

# ENVIRONMENT

## BUILT TO DELIVER POSITIVE ENVIRONMENTAL IMPACT

Our LNG helps to improve local air quality in communities globally (when displacing coal), support the advancement of the energy transition and meet growing energy demand around the world.

In 2020, we chartered more efficient LNG vessels, strengthened our environmental management systems and expanded our environmental training and awareness. Our goal is to reduce the environmental impacts associated with our operations, while seeking opportunities to responsibly manage and protect natural resources.

# ENVIRONMENT

## OUR FOCUS AREAS

We are committed to responsibly managing our environmental impacts, including those relevant to air quality, biodiversity and effluents and waste. In terms of our own operations, we are required to operate within the terms of our permits and to limit hazardous air pollutants. Furthermore, our LNG helps to improve air quality and human health in communities globally when displacing coal and oil.

During the initial construction of our LNG terminals and pipelines, we worked toward minimizing our impacts on biodiversity and land use (including impacts to cultural resources) through selective siting and routing, or other mitigation plans approved by regulators.

Due to the quantities and nature of the materials that we manage, we have relatively limited risk and impacts related to effluents and waste. Unlike many market participants (which also operate exploration and production business segments), we do not produce or process crude oil or any refined petroleum products. Nonetheless, we maintain strong effluent, waste, spill and release management processes. Cheniere does not operate in any area of high water stress and, with strong spill and release management programs, has limited potential to impact water resources through releases.<sup>32</sup> For more information see the [Water Risk Analysis](#) on our website.

## BOARD OVERSIGHT AND MANAGEMENT APPROACH

The vice president of health, safety and environmental (HSE) manages HSE compliance and risk across the business. The vice president of environmental and regulatory projects assures environmental performance and execution of the company's business strategy consistent with our environmental management systems and the company's mission and core values. Our executive vice president and chief legal officer oversees environmental management, biodiversity and land impacts, air quality, effluents and waste. Our board of directors reviews these issues regularly and receives updates on a selection of environmental performance metrics quarterly.

Our corporate Health, Safety and Environmental Policy<sup>33</sup> codifies our approach to protecting environmental resources and our commitment to operate in an environmentally responsible manner, which includes proactively identifying and addressing environmental risks and opportunities across the lifecycle of our operations and engaging regularly with stakeholders on environmental issues.

## PROGRESS AND HIGHLIGHTS

- Implemented mandatory environmental awareness training for all employees.
- Enhanced alignment of our environmental management system (EMS) with the ISO 14001 standard.
- Conducted company-wide environmental audits on hazardous waste, criteria air emissions<sup>34</sup> and contractor performance.
- Restored 88% of terrestrial acreage disturbed by the construction of our facilities between 2016 and 2020. Permanent impacts associated with the projects were mitigated ([page 27](#)).

## LOOKING FORWARD

- Expand the environmental metrics reviewed by our board of directors.
- Enhance our EMS by rolling out site-specific implementation of company-wide environmental standards and integrating our existing EMS into the Cheniere Integrated Management System (CIMS).

## READ MORE

Read more in our [ESG Metrics and Disclosures Appendix](#) about our:

[Health, Safety and Environmental Policy](#)

[Environmental Management System](#)

<sup>32</sup> Cheniere utilized the Aqueduct Water Risk Atlas and other resources to conduct this assessment. <sup>33</sup> Cheniere (2021), Environmental Policy, <https://www.cheniere.com/resources>. <sup>34</sup> Criteria air pollutants relevant to our operations include nitrogen oxides (NO<sub>x</sub>), sulfur dioxides (SO<sub>x</sub>) and volatile organic compounds (VOC).

# RESPONSIBLY MANAGING OUR ENVIRONMENTAL IMPACTS

## BIODIVERSITY

Our operations are located on the U.S. Gulf Coast, an area of rich biodiversity and environmental importance. We recognize that protecting biodiversity is an important responsibility we have to the communities that depend on these vital ecosystems. While our impacts on biodiversity are generally limited, what impacts do occur primarily take place during the construction of our LNG terminals and natural gas pipelines. We apply intensive assessment, avoidance and mitigation efforts to reduce negative impacts on local ecosystems and continue to support voluntary biodiversity protection projects near our areas of operation. We also partner with the local communities near our Sabine Pass and Corpus Christi liquefaction facilities to help target company social investment towards environmental projects for coastal restoration and marine habitats.

### Key issues and initiatives

Where possible, we seek to avoid, rather than mitigate, impacts on biodiversity. Key elements of our approach include:

**Pre-project assessments:** As part of our permitting process under the National Environmental Policy Act (NEPA), our projects undergo biodiversity-related assessments through which we identify and seek to avoid high-priority, critical habitats, while also identifying potential impacts on sensitive species and ecosystems. We perform cumulative risk assessments to understand potential risks to biodiversity that could occur near to, but outside of, our own operations and incorporate these potential risks into our impact avoidance and mitigation plans.

