



ASSESSMENT OF EXXONMOBIL'S CLIMATE STRATEGY

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INTRODUCTION

While a growing number of institutions are disengaging from the oil and gas sector, deeming it incapable of transformation, others believe that oil and gas companies are essential to the energy transition and that their support is indispensable to the massive development of renewable energies. Considering this: What is the actual situation? To what extent does ExxonMobil contribute to the development of sustainable solutions? Given that we can't limit global warming to 1.5°C without gradually reducing hydrocarbon production, has ExxonMobil given up on developing new oil and gas projects?

To assess ExxonMobil's climate strategy and provide our analysis, Reclaim Finance relied on the International Energy Agency's (IEA) Net Zero Emissions by 2050 Scenario (NZE).¹ The NZE is based on a 1.5°C trajectory and includes:

- A drop in oil and gas production of 21% and 18% respectively by 2030, compared with 2022 levels.
- A halt to the development of new oil and gas production projects and liquefied natural gas (LNG) terminals.
- A 67% increase in total annual investment in energy, with a 2.3-fold increase in annual investment in energy transition, covering clean energy supply, end-use and energy efficiency. This would mean investing ten euros in the transition by 2030, six in energy supply – mainly electricity – for every euro invested in fossil fuels, i.e. a 6:1 ratio.

ExxonMobil ranks as the 5th biggest oil and gas producer and the 7th biggest oil and gas upstream developer worldwide. The company is the 17th largest LNG export terminal developer.²

As one of the top European integrated oil and gas companies and one of the largest greenhouse gas (GHG) emitters globally, ExxonMobil is among the few companies in the world whose climate transition (or lack thereof) in the coming years will have a determining impact on our collective ability to limit global temperature rise to 1.5°C. In 2020, the company pledged to achieve carbon neutrality across its entire operations on an absolute basis by 2050 or sooner.³



“ I am also calling on CEOs of all oil and gas companies to be part of the solution. They should present credible, comprehensive and detailed transition plans in line with the recommendations of my High-Level Expert Group on net-zero pledges. ”

**Antonio Guterres,
Secretary-General of the United Nations,
March 2023**

KEY FINDINGS

1. The investment strategy of ExxonMobil prioritizes the oil and gas sector and redistribution to shareholders, to the detriment of climate solutions

- ExxonMobil invested massively in oil and gas and remunerated shareholders without investing in sustainable energies.
- ExxonMobil does not report any future investments in sustainable energy.

2. The energy strategy of ExxonMobil will continue to rely on the development of new fossil fuel projects

- Although scope 3 emissions represent 83% of the company's emissions in 2023, ExxonMobil has no scope 3 target for 2030 or beyond.
- With ExxonMobil's oil and gas production from its currently producing fields and already committed short-term expansion plans, the company's production in 2030 will be 12% higher than the level required to align with the NZE. In terms of short-term expansion, ExxonMobil ranks as the 7th biggest oil and gas upstream developer.
- Yet, ExxonMobil will have to develop additional discoveries or acquire fields beyond those already under short-term expansion to meet its 2030 oil and gas production target. Its existing operating fields and short-term expansion plans will not be sufficient to reach its production target of 4200 thousand barrels of oil equivalent of oil and gas by 2027.
- With the company's current strategy, its 2030 production will be 36% higher than the NZE.
- ExxonMobil is constructing and plans to develop new liquefaction terminals in the coming years. Consequently, with its current LNG strategy, ExxonMobil will add 14.1 Mtpa of liquefaction capacity and will exceed the NZE capacities by 65.4%.
- As ExxonMobil relies on oil and gas expansion, no scope 3 decarbonization target is set.

3. ExxonMobil's diversification strategy remains marginal and partly relies on gas and unsustainable energies

- Oil and gas extraction will still represent a vast majority of ExxonMobil's energy mix by 2030. The company will account for 3.5% of the worldwide oil and gas production in the NZE.
- ExxonMobil owns gas plants and is constructing new ones, increasing its current capacity by 21%.
- By 2030, ExxonMobil will develop unsustainable renewable energies such as bioenergy and develop new hydrogen capacities from fossil fuels.



