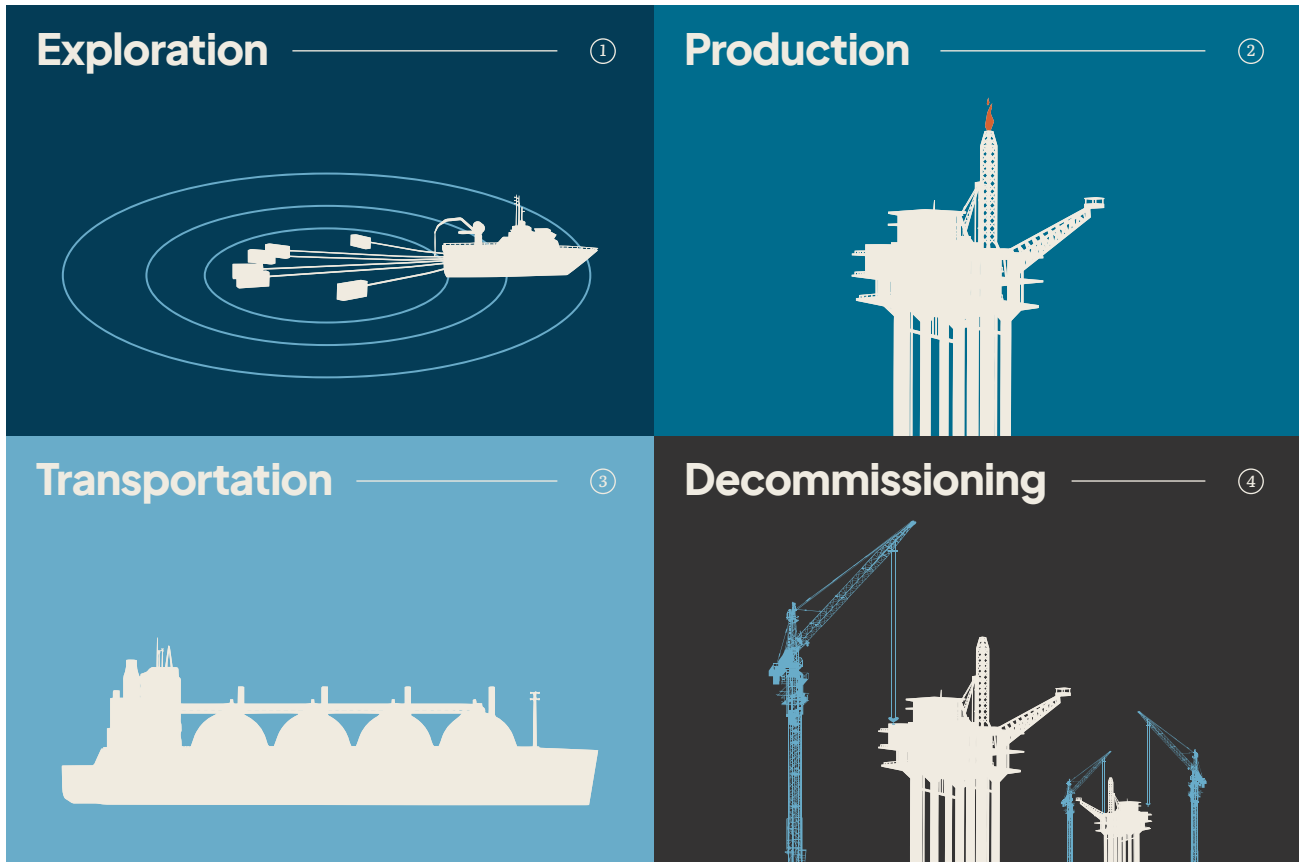


# Making Oceans Off-Limits to Offshore Oil and Gas

From seismic exploration and drilling in the seabed to coastal processing and overseas transport of fossil fuels, offshore oil and gas activity threatens two global commons on which all life on Earth depends: the oceans and the atmosphere.



**Offshore projects are growing in number, and today represent more than 30 percent of global oil and gas production.** Fossil fuel companies are sinking ever more money into undersea reserves, taking their operations to ever deeper and more remote waters. One of the most significant and growing threats to oceans is the recent boom in the production of liquefied natural gas (LNG). Designed to be transported over long distances, LNG has entrenched the use of oceans as conduits for the global trade in dirty energy, and littered coastlines with polluting processing plants, import and export terminals, and other infrastructure. Transporting massive volumes of crude oil or highly flammable gas over long distances and through fragile marine ecosystems is an inherently hazardous activity. And it's on the rise. **Fully 40 percent of maritime trade now consists of shipping fossil fuels and fossil fuel products from one place to another.** The buildout of infrastructure and shipping routes for expanded oil and gas production and trade is coming on top of decades' worth of oil and gas wells and pipelines that the industry has left behind, many of which are leaking and abandoned.

