# **Engineering transition**

Rachel Clingman, McDermott's Executive Vice President of Sustainability and Governance at McDermott, answers our questions about engineering the energy transition

## What are McDermott's priorities in relation to the energy transition?

We have a number of priorities based on the belief that multiple avenues will be needed to decarbonize capital infrastructure at scale and at the pace required while maintaining accessibility and affordability. We are actively partnering with clients and other innovators in five areas where we believe we will have the most meaningful impact on decarbonization. We refer to our focus areas as net zero [low carbon] delivery; hydrogen; carbon capture, utilization and storage (CCUS); offshore wind; and circular economy.

Net zero delivery is exciting because we are partnering with key clients and vendors to reduce carbon in existing energies such as LNG, upstream oil and gas, refined products and petrochemicals production. To support our clients in carbon reduction, we, along with our partners and vendors, have tested and used designs and materials to reduce the carbon impact of existing or new facilities. We have built and are working on LNG facilities with dramatically lower emissions, striking a balance between decarbonization and access to affordable energy. One of our key achievements is that we built the world's largest LNG e-drive facility in Freeport, Louisiana, which allows LNG plants to use renewable power. There are only two plants with this capability in the world.

In the area of hydrogen, McDermott has partnered with innovative technology

providers and clients to support both renewable (green) and low-carbon (blue) Hydrogen projects, with an emphasis on lifecycle decarbonization and integration at scale. As an example, earlier this year, we were awarded a New Jersey Natural Gas power-to-gas facility earlier this year to produce green hydrogen from solar power and inject that back into the existing natural gas distribution network.

In CCUS, our historical experience in gas processing and storage and relationships with leading technology providers make McDermott a natural partner for companies progressing capture, removal and storage of CO2.

We are also leveraging our marine and offshore capabilities to design, fabricate and install large substations for offshore wind developments, an exciting area in which we see a continuous need for innovation to drive down the levelized cost of electricity. To promote a circular economy, we are using McDermott's experience with petrochemical and refining processes to innovate and efficiently develop advanced recycling and renewable fuels, chemical recycling, and/or biochemical concepts to retrofit and newbuilds. Recent commitments by governments and companies to sustainability and decarbonization targets are increasing activity in energy transition. We are excited by the scale and pace of developments to achieve these targets. We believe that our strengths in standardization and modularization combined with digital optimization tools

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#### How do you maintain the dual focus of reducing your own carbon footprint and enabling your partners to do the same? It is a challenge, and no one company has all of the answers, but we rely upon the exceptional talent and commitment of our workforce, strong collaboration with our

workforce, strong collaboration with our clients and partners, and our corporate values.

We are committed to efficiency and sustainability as core elements and value our business. We've announced targets and are implementing sustainable initiatives across projects, andassets. We are excited to be reducing energy use and emissions at our offices, project sites, and facilities; reducing waste generation from operations; improving water stewardship; innovating on marine and coastal ecosystem preservation and impact mitigation; and supporting the conservation, restoration, and sustainable use of land.

Along with our clients and operators, we need plans and tools to achieve our goals. Members of our Sustainability and Operations teams have come up with some creative and effective tools to support enhanced reporting and sustainable operations. As an example, our in-house teams created a tool to measure internal Scope 1, 2 and 3 emissions across our operations to support our greenhouse gas (GHG) management system and, through that, our target reductions. Our method draws from various standards and guidance documents like the GHG Protocol, IPIECA reporting guidance, and the Encord Construction CO2eq Measurement Protocol. We collect

data from worksites where we have operational control, including our own offices, facilities and vessels, as well as joint ventures where we have at least 15% equity. Our operations teams in marine, fabrication and construction work with our corporate sustainability team to collect data on fuel, waste, electricity and other emission sources and plan to use software tools to generate data on Scopes 1, 2, and 3 GHG emissions. We certainly don't claim to have all the answers, and we are working through challenges such as the remoteness of many construction sites, the temporary nature of EPC work, and constraints for alternative power sources. We recently launched an EPC Decarbonization Taskforce made up of project, construction, fabrication and environmental specialists to work collaboratively and identify our best opportunities and solutions.

We are actively working with key suppliers on Scope 3 emissions to understand their carbon footprint reduction programs and highlight areas in our supply chain where we can leverage synergies for both quick wins, such as in steel products and logistics, and other areas such as equipment. In collaboration with our partnerst, we are focused on seven high impact supply categories to reduce carbon footprint: steel products, equipment (static, electrical, instrumentation, and rotating), logistics, subcontractors (civil, piping, mechanical), cable, fuel, and valves.

## Are sustainability and profitability linked? If so, in what way?

Sustainability and good financial performance are connected in both measurable and intangible ways. Numerous studies support a correlation between sustainability, good governance and profitability, including a McKinsey study which found that companies with higher ESG ratings have a lower cost of debt and equity and outperform the market both in the medium and long term.

We also see sustainability as part of robust client service and client partnership. For years, our teams have



developed and delivered world-leading and record-breaking projects. Today, our teams dedicated to sustainability and energy transition continue to innovate and are creating new standards and offerings. Our experienced teams understand new opportunities in emerging and developing markets and also partner effectively with clients to create new designs and ways of working. We've had success and very positive feedback from clients on new products and ways of working.

Clearly improving resource management and simplifying our supply chain also tend to reduce operating costs and directly impact the bottom line. Our Sustainability vision and principles also strengthen risk management and position us to avoid or mitigate reputational, operational and regulatory risks. As we continue to progress and strengthen computing and communicating the financial and non-financial benefits of sustainability, the value created by sustainability efforts will become more clear with time.

## How does the energy transition figure into McDermott's long-term plans?

Energy transition is part of our immediate and long-term plans and will drive longterm growth for McDermott. Globally, we see meaningful support and commitment to achieving decarbonization targets. Most of the largest economies, those jointly responsible for over 80% of global GDP, have implemented some form or decarbonization strategies and/ or targets. Many of these targets are ambitious and time-sensitive, and that creates an opportunity and a challenge for McDermott, and the industry as a whole, to enable delivery of energy that is sustainable, affordable, available and safe. Missing any of these elements would be a suboptimal solution for our clients, our business and society as a whole. McDermott has the skill, customer base and commitment to continue to play a leading role in supporting our clients and our business in meeting their challenges and creating value through low-cost, reliable, and sustainable energy. O