1. CURRENT ENERGY PRODUCTION

ExxonMobil accounts for 2.8% of global oil and gas production.⁴ In 2023, ExxonMobil extracted 834 million barrels of oil (mmbbl) and 484 million barrels of oil equivalent (mmboe) of gas.⁵ Beyond exploration and production, ExxonMobil is also active in other energy segments such as oil and gas transportation, oil refining, hydrogen, bioenergy and gas power generation and retail.

ExxonMobil does not disclose its power production which relies heavily on gas plants and does not mention renewable energies. ExxonMobil has also hydrogen capacity but does not report its origin, which can be from renewable energy or from fossil fuels, with or without carbon capture, utilization and storage (CCUS).



2. CASH-FLOW ALLOCATION

The future energy mix and GHG emissions of a company are determined by its current energy mix and its investment strategy.

From 2021 to 2023, ExxonMobil invested US\$1,355 million per year in oil and gas exploration, making it the 9th largest investor in this area over those three years.⁶ The investments reveal the importance of oil and gas expansion in the company's long-term strategy, which includes the search for new fields that once discovered could come into production in decades.

Information in ExxonMobil's 2023 annual report⁷ shows how the cash and cash flows generated from its operational activities were spent in 2023:

1. ExxonMobil invested US\$25,703 million in oil and gas, including US\$19,761 million in oil and gas exploration and production, without the company investing in sustainable energies.
2. ExxonMobil provided its shareholders with US\$33,220 million through dividend

payments (US\$15,772 million) and share buybacks (US\$17,748 million).

ExxonMobil's investment plan remains fossil-fuel driven. It plans to invest around US\$22.5 billion per year from 2023 to 2027 in oil and gas⁸ and US\$3.3 billion per year from 2022 to 2027 in lower-emission solutions, that include emission reduction technologies and energies such as carbon capture and storage, blue hydrogen, biofuels, and lithium. Sustainable energies remain absent from ExxonMobil's investment strategy.

Total annual energy investment needs to increase by 67% by 2030 according to the NZE, which includes a shift from fossil fuels to clean alternatives. Investments in clean energy supply, end-use and efficiency are multiplied by 2.3 times by 2030 in the NZE, with 10 euros spent in these areas for each euro spent on fossil fuels, 6 euros of which are for sustainable power supply.⁹ In its 2023 report, the IEA established that oil and gas companies must allocate more than 50% of their capital expenditure (CAPEX) in clean energy by 2030.¹⁰

