



COVID-19 IMPACT SURVEY – CONFIDENTIAL

(June 2020)

COVID-19 IMPACT: SURVEY RESULTS

Amongst the initiatives taken by the GIIGNL Central Office to support GIIGNL members in their COVID-19 and post-COVID-19 actions, a questionnaire was sent to all GIIGNL member companies on May 6, 2020 in order to assess how they have been impacted by the COVID-19 pandemic and what are the main challenges that they have to face. The questionnaire also covered their views for the future as well as lessons learnt and recommendations for achieving resilience.

As of May 29, 2020, 47 responses had been received from all three regions (Americas, Asia, Europe). The present document is the interim result of the survey to date and shall be completed when additional contribution are received.

This paper presents the findings from the survey, structured around 4 main themes:

- 1- **Managing the crisis**
- 2- **Tomorrow's LNG world**
- 3- **Lessons and strategies to achieve resilience**
- 4- **Role of GIIGNL**

1. MANAGING THE CRISIS

1.1 Maintaining continuity

Most participants to the survey reported a strong impact on operations but no supply disruption. 54% of the respondents assessed the existing impact of COVID-19 on their organization as high (43%) or disruptive (11%). Compared to other categories, terminal operators/owners have been less strongly affected, 72% of them considering the impact as moderate when 75% of the LNG buyers/traders assessed the COVID-19 outbreak impact as high.

Operational issues are the most mentioned issues, encountered by 62% of the respondents. All categories of companies have had to adapt their operational procedures, in particular to manage physical deliveries with COVID-19 constraints. Terminal operators were the most impacted (84%), as exceptional health and safety measures had to be implemented to safeguard employees and maintain the continuity of operations.

Beside operational issues, **financial consequences** are deemed to be the most critical challenge to tackle as reported by more than a quarter (28%), when 21% mention management issues.

A vast majority of LNG organizations seems to have sufficiently robust IT systems in place, but IT issues were nevertheless quoted by 13% of the respondents.

The industry did not suffer any severe supply chain disruption: only 6% of the players experienced a lack of material or equipment, mostly of personal protective equipment.



COVID-19 IMPACT SURVEY – CONFIDENTIAL

(June 2020)

1.2 People first

An overwhelming majority of the respondents mentioned the **health and wellbeing of their staff** and business counterparts as the top priority.

Managers worked around the clock to implement new operational procedures to insulate and protect their operational workforce, as well as to adapt to reduced demand levels. For most respondents, working remotely from multiple locations and keeping teams highly motivated while minimizing the risk of contamination at the same time is the most challenging. Ensuring continuity of business activity requires to modify work settings, resulting in most cases in tele working and web meetings. Communication and coordination of response actions throughout all levels of the organizations were quoted as some of the main challenges. Shipping operations and ship/shore activities frequently resulted in increased bureaucracy.

Note : On March 30, April 9, April 27 and May 27, 2020, GIIGNL held webinars with TSG representatives and a selection of invited terminal operators to share COVID-19 measures and best practices in export and import terminals. The webinars allowed to note several common practices, such as additional hygiene measures, splitting of teams, reduction of team rotations, arranging onsite accommodation for workers, avoiding public transportation or car sharing and in general avoiding physical contact and reducing paperwork to the minimum. Maintenance works have been in most cases reduced to the strict minimum. No delays or disruption of operations have been reported. Loading arms connection/disconnection, crew changes and SIRE inspections onboard ships were critical safety points to monitor. At the end of May 2020, some terminals were starting to lift exceptional measures and to resume general maintenance operations while others were still operating under the strictest COVID-19 health and safety rules.

Managing the impact of the crisis on near term demand with limited resources and mobility was also quoted by more than one third of the respondents as a top challenge. The sharp decrease in demand entailed by the lockdown measures taken in several countries created logistical issues and several buyers mentioned LNG inventory management as a concern, as some players had to revise spot procurement strategies or defer prompt cargoes.

The crisis has largely **increased demand uncertainty**, which may have an impact both on the near term markets and on longer term business developments. Around 10% of the respondents indicated that the financial issues they have to face are due either to reduced revenues or to credit issues on the customer side.

Among the short-term issues to deal with, **maintaining relationships** with existing counterparts (vendors, customers), especially with new ones, was also highlighted as an unwanted consequence of remote work and travel restrictions.

