today	- No current offsetting claims identified.	N/A	N/A
Offsetting plans for the future	No clarity on the role of offsetting or the criteria (to be) used to meet its net-zero ambitions. Offsets mentioned to achieve net-zero operational emissions in the Permian Basin by 2030.	Low	?

RATINGS **Transparency** refers to the disclosure of information. **Integrity** refers to the quality and credibility of the approach.
Overall Average of sections 1-4 ■High ■Reasonable ■Moderate ■Low ■Very Low;
Sections 1-4 Average of criteria in each section ■■■■■; **Rating criteria** See methodology for rating criteria ■■■.

Source: SEO Amsterdam Economics' interpretation of identified public documentation from ExxonMobil Corporation & ExxonMobil Benelux

ExxonMobil Benelux

ExxonMobil Benelux is a subsidiary of US-based ExxonMobil Corporation, one of the world's largest oil and gas companies. The company has refineries in Rotterdam and Antwerp, operates several factories around the ports of Rotterdam and Antwerp, and has fuel depots in all three Benelux countries – some under the brand name Esso. ExxonMobil co-owns Dutch oil and gas exploration company NAM. Major emissions of ExxonMobil are from the use of its products, but the disclosure is incomplete and untransparent. The company is committed to net-zero S1 and S2 emissions from its operated assets by 2050. ExxonMobil Benelux is covered by this commitment, but has no reduction targets of its own. In the medium term, the company has numerous worldwide intensity targets, none of which are expected to align ExxonMobil with a 1.5°C trajectory. The company has no plans to phase out fossil fuel facilities and claims to be bound by (future) demand.

About the tracking and disclosure of the GHG emissions of ExxonMobil

ExxonMobil Benelux does not provide information about its emissions, while the disclosure of S3 emissions at the holding level of ExxonMobil Corporation is incomplete and undetailed. The emissions at the Benelux level are only available for S1 through national greenhouse gas registries for the Netherlands and Belgium. We estimate that they equal 4.7 $MtCO_2$ in 2022 or 4.8 $MtCO_2$ if we include half of the emissions by NAM (Dutch Emissions Authority, n.d.; Belgian Greenhouse Gas Registry, n.d.). These do not include major emissions from the use of the extracted and refined fossil products (S3). On a global level, ExxonMobil Corporation (2023b) does annually disclose emissions from S1 and S2. However, it only provides S3 emissions from product use, which totalled 540 to 720 $MtCO_2e$ in 2022, depending on the accounting method used. It is not clear what the extent of the other upstream and downstream S3 emissions is. The company states that other categories are not tracked "due to the lack of third-party data" (ExxonMobil Corporation, 2023b, p. 6).

About long-term emission reduction targets and neutralisation plans for the future

ExxonMobil Corporation has made net-zero commitments that do not encompass emissions resulting from the use of fossil fuels, which constitute a significant portion of the company's emissions. ExxonMobil Corporation (2023a, p. 10) commits itself to reaching net-zero GHG emissions from its operated assets (S1 and S2) by 2050. However, neither of these targets includes S3 emissions, despite the fact that emissions during the usage phase of fossil fuels represent the most significant source of emissions for fossil fuel producers (at the very least 84 percent of reported emissions for ExxonMobil). ExxonMobil Benelux is covered by these targets, but has not stated any commitments of its own for its regional operations.

ExxonMobil's net-zero strategy lacks clarity regarding the role of offsetting, which further undermines the credibility of its commitment. Again, for ExxonMobil Benelux no specific policy is detailed. ExxonMobil Corporation (2023a, pp. 11-13) does mention "high quality offsets" as abatement options to achieve net-zero emissions from operations in the Permian Basin by 2030 and lower emissions across its operated assets as a whole. Offsets are presented as the cheapest option, along with part of its electrification plans and the use of PPAs/RECs (without detailing the planned extent of either of these measures). ExxonMobil Corporation (2023a, p. 68) has started pilots in the Permian Basin to restore native grassland to sequestrate carbon in the soil. The company claims to support regulatory policies on CCS to "allow for high-quality offsets generated from carbon capture and storage, low-carbon, and carbon-removal projects" (ExxonMobil Corporation, 2023a, p. 85). Details on the company's own principles or the scale of

