



# RIO GRANDE VALLEY

AT RISK FROM FRACKED-GAS EXPORT TERMINALS | 2022 UPDATE

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PHOTO: CHILDREN STANDING ON THE PROPOSED SITE OF RIO GRANDE LNG / SAVE RGV



# Summary for Financial Institutions

Any public official, bank, or investor involved with the two proposed liquefied natural gas (LNG) terminals: Rio Grande LNG and Texas LNG in the Rio Grande Valley in South Texas faces serious reputational and financial risks. If built, the LNG projects would extensively and negatively affect Indigenous rights, community health, endangered species, and the climate. This report, in its third edition, provides an overview at what stands to be lost if both proposed LNG terminals and the additional necessary infrastructure are developed.

PROJECT NAME	COMPANY
TEXAS LNG	GLENFARNE GROUP, TEXAS LNG, SAMSUNG ENGINEERING CO.
RIO GRANDE LNG	NEXTDECADE
RIO BRAVO PIPELINE	ENBRIDGE
VALLEY CROSSING PIPELINE	ENBRIDGE

## Key Risks

### Climate Disaster

- The two terminals and pipelines would be destructive to the climate and spew just as much greenhouse emissions as approximately 40.4 million cars on the road per year.
- These terminals would liquefy fracked gas and would contribute to the expansion of hazardous fracking in the Eagle Ford and Permian shale basins in Texas.
- If built, the LNG terminals would be counterproductive to the Paris Agreement's goal of limiting global warming to 1.5° Celsius, which requires an end to all expansion of fossil fuel infrastructure.

### Indigenous Rights Violations

- The Texas LNG terminal site contains Garcia Pasture, a sacred burial site of the Carrizo Comecrudo Tribe of Texas. This burial site is on the National Park Service's list of historic places and declared an endangered site by the World Monuments Fund in 2022.
- Rio Grande LNG plans to build adjacent to Texas LNG on land that is sacred to the Carrizo Comecrudo Tribe of Texas.

- Texas LNG, Rio Grande LNG, regulatory agencies, and banks have failed to consult with the Carrizo Comecrudo Tribe.

### Community and Health Impacts

- These LNG terminals would emit thousands of tons of harmful pollutants into the air, impacting the health of nearby low-income Latinx and Indigenous communities.
- The facilities would significantly degrade the local fishing, shrimping, and nature tourism industries, which make up large parts of the local economy.
- The projects are formally opposed by the City of South Padre Island, the City of Port Isabel, the Town of Laguna Vista, Long Island Village, the Laguna Madre Water District, and the South Padre Island Business Owners Association.

### Ecosystem Damage

- These terminals are proposed for an unindustrialized area of the Texas Gulf Coast that does not currently have fossil fuel infrastructure. They would pave over a

“greenfield” of undeveloped wetlands, pollute nearby wildlife refuges, and divide a national wildlife corridor.

- Construction and operation of the LNG projects would destroy habitat for multiple endangered species. Habitat loss, industrial noise, and LNG ship traffic would mean “permanent and significant” impacts on the endangered ocelot, northern aplomado falcon, the Rice’s Whale, and Kemp’s Ridley sea turtle.

#### **Reputational and Financial Risk to Financial Institutions**

- Organizations and local communities have already garnered significant attention in speaking out against banks advising these LNG projects, and the opposition will continue.
- Protests from activists, including Indigenous people, pushed the French bank, BNP Paribas, to withdraw from Texas LNG and ultimately from nearly all LNG terminals and pipelines.

- Cork, Ireland, canceled their plans to import gas from Rio Grande LNG because of the impacts of fracking and Texan and Irish opposition to LNG terminals.
- In 2021, Annova LNG, another LNG terminal proposed for the Rio Grande Valley, canceled its export project because of the unstable global market for LNG and local opposition.
- In 2021, a major lawsuit victory is forcing the Federal Energy Regulatory Commission (FERC) to re-review the climate and environmental impacts of Texas LNG and Rio Grande LNG. The FERC is considering several other amendments to the proposed LNG terminals such as a new proposed pipeline design.
- Texas LNG does not currently have its Clean Water Act Section 404 permit from the Army Corps of Engineers required to move forward with the project.
- Nearly four years behind schedule, the two remaining LNG terminals have been plagued with delays because of opposition, lawsuits, and the unstable gas market.

## *Introduction*

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Since this report was last released in 2019, the geopolitical and economic landscapes of LNG have shifted significantly. Most notably, the Covid-19 pandemic led to months-long global industrial shut-downs followed by rebounding economic activity and record breaking corporate profits. Two years after the onset of the pandemic, the world faces severe inflation driven in part by high oil and gas prices. Many other conditions are aligned to allow the US to expand their export market and garner industry record profits. At the same time, frontline communities are left to deal with the health, environmental, and safety inequities created by industry. To add insult to injury, in the last year, domestic oil consumers have faced record prices for domestic oil.

At a global level, demand for oil and gas has shifted. The Russian invasion of Ukraine in February of 2022 launched a global divestment from Russian oil and gas, forcing countries dependent on Russian oil (largely EU member countries) to seek replacement energy sources in the short term. Following the invasion, President Biden announced the US would expand the supply of US-produced gas to Europe as the EU looks to end its reliance on Russian gas. The oil and gas industry has used the opportunity to announce new projects and expand existing proposals under the guise of helping to replace Russian gas.

In the six months since the War in Ukraine began, the US is on track to surpass the commitment that President Biden made to fill the gap left by Russian gas,<sup>1</sup> making it clear that no additional LNG terminals are needed to meet European demand. Further, any additional LNG terminal built would lock in decades of reliance on gas at the expense of our climate and communities. Moreover, Ukrainians have called for a transition away from fossil fuels, not a future more dependent on LNG.<sup>2</sup>

While global economics and markets have largely shifted in response to the COVID-19 pandemic and the war between Russia and Ukraine, opposition to these facilities has only continued to expand. In 2021, a major lawsuit victory led by Texas RioGrande Legal Aid, Sierra Club, Vecinos para el Bienestar de la Comunidad Costera, Shrimpers and Fisherman of the RGV, and Save RGV is forcing the Federal Energy Regulatory Commission (FERC) to re-evaluate the environmental justice and climate impacts of Rio Grande LNG, Rio Bravo Pipeline, and Texas LNG.<sup>3</sup> Ongoing litigation and permitting delays due to community opposition continue to push back the timelines for these projects while further exposing the harms and risks they pose.