1.3 A blow to LNG demand and a long recovery

Two thirds (66%) of all respondents either anticipate a decrease in sales or imports in 2020 compared with 2019 or do not know with certainty the future impact on their volumes. When it comes to the market outlook, LNG buyers and sellers do not share the same view: 67% of the buyers forecast a decrease in imports in 2020, while most of the sellers (75%) declared that they did not expect a decrease in sales.



COVID-19 IMPACT SURVEY – CONFIDENTIAL

(June 2020)

Most organizations expect that **the recovery period will be long**. More than half (53%) of them indicated that their company will not resume normal activities before Q1 2021 and one third even estimate that the return to normal will take place even later.

2. TOMORROW'S LNG WORLD

2.1 The future of LNG in the balance

Looking ahead, as stated by one respondent, “**the future of LNG currently hangs in the balance**”.

Whilst most players acknowledge the possibility of demand destruction in the short term across all regions, the COVID-19 crisis is estimated by 32% of the respondents to have the potential to grow LNG imports in the medium to long term. Competitive LNG prices could incentivize customers to increase the use of gas in the power sector and to reduce their dependence on coal. The potential for growing imports could largely vary from one region to another. Emerging countries, Latin America and Europe were cited as some of the most promising areas for additional imports. The abolition of destination clauses could also help revitalize the market.

On the contrary, 36% of the respondents expressed a rather pessimistic view on the outlook for LNG imports. According to most players, the ability to build additional demand will mostly depend on the length of the recession, on the pace of economic recovery and on the level of power and industrial demand. The financial stress caused by the crisis and the fall in oil prices could delay some investment decisions in new liquefaction and exert a negative impact on the development of new LNG supply. If LNG prices rise again because of a new market tightening, this could in turn curtail future LNG demand.

The outlook for imports remains largely uncertain, with 32% of respondents unsure about the impact of the pandemic on LNG's growth prospects. It is estimated that there will be more opportunities for flexible LNG volumes given the demand uncertainty. While the impact on existing regasification infrastructure is considered to be limited, the crisis could nevertheless reduce commitments to new infrastructure, hindering for instance specific segments such as small-scale LNG.

2.2 The energy transition in limbo?

47% of the respondents estimate that the crisis will undoubtedly accelerate the energy transition. There seems to be a consensus that the pandemic not only will but *should* result in policy action to achieve a greater diversity of fuels and more sustainable lifestyles.

However, **the energy transition will be a function of opposing forces**. On the one hand, the COVID-19 crisis will accelerate the change in mindsets, reminding organisations and citizens of the “*inter-connected*” nature of the world and emphasizing the importance of better air quality and of diversity of energy supplies. It may also accelerate the decentralization of energy production and delivery. The decrease in transportation and industrial demand could put further pressure on the oil industry, speeding up the decline of oil-based energy systems. In such a scenario, electricity and renewables are seen as potential winners, provided that policy makers prioritize cleaner energy and retain the financial strength to fund cleaner energy systems.



COVID-19 IMPACT SURVEY – CONFIDENTIAL

(June 2020)

On the other hand, the global economic downturn is reducing investment capabilities for governments and companies, which could in turn delay FIDs on renewable energy projects. Competitive oil and gas prices could also act as a neutralizing force which may slow down the transition and contribute to prolongate the role of fossil fuels.

Interestingly, LNG is viewed by one fraction of the respondents as a potential contributor to the energy transition (when it has the potential to replace oil and coal). However, when compared with renewables, LNG is rather regarded as a fossil fuel which could suffer from the energy transition.

Energy prices, availability of capital and strong policies will be key for the evolution of the energy transition, especially at the European level. As summarized by one of the respondents: *“The key lessons of the pandemic are that (1) humankind should respond proactively to risks to sustainability that science has identified (including pandemic and climate risk), and (2) humankind is now living at the edge of sustainability and action is required to protect humankind and environment. However, policy action supported by popular opinion are needed to accelerate the energy transition, and right now there is inconsistent support for such acceleration.”*

2.3 Future developments threatened by higher perceived risks

62% of the players indicated that their company’s business development strategy will (34%) or may be (28%) durably impacted by the crisis.

43% of the respondents told us that the current uncertainties are likely to force them to reduce capital investment in the short or medium-term. Poor demand prospects, tighter finance control and pressure to reduce costs are the main reasons behind these cuts.

