



# RIO GRANDE VALLEY

AT RISK FROM FRACKED GAS EXPORT TERMINALS

A **\$**SHORTING THE CLIMATE CASE STUDY

OCTOBER | 2016

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# LNG EXPORT

DOUBLING DOWN ON DANGER



There are many misconceptions about liquefied natural gas, or LNG. This is because the process starts with natural gas, touted as a cleaner fossil fuel. The end product, however — liquefied, supercooled gas for export — has an enormous climate and infrastructure footprint that harms local communities, ecosystems, and our shared climate.

LNG is gas — mostly derived from fracking — that is piped to the coast, supercooled, and condensed into a liquid.<sup>1</sup> Due to over-extraction from fracking, the United States faces an oversupply of natural gas. In order to recoup costs, fossil fuel corporations are now looking to international markets. Enter the LNG export terminal, otherwise known as the “fracked gas terminal.”

Companies are racing to build dozens of LNG export facilities across North America. Each facility connects to a maze of pipelines that are fed from fracking sites. LNG terminals span hundreds of acres and have ships three football fields long to carry the carbon-heavy fuel to be burned in other countries. There are 40 of these proposed and existing facilities in the United States, with 80 percent along the Gulf Coast.<sup>2</sup>

PHOTO: VYTAUTAS KIELAITIS / SHUTTERSTOCK

## THE RIO GRANDE VALLEY

The proposals for enormous LNG terminals spotting the Gulf Coast are clustered around existing ports and ship channels. In south Texas, near the Mexican border, fossil fuel corporations plan to transform the coastal landscape of the Rio Grande Valley into an industrial LNG export hub. Three companies are moving forward with plans to build greenfield LNG export terminals on undeveloped land in the Port of Brownsville, Texas.

As is often the case with industrial fossil fuel development, the communities that would feel the negative impacts of these terminals are largely low-income people of color.<sup>3</sup> These LNG terminals would be constructed between the Laguna Madre communities and next to Brownsville, Texas, a rural community that is 93 percent Hispanic or Latino and often tops the list of poorest cities in the country.<sup>4</sup> More than 35 percent of the area's residents live in poverty, the highest rate of any metropolitan area in the United States.<sup>5</sup> The region already struggles with major health disparities, and these facilities would emit thousands of tons of harmful pollutants into the air. Across the United States, nearly 1.78 million Latinos already live in counties that face a cancer risk above EPA's level of concern from toxins emitted by oil and gas facilities. Industrial ozone smog burdens Latino communities with 153,000 childhood asthma attacks and 112,000 lost school days each year.<sup>6</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.

If built, the three proposed LNG terminals in the Rio Grande Valley could significantly impact the local fishing, shrimping, and eco-tourism industries. Nearby South Padre Island, a well-known destination for its sport fishing, bird-watching, and pristine beaches, could have its beauty and its economy compromised by flaring towers hundreds of feet tall, the release of millions of gallons of effluent water, and the brown haze that would come with the thousands of tons of air pollution.<sup>7</sup> In the Rio Grande Valley, nature tourism alone leads to 6,600 part- and full-time jobs. An LNG terminal, on the other hand, creates mostly temporary construction jobs, and typically only a few hundred permanent jobs.<sup>8</sup> The largest terminal proposed for the Rio Grande Valley would only create about 200 permanent jobs, while its effects would put an unknown number of livelihoods in jeopardy.<sup>9</sup> These economic concerns, along with the threat to the environment and public health, have prompted many city councils and groups to formally oppose the projects, including the City of South Padre Island, the City of Port Isabel, the Town of Laguna Vista, the Laguna Madre Water District, the South Padre Island Business Owners Association, the Texas Shrimp Association, and the National Park Service.<sup>10</sup>



LAGUNA ATASCOSA NATIONAL WILDLIFE REFUGE;  
PHOTO: KITE AERIAL PHOTOGRAPH BY J.S. AND S.W. ABER; ALL RIGHTS RESERVED.

## THREE TERMINALS TOO MANY

Three LNG export terminals are being proposed by different companies at the Port of Brownsville: Texas LNG, from a company of the same name; Annova LNG, now owned by the Fortune 100 energy giant Exelon; and Rio Grande LNG, owned by NextDecade. The Texas LNG site is the smallest at 625 acres — four times the size of Disneyland.<sup>11</sup> The sprawling Rio Grande LNG site, at 1,000 acres, is bigger than New York City's Central Park.<sup>12</sup> In addition is the land needed for new pipelines, which would stretch around 140 miles to the Agua Dulce gas hub near Kingsville, Texas. This gas hub connects to eight other pipelines and is a point-of-sale for gas from the Eagle Ford shale basin, where extraction through fracking has been impacting the health of other Texas communities for over a decade.<sup>13</sup>



While the terminals have each received authorization from the Department of Energy to export their LNG overseas, all three are awaiting completion of a full environmental review and a final decision from the Federal Energy Regulatory Commission (FERC), the government agency in charge of regulating gas infrastructure and supply. These FERC authorizations could happen as soon as early 2017, and if they are approved, investment decisions from the companies and lending banks would come shortly afterward. Once billions of dollars are committed to the projects, there will be even stronger momentum for them to keep moving forward.