# Liquefied Gas Export Background

**Hydraulic fracturing**, or fracking, is an unconventional extraction method used to force oil and gas out of shale bedrock by injecting high-pressure fluids. The invention of the fracking process opened access to trillions of cubic feet of gas previously inaccessible and trapped beneath the bedrock. Fracking is an extremely water- energy- and chemical-intensive process. Fracking generates even higher levels of greenhouse gas emissions than conventional gas extraction and poses great risks of water, soil and air pollution.<sup>4</sup> Fracking has already been banned in many places because of its dangerous environmental and public health impacts.<sup>5</sup> However, despite hazardous impacts and public opposition, fracking still accounts for 90% of planned oil and gas expansion in the United States, which could release 120 billion metric tons of carbon dioxide emissions by 2050 — equivalent to the annual carbon dioxide emissions of nearly 25.9 billion gasoline-powered cars.<sup>6</sup>

**Fracked gas** (also called “natural” gas) is 95% methane. This greenhouse gas is a key contributor to climate change because it has a warming potential over 80 times higher than carbon dioxide.<sup>7</sup> Researchers estimate that the fracked gas boom has

increased global methane emission by an estimated 33% over the last decade.<sup>8</sup> Supporters claim that fracked gas is better for the climate because burning fracked gas produces about half of the carbon dioxide (CO<sub>2</sub>) produced by burning coal. But that doesn’t tell the whole story. When assessed over its entire lifecycle, fracked gas results in significant emissions. One major source of emissions is methane leakage all along the supply chain.<sup>9</sup> Between 3-9% of fracked gas produced is released into the atmosphere through haphazard extraction and transportation methods.<sup>10</sup>

**LNG** — liquefied “natural” gas — is created by super-cooling gas to around -160°C at which point it condenses into a liquid. Liquefaction, which reduces the gas’s volume for shipping, happens at LNG export terminals situated on the coast or offshore.<sup>11</sup> From there, tanker ships export the liquefied gas. When the liquified gas arrives at its destination, it is regasified — or turned back into a gas form — at an LNG import terminal and generally piped to power plants, where it is burned for energy.



PHOTO: LNG TANKER SHIP IN CORPUS CHRISTI BAY / REBEKAH HINOJOSA

Since the Russian invasion of Ukraine in February 2022, fossil fuel companies are racing to build dozens of LNG export facilities across Canada and the United States, including projects that had been delayed for years.<sup>12</sup> More than 16 of these facilities have received federal permits in the United States, in addition to eight existing LNG terminals, all to be connected to a maze of pipelines fed from shale bedrock.<sup>13</sup>

In 2015, nearly every nation signed the Paris Climate Accord, thereby making an historic commitment to reducing greenhouse

gas emissions to slow climate change in order to secure a liveable future. The goal of the Paris agreement is “to limit global warming to well below 2, preferably to 1.5 degrees Celsius, compared to pre-industrial levels” in order to avoid the worst effects of climate change.<sup>14</sup> Studies now clearly show that the only way to achieve the goal of limiting climate change to 1.5°C is to end all fossil fuel expansion, including fracked gas. The North American fracked gas boom may be the single largest obstacle to stopping climate change today and in the decades to come.<sup>15</sup>

## *LNG Threats To The Rio Grande Valley*

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Proposed enormous LNG terminals along the Gulf Coast cluster around ports and shipping channels. In South Texas, near the US-Mexico border, LNG corporations plan to transform the coastal landscape of the Rio Grande Valley from one of the last pristine areas of the Texas coastline – a haven for wildlife, fishing, and recreation, and home to Latinx and Indigenous communities – into an industrial LNG export hub. Two companies are moving forward with plans to build LNG export terminals on “greenfield” – previously undeveloped land – along the Port of Brownsville. The LNG terminals’ gas storage tanks, flare stacks, pipelines, and explosion risks will negatively impact the communities surrounding the Port of Brownsville, including the City of Brownsville and those known as the “Laguna Madre”: Port Isabel, South Padre Island, Laguna Vista, Long Island Village, and Laguna Heights.

Two LNG export projects and an associated pipeline are proposed at the Port of Brownsville:

- **Texas LNG**, owned by Glenfarne Group, Samsung Engineering Co, and Texas LNG;
- **Rio Grande LNG**, owned by NextDecade;
- **Rio Bravo Pipeline**, owned and operated by Enbridge.
- **Valley Crossing Pipeline**, an existing pipeline that would also service gas to the LNG projects, owned and operated by Enbridge.

At the time of publication, these two terminals and the Rio Bravo pipeline have been authorized by the Federal Energy Regulatory Commission (FERC), but the companies have yet to

make a Final Investment Decision (FID). A FID is the decision of a company to commit and proceed with the project. FID signals that the company has made its major financial commitments and secured financing.<sup>16</sup> When a company reaches FID, major equipment orders are placed, and contracts are signed for engineering, procurement, and construction.

The Texas LNG site would span about 625 acres — four times the size of Disneyland.<sup>17</sup> The Rio Grande LNG site is 984 acres and is bigger than New York City’s Central Park.<sup>18</sup> Combined, this fossil fuel industrial landscape would be larger in size than the nearby City of South Padre Island, Texas. The two storage tanks for Texas LNG, at 19 stories tall, would be three times the height of the historic lighthouse in the City of Port Isabel, Texas. The Rio Bravo pipeline would stretch over 137 miles from the Agua Dulce gas hub near Kingsville, Texas.<sup>19</sup> This pipeline would be made of two 48-inch diameter pipes that would put families along the route, especially within 1.6 miles of the pipe, at risk of pipeline explosion. The Agua Dulce gas hub is a key point-of-sale for gas from the Eagle Ford shale basin and Permian Basin, where extraction through fracking has been impacting the health of Texas communities for over a decade.<sup>20</sup>

With the proposed sites of Rio Grande LNG and Texas LNG immediately adjacent to one another along the Brownsville Ship Channel, the cumulative impacts on soils, water quality, vegetation, wildlife, threatened and endangered species, tourism, and commercial fisheries, air quality, and noise are significant.<sup>21</sup>



PHOTO: MAP OF PROPOSED SITES OF TEXAS LNG, RIO GRANDE LNG, AND JUPITER OIL SHOWING PROXIMITY TO COMMUNITIES, WILDLIFE REFUGES, AND SPACEX.

