SUSTAINABILITY DEVELOPMENT

Greenhouse gas (GHG) emissions, carbon emissions, carbon efficiency, and energy efficiency are all drawing increased attention associated with growing concerns about global climate change and associated environmental damage. LNGL works to avoid, mitigate, and minimize environmental impacts where we do business, seeking to create mutually supporting economic and environmentally sustainable solutions. We recognize that climate change and limits on carbon emissions pose potential long-term risks to achieving LNGL's Vision.

Natural gas is the hydrocarbon fuel with the lowest carbon emission intensity, emitting lower quantities of carbon per unit quantity of heat than any other hydrocarbon including coal, oil, oil-based products (i.e. gasoline, bunker fuel), and propane. Displacing coal with natural gas reduces power plant GHG emissions by approximately fifty percent, as well as reducing or eliminating the emissions of oxides of nitrogen (NOx), sulphur, particulates, and mercury. Natural gas is broadly viewed as a "bridge fuel" while the world moves in the direction of increasing renewables, providing a means to substantially reduce carbon emissions on an immediate basis. Natural gas also serves a complementary role with renewable energy, providing reliable and fast acting back-up power during periods when renewable power output becomes limited due to weather conditions or day-night cycles.

The production of LNG from natural gas is highly efficient, with nominally 90-92% of the energy value of the feed gas delivered into the LNG. LNGL's patented OSMR® technology offers a range of economic, ecological, and social benefits, with the objective being reduced capital and operating costs, a smaller environmental footprint, and simple start-up and operation. OSMR® technology is energy efficient, combining the use of ammonia as a pre-cooling refrigerant, high efficiency gas turbines, use of combined cycle to further improve gas turbine cycle efficiency, and low-pressure boil-off gas re-liquefaction into a process delivering the lowest fuel use and CO_2 emissions available. Ammonia is classified as a natural refrigerant (naturally occurring in the biochemical process), with a global warming potential (GWP) of zero and an ozone depletion potential (ODP) of zero, in addition to being inherently more energy efficient than other commonly used LNG pre-cooling refrigerants. Both Greenpeace and the United Nations Environment Programme (UNEP) support the use of natural refrigerants including ammonia. Overall, OSMR® technology results in a minimum two percent improvement in the liquefaction plant energy efficiency. For an 8 mtpa facility such as Magnolia LNG, this translates into a reduction in CO_2 emissions of 500,000 metric tonnes annually compared to the best conventional technologies.

To address sustainable development broadly including the topic of carbon emissions, LNGL reviewed programs used globally, including Global Reporting Initiative (GRI), formerly the Carbon Disclosure Project (CDP), Climate Disclosure Standards Board (CDSB), and Task Force on Climate-related Financial Disclosures (TCFD). LNGL is currently in the development stage, with no operating assets and consequently most of these global programs do not align closely with our activities. Based on our review, we have selected the United Nations Division for Sustainable Development Goals (DSGS) program as the framework for our current sustainability activities.

The United Nations (**UN**) identifies Sustainable Development as, "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs." To this end, in September 2015, the UN adopted a set of 17 specific Sustainable Development Goals (**SDG's**) with a target of achieving them by the year 2030.

In a similar manner, we seek to understand where our organization has material exposure to economic, environmental, and social sustainability risks, and how we can manage or intend to manage these risks. The ability to manage our business in a sustainable manner can result in a substantial impact on our long-team viability, as well as the long-term impact LNGL has on society and the environment.

Of the 17 SDGs, LNGL has identified six where we believe our performance can directly and positivity impact on them within the communities where we are working to develop our projects:

Goal 7: Affordable and Clean Energy;

Goal 8: Decent Work and Economic Growth;

Goal 9: Industry, Innovation and Infrastructure;

Goal 11: Sustainable Cities and Communities;

Goal 12: Responsible Consumption and Production; and

Goal 13: Climate Action.

Following is an overview of how we are working within our projects to support these five key topics.