Some participants declared that they are currently deferring infrastructure expansion plans or are considering to do so. In some cases capital expenditures may be reduced for group strategy reasons rather than on a stand-alone basis.

Economic growth was quoted by a majority of the players as the main uncertainty to monitor.

In the short-term, demand destruction and uncertainty around LNG demand in the key markets seem to be the main concerns for LNG players.

The high **volatility of energy prices** is limiting financial resources and hindering long-term business planning, which affects the way companies manage LNG supply portfolios, LNG assets such as liquefaction, ships and terminals, power generation portfolios and future LNG projects. Uncertainties around LNG price spreads and LNG’s competitiveness vis a vis other fuels are closely monitored, especially in price sensitive markets.

In the longer term, economic growth also remains a concern quoted by most respondents, immediately followed by **greenhouse gas policies** in connection with LNG. CO₂ pricing measures and availability of financing for fossil fuel projects will determine the future LNG demand potential.

Uncertainties related to digitalization or renewables were only quoted by a small minority of respondents. This may have to do with the topic of the survey which deliberately focused on the impact of COVID-19.



COVID-19 IMPACT SURVEY – CONFIDENTIAL

(June 2020)

2.4 LNG commoditization: the fundamentals remain in place

The current situation characterized by highly volatile energy prices is reducing the level of risk that participants are willing to take. In addition, low oil prices can disincentivize the switch to LNG and exert a negative influence on project developers and investors. Given the situation, some LNG traders are taking a “risk-off” position, which is reducing the volumes of LNG transacted on the spot or short-term market. Trading is also affected by the need for traders to work remotely, which created additional challenges and resulted in some cases in reduced activity. In some cases, LNG buyers are only taking long-term LNG volumes and one respondent even estimated that the commoditization of LNG has “*decelerated greatly*”.

However, low spot LNG prices also increase commercial opportunities. The currently oversupplied market leads some of the buyers to prefer spot or mid-term LNG contracts. Increased uncertainties for sellers and buyers can be managed through more flexible contracts and through a greater use of derivatives. As a result, 43% of the respondents estimated that the COVID-19 crisis will accelerate the commoditization of LNG.

A number of respondents also highlighted that **commoditization will take place regardless of the crisis**. Before the virus outbreak, the LNG market activity was strong with growing LNG supplies, available shipping capacity and many participants in the market. Given the large supply volumes expected to reach the market in future years, this tends to indicate that the pace of commoditization will mostly depend on the speed of economic recovery.

3. Lessons and Strategies to achieve resilience: Protect, Communicate, Prepare

The suggested solutions for LNG companies to manage the crisis are extremely varied, ranging from short-term recommendations to longer-term strategies.

In the shorter-term, **protecting teams** by preventing the spread of Covid-19 and monitoring the health and wellbeing of employees is the number one recommendation. Introducing clear health and safety instructions to employees and contractors, providing equipment/tools to work remotely are a must. Such measures are a prerequisite to avoid supply chain disruptions and ensure a stable LNG supply and maximum availability of plants, thus enabling continuity of operations.

Interestingly, “**communication**” - **whether internal or external** - was the word most quoted by the respondents. Keeping contact in contactless times, staying “*customer-focused*”, focusing on “*customer intimacy*”, “*staying close to customers, banks, shareholders*” and maintaining good long-term relationships with all stakeholders is a concern for most players who are aware of the need to better understand their counterparts and the uncertainties faced by all. As stated by one respondent, “*LNG companies need to maintain strong lines of communication and exchange up-to-date information to find opportunities, to match complementary needs and to optimize.*”

Fostering a proactive risk management strategy and bracing-up for future shocks is the third main recommendation. In the mind of the respondents, **preparing** for such shocks primarily means reducing costs, reviewing operational expenditures and keeping a strong balance sheet.

Some companies also recommend to risk assess business models, run stress tests draw lessons from benchmarking the winners and losers of the crisis, “*use the lessons learned to shape the organization in a most effective way and get better prepared to the next pandemic*”, leveraging technology,



COVID-19 IMPACT SURVEY – CONFIDENTIAL

(June 2020)

digitalization and collaborative tools to become more efficient, which eventually boils down to communication as well.

Finally, players recommend to develop more flexible and agile portfolios as well as to give priority to contracts which incorporate the existing uncertainties more comprehensively, if needed through adequate Force Majeure and/or termination clauses.