## Climate Disaster

The world's climate and energy scientists have set forth a clear mandate: in order to maintain a livable planet, and limit global temperature increasing more than 1.5° Celsius, we must rapidly and dramatically decrease greenhouse gas emissions. The science is clear that to meet global climate goals set forward in the Paris Agreement, we must collectively slash greenhouse gas emissions by 50% by 2030 and reach net zero by 2050.<sup>22</sup>

Hundreds of governments, cities, financial and education institutions have adopted a net zero framework with pledges to cut emissions. The United Nations Net Zero Coalition states, "net zero means cutting greenhouse gas emissions to as close to zero as possible, with any remaining emissions re-absorbed from the atmosphere, by oceans and forests for instance."<sup>23</sup> The UN Net Zero Coalition calls on the global energy industry, as the key source of nearly three-quarters of greenhouse gas emissions today, to make dramatic emissions reductions to avert the worst effects of climate change.

The International Energy Agency (IEA) issued a special report, *Net Zero By 2050: A Roadmap for the Global Energy Sector*, in May 2021. In their scenario, the IEA describes the need for a sharp decline in LNG production:

**No new natural gas fields are needed in the NZE [net zero by 2050 scenario] beyond those already under development.** Also not needed are many of the LNG facilities currently under construction or at the planning stage. Between 2020 and 2050, natural gas traded as LNG falls by 60%, and trade by pipeline falls by 65%. During the 2030s, global natural gas demand declines by more than 5% per year on average, meaning that some fields may be closed prematurely or shut in temporarily.<sup>24</sup>

If we are to decrease the LNG trade by 60% over the next decades, as the IEA proposes is necessary in order to achieve net zero by 2050, we cannot afford to add any new LNG infrastructure. According to a study led by Oil Change International, the emissions from already developed fossil sources would take the world beyond 1.5°C of warming, the threshold for avoiding some of the most dangerous effects of climate change.<sup>25</sup> To keep to the Paris Agreement's goals, it is essential to leave the vast majority of oil, gas, and coal in the ground. We must phase out production of some oil and gas reserves before they are fully exploited. We must stop building new fossil fuel infrastructure.

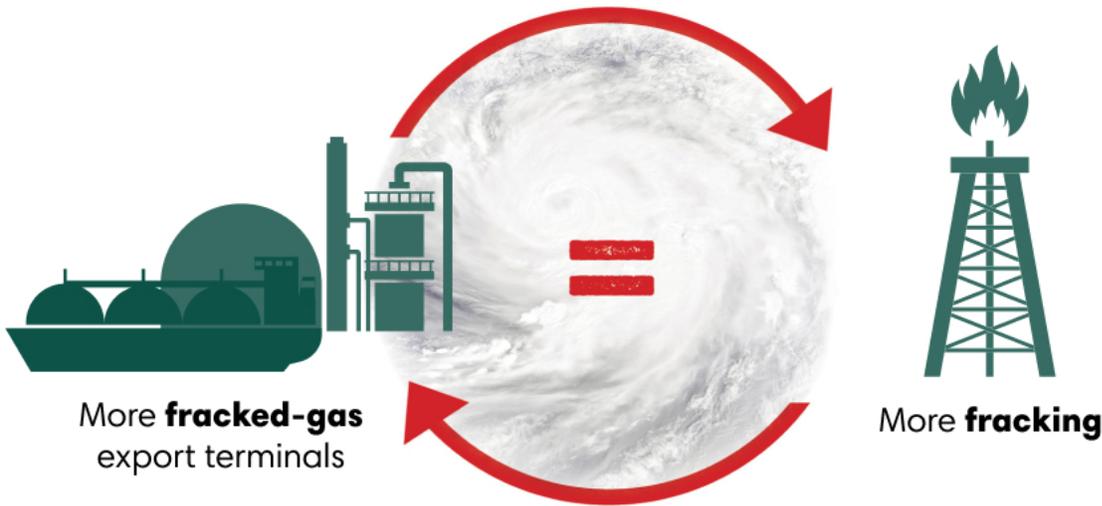
As Fatih Birol, executive director of the International Energy Agency, puts it:

**“We have no room to build anything that emits CO<sub>2</sub> emissions.”<sup>26</sup>**

Between the two terminals planned in the Rio Grande Valley, the Port of Brownsville would be prepared to liquefy and export 4.15 billion cubic feet of gas every day.<sup>27</sup> With each of those terminals operating at full capacity, and accounting for the emissions released throughout the LNG lifecycle -- from extraction to the end use of the gas -- the Rio Grande Valley's LNG terminals could add **greenhouse gasses equivalent to that of 40.4 million cars each year.**<sup>28</sup>



## DESTRUCTIVE LNG AND FRACKING CYCLE



## CLIMATE IMPACTS OF FRACKED GAS TERMINALS PROPOSED IN RIO GRANDE VALLEY



PHOTO: GRAPHIC COMPARING EMISSIONS FROM LNG AND FRACKING TO CAR EMISSIONS.

Beyond the climate impacts associated with production at these terminals, Texas LNG, Rio Grande LNG, and the Rio Bravo Pipeline will result in an increase in fracking in Texas. Pipelines would carry gas fracked from the Permian Basin in West Texas, the second largest oilfield in the world, where drilling has already caused sinkholes and unstable ground.<sup>29</sup> That shale basin, together with South Texas' Eagle Ford shale basins, which would together feed the Rio Grande Valley's terminals, are ticking time bombs for the climate: projected production through 2050 from the Permian Basin alone could use up ten percent of the global carbon budget for a 50/50 chance of limiting global warming to 1.5°C.<sup>30</sup> The global carbon budget is an estimation of how much greenhouse gasses have been emitted, and how much more the world can emit if we want to have a chance to stay below 1.5°C.<sup>31</sup>

With two projects in the Gulf Coast already making FID in 2022, the global carbon budget is simply bursting at the seams. Venture Global LNG Ltd. is moving forward with its 13.33 million tons per year (MTPA) Plaquemines LNG terminal, and Cheniere's Corpus Christi Stage 3 expansion would add a possible 10 MTPA to the capacity of its existing plant. These combined projects would result in an additional 141 million metric tons of

greenhouse gas emissions per year, the annual equivalent of 30.4 million cars on the road.

Investing in Rio Grande Valley's LNG terminals would lock in massive new pollution, exacerbating climate change for decades to come. Any financial institution, public official, or county that is taking the climate crisis seriously must reject these projects that increase rather than reduce emissions.