## QUESTIONABLE CONDUCT

These three companies are causing ire in the community for reasons beyond the terminals themselves. The Port of Brownsville ship channel must be deepened an additional 10 feet to a new depth of 52 feet in order for the massive LNG ships to pass through.<sup>14</sup> Another explicit purpose of deepening the ship channel is so that the port can support more deepwater offshore oil and gas drilling in the Gulf of Mexico.<sup>15</sup> Two of the LNG companies have committed to pay for the \$200 million dredging project, as well as the \$3.3 million design stage of the channel deepening; if this money doesn't come through, however, costs could be dumped onto taxpayers, as occurred in Houston in the 1990s.<sup>16</sup>

In April 2015 Annova LNG brazenly requested abatement of all of its county property taxes for the first 10 years of its LNG export terminal operation.<sup>17</sup> The company also requested that the local school district limit the tax valuation of the property, which would have allowed Annova LNG to pay taxes on less than 1 percent of the value of the terminal. The company offered the local school district \$3 million to agree to the tax break, under a law that has been called "Texas' biggest corporate welfare program" that uses state money to facilitate major industrial projects. Even so, the Point Isabel Independent School District voted unanimously to reject the company's request.<sup>18</sup> Rio Grande LNG tried the same dirty trick a few months later and was similarly rejected by the school district.<sup>19</sup>

There is also controversy around Rio Grande LNG's partnership with the University of Texas Rio Grande Valley, announced in August 2016, which aims to legitimize industry-promoted research advocating for continued use of fossil fuels.<sup>20</sup>

PHOTOS: SAVE RVG FROM LNG



## ECOSYSTEM DAMAGE

All together, the terminals will cover 2,356 acres, including paving over hundreds of acres of wetlands. Fourteen liquefaction trains, eight storage tanks, and hundreds of miles of new pipeline would be built for these three projects.

The terminals are proposed right on the edge of what the U.S. Fish and Wildlife Service calls “one of the largest and most successful coastal wetland restoration projects in the United States”: the Bahia Grande unit of the Laguna Atascosa National Wildlife Refuge, where wetland restoration is still ongoing. The 21,700-acre refuge is almost half wetlands, making it a safe haven for a range of 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>21</sup> Endangered ocelots and Aplomado falcons roam this area.<sup>22</sup> As of August 2015 there were only 53 ocelots left in all of Texas, all in the southern tip of the state where LNG export facilities are planned.<sup>23</sup> Annova LNG already had to move its planned facility over a few acres to leave a passageway for the ocelot, a concession that doesn’t change the fact that the endangered ocelot’s mostly undeveloped home region will be inundated by industry.<sup>24</sup> Construction, bright lights, tall structures, air pollution, and wastewater will fundamentally alter the ecosystem of the area.



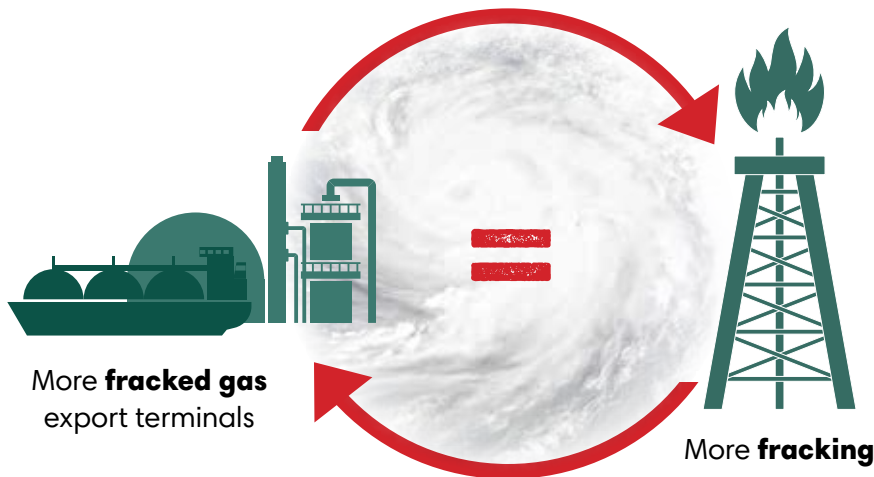
PHOTOS (CLOCKWISE FROM TOP): LARRY DITTO / DANITADELIMONT.COM; USFWS; ELITRIVO / SHUTTERSTOCK