4. GIIGNL: I.A.M (Inform, Advocate, Monitor)

A large number of respondents are relying on GIIGNL to gather LNG players together and encourage **cooperation, coordination and sharing of information**. In a confusing market especially, exchanging views and ideas and sharing lessons and good practices is deemed essential, starting with lessons and protocols for crisis situations drawn from the current crisis.

A majority of the respondents are expecting GIIGNL to bring more transparency to the market, in particular on emerging countries. They primarily want to benefit from timely market information, and secondly from technology or innovation-related information. Roundtables, reports on market trends, quarterly supply/demand balances, outlooks or event project feasibility assessments were the most quoted potential deliverables. It was also suggested that importers could provide GIIGNL with an estimate of their LNG demand for the following rolling 5 years, so that the organization could make and provide an estimation of future demand growth.

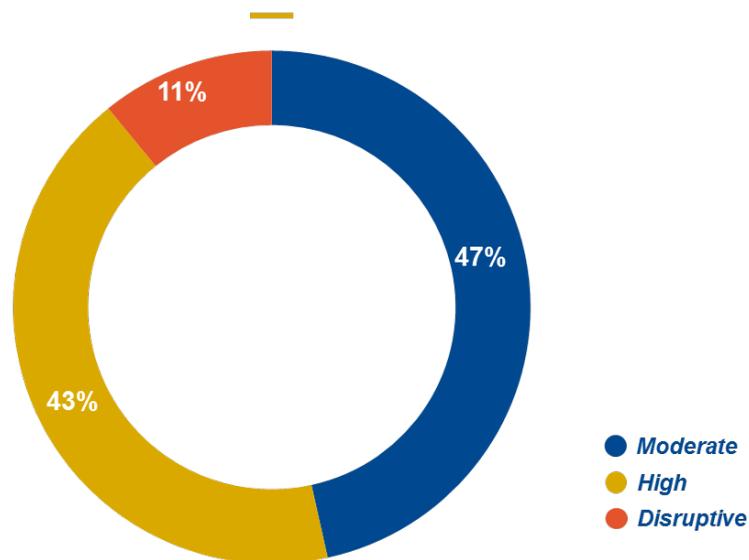
Secondly, GIIGNL is expected by to continue **advocating** for LNG. As the long term viability of LNG being questioned, investors are harder to convince and GIIGNL should continue to promote LNG as a key energy source in the medium to long term, leading to demand-creation, especially in Asia. Showing in particular LNG's affinity with renewable energy should be the focus. Around the same idea, several respondents anticipate a role for GIIGNL in assessing the impact of greenhouse gas emission policies, but also in helping to measure and control emissions.

Finally, it must be mentioned that some players would like GIIGNL to develop **oversight** capabilities and to act as a watchdog to prevent market manipulations. As one player emphasized, GIIGNL could play a role to “rectify the LNG market, often crooked by unreasonable behavior”, prevent some players to be “*unfairly treated*” and reinforce confidence in the market.

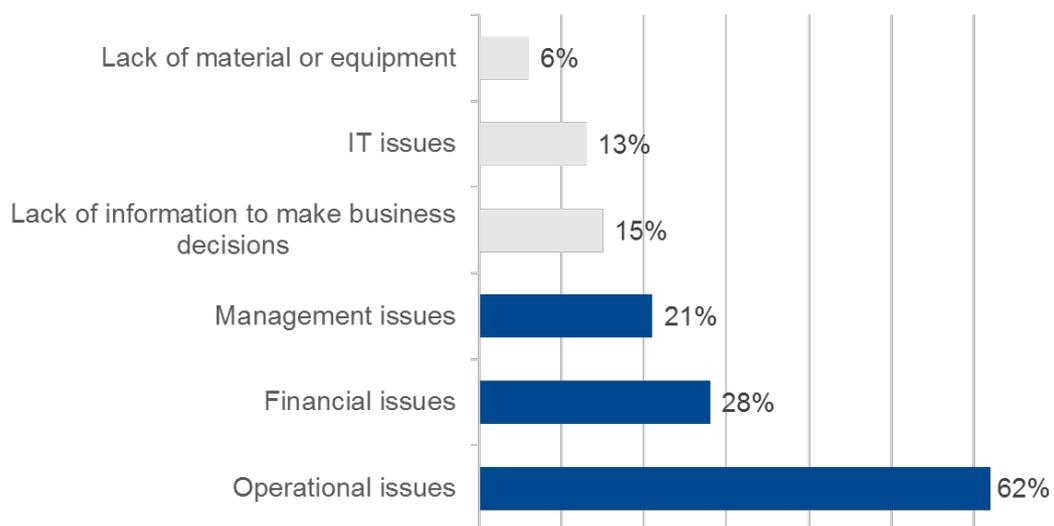


ANNEX

How would you describe the impact of the Covid-19 crisis on your organization?