Ironically, if built, these new LNG terminals and the associated pipelines would themselves be at risk from climate change impacts. The Gulf Coast is already experiencing sea level rise and extreme weather events, including storms, that will become stronger and more frequent as global temperatures rise.<sup>32</sup> NextDecade admits that the terminals would damage wetlands that act as a storm barrier, protecting the coast and its residents from inundation during storm surges. In this dynamic coastal ecosystem, any new infrastructure is at severe risk from climate change.<sup>33</sup> As climate impacts intensify, regulations that phase out fossil fuel infrastructure are likely to turn these projects into stranded assets. Overall, the financial viability and prudence of Rio Grande LNG, Rio Bravo Pipeline, and Texas LNG are far from guaranteed.

## Greenwashing LNG

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NextDecade and other LNG companies are actively "greenwashing" their dirty, polluting LNG projects by falsely presenting an environmentally responsible image. NextDecade announced in October 2020 that it will aim at achieving net-zero emissions at its proposed Rio Grande LNG facility.<sup>34</sup> The company plans to use Carbon Capture and Storage (CCS) Technology to meet its net-zero emission goal by capturing carbon dioxide from gas pre-treatment and post-combustion processes and injecting it into permanent storage underground.<sup>35</sup>

Carbon capture technology has yet to be applied to any gas export facilities in the U.S and has been unsuccessful for other fossil fuel projects. Rio Grande LNG has partnered with Mitsubishi for its clean carbon storage facility. However, Mitsubishi failed at a previous attempt to capture carbon for coal plants because of cost and technology snafus.<sup>36</sup> CCS remains an untested and unproven technology for LNG, and the risks and hypocrisies of its application at the Rio Grande LNG facility are already obvious.

The CCS proposal only takes into account the emissions released on-site at the LNG terminal, meaning it avoids assessing and addressing the emissions released from the entire process of processing the gas or the full climate impact of Rio Grande LNG. Emissions happen all along the supply chain, from drilling gas to combustion, including pipeline transportation, shipping overseas by tanker ship, and regasification – referred to as "life cycle" emissions. Some of the most massive and highly dangerous emissions sources are methane leaks along the life cycle, which the company would not attempt to capture with CCS technology. In fact, 95% of all LNG emissions occur before and after the gas is processed at the LNG terminal.<sup>37</sup> NextDecade boasts that a CCS project at Rio Grande LNG is expected to enable the capture and permanent geologic storage of over 5 million metric tons of CO<sub>2</sub> per year.<sup>38</sup> But that is only 3% of the total emissions generated by the project in a year.<sup>39</sup> In other words, NextDecade's carbon capture proposal would hardly be a drop in the bucket.

NextDecade also announced a partnership with Project Canary that would attempt a pilot project to monitor emissions intensity from the drill site to Rio Grande LNG, but this does not include any actual plan for reducing emissions.<sup>40</sup> Rio Grande LNG's proposed CCS project will not fix the dangerous environmental and public health impacts on the community. Rio Grande LNG offers no specific emissions reduction goal or plan for reducing the harms associated with fracking for gas. Research found that methane emissions in the Permian Basin, where the gas is fracked, are leaking about 60% higher than the reported national average leakage rate.<sup>41</sup> Again, we know methane emissions are over 80 times more destructive to the climate than carbon dioxide over 20 years.<sup>42</sup>

NextDecade refers to the proposed Rio Grande LNG project as

the "greenest LNG project," but this is a dangerously misleading claim. In fact, Rio Grande LNG would be the biggest polluter in the Rio Grande Valley region, releasing greenhouse gases that exacerbate climate change and toxic air pollution, including cancer-causing volatile organic compounds (VOCs) and particulate matter that is dangerous for respiratory and reproductive health.<sup>43</sup> Implying that the project will be sparkling clean and green due only to a proposal to reduce emissions by just 3% via CCS is a sham. This proposal is an attempt to make a massive fracked gas project appear environmentally friendly. The Rio Grande Valley community opposes the carbon capture storage facility for Rio Grande LNG. Last year, public pressure stopped the Cameron County commissioners from sending a letter supporting the CCS proposal to the Department of Energy.<sup>44</sup>

## Indigenous Rights Violations

The legacy of displacement of Indigenous people in Texas is one of the most thorough examples of land dispossession in the Americas. Disregard for sovereignty, land rights, and lack of land access has characterized the experience of virtually all Indigenous peoples throughout Texas history. No existing tribe or nation with ancestral ties to the land in Texas has federal Indian recognition. Despite the state-driven erasure of the Native population, there still exists a thriving Indigenous population with histories, languages, and life ways.

The development of Texas LNG, in particular, poses a threat to Indigenous peoples, which the company has failed to address. The U.S. National Park Service, in its official comments to the federal agency regulating the project, noted that "[t]he proposed Texas LNG terminal site contains one of the premier prehistoric archeological sites in Cameron County, the Garcia Pasture Site. The Garcia Pasture Site (41CF8), which is listed on the National Register of Historic Places, has known burials, discrete shell working areas, and contact period artifacts."<sup>45</sup>

One tribe, the Estok-Na, commonly referred to as the Carrizo Comecrudo, has ancestral ties to the immediate region of the South Texas Rio Grande Delta where Texas LNG is proposed to be sited. This site is referred to as Garcia Pasture by archeologists and the National Park Service.<sup>46</sup> The Garcia Pasture Site is the burial site of the Carrizo Comecrudo Tribe's ancestors and therefore is culturally significant and constitutes

sacred ground to the Tribe. In 2022, the World Monuments Fund listed Garcia Pasture as one of the most irreplaceable, endangered sites around the world.<sup>47</sup> The protection of cultural sites is a human rights issue under the United Nations Declaration on the Rights of Indigenous Peoples.<sup>48</sup> And yet, though the Garcia Pasture area is a culturally important sacred site, because the Carrizo Comecrudo Tribe have not been granted federal recognition, they have not been consulted by regulatory agencies, financial institutions, and public officials in the matter of its development.



PHOTO: JUAN MANCIAS,  
TRIBAL CHAIR/  
CARRIZO COMECRUDO  
TRIBAL NATION  
OF TEXAS

This is also concerning because, while Texas LNG did contact some Indigenous tribes for its Cultural Resources report, it failed to consult with the Carrizo Comecrudo Tribe.<sup>49</sup> International business and human rights standards include the right to Free, Prior, and Informed Consent by Indigenous Peoples on projects that impact their traditional lands. The International Finance Corporation (IFC) specifically names in their Performance Standard 7 (PS7), that the “PS7 seeks to ensure that business activities minimize negative impacts, foster respect for human rights, dignity and culture of indigenous populations, and promote development benefits in culturally appropriate ways.”<sup>50</sup>

FERC, project developers, and financial institutions involved in the Texas LNG project should ensure that the Carrizo Comecrudo Tribe has the right to give or withhold their free, prior, and informed consent with regard to development on their sacred grounds.

