























November 11, 2022

Congressman John Rutherford, FL-4

Captain Daniel Cost, Chief, Office of Design and Engineering Standards, U.S. Coast Guard Jeffrey Lantz, Director, Commercial Regulations and Standards, U.S. Coast Guard Timothy Meyers, Technical Lead, Office of Design and Engineering Standards, U.S. Coast Guard

Mario Cordero, Executive Director, Port of Long Beach

William Doyle, Executive Director, Maryland Port Administration

Chett Chiasson, Executive Director, Greater Lafourche Port Commission

Michael Peace, Senior Business Development Analyst, Hamilton-Oshawa Port Authority

Farid Trad, Vice President of Bunkering and Energy Transition, CMA-CGM

Harly Penner, General Manager, Seaspan Ferries

Coulston Van Gundy, Vice President of Construction and Engineering, Crowley Shipping Daniel Wasp, Senior Principal Engineer, ABS

Daniel Holmes, Business Development Manager, North America, Bureau Veritas

Kevin Humphreys, Green Corridor Chairman, Blue Sky Maritime Coalition

Arlie Sterling, Director, Blue Sky Maritime Coalition

Kathy Metcalf, President and CEO, Chamber of Shipping America

Re: LNG Bunkering North American Summit

On behalf of the *Ports for People* campaign to end port and ship pollution and a coalition of 25 global campaign partners, we strongly urge you to withdraw your speaking commitments, sponsorship and attendance at the LNG Bunkering North American Summit in Washington, D.C. on November 15-17, 2022. In the face of inextricably linked climate, ecological and public health crises, we must stop investing in and supporting fossil fuels and fossil fuel infrastructure at our ports – including liquefied natural gas (LNG) bunkering.

LNG leaks potent methane greenhouse gas emissions that are exacerbating our climate crisis.

Climate change is already ravaging our state with record-breaking droughts, heat waves and wildfires – all induced by generations of reliance on fossil fuels. In summer 2021, heatwaves in the U.S. Pacific Northwest and British Columbia, Canada <u>killed 800 people</u>. The 2021 heatwaves were deemed a "<u>once-in-10,000-years kind of event</u>". Then, in September 2022, the West Coast states suffered a 12-day heatwave that <u>shattered more than 1,000 heat records</u>. These increasingly severe heatwaves harm and kill people, shock and strain our energy systems and power grids, and <u>interact with windstorms to start and worsen wildfires</u>.

With LNG production on the rise, a new study by the World Meteorological Organization reported that methane concentrations are rising faster than ever. Echoing the WMO's alarm on rising emissions the U.N. Climate Change Secretariat Executive Secretary Simon Stiell warns that "Government decisions and actions must reflect the level of urgency, the gravity of the threats we are facing, and the shortness of the time we have remaining to avoid the devastating consequences of runaway climate change. We are still nowhere near the scale and pace of emissions reductions required."

At a time when we must rapidly end fossil fuel development to mitigate our present climate crisis, your action in support of LNG conflicts with Paris-aligned climate mitigation and adaptation goals and the well-being of people around the world. Numerous studies have shown LNG leaks super-potent methane (CH₄) emissions, making it 80 times more potent in its climate warming potential than carbon dioxide (CO₂) over a 20-year period. In other words, use of LNG will not reduce global warming; instead, it will accelerate global warming and worsen our ongoing climate crisis exponentially.

By speaking at this conference, you are neglecting the wellbeing of our climate and the health of portside communities in pursuit of profit. Now is the time to invest in North American ports' zero-emission future—and to reject LNG as the dangerous fossil fuel it is.

When used as a marine fuel, LNG causes methane slips, or leaks. The International Council on Clean Transportation (ICCT), an international non-profit research organization headquartered in Washington, D.C., found that the most popular marine engines emit up to 82% more carbon dioxide equivalent emissions than marine gas oil.

LNG poses high risk to public safety and public health.