AFFORDABLE AND CLEAN ENERGY

Access to affordable energy underpins economic growth and is essential to the aspiration of ending global poverty. According to the UN, energy is central to nearly every major challenge and opportunity the world faces today. Jobs, security, climate change, food production, and improved family incomes all require access to affordable energy as an essential element to achieve success. Energy is fundamental to transforming lives and economies. Yet today, one in five people on our planet lack access to modern electricity, and nominally three billion people rely on wood, coal, charcoal, or animal waste for cooking and heating. While we seek to improve this imbalance, we must also recognize that inefficient production of energy has been identified as a major potential contributor to climate change. So as a society we are faced with a need to significantly improve access to energy as a means to fight poverty, but we must do this in a way which minimizes carbon intensity at the same time.

We consider our OSMR® natural gas liquefaction technology to be a part of the solution. The patented OSMR® technology enables LNG to be produced using less energy than conventional technologies, generating lower greenhouse gas emissions per unit volume of product. The OSMR® technology also results in lower priced facilities and optimized operations costs, enabling cleaner burning natural gas to compete more economically with coal and oil. Since natural gas generates substantially less CO_2, particulate emissions, and other pollutants than coal and oil do for the same quantity of energy delivered, better economics increase the

opportunity to use natural gas in place of these traditional energy sources, improving our environment. Additionally, while natural gas is a fossil fuel, the highly flexible nature of natural gas fueled power plants make gas a superior choice to complement renewable energy to maintain stability in modern power grids during periods of low sunlight or wind availability.

DECENT WORK AND ECONOMIC GROWTH

According to the UN, sustainable economic growth will require societies to create the conditions that allow people to have quality jobs that stimulate the economy while not harming the environment. Job opportunities and decent working conditions are required for the entire spectrum of the working age population. LNGL has commissioned economic studies associated with our Magnolia LNG project, which can be extrapolated to its sister project Bear Head LNG as well.

Magnolia LNG is committed to fostering the growth of a skilled local workforce to build a sustainable, mutually beneficial relationship with the region and state. Magnolia will generate approximately 190 high paying direct permanent jobs in the City of Lake Charles and the regional southwest Louisiana area. These permanent direct jobs are expected to generate an additional 1,200 indirect jobs in the region. In the nearer term, the construction of the Magnolia facilities will require 1,500 craft labor, supervisory and support personnel at the site, as well as hundreds of jobs in the supplier shops and fabrication yards where Magnolia LNG equipment, materials, and modules will be produced.

The modular construction strategy adopted as part of the OSMR® technology serves to minimize the "boom-bust" cycle that too often accompanies major facility development, as the influx of temporary craft labor to support construction is reduced with quantities of work directed to established module fabrication yards.

The economic impact of Magnolia LNG on southwest Louisiana is substantial. About US$700 million will be invested in Calcasieu Parish (**Parish**), which in turn is projected to generate nearly US$1.3 billion in new sales in the Parish, US$380 million in new household earnings and millions in associated sales tax collections for the Parish government. Globally, the total direct spend just to deliver Magnolia LNG into operations will approximate US$6 billion including engineering, procurement, fabrication, construction, Owner's costs and the cost of financing construction.

To support preparation for this growth, LNGL has partnered with McNeese State University and SOWELA Technical Community College in Lake Charles, and with Cape Breton University in Nova Scotia to align engineering and technical education programs with the future needs of our regional projects.

INDUSTRY, INNOVATION AND INFRASTRUCTURE

According to the UN, investments in infrastructure – transport, irrigation, energy and information, and communication technology – are crucial to achieving sustainable development and empowering communities. It has long been recognized that growth in productivity and incomes, and improvements in health and education outcomes require investment in infrastructure.