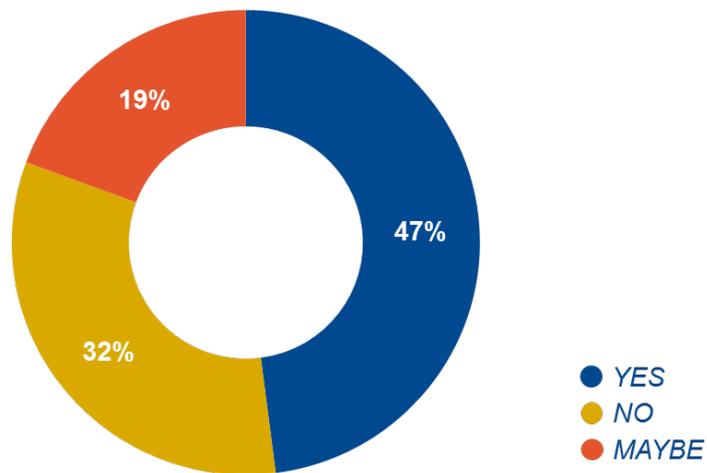
What are the biggest challenges that your company has to face because of the crisis?



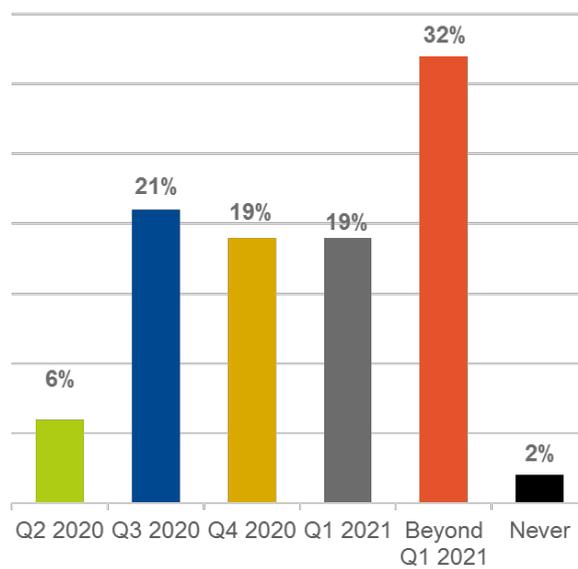


COVID-19 IMPACT SURVEY – CONFIDENTIAL
(June 2020)

Do you foresee a decrease in your company's LNG sales/imports in 2020?



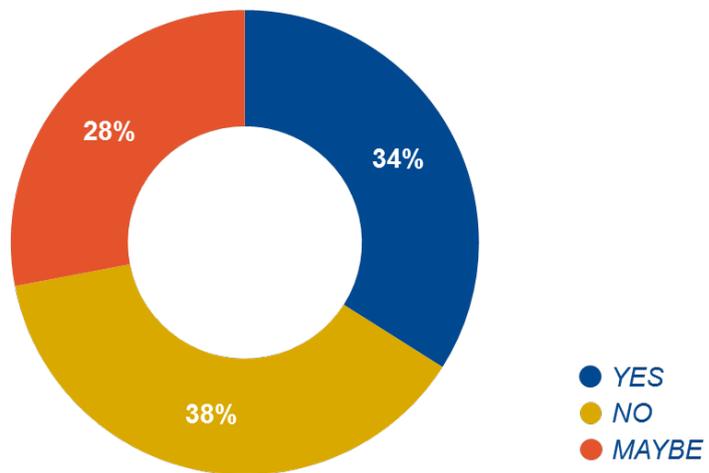
When do you expect that your company's operations will be getting back to "normal"?





COVID-19 IMPACT SURVEY – CONFIDENTIAL
(June 2020)

Do you expect that your company's business development strategy will be durably impacted?



Does your company plan to cut capital expenditures in the short or medium-term?