While there have been no archeological studies in the immediate construction site of Rio Grande LNG, patterns

of burials in the area show a need for more collection and assessment of data with tribal guidance. It is likely that there are burials at these construction sites. Still, because there are no studies and because none of the local tribes qualify for protection under the Native American Graves Protection and Repatriation Act, current laws are too weak to ensure cultural protection. More archaeological and cultural data needs to be collected and assessed by the Tribe before any construction permits are allowed for the two LNG projects lest the construction of Rio Grande LNG and Texas LNG continue the colonial legacy of cultural destruction on Indigenous lands. The experience of the Carrizo Comecrudo Tribe exemplifies the need for policy-makers, regulatory agencies, and banks to consult all Indigenous tribes regardless of their Federal Tribal status.

Banking on the development of these highly controversial projects means being complicit in violations of Indigenous rights; after banks’ experience with the Dakota Access Pipeline, they should be wary of the reputational risks involved.

## Community and Health Impacts

As is often the case with fossil fuel development, the communities that would feel the negative impacts of these terminals are largely low-income people of color.<sup>51</sup> These LNG terminals would be constructed between the Laguna Madre communities and Brownsville, Texas, a rural community that is 94 percent Hispanic or Latinx.<sup>52</sup> The 2019 US Census Bureau

data for Brownsville shows that 29.9% of the population lives in poverty, which is higher than the 10.5% national average poverty rate.<sup>53</sup> Moreover, the Rio Grande Valley has a population of 1.4 million and about 80% speak Spanish.<sup>54</sup> The region already struggles with major health disparities, and is at high risk from climate change impacts.<sup>55</sup> Across the United States, nearly



PHOTO: RALLY TO STOP TEXAS LNG AND RIO GRANDE LNG ALONG HWY 48.



PHOTO: SOUTH TEXAS ENVIRONMENTAL JUSTICE NETWORK FLOAT AT THE 2020 CHARRO DAYS PARADE IN BROWNSVILLE, TX.

1.78 million Latinx people already live in counties that face a cancer risk above the Environmental Protection Agency's level of concern from toxins emitted by oil and gas facilities.<sup>56</sup> Industrial ozone smog burdens Latinx communities with 153,000 childhood asthma attacks and 112,000 lost school days each year.<sup>57</sup> Siting dangerous new infrastructure in a low-income community of color — particularly along the Gulf of Mexico, where environmental racism has been part and parcel of industrial growth — is a classic example of environmental injustice.<sup>58</sup>

Communities within a 3 miles radius of the proposed LNG terminals are also exposed to more fine particulate matter air pollution, PM<sub>2.5</sub>, on an annual basis than over 80% of the US.<sup>59</sup> These small pollutant particles can travel deep within the lungs and also enter the bloodstream, having a high potential for severe and long lasting negative health impacts such as asthma, heart disease, lung inflammation, and premature death.<sup>60</sup>

These nearby communities are within three census tracts each identified as disadvantaged by the White House Council on Environmental Equity and its Justice40 analysis. The census tracts are classified as disadvantaged because of the climate change impacts and health burdens they face.<sup>61</sup> And yet, these are the same communities where, with FERC's approval, industry intends to build these enormous, polluting LNG export terminals. Rio Grande LNG and Texas LNG will amplify the legacy pollution and environmental hazards that these communities have faced for decades.

## *Explosion Risk*

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If you only listened to industry to understand the risk LNG terminals pose to community members, you might hear that LNG is completely safe in its liquid form and poses no threat to communities. While it is true that once methane reaches a liquid state (after being processed with additional flammable solutions and cooled to -160 degrees) it no longer poses an explosion threat, only assessing risk on the final, liquefied product in this long industrial process misses all the other opportunities for an explosion to occur.

In truth, all of the risks associated with LNG terminals are not available for the public to know because of homeland security concerns. While more transparency is needed to ensure

Project developers say that the LNG terminals will bring jobs to the Rio Grande Valley. For example, in 2016, NextDecade claimed the Rio Grande terminal would create many temporary construction jobs and about 200 permanent jobs. Only 35% of those jobs are for locals living within 100 miles of the site for a minimum of 6 months.<sup>62</sup> However, developers do not mention that the LNG terminals will undermine existing industries, such as nature tourism, which employs thousands of people annually.<sup>63</sup> Also missing from developer statistics is that the nature of the jobs created put many more livelihoods in jeopardy.<sup>64</sup> The companies behind these projects have also engaged in questionable conduct that adds insult to the serious injury of their proposed terminals. Rio Grande LNG pushed for tax breaks from communities, seeking to avoid paying over \$300 million of property taxes to one of the poorest counties in Texas, Cameron County.<sup>65</sup> Over the last six years, both Texas LNG and Rio Grande LNG have attempted to secure tax breaks from the Point Isabel Independent School District but were rejected by the school board members due to local opposition.<sup>66</sup>

These economic concerns, along with the threat to the environment and public health, have prompted many city councils and community groups to formally oppose the projects, including the Carrizo Comecrudo Tribe of Texas, City of South Padre Island, the City of Port Isabel, the Town of Laguna Vista, Long Island Village, the Laguna Madre Water District, and the South Padre Island Business Owners Association.<sup>67</sup>

communities are well-informed on the risk these projects pose, we can learn important lessons from previous explosions and safety incidents that communities have experienced. On June 8, an explosion rocked the Freeport LNG liquefied gas terminal in Brazoria County, Texas less than 70 miles from Houston.<sup>68</sup> There were no reported injuries at the Freeport LNG terminal, but a nearby beach was evacuated and ship traffic was restricted in the area for hours. The cause of the explosion was a gas leak. Freeport LNG initially reported it would have to shut the facility for at least three weeks. On June 30, federal officials barred Freeport from restarting without further study and safety upgrades.<sup>69</sup>

The proposed terminals at the Port of Brownsville pose an additional, unique explosion risk. They are planned to be located adjacent to each other and in close proximity to nearby communities and, extraordinarily, just six miles from a SpaceX rocket launch site.<sup>70</sup> SpaceX plans to launch the largest rockets in human history – the Starship/SuperHeavy rockets – even though it has never addressed the risk of explosions, given the proximity to potential LNG facilities. Residents have demanded answers from the Federal Aviation Administration,

SpaceX, FERC, and the LNG companies. In an attempt to allay community concerns, NextDecade funded a report suggesting that the SpaceX launch site poses no special dangers.<sup>71</sup> The report did not allay community concerns, especially after rocket testing in July 2022 sent shockwaves for miles that rattled the Port Isabel lighthouse, which is roughly 6 miles from the SpaceX launch site.<sup>72</sup> Debris from SpaceX rocket testing has also been recovered on the South Padre Island jetties, which are equivalent in distance.<sup>73</sup>

## Ecosystem Damage

All together, the terminal sites would cover 1,609 acres, including paving over hundreds of acres of wetlands.<sup>74</sup> Seven liquefaction trains, six storage tanks, and hundreds of miles of new pipeline would be built for these two projects.<sup>75</sup> The development and operation of the gas infrastructure, as well as the constant navigation of tankers shipping the gas across the ocean, would severely harm and fracture the wildlife corridor concentrated in the Rio Grande delta and around the ship channel and would further divide a national wildlife refuge.