LNGL's projects are fundamentally energy infrastructure projects. They enable clean burning natural gas to be transported from regions of plenty to regions of scarcity. Global natural gas demand and consumption is predicted to grow substantially during the next 20 – 30 years as more and more regions of the world begin to access this fuel for power generation, industry, fertilizer production, home heating, and transportation. The energy infrastructure delivered by LNGL will help to ensure the availability of natural gas remains adequate to meet demand, and that cost of the natural gas remains competitive with traditional fuels such as coal and oil.

The OSMR® technology is at the heart of this development, enabling LNGL's plants to be built faster and at lower cost, further supporting the expansion of natural gas use globally. In 2017, IChemE, the UK-based Institution of Chemical Engineers, recognized us and our patented LNG liquefaction process with two "Highly Commended" awards in the Energy and Oil & Gas categories, recognizing the importance our OSMR® technology can play in the global energy industry of tomorrow.

SUSTAINABLE CITIES AND COMMUNITIES

We are proud to have had the opportunity to contribute to the communities in which we operate.

In Lake Charles, where Magnolia LNG will be built, we have established a Community Action Committee consisting of volunteer residents of the Southwest Louisiana region to help guide Magnolia LNG's areas of giving. Focus areas include civic and human needs in the community while promoting healthy lifestyles, cultural arts that promote access to underserved students and communities, disaster relief efforts, and environmental, preservation, and wetland initiatives. The efforts particularly seek to support groups that reflect the diversity and inclusiveness of the local community.

Magnolia LNG is very proud to have been selected by the Mayor of Lake Charles for receipt of the 2017 Patron of the Year award for support of the local community. In addition, Magnolia LNG staff support and attend activities in the region including Calcasieu Parish's Southwest Louisiana Task force for Growth and Opportunity (Go Group) who focus on strategic planning associated with regional growth, The Propeller Club who promote the well-being of the maritime community, and the Calcasieu River Waterway Harbor Safety Committee.

In Houston, LNGL team members have provided support as volunteers to the Houston Food Bank, a non-profit organization that collects and distributes food to hunger relief charities. Following the devastating floods from Hurricane Harvey that impacted thousands in the Houston area, our employees and their families were out in the community helping to clean out homes damaged by the storms.

In Nova Scotia, home to our Bear Head LNG and Bear Paw Pipeline projects, LNGL staff are active in the community including the region of our project site on Point Tupper, Richmond County, Nova Scotia as well as in Halifax where our project office is located. This year, Bear Head LNG was proud to be a foundation sponsor for Grand-Pre' 2017, a reconciliation and celebration of over 400 years of friendship and alliance between the indigenous Mi'kmaq people and the Acadians, at the Grand-Pre' UNESCO World Heritage Site. Bear Head LNG is a member of the Cape Breton Partnership, the Straights Area Chamber of Commerce, the Maritime

Energy Association, and sponsors local arts, activities, and charities including the Port Hawkesbury ROC Centre, which assists people with disabilities work towards their hopes and dreams, St. Martha's Hospital Foundation, and the Granville Green street concert series.

RESPONSIBLE CONSUMPTION AND PRODUCTION

Achieving sustainable consumption and production patterns requires a strong national framework that is integrated into national and regional plans, coupled with sustainable business practices and effective management of hazardous chemicals and wastes, according to the UN mandate. On the US Gulf Coast and in Eastern Canada, the mature regulatory permitting, monitoring, and reporting framework provides the foundation for achieving this goal. The design and siting of both the Magnolia LNG and Bear Head LNG projects are configured and structured to fully comply with all regulatory requirements, to report emissions accurately, and to enable minimization of waste products from the facilities, as well as to isolate both staff and regional communities from the impacts of any emissions that do exist.