BREAKDOWN OF EXXONMOBIL'S 2023 CASH-FLOWS



Source: ExxonMobil, 2023 Annual report, 2024

3. FOSSIL FUEL STRATEGY

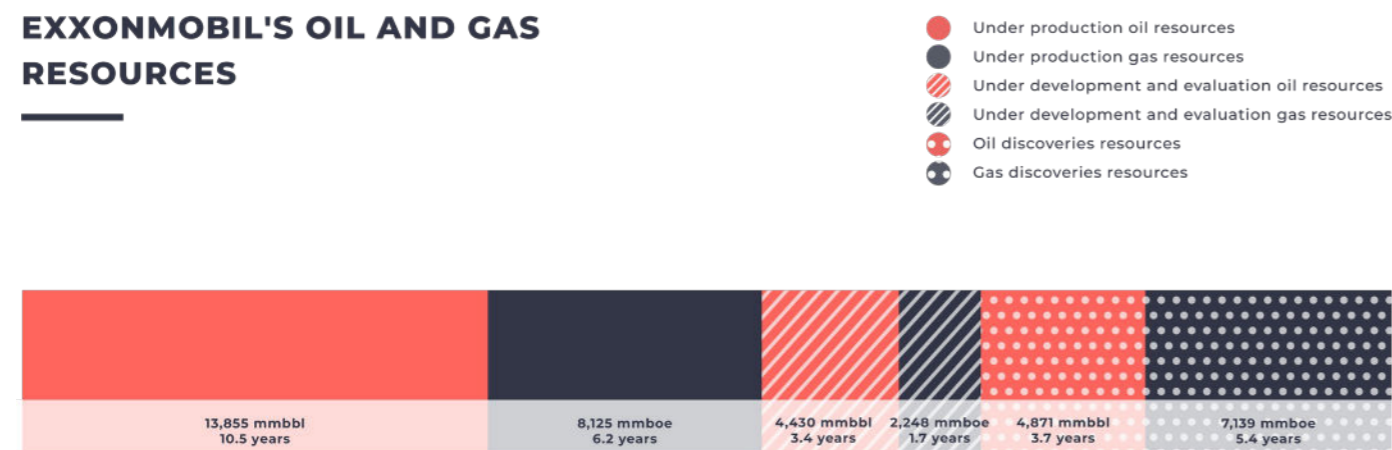
a. Upstream expansion plans

The IEA published the NZE in May 2021¹¹ to provide a pathway to meet global energy needs while maintaining a 50% chance of keeping global temperature increases below 1.5°C. It was used as the reference scenario in the IEA's World Energy Outlook (WEO) 2021 and was updated in the WEO 2022¹² and WEO 2023.¹³ The NZE projects a halt to the development of any new oil and gas fields for which a Final Investment Decision (FID) was not approved by January 1st, 2022, plus an end to the construction of LNG terminals.

The Intergovernmental Panel on Climate Change (IPCC) also highlights the risks associated with the development of any new fossil fuel projects. This concurs with a large and growing body of scientific evidence showing the need to immediately end fossil fuel development, and a growing consensus on this in net-zero policy discussions.

According to the 2023 Global Oil and Gas Exit List (GOGEL), ExxonMobil is the 7th top global oil and gas upstream short-term developer.

EXXONMOBIL'S OIL AND GAS RESOURCES



Source: Rystad Energy, accessed in April 2024

The company accounts for 3.3% of global short-term expansion plans, with 55.2% of its short-term expansion plans not obtaining a FID before 2022 – therefore overshooting the NZE.

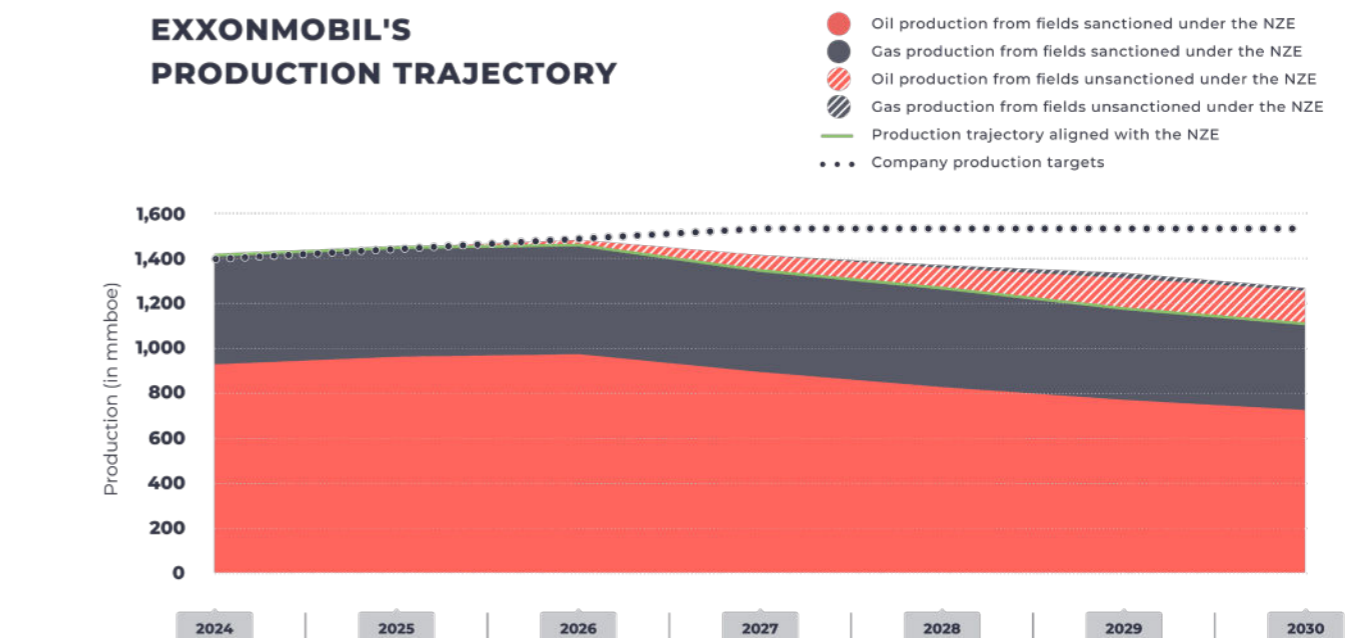
These projects would give ExxonMobil significant additional resources even though it already has enough to extract oil and gas for several years. As of April 2nd, 2024:

- ExxonMobil has 21,981 mmboe of resources under production, including 13,855 mmbbl of oil and 8,125 mmboe of gas. This represents the equivalent of 16.7 years of production at 2023 levels.
- ExxonMobil has 6,679 mmboe of resources under development or field evaluation, including 4,430 mmbbl of oil and 2,248 mmboe of gas. This represents 5.1 years of production at 2023 levels.
- ExxonMobil owns 12,010 mmboe of oil and fossil gas discoveries, including 4,871 mmbbl of oil and 7,139 mmboe of gas. This represents 9.1 years of production at 2023 levels.

b. Upstream production

Oil and gas production should decrease by 20.9% and 17.9%, respectively, between 2022 and 2030 according to the NZE.¹⁴ In this scenario, the rate of oil and gas production declines due to a combination of the natural depletion of existing oil and gas fields and the absence of new fields to fill the gap, despite the reliance on negative emissions. Oil and gas production would need to decline much faster without this reliance. Negative emissions include the deployment of technologies unproven at scale, such as CCUS. Other prominent 1.5°C scenarios with no or low overshoot also show oil and gas production declining by 2030. These include the One Earth Climate Model (OECM),¹⁵ the net zero climate scenarios from the Network for Greening the Financial System (NGFS),¹⁶ and the IPCC's 1.5°C with no or low overshoot scenarios filtered to limit to reasonable volumes the reliance on negative emissions (e.g. CCUS, nature-based solutions (NBS), etc.).¹⁷

The following chart compares ExxonMobil's planned oil and gas production level by 2030 with:



Source: Rystad Energy on oil and gas production and expansion, accessed in April 2024; ExxonMobil Corporate Plan Update 2022.

- ExxonMobil's production by 2030 if it aligns with the NZE (i.e. ExxonMobil's production level from its producing fields and its fields currently under development with a FID obtained before 2022).
- ExxonMobil's production by 2030 if it carries out its short-term expansion plans (i.e. ExxonMobil's production from its fields currently under production, under development and under field evaluation).

In 2030, with oil and gas from currently producing fields, fields under development and under evaluation, ExxonMobil's production level will be 12% higher than the NZE.

ExxonMobil plans to reach a production of 4,200 thousand barrels of oil equivalent of oil and gas a day by 2027.¹⁸ With its already committed short-term expansion plans, ExxonMobil still could not achieve its target. In other words, to reach its production target, ExxonMobil will have to develop part of its discoveries and/or acquire new fields. Assuming the conservative hypothesis that ExxonMobil will reach plateau in 2027, **ExxonMobil's 2030 production target for oil and gas will be 36% above NZE alignment.**

With its production target, ExxonMobil's 2030 oil and gas extraction will represent nearly all its energy mix and 3.5% of the global oil and gas production in 2030, according to production level of the NZE.