This intensified assault on our oceans compounds existing stressors posed by climate change, overfishing, plastic pollution, and resultant biodiversity loss. Oceans play a critical role in stabilizing the global climate. **They are Earth's biggest carbon sink and have a tremendous capacity to store and release heat over long periods of time.** However, this role is jeopardized by continued greenhouse gas emissions, overwhelmingly from fossil fuels. And the rising wave of offshore oil and gas activity only amplifies this threat.

Offshore production activities have outsized yet largely underreported climate footprints. Recent developments in satellite technology have revealed that methane leaks and other emissions due to flaring at offshore oil and gas platforms and coastal facilities far exceed official accounts. Enormous quantities of greenhouse gases are further generated during the transport and end use of the produced oil and gas. By increasing concentrations of carbon dioxide in the atmosphere and accelerating climate change, oil and gas activity exacerbates sea level rise, ocean warming and acidification, and other impacts already degrading marine and coastal ecosystems and threatening the survival of coastal communities. These climate consequences compound the local ecological impacts of offshore activity, like air pollution, water contamination, and disturbance of marine habitats. But because offshore oil and gas projects are often “out of sight, out of mind” and technically difficult to monitor, many of these impacts go unnoticed and unaddressed.

Offshore oil and gas activity poses risks across its life cycle, from **exploration** and **production** to **transport** and **decommissioning**. At each phase, the risk of accidents on top of the hazards inherent in routine operations endangers the oceans and the communities, ecosystems, and climate that depend on them. Whether from new deepwater exploration or legacy wells, offshore projects have profound impacts on human rights and the global commons at every stage. To ensure a livable future for all, we need to make oceans everywhere off-limits to oil and gas.

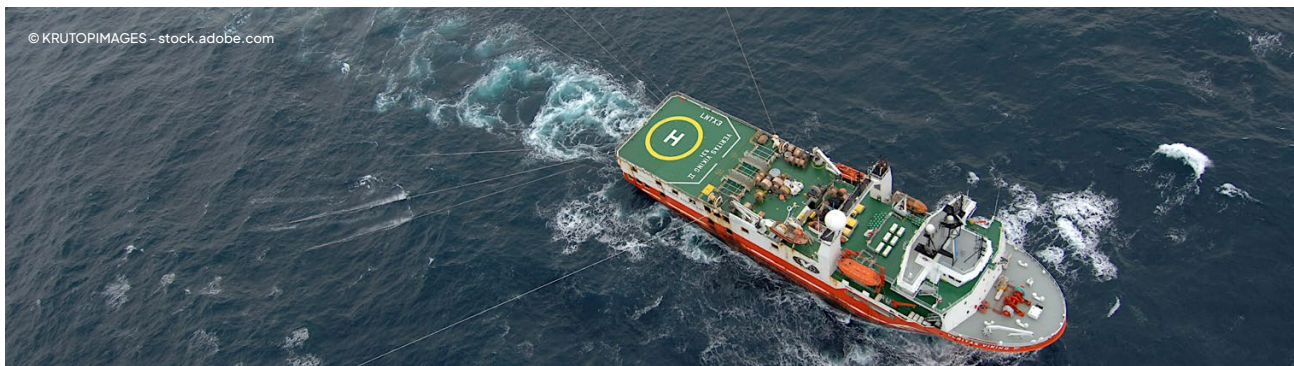
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## Exploration



The damage begins long before any oil or gas is produced, when companies explore for new fields off the coast. To map underwater oil and gas deposits, surveyors use air guns to send sound waves toward the seabed. These blasts can be louder than a rocket launch. Noise pollution generated by sub-sea exploration activities can seriously harm marine life, from microorganisms to whales, by inducing stress responses and behavioral changes that jeopardize survival.

Companies may also drill exploratory wells, which requires constructing rigs and other equipment, and can introduce heavy metals and other toxins into the marine environment. These impacts threaten the health, productivity, and resilience of marine ecosystems crucial for biodiversity and for coastal and fisherfolk communities around the world. Moreover, the installation of offshore infrastructure is often accompanied by the creation of exclusion zones that prevent local communities from accessing fish stocks critical for income and survival, leading to loss of livelihood and food insecurity.

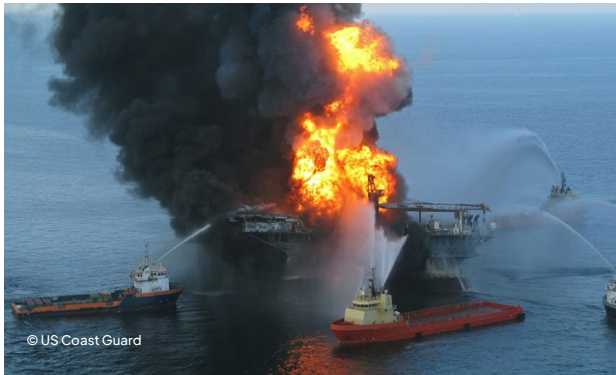


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## Production



Once companies begin producing oil and gas, offshore operations release myriad pollutants that drive climate change and harm human and environmental health. Offshore oil and gas production platforms have enormous climate footprints due to greenhouse gas emissions from gas flaring, methane leaks from offshore infrastructure, and the massive amounts of energy needed to power operations. Many of these emissions are underreported due to the difficulty of monitoring installations at sea.