In addition to the known methane slips attributed to use of LNG, LNG facilities pose a risk of explosion and fires. In June 2022, Texas's Freeport LNG facility experienced its fourth safety incident reported to the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA) since mid-2019 at the plant, which began operations in 2008 as an import terminal. The site began exporting gas in 2019. Regulators acknowledge that LNG facility explosions can cause "mass destruction because facilities handle immense amounts of

natural gas that can become explosive when exposed to the atmosphere." In 2014, five workers were injured in an explosion at a liquefaction plant in Washington State that caused \$72 million in damage and led to the evacuation of a 2-mile radius around the plant.

LNG is a dead end for investments.

Maritime leaders such as Target, Amazon, and IKEA are embracing reality and made landmark commitments as part of the Aspen Institute's <u>Cargo Owners for Zero Emission Vessels (coZEV) initiative</u> to end their use of LNG for maritime decarbonization. The World Bank also urges governments against LNG as a marine fuel. According to the University College London, LNG deployment could leave businesses with up to <u>\$850 billion in stranded assets by 2030</u> as governments institute zero-emission ship standards.

Ports must prioritize electrification and zero-carbon, zero-emission fuels for the hardest to abate sectors (like cargo shipping) in order to reduce the air quality and climate impacts.

With the right market signals from ports investing in electrification and zero-emission fuel bunkering, shipbuilders, ship owners and shippers will have no choice but to retrofit and transition their fleets to run on energy-saving technologies, wind-assisted propulsion, renewable electricity, zero-emission fuels, batteries, and fuel cells.

We strongly urge you to take a stand for our collective future by announcing that you will not attend, speak at, or sponsor the LNG Bunkering Summit in Washington, D.C. this month, and we urge ports, the shipping industry, and the U.S. Government to take immediate action to accelerate the industry's transition to zero-emission shipping.

Sincerely,

Pacific Environment
Fridays for Future DC
Friends of the Earth
Rachel Carson Council
Earth Ethics Inc
Terra Advocati
350 Seattle
Animals Are Sentient Beings Inc
Ocean Conservation Research
Seven Circles Foundation
7 Directions of Service
Peace and Freedom Party
Extinction Rebellion US
Unitarian Universalists for a Just Economic Community
Physicians for Social Responsibility Pennsylvania

tUrn Climate Action

Concerned Health Professionals of Pennsylvania

The People's Justice Council
Alabama Interfaith Power and Light
Earthworks
Friends of the Earth
Pass the Federal Green New Deal Coalition
Nicaragua Center for Community Action
Group Against Smog and Pollution
South Asian Fund for Education Scholarship and Training, Inc

Studies on why LNG is harmful for our environment and how investing in LNG will create stranded assets for ports and businesses:

Energy Institute at the University College London, <u>The shipping sector's costly affair with</u> LNG as a marine fuel

The study quantifies the financial losses that would likely be incurred by the world's growing fleet of LNG ships as policymakers globally align with the Paris Agreement's goal of keeping global warming under 1.5 degrees Celsius above pre-Industrial levels:

- This study finds the world's rapidly growing fleet of ships that can run on liquefied natural gas (LNG) are at risk of financial losses of \$850 billion by 2030.
- If policies that incentivize shipping to decarbonize in line with the Paris Agreement were in place by the end of the decade, the LNG-capable fleet would compete against zero-emission shipping. While policy and competition would affect all ships built to use fossil fuels, the analysis suggests that more expensive LNG-capable assets (also known as LNG dual-fuel) would see reductions in their value to match the value of similar aged but lower cost conventional vessels designed to use fuel oil.
- This study argues that governments should not use public funding to exacerbate the creation of stranded value and identifies methods that investors can use to identify the risks posed by climate change on shipping assets.

International Council on Clean Transportation (ICCT): <u>Comparing the Future Demand for,</u>
<u>Supply Of, and Life-Cycle Emissions From Bio, Synthetic, and Fossil LNG Marine Fuels in the EU</u>

- The report estimates demand for LNG used by ships on voyages to, from, and between EU ports in 2030, including bio and e-LNG ("renewable" LNG).
- Using 100% fossil LNG would triple well-to-wake greenhouse gas emissions from LNG ships projected to be on the water globally between 2019-2030.
- Even using 100% "renewable LNG" would double absolute methane emissions between 2019-2030.
- Meanwhile, the IPCC has indicated that emissions of short-lived climate pollutants such as methane need to be reduced by one-third from 2019 levels by 2030 to limit warming to 1.5°C.