c. LNG terminal net capacities

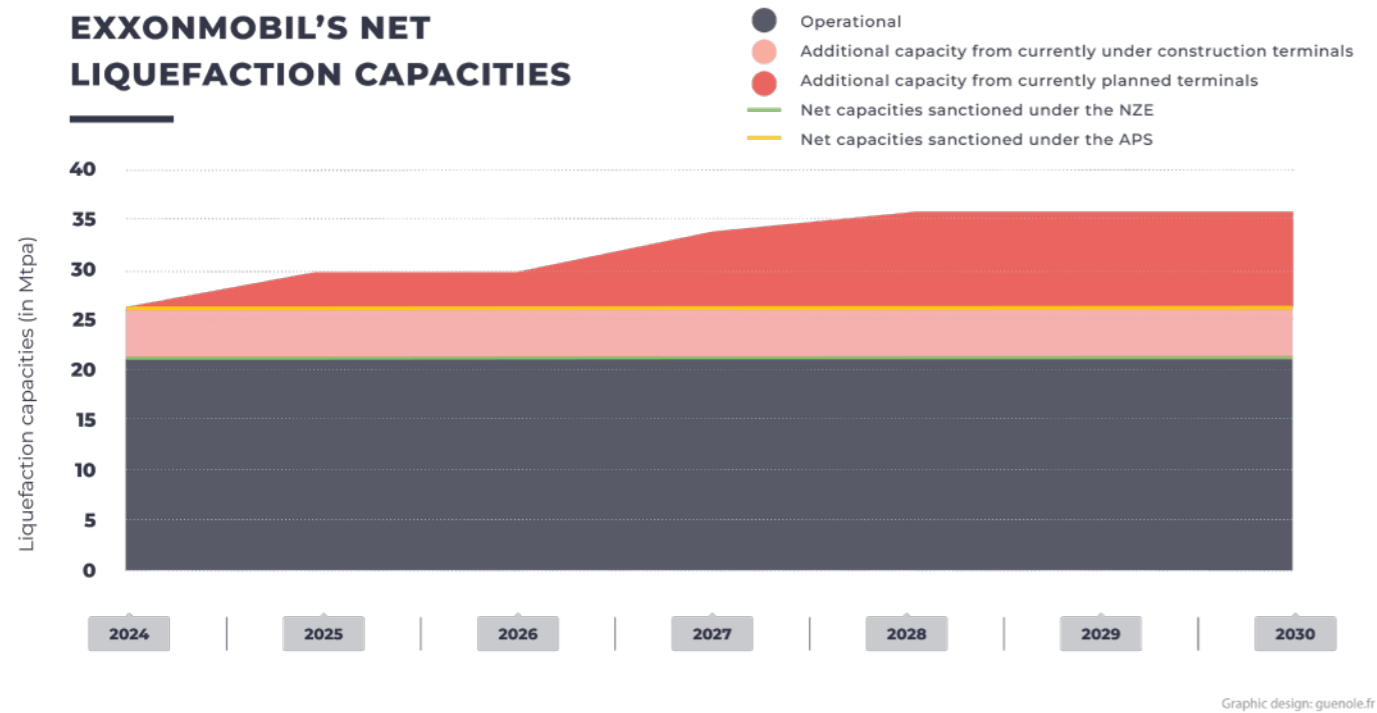
Under the NZE, gas demand by 2050 is met with all existing LNG terminals. Under the IEA's Announced Pledges Scenario (APS), gas demand is met with operational and under construction facilities. In either case, no new LNG terminal plans are necessary to meet demand. With its current plans, none of ExxonMobil's LNG expansion plans are aligned with the NZE, while only the infrastructure already under construction is aligned with the APS.¹⁹

ExxonMobil's gas-oriented strategy relies on new midstream infrastructure that will be commissioned in the coming years. Indeed, ExxonMobil owns existing LNG export terminals, and both constructs and plans to construct new LNG export terminals in the

coming decade.

- ExxonMobil is a shareholder of existing export terminals such as Qatargas, and Ras Laffan in Qatar, Gorgon LNG in Australia, and PNG LNG in Papua New Guinea. ExxonMobil's operational export terminals net liquefaction capacity reaches 21.6 Mtpa.²⁰
- ExxonMobil is already constructing additional liquefaction capacities with Golden Pass LNG in North America. These would add net liquefaction capacities of 4.7 Mtpa to its portfolio.²¹
- ExxonMobil plans to construct additional liquefaction capacities with Rovuma LNG in Mozambique, Papua LNG, Qatar North Field, and Tanzania LNG. This would add net liquefaction capacities of 9.4 Mtpa to its portfolio.²²

With its current LNG plans, ExxonMobil's 2030 total net liquefaction capacity will increase by 14.1 Mtpa to 35.6 Mtpa. Then, it will exceed the APS by 35.8% and the NZE by 65.4%.



Source: Enerdata LNG database for operational terminals and Global Oil and Gas Exit List 2023 for under construction and planned terminals, accessed in January 2024



4. DIVERSIFICATION STRATEGY

a. Sustainable energy

The NZE projects strong growth in renewable energy production, from 27 exajoules (EJ) in 2021 to 80 EJ by 2030, led by solar and wind capacity additions.