**Impact avoidance:** We prioritize the avoidance of impacts, minimization of impacts to the maximum extent practicable, restoration to pre-construction conditions where possible and, finally, the mitigation of unavoidable impacts. Our LNG facilities and pipelines were sited in order to avoid protected conservation and/or critical habitat areas, and our currently planned LNG expansions are not expected to cause additional disturbance to areas outside of our fence line.

**Protecting biodiversity and restoring ecosystems:** We seek opportunities to restore and rebuild ecosystem in our areas of operation both as beneficial outcomes of our construction projects and through voluntary investments unrelated to our facility construction. These efforts primarily focus on restoring wetlands and other Gulf Coast ecosystems, which provide critical ecosystems services as well as important habitat for local and migratory species.

**Terrestrial acreage disturbed and restored:** We do not disturb existing land uses as part of our ongoing operations, but can impact intact ecosystems when constructing new facilities. Since 2016, we have restored 88.4% of acreage disturbed, which resulted from the construction of our two liquefaction terminals and the Midship Pipeline (see [page 51](#)).

### READ MORE

Read more in our **ESG Metrics and Disclosures Appendix:**

[Biodiversity impact assessment process](#)

[Voluntary projects to enhance biodiversity](#)

### CASE STUDY

Read more online about:

[Protecting biodiversity and reducing impacts during construction](#)

## EFFLUENTS AND WASTE

Effluents from our operations primarily relate to our sanitary water treatment systems, stormwater runoff and the use of a reverse-osmosis process to treat water provided to us by local utilities. These pose only limited risk to the environment, due to the nature of the potential contaminants in the effluents. Similarly, compared to most companies in our industry, our operations pose only limited risks of hydrocarbon spills, because our primary product is natural gas, not oil. While our operations do produce wastewater with small amounts of potentially hazardous pollutants, these are carefully managed.

### Key issues and initiatives

**Responsible waste management:** We follow waste-minimization plans across all of our facilities and carefully label, manage and dispose of hazardous and non-hazardous waste at permitted treatment, storage and disposal facilities. We contract qualified and licensed third parties to transport and dispose of hazardous wastes and follow strict regulatory tracking and reporting requirements. We have also implemented a range of recycling and waste diversion programs, through which we recycled more than 357,000 gallons of used waste oil and oily water from our LNG facilities and about 25,000 gallons of pipeline liquids, and diverted over 15 tons of office waste.

**Spill prevention and response:** Our business model is unique as a pure-play LNG company. Our spill risks are limited, based on the products and materials we handle and primarily stem from liquid fuels used to run equipment and lubrication oils used in our liquefaction facilities. Through our subsidiaries, affiliates and investments, we operate just over 300 miles of pipelines, which transport natural gas, reducing our risks related to hydrocarbon spills.<sup>35</sup> Still, we maintain site-specific spill prevention, control and countermeasure plans. Our primary product, LNG, dissipates if released and does not pose a significant risk of environmental contamination. In 2020, we experienced one reportable hydrocarbon spill.<sup>35</sup> This involved less than one gallon of hydrocarbons (see [page 51](#)).

### READ MORE

Read more in our **ESG Metrics and Disclosures Appendix:**

[Effluents management](#)

[Waste recycling and diversion](#)

<sup>35</sup> We define reportable spills as a spill of liquid materials containing hydrocarbons to the ground or water, such as liquid fuels, lubrication oils and hydraulic fluids, that exceeds a regulatory-based reportable quantity and requires an immediate (<24 hours) notification to a regulatory agency. Our business focuses solely on natural gas. Reportable spills from our operations refer to spills from service equipment, process equipment or similar sources.

## AIR QUALITY

Our operations generate criteria air pollutant emissions, including nitrogen oxides (NO<sub>x</sub>), sulfur dioxides (SO<sub>x</sub>) and volatile organic compounds (VOC). The natural gas-powered turbines that run our Sabine Pass and Corpus Christi LNG liquefaction processes in Louisiana and Texas are the primary source of these emissions; smaller amounts are emitted through our pipeline operations.<sup>36</sup> We actively work to limit our criteria emissions and impacts on local air quality. See the Key Performance Data table ([page 51](#)) for emissions data.

### Key issues and initiatives

#### Managing criteria air emissions from our operations:

Our LNG production facilities are relatively new and were designed to comply with strict emissions limits. We have implemented a range of NO<sub>x</sub> and VOC emission-control technologies and work practices across our operations. For example, we utilize state-of-the-art engines to drive our pipeline compressors that limit NO<sub>x</sub> emissions, which are below permit requirements.