using offsets in the future remain vague, however, and no measures beyond 2030 are mentioned. This raises concerns about the level of ambition behind the net-zero pledge, especially considering the already weaker commitment due to the exclusion of S3 emissions. It is important to note that offsetting is not a credible substitute for emission reductions in sectors that have feasible options to decarbonise in the coming decades, which includes the fossil industry (see section 4.3.2 of the methodology; NCI, 2023b).

Despite numerous studies emphasising the necessity of phasing out fossil fuel extraction, ExxonMobil Corporation has not committed to such a transition. According to the International Energy Agency (IEA, 2021, pp. 20-21) and IISD (2022, p. iv), in order to achieve global net-zero emissions by 2050, there should be no investments in new oil and gas fields from 2021-2022 onwards. Instead, substantial investments in clean energy technologies and credible Carbon Capture and Storage (CCS) are required. The IPCC's Sixth Assessment Report reveals that existing fossil fuel infrastructure is projected to emit more greenhouse gases than is compatible with limiting global warming to 1.5°C, unless early decommissioning or scaled-down utilisation of these assets occurs (IPCC Working Group III, 2022, pp. 265-267). However, ExxonMobil Corporation has not committed to ending or even reducing its fossil fuel extraction activities. In fact, multiple reports – including its progress reports on climate – imply that its operations do not influence energy demand or global GHG levels. The company has stated that individual production reductions would have no impact on energy demand or consumption, but would merely shift production from one producer to another (ExxonMobil Corporation, 2021, p. 45). ExxonMobil Corporation (2023a, p. 7, p. 18) further states that in 2050 "oil and natural gas continue to play an important role. Sustained investment is needed to meet demand" (the company expects 79 percent of the 2019 levels of fuel oil consumption to remain by 2050, and a slight overall *increase* of diesel and gasoline usage). Nonetheless, corporations have a crucial role to play in mitigating global warming through supply-side interaction with changing consumer preferences, investing in low-carbon alternatives, and making net-zero commitments for their own emissions footprint (Creutzig et al., 2022, p. 84). The IPCC's Sixth Assessment Report also emphasises that in modelled pathways leading to global net-zero emissions, the energy supply sector achieves net-zero carbon emissions before the overall economy does (IPCC Working Group III, 2022, p. 337). This highlights the significant responsibility that energy suppliers like ExxonMobil Corporation have in limiting global warming to 1.5°C.

About medium-term emission reduction targets

ExxonMobil Corporation's medium-term emission reduction plans up to 2030 do not align with the goals of the Paris Agreement nor with the company's overarching pledge. The company targets an intensity reduction of 20 to 30 percent for its S1 and S2 emissions from operated assets and expects that this will result in around 20 percent lower emissions in absolute terms (ExxonMobil Corporation, 2023a, p. 6). For 2050, it aims for "net-zero" S1 and S2 emissions without specifying whether this is an intensity or absolute target nor to what extent offsetting may play a role. The company does not state any S3 targets for either the medium- or the long-term. These ambitions fall short of the IPCC's findings, which indicate that by 2030 GHG emissions and global CO_2 must decrease by 43 and 48 percent, respectively, versus 2019 levels to have a reasonable chance of limiting global warming to 1.5°C (IPCC, 2022). Such a reduction also requires a substantial decline in fossil fuel consumption by 2030 (IPCC Working Group III, 2023, p. 615).