If any, ExxonMobil does not report on its installed renewable capacities, nor on its objectives in terms of the development of new capacities.

b. Unsustainable diversification

The NZE also projects strong growth in hydrogen production, from 94 megatonnes (Mt) in 2021 to 180 Mt by 2030, led by “low-carbon hydrogen” capacity addition. Of this, one-third is produced from fossil fuels – therefore unsustainable – and two-thirds from water-based electrolysis.²³ To meet the NZE scenario’s production targets, electrolytic hydrogen production capacity should reach 720 GW to 850 GW by 2030.²⁴

Although ExxonMobil is investing in the development of new hydrogen capacities, without reporting on the hydrogen origin, the company does not communicate targets for these capacities. However, ExxonMobil does not report any installed renewable power capacity so its hydrogen production would be issued using natural gas with CCUS.

Gas combustion is one of the main contributors to carbon dioxide (CO₂) and methane emissions and should be replaced by sustainable solutions – i.e. gas power is

unsustainable. By 2035, advanced economies should achieve a carbon neutral power sector, according to the NZE.²⁵ Despite the company having no targets on gas power capacities,²⁶ it has neither committed to stop developing gas plants nor committed to closing its gas plants. ExxonMobil neither communicates on its gas power production, nor on its gas plant ownership. Then, it is impossible to calculate ExxonMobil’s gas power current and future net capacities and net production. ExxonMobil is involved in 14 gas plants in operation with a total capacity of 3,029 MW,²⁷ and in 1 gas plant under development with a capacity of 650 MW.²⁸

The NZE projects strong growth in bioenergy production, with an increase of biofuel from 133 Mtpa in 2021 to 367 Mtpa by 2030 and of biomethane from 278 TWh to 1,944 TWh by 2030. By then, ExxonMobil targets a biofuel production of 10.6 Mtpa.²⁹ Most biofuel production currently uses so-called conventional feedstocks, such as sugarcane, corn and soy. Due to feedstocks use, emissions from direct and indirect land-use change, increased fertilizer use and carbon emissions from energy-intensive refining, both biofuels and biomethane can have a higher emissions factor than fossil diesel.³⁰ In addition to the climate impacts of land-use change, biofuels can divert crops from food production to energy production, leading to higher food prices.³¹

5. EMISSIONS TARGETS

ExxonMobil pledged mitigation targets for 2030 on scope 1 and 2 using 2016 baseline in absolute and intensity terms. In 2022, ExxonMobil’s CO₂e emissions were 651 MtCO₂e, including 111 MtCO₂e of scope 1 and 2 emissions and 540 MtCO₂e of scope 3 emissions. **Scope 3 emissions are by far the largest, representing 83% of the company’s emissions.**³² However, while scope 3 represents the most significant part of the company’s GHG emissions, **ExxonMobil has no scope 3 target by 2030 and has not committed to achieving carbon neutrality on its scope 3 by 2050.**

Due to ExxonMobil’s lack of transparency and to its absence of scope 3 targets, it

is impossible to calculate its emissions trajectory. However, given the current trend in ExxonMobil’s emissions, its carbon intensity will be far higher than NZE in 2030.

ExxonMobil relies heavily on CCUS: the company will capture 50 Mtpa CO₂ in 2030.³³ As highlighted by the IPCC, however, CCUS in the energy sector still has limitations to overcome before it can be scaled up, which means it comes with limited potential and prohibitive costs. Too high reliance on these types of mitigation approaches represents a material risk factor for ExxonMobil’s ability to reach its decarbonization targets.³⁴

Base year	Target year	Reduction target	Emission scope	Emission Type
2016	2030	-25%	1 & 2	Intensity
2016	2030	-20%	1 & 2	Absolute

Source: ExxonMobil, *Advancing Climate Solutions Report*, page 51, 2024

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Useful links

[Methodology - Glossary](#)

[Factsheets on bioenergy](#), [hydropower](#), [hydrogen](#), [CCUS in power](#), [Energy storage](#)

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Reclaim Finance is an NGO affiliated with Friends of the Earth France. It was founded in 2020 and is 100% dedicated to issues linking finance with social and climate justice. In the context of the climate emergency and biodiversity losses, one of Reclaim Finance's priorities is to accelerate the decarbonization of financial flows. Reclaim Finance exposes the climate impacts of financial players, denounces the most harmful practices and puts its expertise at the service of public authorities and financial stakeholders who desire to bend existing practices to ecological imperatives.

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