#### Reducing emissions and enhancing efficiency in LNG shipping:

Based on existing charter agreements in place as of April 14, 2021, by the end of 2022, we expect 86% of Cheniere Marketing’s fleet will be made up of XDF/MEGI vessels, the most efficient vessels available in the market.<sup>37</sup>

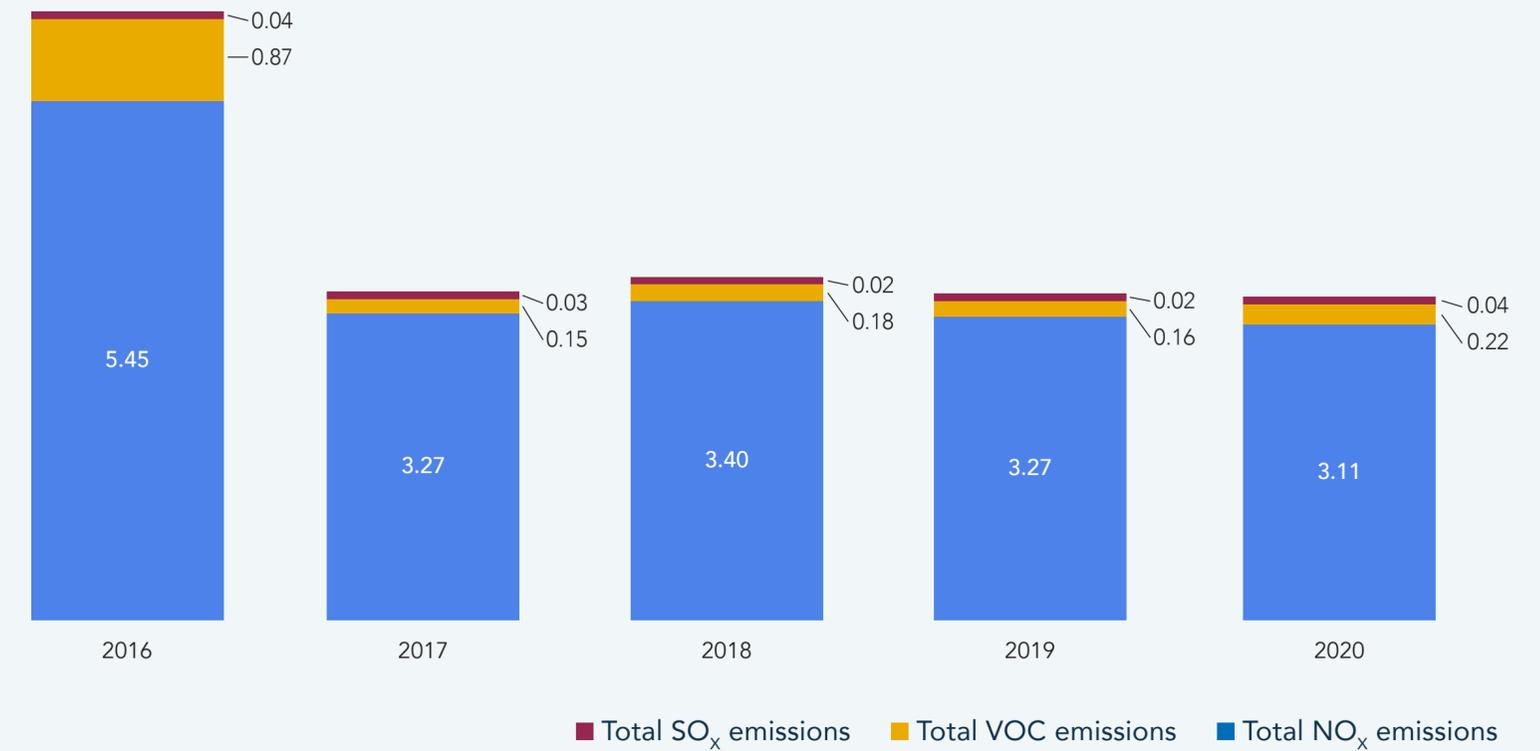
#### [READ MORE](#)

Read more in our ESG Metrics and Disclosures Appendix:

[Monitoring and assurance of non-GHG air emissions](#)

[Initiatives to reduce non-GHG air emissions](#)

### CRITERIA AIR POLLUTANT EMISSIONS INTENSITY (short tons/BCF of LNG exported)



<sup>36</sup>. Small volumes of natural gas condensate extracted from the natural gas feed are exported from the liquefaction trains into third-party pipelines. <sup>37</sup>. Cheniere considers the most efficient vessels available to include vessels of not less than 173,400 cbm with two-stroke propulsion systems, which include XDF or MEGI vessels.