ExxonMobil Benelux explores carbon capture and storage (CCS) as a future abatement measure in the Netherlands and Belgium, but it does not disclose the expected impact of these projects. Collaborating with other companies, ExxonMobil Benelux is assessing the potential for CCS in the port areas of Antwerp and Rotterdam. In 2019, ExxonMobil, Shell, Air Liquide and Air Products launched a CCS project called Porthos (n.d.) to transport and store captured carbon beneath the North Sea. After having received a guarantee for government subsidies already, the Final Investment Decision (FID) is expected in 2023, with the hope that the project will be operational

by 2026 (although legal nitrogen requirements may delay the project). Meanwhile in Belgium, Antwerp@C – a CCS project in the Port of Antwerp launched by ExxonMobil, Air Liquide, BASF, Borealis, INEOS, Fluxys and TotalEnergies – is expected to have a capacity of 2.5 $MtCO_2$ at the start and up to 10 $MtCO_2$ by 2030 (Air Liquide, 2023). The project's expected FID has been delayed from 2022 to 2023. However, the specific proportion of operational emissions by ExxonMobil Benelux that the company plans to abate through CCS remains unclear. While credible CCS plays a role in achieving pathways consistent with the 1.5°C target, it cannot serve as a substitute for substantial reductions in fossil fuel consumption (IPCC Working Group III, 2022, pp. 1163-1164). Decarbonisation of the energy supply sectors is feasible, and the limited and uncertain potential of carbon dioxide removal is necessary to neutralise emissions from more challenging sectors. The abatement measures planned by ExxonMobil Benelux for its installations in Belgium and the Netherlands, apart from CCS, remain unclear.

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ExxonMobil Benelux

Low **Integrity assessment for short- and medium-term target(s) towards 2030**

What do the short- and medium-term targets actually mean?

What are the targets for the short to medium term?

ExxonMobil Benelux is covered by ExxonMobil Corporation's 2030 targets.
S1 and S2 GHG emissions from operated assets:

- 20-30 percent reduction in corporate-wide GHG intensity by 2030 (2016 baseline)
- 40-50 percent reduction in upstream GHG intensity by 2030 (2016 baseline)
- 70-80 percent reduction in corporate-wide CH4 intensity by 2030 (2016 baseline)
- 60-70 percent reduction in corporate-wide flaring intensity by 2030 (2016 baseline)

These plans "include actions that are also expected to achieve" (approximately):

- 20 percent absolute reduction in corporate-wide GHG emissions
- 30 percent absolute reduction in upstream GHG emissions
- 60 percent absolute reduction of flaring
- 70 percent absolute reduction of CH4 emissions

For non-operated assets, ExxonMobil (2023a, p. 6) works "with [its] equity partners to advance greenhouse gas reductions to achieve comparable results".

How do these targets equate to emission reductions across the value chain (compared to a 2019 baseline)?

ExxonMobil Corporation has no absolute emission reduction targets. However, for the expected 20 percent reduction of S1 and S2 emission reductions by 2030, we can make a calculation. Given the emissions of 2016 and 2019 and assuming similar S3 emissions as in 2022, we estimate a reduction of full value chain emissions of no more than 4 percent compared to 2019 levels. However, not all S3 emission categories are disclosed, so the reduction might be even smaller.

Do these targets cover both the short term (within 5 years) and medium term (up to 2030)?

ExxonMobil Corporation does not state any interim short-term targets that require immediate action.

Do these emission reduction commitments align with a 1.5°C trajectory for the sector according to available literature?

Global benchmarks: The IPCC's Sixth Assessment Report stresses that global CO_2 emissions must be reduced by net 48 percent by 2030, compared to 2019 levels, to ensure a reasonable chance of limiting global warming to 1.5°C (IPCC, 2022). In the same period, global GHG emissions must decrease by 43 percent. The Sixth Assessment Report thus reaffirms the findings of the IPCC's Special Report on 1.5°C (IPCC, 2018). Based on the scientific insights from the latter report, the Hague District Court ordered Shell to reduce CO_2 emissions across all emission scopes by net 45 percent by 2030 below a 2019 baseline (The Hague District Court, 2021). ExxonMobil Corporation will not meet these global benchmarks given its current medium-term targets.