The terminals are proposed on greenfield sites across the street from the Bahia Grande of the Laguna Atascosa National Wildlife Refuge, which the U.S. Fish and Wildlife Service calls “one of the largest and most successful coastal wetland restoration projects in the United States.”<sup>76</sup> The Bahia Grande comprises

21,700 acres of the 120,000-acre refuge and is a haven for endangered species and native vegetation, as well as a crucial storm barrier for weather events that are increasing in frequency and strength with climate change.<sup>77</sup>

As examples, the endangered ocelots and northern aplomado falcons roam this area, but LNG construction, bright lights, tall structures, air pollution, ship and vehicle traffic would fundamentally alter the ecosystem beyond repair.<sup>78</sup> Laguna Atascosa National Wildlife Refuge is the natural habitat of one of just two populations of ocelots left in the United States, across which there are a total of 60 or fewer individuals.<sup>79</sup> The 2018 final environmental impact statement for Texas LNG states that the impacts on ocelots would be “permanent and significant” because of habitat destruction, as well as increased vehicle

PHOTOS: PROPOSED SITE OF TEXAS LNG AND RIO GRANDE LNG / JASON FRY



strikes.<sup>80</sup> The U.S. Fish and Wildlife Service has already invested millions of dollars into ocelot conservation by protecting their ability to migrate to Mexico, and these terminals would also cut off their only remaining wildlife corridor out of Texas.<sup>81</sup> A 2019 Defenders of Wildlife report on the threat of the two planned LNG projects to the ocelots finds that “Current commitments to mitigation by the companies developing the projects are inadequate to offset harm to ocelots.”<sup>82</sup> Rio Grande LNG and Rio Bravo Pipeline plans would destroy acres of wetlands but have also offered no plan for wetland restoration to the Army Corps of Engineers, a clear violation of the Clean Water Act. Sierra Club, Save RGV, and Shrimpers and Fishermen of the RGV are

currently legally challenging Rio Grande LNG’s 404 Clean Water Act permit by the Army Corps.<sup>83</sup>

If built, the two proposed LNG terminals in the Rio Grande Valley would significantly degrade the local fishing, shrimping, and ecotourism industries like dolphin watch tours. Nearby South Padre Island, a well-known destination for its sport fishing, bird-watching, and pristine beaches, would have its beauty and its economy compromised. Flaring towers hundreds of feet tall and thousands of tons of air pollution would dim the natural beauty view with brown haze.<sup>84</sup>

## *Banking and Financing LNG*



Financial institutions that fund fossil infrastructure expansion share responsibility for the impacts on climate, communities, and ecosystems. Global financial institutions have acknowledged that they share this responsibility and that they need to act now in the face of unprecedented climate risks. In 2021, hundreds of companies voluntarily joined the industry-led, United Nations-convened Glasgow Financial Alliance for Net Zero (GFANZ) and the Net-Zero Banking Alliance (NZBA).<sup>85</sup> In joining these alliances, financial institutions pledged to immediately begin aligning their portfolios with net-zero emissions by 2050.

Even as banks pledged to align their lending and investment with a low carbon future, they continue to finance fracked gas around the world. In 2021, the same year they joined the NZBA, the world’s top banks provided \$62 billion in financing to the 30 top fracking companies and 10 key fracked oil and gas pipeline companies. They provided an additional \$23 billion specifically for LNG. Led by JPMorgan Chase, Wells Fargo, Citi, and Bank of America, banks have financed at least \$465 billion for fracked gas and nearly \$140 billion for LNG since the 2015 Paris Agreement.<sup>86</sup> Banks, asset managers, investors, insurance companies, and other financial institutions should reevaluate the risks from fracked gas and new export terminals.

Beyond their net-zero commitments, many banks have adopted the Equator Principles, which provide a financial industry benchmark for determining, assessing, and managing

environmental and social risk in projects. The LNG projects proposed in Brownsville are clearly subject to the Equator Principles because the proposed capital costs are well above \$10 million each, and the projects carry “potential significant adverse environmental and social risks and/or impacts that are diverse, irreversible or unprecedented.”<sup>87</sup> Société Générale, NextDecade’s financial advisor, is an Equator Principles Financial Institution and should classify Rio Grande LNG and the Rio Bravo Pipeline as Category A, indicating the highest risk and requiring an enhanced assessment before committing to provide services.<sup>88</sup> In fact, an assessment in 2019 found that none of the proposed terminals are likely to comply with the Equator Principles.<sup>89</sup>

Some of the world’s largest financial institutions are providing the financing for Rio Grande LNG and its parent company, NextDecade. The largest single shareholder as of September 2022 is York Capital Management Global Advisors LLC, which holds 44.54% of outstanding shares. Morgan Stanley holds 2.41%. BlackRock holds 2.36%. Vanguard holds 1.96%.<sup>90</sup>

According to data obtained through a public records request, the investment advising company BlackRock invested \$29m in NextDecade in 2018 to help launch the Rio Grande LNG export terminal.<sup>91</sup> Their holdings in NextDecade are currently valued at \$20 million, and they acquired an additional 1.3 million shares in Quarter 2 of 2022. BlackRock has investments all over Texas



PHOTO: ACTIVISTS PROTEST INSIDE A SOCIÉTÉ GÉNÉRALE BANK OFFICE IN PARIS, FRANCE IN 2019 / LES AMIS DE LA TERRE FRANCE

oil and gas, managing \$91 billion in fossil fuel investments in the state in 2021.<sup>92</sup> Globally, they manage energy sector investments valued at \$289 billion.<sup>93</sup>

These are risky investments. Despite the pressure to replace Russian energy following the Russian invasion of Ukraine, the future for LNG export remains murky, with the glut of proposed projects threatening oversupply.<sup>94</sup> Most of the proposed export terminals in the United States are unlikely to reach FID.<sup>95</sup> Nor should they. Even with a renewed push by the US government and investors to expedite proposed export terminals, new projects won't fix Europe's near-term gas needs because they cannot begin operating soon enough. Analysis by Global Energy Monitor (GEM) shows that such facilities typically take three to five years to build in the United States.<sup>96</sup> Existing export terminals likely have enough capacity to meet Europe's short term needs

even without added capacity.<sup>97</sup> The situation in Ukraine is the latest attempt by investors to justify LNG export terminals that are unnecessary, uneconomic, and unwanted.

