Video Message by GIIGNL Chairman Jean-Marie Dauger for the LNG Producer-Consumer Conference 2020

Distinguished Ladies and Gentlemen, Dear Colleagues,

As the chairman of GIIGNL, the international association of LNG importers, I would like to congratulate METI and APERC for maintaining despite the persistent pandemic this LNG Producer Consumer dialogue which is so important in these times of deep transformation and uncertainty.

Climate change, combined with technological and digital revolution as well as demographic evolution and societal aspirations, is among the toughest challenges we ever had to face. It is our duty, as industry leaders to propose options and implement energy solutions which contribute to balance social, economic and environmental requirements. Rapid and far-reaching transitions in energy, land, urban infrastructure and industry are needed. These transitions are unprecedented in terms of scale. They imply deep emission reductions in all sectors, a portfolio of mitigation options and significant investments. For this transition, LNG has a role to play.

Last year, LNG trade increased by 13% to reach 354 million tons and it is also expected to expand in 2020 - although at a slower pace - despite the various impacts of COVID 19. LNG's resilience is solid thanks to its safety track-record, its versatility, its environmental edge over coal and oil, as well as its flexibility, including its ability to complement domestic gas production and to support variable renewable electricity generation.

As a result, the LNG market is expected to double between now and 2040 according to most forecasts.

Despite these bright prospects, LNG's market expansion and its major role in the energy transition will only materialize provided that the competitiveness of LNG can be maintained but also that the environmental benefits of LNG are given all the attention and recognition they deserve. Yes, today, LNG is recognized as a significant contributor to the energy transition, but its long-term prospects are sometimes questioned because of its fossil fuel nature and because of the carbon footprint of the LNG supply chain itself.

This is why it is critical to reassert LNG's benefits in mitigating climate change:

Given the lower emission intensity of natural gas and thanks to the flexibility offered by gas-fired plants, LNG contributes to progress towards UN Sustainable Development Goal 7, as it can enable renewables integration without compromising affordability or reliability of energy supply.

As the Blue Sky policy in China has shown, gas and LNG can quickly substitute coal-fired heat production systems, thus helping to decarbonize by while cutting sulfur emissions as well as particulate matter and nitrogen oxides emissions.

Besides, as governments put in place post Covid-19 programs, it is useful to recall that natural gas and LNG use have the potential to fuel industrial recovery while reducing emissions compared with coal or oil, especially in sectors like fertilizers manufacturing or petrochemicals.

As the transport sector accounts for about one quarter of CO_2 emissions globally, it is equally urgent to foster the use of LNG in new markets (including small-scale LNG, bunkering and road transport) in order to contain emissions and clean up the air.

The LNG industry also has a role to enable the uptake of hydrogen when and where it makes sense. A hydrogen-based energy transition will not happen overnight. Natural gas and LNG's synergies with hydrogen could be fully exploited in order to create economies of scale. In some regions, blue hydrogen

production from natural gas coupled with carbon capture, utilization and storage could therefore be essential to transition to a green hydrogen economy.

Yet despite these benefits, the LNG industry is well aware that the growing role of LNG in the very long-term growth could be challenged by the need to further reduce the link between economic growth and CO_2 emissions, as well as by the falling cost of renewables.

In order for LNG to be part of a long-term solution, producers, consumers and policymakers should cooperate in order to:

- 1) Clean up the LNG chain by abating greenhouse gas emissions (from wellhead to terminal outlet), in particular fugitive methane emissions. Our industry is already taking a number of actions such as limiting venting and flaring, optimizing operations and equipment to minimize losses or conducting regular leak detection and repair campaigns. Yet there are today wide disparities in terms of emission intensity factors, or reporting and measurement methods. More transparency is needed, more actual data are required. As an industry, we have the opportunity to proactively develop uniform methodologies in order to monitor, report and control emissions from the LNG supply chain. The environmental case for LNG is not limited to beating the CO2 emissions performance of burning coal or oil. It also making sure that its own emissions intensity in particular regarding methane is as low as possible.
- 2) Develop partnerships and accelerate the efforts in developing new and cost-competitive decarbonization technologies. Electric liquefaction trains and integration of liquefaction projects with carbon sequestration already provide substantial emission reductions. However in all scenarios, technologies such as Carbon Capture Utilization and Storage will be required on a large scale to reach targets. As new technologies are implemented, our definition of gas will also evolve to progressively include new and renewable gases. Already today, bio-LNG and liquefied synthetic methane are viable and scalable solutions which can abundantly supply the maritime shipping sector and provide additional emission savings.
- 3) But even when emissions cannot be avoided fully, the LNG industry may offset the negative impact of its residual carbon footprint. Since 2019, several cargoes of "carbon-neutral LNG" have been delivered to customers in Asia. In order to expand the penetration of carbon-neutral LNG, customer education and cost competitiveness are to be developed. Currently, the adoption of carbon-neutral LNG mostly results from voluntary initiatives and it is not sufficiently incentivized. National policies should also ensure that offsets can be used in their existing trading schemes, as carbon allowances or as a way for offsetting existing taxation. The development of carbon-neutral LNG is an opportunity to contribute not only to decarbonization, but also to other areas of sustainable development including better access to energy, alleviating poverty or protecting biodiversity.
- 4) Finally, international cooperation is key: Governments, in the framework of the United Nations Framework Convention on Climate (UNFCCC), should strive to reach an agreement on the implementation of article 6 of the Paris Agreement, as to lay the foundation for an emissions trading system which could eventually lead to a global price on carbon. Only then will technologies be able to compete on a level playing field, which will enable the switch from more polluting sources to cleaner alternatives.

The task ahead of us is daunting. In the coming decades, LNG can provide a far-reaching contribution to achieve sustainable development goals, even beyond the energy sector. However, to speed-up decarbonization, governments should implement the right incentives to

develop decarbonizing option at scale and better recognize the full environmental optionality of LNG for the future.

For its part, the LNG industry is committed to further reduce its footprint and to implement industrial solutions in order to provide clean energy for the benefit of all.