# CLIMATE DISASTER

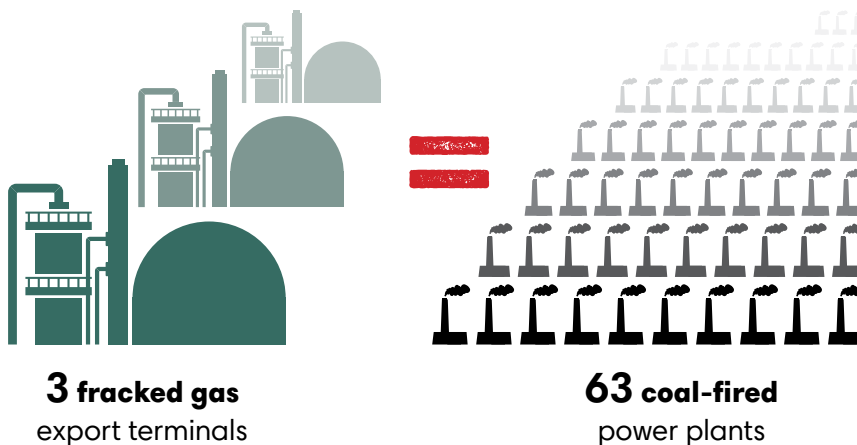
Between these three terminals, the Port of Brownsville would be prepared to liquefy and export 5.1 billion cubic feet of gas every day.<sup>25</sup> With each of those terminals exporting at full capacity, burning just one year's worth of the gas exported from Brownsville would create greenhouse gas emissions equivalent to the annual emissions from 30 coal-fired power plants.<sup>26</sup> If just 3.8 percent of the gas meant for these terminals in a given year escapes into the atmosphere before being burned, Rio Grande Valley's LNG terminals would be doing the same annual damage of 63 coal plants!<sup>27</sup>

And all that only considers the gas burned on the importing end. Accounting for extracting, piping, liquefying, and shipping the gas nearly doubles the carbon intensity of energy produced from RGV's exported LNG.<sup>28</sup> To be clear: LNG is the most carbon-intensive form of natural gas. Using the world's operating oil and gas reserves alone would overshoot a 1.5 degree Celsius climate budget — meaning there is no room for an industry that encourages more fracking and produces such carbon-intense energy.<sup>29</sup>

## DESTRUCTIVE LNG AND FRACKING CYCLE



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



## BANKING ON LNG

Banks that provide loans to construct these projects, or other financial support for companies building LNG terminals, share responsibility for the impacts. The bank arranging the finances for Rio Grande LNG, the largest project in the area, is Sumitomo Mitsui Banking Corporation (SMBC). SMBC, a Japanese bank, is a huge pillar of support for LNG export buildout in North America; by the time SMBC joined forces with Rio Grande LNG, the bank had arranged financing for every single LNG export project finance loan on the continent.<sup>30</sup> The French bank BNP Paribas — already heavily criticized for its fossil fuel exposure<sup>31</sup> — will arrange debt and equity financing for Texas LNG's project.<sup>32</sup> Annova LNG's parent company Exelon has most recently been backed by Barclays, Citigroup, Credit Suisse, JP Morgan, and Morgan Stanley. Major global banks have an obligation to stop harming local communities and shorting the climate with LNG export.



## ANOTHER VISION FOR THE RIO GRANDE VALLEY

An industrial, smoggy future perpetrated by LNG export does not have to be the fate of the pristine Rio Grande Valley. The sunshine in the Rio Grande Valley not only makes its beaches desirable, but also powers the largest solar roof in Texas<sup>33</sup> 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>34</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 portfolio.

LNG terminals in the valley threaten the health and vitality of surrounding communities, endanger animals and ecosystems, and usher in climate chaos, all in an area increasingly drier and hotter from climate change.<sup>35</sup> Big banks have no business funding LNG-fueled destruction in the Rio Grande Valley.

PHOTOS: ALVOV / SHUTTERSTOCK; SAVE RVG FROM LNG

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**ACKNOWLEDGEMENT:** RAN is challenging LNG export infrastructure in the Rio Grande Valley in partnership with **Save RGV from LNG**, a community group that has worked to oppose LNG terminals in the Rio Grande Valley since 2013. RAN is grateful for their input and collaboration. Learn more at [www.SaveRGVfromLNG.com](http://www.SaveRGVfromLNG.com).