Sector-level benchmarks: Teske (2022, p. 319) concludes that the oil sector should reduce its operational emissions from S1 and S2 by 26 percent by 2030 (compared to 2019 levels). For full value chain emissions, which include major S3 emissions, the reduction milestone is 31 percent by 2030. For the gas sector, Teske (2022, p. 319) finds that operational emissions should be reduced by 13 percent by 2030 while full value chain emissions should decrease by 18 percent. ExxonMobil Corporation's targets fall short of the benchmark calculations for either sector. Only the operational emission reduction requirement for the gas sector would be met. UNFCCC (2021b, p. 17) finds that global production of oil and gas should be reduced by 40 percent below 2019 levels to be 1.5°C-aligned. Regarding ExxonMobil Corporation's intensity targets for corporate-wide and upstream emissions across S1 and S2, it remains unclear if these meet global benchmarks. The targets translate to a reduction of 22 and 40 percent, respectively, versus 2019 intensity levels, but these are expressed relative to tons of throughput or production while sectoral benchmark use gCO_2e/MJ. The Transition Pathway Initiative (TPI; 2021, pp. 9-10) finds that the emissions intensity in terms

of gCO_2e/MJ should decrease by 35 percent between 2019 and 2030 for the 1.5°C scenario. The TPI (n.d.) considers ExxonMobil's medium-term targets not to be aligned with a 1.5°C or a Below 2°C scenario. IEA (2021, pp. 20-21) and IISD (2022, p. iv) further note that by 2021-2022 there should have been no new approvals for the development of oil and gas fields in order to limit warming to 1.5°C. In contrast to this key milestone compatible with 1.5°C, ExxonMobil Corporation has ongoing explorations for new oil and gas fields and has not developed any targets to phase out fossil fuels. Additionally, IISD (2022, pp. iv-v) notes that by 2030 worldwide oil and gas production should be decreased by 15 and 30 percent, respectively, and by 2050 by 65 percent relative to a 2020 baseline. Again, ExxonMobil Corporation has not stated any such targets.

Low Integrity assessment for long-term target(s) (post-2030)

What do the long-term targets actually mean?

What are the targets for the long term beyond 2030?

ExxonMobil Benelux is covered by ExxonMobil Corporation's long-term ambitions.
S1 and S2 GHG emissions from operated assets:

- 'net zero' by 2050

How do these targets equate to emission reductions across the value chain (compared to a 2019 baseline)?

No assessment possible as the net-zero ambition is not further translated into specific emission reduction targets. Given that S1 and S2 account for an absolute maximum of 16 percent of the full value chain emissions, net zero would imply a reduction of no more than 16 percent. However, if the maximum product use emissions are taken (720$MtCO_2e$ in 2022 instead of the minimum of 540 $MtCO_2e$) and S3 categories other than the use of its products are included, this estimate may in fact be even lower. Also, ExxonMobil Corporation does not specify a maximum share of emissions that the company may offset.

Do these emission reduction commitments align with a 1.5°C trajectory for the sector according to available literature?

Given that S3 emissions are excluded and that ExxonMobil Corporation does not specify what share of emissions it may offset, the company is not likely to align itself with a 1.5°C trajectory.

Teske (2022, p. 319) concludes that oil sector emissions should decrease by 98 percent across the full value chain by 2050 and by 81 percent across S1 and S2. For the gas sector, the reduction requirement is 94 percent across the complete value chain and also specifically across S1 and S2. The 'net-zero' target of ExxonMobil Corporation could be aligned for its operational emissions, but this highly depends on the potential to offset emissions. UNFCCC (2021b, p. 17) finds that global emissions across all scopes should have a 100 percent net reduction (i.e., net zero) to be 1.5°C aligned. Furthermore, the TPI (2021, pp. 9-10) concludes that in a 1.5°C scenario the emissions intensity in terms of gCO_2e/MJ should decrease by almost 91 percent relative to 2019 intensity levels. The TPI (n.d.) considers ExxonMobil's long-term targets not to be aligned with a 1.5°C or a Below 2°C scenario.