LNGL's OSMR® technology inherently supports the objectives of this UN Development Goal through its high degree of energy efficiency and industry leading emissions profile. This enables our projects to produce LNG while minimizing the quantity of natural gas consumed in the process while delivering the maximum quantity of the energy in the natural gas feedstock to the market. The compact modular design concept adopted as part of the OSMR® technology approach minimizes the physical area required for the facility as well as the size of the workforce needed at the site. This reduces the extent of temporary facilities necessary to support construction as well as minimizing the boom-bust impact of temporary construction labor on the regional community. For Magnolia LNG, dredge spoils generated by the excavation of the marine berth are being used to reinstate wetland areas lost in a recent hurricane. An innovative start-up and cool-down gas recovery system will significantly reduce start-up flaring as well as enhancing the overall economic efficiency of the LNGL facilities.

CLIMATE ACTION

The UN highlights that climate change is now affecting every country on every continent, disrupting national economies and affecting lives, costing people, communities, and countries dearly. The impact of greenhouse gas emissions from human activities is still debated but widely identified as a driver of climate change. Climate change is a global challenge that is not impacted by national borders. Emissions anywhere affect people everywhere. Movement towards a lower-carbon economy requires international cooperation and coordination to be effective.

LNGL's development projects support the transition to a less carbon intensive economy. Although still a fossil fuel, natural gas is the least intensive, generating nominally half the carbon dioxide emissions per unit quantity of energy delivered than coal, and a third less than oil. Natural gas also emits less sulphur, NOx, particulates, and other pollutants than those traditional energy sources. Additionally, as identified in the U.S. National Bureau of Economic Research working paper 22454 (Bridging the Gap: Do Fast Reacting Fossil Technologies Facilitate Renewable Energy Diffusion; **http://www.nber.org/papers/w22454**,) natural gas fired electrical generation facilities are vital to enable deep penetration of renewable energy into a power grid without jeopardizing grid stability and reliability. It is clear that natural gas (and by necessity LNG) represents the bridging fuel of choice required globally to enable progress to a fossil-fuel free global economy.

LNGL's patented OSMR® technology enables LNG to be produced with lower carbon intensity than traditional processes. All LNG facilities are efficient, delivering over 90% of the feed gas energy to the market. OSMR® generates a further improvement in this process. Ammonia, a natural refrigerant with a zero greenhouse gas potential and zero ozone depletion potential, provides precooling refrigeration 20% more efficient than the traditional propane refrigerant. Combined cycle gas turbines and low-pressure boil-off gas re-liquefaction further reduce energy consumed in the natural gas liquefaction process. OSMR® technology's net result on greenhouse gas emissions is substantial, representing a reduction in CO_2 emissions of 500,000 metric tons/year from the Magnolia LNG plant capacity when compared to widely used older technologies.

Although LNG export facilities do consume energy and consequently generate CO_2 as part of the liquefaction process, when LNG is used to replace coal burning as is being done in China, Korea, and other places in support of the Paris Agreement at COP21, the reduction in global CO_2 emissions is substantial. The LNG produced in a facility such as Magnolia LNG will displace 25 million tonnes of coal per year, which will reduce global CO_2 emissions by 32 million tonnes annually compared to the emissions from the coal fired power plant. The equivalent values for a 12 mtpa facility such as Bear Head LNG are displacement of nearly 40 million tonnes of coal, reducing annual CO_2 emissions by 48 million tonnes.

LNGL's Magnolia LNG and Bear Head LNG projects together represent a reduction in global CO_2 emissions of 80 million tonnes every year. This is the equivalent of removing 17 million cars from the road.

LNGL's OSMR® technology also enables a smaller footprint for our LNG facilities. Magnolia LNG will develop liquefaction capacity using only 115 acres (47 hectares) of land. The land itself is a dredge spoils disposal site currently comprised of scrub brush and a few small scattered trees in an industrial park, minimizing impact on regional wildlife. In addition, spoils from the excavation of the LNG ship berthing pocket on the existing industrial canal will result in the restoration of up to 100 acres of wetlands washed out by Hurricane Rita in 2005.

In summary, we are proud to be a strong supporter of global sustainability goals as an integrated element of our project development activities consistent with our stated Vision, Mission, Values, Strategy statements.