An industrial, smoggy future perpetrated by fracked gas export does not have to be the pristine Rio Grande Valley's fate. The sunshine in the Rio Grande Valley not only draws visitors from all over to visit the beaches, but has enormous capacity for wind and solar energy. Over 100,000 Texans currently work in renewable energy. The Lone Star State has added more wind energy capacity than any other state and is expecting huge growth in solar in the coming year.<sup>98</sup> As in other parts of the state, Rio Grande Valley presents an opportunity to continue this trajectory and grow the state's renewable energy viability rather than expanding oil and gas infrastructure.

# Delays, Cancellation, and the Risk of Stranded Assets

Nearly four years behind their schedule, the two terminals have been plagued with delays, even before the COVID-19 pandemic. NextDecade originally intended to take FID on the Rio Grande LNG terminal in 2017<sup>99</sup> and be in operation in the fourth quarter of 2020.<sup>100</sup> In April 2022, NextDecade sought authorization to delay opening until 2026 from FERC.<sup>101</sup> Their request was met with protests from the City of Port Isabel, Carrizo Comecrudo Tribal Nation of Texas, Healthy Gulf, Public Citizen, Sierra Club, Vecinos para el Bienestar de la Comunidad Costera, Save RGV, and hundreds of individuals.

NextDecade has since closed a handful of purchase agreements for Rio Grande LNG, and they now hope to move to FID by the end of 2022.<sup>102</sup> Texas LNG originally planned to take FID in the middle of 2016<sup>103</sup> and to be operational by 2020.<sup>104</sup> Texas LNG's latest schedule includes FID in 2022, to be in operation by the end of 2025 or 2026.<sup>105</sup> To date, Texas LNG has not secured any binding offtake contracts, making the 2022 FID date look highly unlikely. This continued delay points to big risks for financial backers.

The vision for LNG in the Rio Grande Valley initially included Annova LNG. Annova canceled its certificate with FERC in March 2021 due to changes in the global market.<sup>106</sup> Annova

LNG, backed by Exelon, Black and Veatch, Enbridge, and Kiewit Energy group, a Fortune 100 utility with strong partnerships, failed to secure any offtake contracts since it was founded in 2013. If built, Annova LNG would have destroyed wetlands, blocked a wildlife corridor threatening the survival of endangered wildlife, and put communities needlessly at risk. This news also came the day before the DC Circuit heard arguments on FERC's approvals of proposed export terminals Rio Grande LNG, Texas LNG, and the aforementioned Annova LNG terminal.

Financial institutions are at great risk of LNG terminals becoming stranded assets if they actually get built. The Carbon Tracker Initiative defines stranded assets as "assets that turn out to be worth less than expected as a result of changes associated with the energy transition."<sup>107</sup> With the large financial capital requirements for new terminals and the length of time from construction to production, LNG terminals are a very unique, high-risk operation.

Some global banks are starting to wake up to the risks of fracked gas and LNG. Recognizing the climate impact of the sector, BNP Paribas, Europe's largest bank, announced in late 2017 that it would not directly finance pipelines and LNG export terminals that transport or are supplied by "a significant



PHOTO: COMMUNITY MEMBERS RALLY AGAINST ANNOVA LNG INSIDE CAMERON COUNTY COURTHOUSE.



PHOTO: PROTEST AGAINST RIO GRANDE LNG IN HOUSTON, TX

volume of unconventional gas.”<sup>108</sup> The bank committed to stop granting dedicated financial support to all unconventional oil & gas pipelines and LNG terminals in North America, as well as the companies .<sup>109</sup> This policy however contains major loopholes, allowing BNP Paribas to remain one of the biggest financiers of oil and gas expansion: the French bank is still in the top 10 financiers of LNG and top 20 financiers of shale oil and gas worldwide – in particular due to its massive support to the big majors of the sector. Mounting opposition to fossil fuels has forced other banks to update their commitments to risky projects like the LNG terminals proposed for the Rio Grande Valley. These banks include Crédit Mutuel and others listed below.

BNP Paribas’s announcement came just months after a delegation from the Rio Grande Valley, including Indigenous leaders and Water Protectors, traveled to Paris to speak out against the relationship between BNP Paribas and Texas LNG. At the time, BNP Paribas was acting as financial advisor to the Texas LNG project.<sup>110</sup> The delegation garnered significant attention in France, speaking at rallies, on popular radio shows, to the advisor for French President Macron, and at the bank’s shareholder meeting.<sup>111</sup>

In reaction to this campaign and its new policy, BNP Paribas effectively announced it will not finance the development of Texas LNG.<sup>112</sup> This occurred after Japanese bank SMBC Group similarly put an end to its advisory mandate for NextDecade’s Rio Grande LNG project.<sup>113</sup>

“The shale gas export market in the United States is growing rapidly with about 40 applications for export terminal construction permits. However, the carbon footprint of unconventional shale gas produced in the United States and exported to Asia is worse than that of a coal-fired power plant.” Laurence Pessez, Head of Corporate Social Responsibility, BNP Paribas.<sup>114</sup>

Pressure continues against another French bank, Société Générale, which in 2017 took over from SMBC Group as financial advisor to the Rio Grande LNG project with the Australian company Macquarie Capital.<sup>115</sup> In January 2022, Société Générale issued its oil and gas policy. In this new policy, Société Générale in particular committed not to provide dedicated financial support to new greenfield LNG projects or significant LNG expansion projects in North America.