The greatest danger associated with offshore oil and gas production is from well blowouts, which trigger massive oil spills, threaten the lives of platform workers, and unleash ecologically devastating pollutants into the water and air. As companies increasingly move their operations to deeper, more remote waters, the risk of large-scale disaster from a blowout and spill increases. Such accidents can have devastating, long-term repercussions for the economies, livelihoods, and mental and physical health of impacted coastal communities. What's more, oil spill cleanup practices are largely ineffective and can exacerbate environmental harm by introducing additional toxic chemicals into marine and coastal ecosystems.



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## Transportation

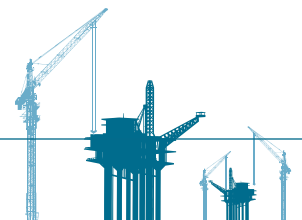


After oil and gas is extracted from undersea reserves, companies transport it to onshore facilities where it can be processed and used as intended — typically combusted. The increasing use of the oceans as highways for the global trade in dirty energy, especially LNG, only magnifies the sector's climate impacts. Moving LNG around the world is particularly emissions-intensive, because of the energy required to liquefy, compress, ship, and regasify the product.



Beyond driving anthropogenic climate change, the movement of oil and gas via pipelines and ships carries myriad ecological risks. Routine discharges from transport vessels contaminate oceans with hydrocarbons, toxic metals, and dangerous chemicals that can bioaccumulate in the tissues of marine life and harm fishing communities. Undersea pipelines can also create safety hazards to fisherfolk by entangling fishing equipment and vessels, endangering life and property. Moreover, transport-related oil spills can devastate large swathes of the ocean and coastlines, and more oil and gas tankers moving between offshore sites and markets mean a risk of more accidents.



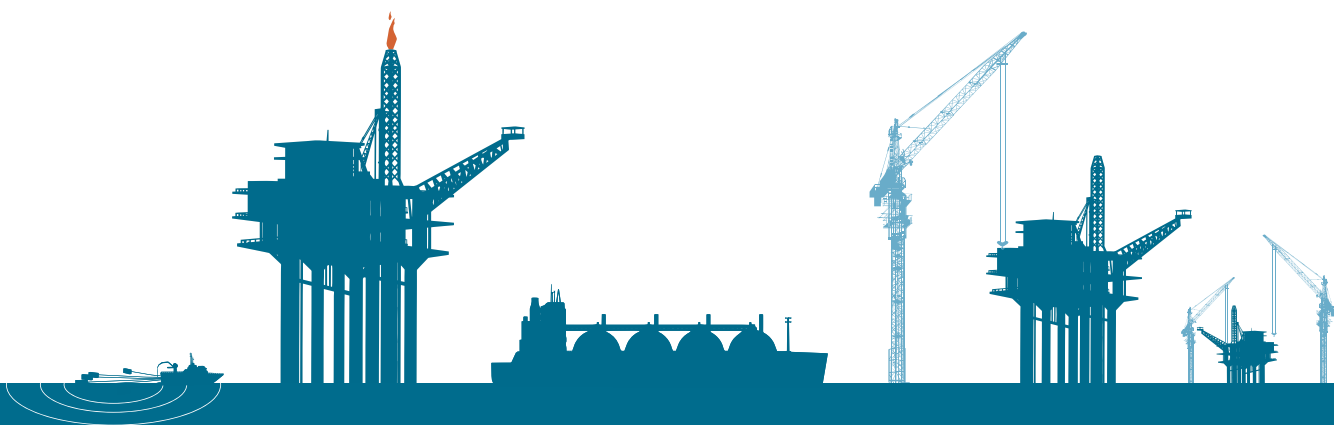


Even after offshore wells have been tapped dry or shut off, the infrastructure continues to harm the marine environment and the climate. Many offshore platforms and wells have never been decommissioned. Abandoned wells and offshore platforms are proliferating in the world's oceans, leaking enormous amounts of planet-warming gases into the atmosphere and toxins into oceans. From impacts on fisheries and tourism to contaminants in the food chain, offshore oil and gas facilities can threaten the health and livelihoods of nearby coastal populations long after operation ceases. To add insult to injury, oil and gas companies often avoid paying decommissioning costs through loopholes in the law, tax codes, and contracts, shifting the expense and burden of cleanup to host governments and taxpayers. Shutting down oil and gas production sites is also inevitably disruptive and damaging to host ecosystems, even when operators follow current industry "best" practices, which do not provide sufficient protections.



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**The world cannot protect the oceans from the triple planetary crises of climate change, pollution, and biodiversity loss without addressing the drivers of these global threats — namely, fossil fuels. Considering the full range of harms caused by intensifying oil and gas activity on coastlines and at sea, oceans everywhere should be off-limits to offshore oil and gas. Making the sea fossil fuel-free is critical to protecting our oceans, our climate, and our collective future.**



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