- University of Maritime Advisory Services at the University College London: *LNG as Marine Fuel in the EU*
- One of the aims of the study is to ascertain the cost/benefit of investing in LNG bunkering infrastructure from a GHG abatement perspective (invested \$/ton CO2 abated).
- The study found that there is no significant CO₂-equivalent reduction achieved through the use of LNG as marine fuel relative to the reduction required to achieve the International Maritime Organization (IMO)'s 2050 objectives.
- Reaching Paris temperature goals is only possible with a switch to increased use of non-fossil fuel sources (non-fossil hydrogen, ammonia, battery electrification) from 2030 and with rapid growth thereafter.
- There is a very uncertain future demand for LNG as a marine fuel over the next 10 years. On the one hand, it is an option for complying with the 2020 sulfur cap, but as it cannot enable the GHG reductions that have been committed to in the IMO's initial strategy for GHG reduction and the Paris Agreement temperature goals more generally, it is clear that its role can only be transient and not transitional.
- There is no development of a significant market for LNG as a marine fuel in scenarios modeled, as these new fuel sources require significant demand growth from 2030 at the latest to meet the GHG reduction objectives.

International Council on Clean Transportation (ICCT): <u>The Climate Implications of Using LNG as a Marine Fuel</u>

- This study compares the life-cycle GHG emissions from LNG, including upstream emissions from leakage during extraction, processing, and transport and downstream emissions from combustion and unburned methane (aka "methane slip"), to those of traditional marine fuels: heavy fuel oil, very low sulfur fuel oil, and marine gas oil (MGO).
- LNG is mostly methane, a potent GHG that traps more than 80 times more heat in the atmosphere than the same amount of CO₂ over 20 years.
- There is no climate benefit from using LNG, regardless of the engine technology, when evaluating its use over a 20-year time frame.
- The most popular LNG marine engine—low-pressure dual fuel (LPDF), medium-speed, four-stroke—is also the leakiest. **Using LNG**, **this technology emitted 70% to 82% more life cycle GHGs than MGO**.
- Continued investment in LNG infrastructure on ships and onshore risks making it
 harder to transition to zero-emission vessels in the future. Investments should instead
 be focused on technologies that reduce total life-cycle GHG emissions, including
 energy-saving technologies, wind-assisted propulsion, zero-emission fuels, batteries,
 and fuel cells.

The World Bank: <u>The Role of LNG in the Transition Towards Low and Zero Carbon</u> Shipping

- Questions this report attempts to answer:
 - What would the role of liquefied natural gas (LNG) as a bunker fuel in the years 2020–2050 look like?
 - Offering significant air quality benefits, could LNG also contribute to the targets set by Initial IMO GHG Strategy and the sector's transition toward low- and zero-carbon shipping?
- The conclusions of this report have been developed through a logic that starts with the Paris Agreement's temperature goals, considers shipping's GHG emissions trajectory and the associated fuel mix that would be required to meet those goals, and assumes that appropriate policy would be introduced to achieve those outcomes. The Initial IMO GHG Strategy is consistent with this logic. Within this context, there is consensus across the literature and industry that LNG cannot form a large proportion of the bunker fuel mix in 2050 due to its carbon intensity

International Energy Agency's Net Zero by 2050 report

- A key finding of the landmark report is that no new gas projects can be started if the world is to align with limiting warming to 1.5 degrees.
 - 'Building on the IEA's unrivaled energy modeling tools and expertise, the Roadmap sets out more than 400 milestones to guide the global journey to net zero by 2050. These include, from today, no investment in new fossil fuel supply projects, and no further final investment decisions for new unabated coal plants. By 2035, there are no sales of new internal combustion engine passenger cars, and by 2040, the global electricity sector has already reached net-zero emissions.'