But this commitment comes with a wide exception: it does not apply to projects for which Société Générale is currently mandated. The bank has thus allowed itself a loophole—the size of Rio Grande LNG and Driftwood LNG in Louisiana—to advise and finance brand new, greenfield LNG projects. The bank’s credibility hangs in the balance on following their own protocols, meeting their net zero commitments and their credibility in participating in many international banking alliances that share 2030 emissions reductions goals. On September 15 of this year, Credit Suisse announced support for Rio Grande LNG.<sup>116</sup>

## Banks that are backing LNG export projects in the Rio Grande Valley:

- ✘ Macquarie Capital
- ✘ Société Générale
- ✘ Credit Suisse

## Banks that have withdrawn from LNG export projects in the Rio Grande Valley:

- ✔ Sumitomo Mitsui Financial Group (SMBC Group)
- ✔ BNP Paribas

Banks committed to staying away from the Rio Grande Valley LNG projects:

- ✓ BNP Paribas
- ✓ Crédit Agricole
- ✓ Crédit Mutuel
- ✓ UniCredit
- ✓ La Banque Postale

Many banks and financial institutions have declared time-bound commitments to meet net zero emissions by 2050. Financial support for new fossil fuel projects, especially greenfield projects, would be in direct opposition to any 2030 target or 2050 net zero emissions goal. LNG terminals in the Rio Grande Valley would threaten the health and vitality of surrounding communities, endanger animals and damage ecosystems, destroy irreplaceable cultural assets, and usher in climate chaos — all in an area that is already burdened by disproportionate levels of poverty and sickness, and that is increasingly drier and hotter from climate change.<sup>117</sup> Big banks have no business funding LNG-fueled destruction in the Rio Grande Valley.

## Importing LNG

In order for Texas LNG and Rio Grande LNG to begin construction and move forward with their plans to operate, the companies behind the LNG projects must secure buyers to import the gas overseas. For years, community activists in Texas have partnered with European activists to prevent these contracts that would result in the companies building polluting LNG export and import terminal plants in their communities.

To date, Texas LNG has been unable to sign any contracts with buyers. This is despite Texas LNG's many attempts to peddle the gas, including a field trip chaperoned by former President Donald Trump to China that was unsuccessful.<sup>118</sup> Texas LNG is facing numerous obstacles. In an August 2022 letter by the

company to the regulator FERC, Texas LNG claims that the lawsuit victory that forces FERC to re-evaluate the permit is impacting the project from entering into contract negotiations with companies to buy the gas.<sup>119</sup> The delay in securing contracts has resulted in Texas LNG pushing back its operation start date by a year.

Rio Grande LNG has faced significant opposition in pursuing several contracts with companies to export the gas to Europe and Asia. In 2020, the Port of Cork, Ireland, scrapped its memorandum of understanding (MOU) with NextDecade that would have resulted in Ireland building a new import terminal facility specifically to import 3 mtpa of gas from Rio Grande



PHOTO: RALLY AGAINST RIO GRANDE LNG AND CORK LNG AT THE PORT OF CORK, IRELAND IN 2019.

## Rio Grande LNG Contracts

PURCHASER	PARENT COMPANY HQ	MTPA
China Gas Hongda Energy Trading Co., Ltd.	China	1
ENGIE S.A.	France	1.75
ENN LNG (Singapore) Pt.e Ltd.	China	1.5
ExxonMobil LNG Asia Pacific	USA	1
Guangdong Energy Group Natural Gas Co. Ltd. and Guangdong Energy Group Co., Ltd.	China	1, with potential for additional 0.5
Shell NA LNG LLC	UK	2
Total Volume Sold So Far		8.25
Estimated Remaining for FID		7.75

LNG. The Port of Cork faced significant public opposition from the Irish Green party and Irish and Texan activists delivering thousands of petitions and staging protests against the MOU.<sup>120</sup> NextDecade has pursued a contract with French company Engie which had originally walked away from the contract negotiations for Rio Grande LNG. The LNG project is still only halfway to its lofty goal of currently selling 16 mtpa of gas overseas before making FID by the end of 2022. Rio Grande LNG has signed contracts with the companies listed above.

Most of this LNG will be delivered on a free-on-board basis, meaning the buyer arranges to ship the LNG and so generally has discretion over where to deliver it. The LNG purchased by Guangdong Energy Group will be delivered on an ex-ship basis,

where the ownership of the LNG transfers to the purchaser at its final destination – meaning it likely will be delivered to China’s Guangdong province.<sup>121</sup>

International opposition to LNG exports and import facilities is gaining momentum. For the last several years, European activists in Germany, Ireland, Sweden, and other countries have hosted protest mobilizations in partnership with Indigenous people, Texans, and Pennsylvanians to protest their government’s plans to build LNG import plants. Banks, public officials, and financiers will continue to see significant delays on contracts for LNG terminals.

# Demands

The companies behind these two terminals are both planning to make FID on the projects in 2022, however unlikely that may seem. Acknowledging the risks of these projects — including risks to local communities and ecosystems, the climate, and their own reputations — banks, financial institutions, or decision-makers:

## Banks & Financial Institutions

- Should not provide any direct or indirect financial services for the development or operation of new and expanded LNG export facilities; specifically Texas LNG, Rio Grande LNG and Rio Bravo Pipeline, or any such gas infrastructure projects planned in the Rio Grande Valley.<sup>122</sup>
- Should not support any LNG export facility that exacerbates environmental injustice to ensure that low-income communities of color communities do not suffer disproportionately from hazardous pollution.

- Should decline any transactions or financial services for LNG export facilities and associated infrastructure that do not meet the requirements of Free, Prior and Informed Consent of Indigenous Peoples in their ancestral territories.
- Should stop support, through any direct or indirect means for fossil fuel expansion, in line with the conclusions of the International Energy Agency “Net Zero by 2050” report.
- Banks and financial institutions must align their overall corporate policy, portfolios and dealbooks with a 1.5 degree global temperature scenario.

## Local, County, State, and Federal Governments

- Across the government, environmental justice considerations should be taken into account to ensure that low-income communities of color communities do not suffer disproportionately from hazardous pollution.
- Regulatory agencies such as the Federal Energy Regulatory Commission and the Army Corps of Engineers should vacate any existing approvals and to deny any permit applications for Rio Grande LNG and Texas LNG because the projects would be an environmental disaster for wildlife, terrible for the climate, and harmful to local communities in South Texas.
- Congress and the Administration should end taxpayer financing and subsidies for LNG export terminals, including: 45Q tax credits for CCS,<sup>10</sup> support for “Advanced Fossil Energy” under the DOE’s Title 17 Innovative Technology Loan Program, and funding from the Office of Fossil Energy’s research program.
- To protect Americans from the risk of undisclosed stranded assets and other climate-related financial risk, Congress and the Administration should do everything it can to support the Securities and Exchange Commission’s proposed climate risk disclosure rule.



PHOTO: SAND SCULPTURE ON SOUTH PADRE ISLAND, TX BY SANDY FEET

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