Environmental Management

WHY IT MATTERS

We understand the importance of minimizing the environmental impacts of our global operations and commit to reducing our environmental footprint and improving resource efficiency.

HOW WE DO IT

Our approach to managing environmental risk and minimizing our impacts is governed by an Environmental Management System that conforms to the ISO 14001:2015 Standard. This system addresses environmental aspects and impacts to identify risks associated with our operations, controls to mitigate them, and compliance with applicable environmental laws and permits.

WHERE WE'RE GOING

McDermott continues to further our commitment through the following guiding principles:

- Increasing our use of renewable energy across our operating sites through the use of onsite solar panels and/or grid sourced renewable energy
- Identify opportunities to optimize use of energy or fuel consumption through the use of digital technologies and/or behavioral changes
- Reduce generation and disposal of waste through improved waste management planning
- Reduce consumption of natural resources, namely water, through enhanced recycling practices

TARGETS

50% reduction in waste generation by 2030.

Zero office waste-to-landfill by 2025.

50% reduction in Scope 1 & 2 GHG emissions by 2030.

Net Zero Scope 1 & 2 GHG emissions by 2050.

35% reduction carbon footprint across 10 key supply chain categories by 2030.

Environmental stewardship is a key responsibility of sustainable operations. We believe we can have a significant impact in the global Energy Transition through how we provide services and deliver projects for our customers. Overall, as an EPCI contractor we must identify opportunities to reduce GHG emissions across our operations to deliver projects with the lowest carbon EPCI footprint possible. All McDermott sites are required to complete an Environmental Aspects and Impacts Assessment, which includes controls for impacts. The aspects and impacts considered as part of this assessment cover a range of environmental matters, including:

- Use of energy, materials, and other resources
- Water and waste management
- Impacts to land, flora, fauna, wildlife, and other ecosystems
- Pollution prevention
- Air quality management
- Chemical management
- Spill prevention, control, and countermeasures (SPCC)

Based on each environmental aspects and impacts assessment, our management team establishes controls and strategies to reduce, prevent, and mitigate impacts to protect environmental resources.

GHG Emissions

Value Chain	SUPPLY CHAIN	MCDERMOTT OPERATIONS	CLIENT OPERATING FACILITY
Sustainability Goal	**SUSTAINABLE SOLUTIONS** **2030:** 35% reduction in carbon footprint across 10+ key supply chain categories	**ENVIRONMENTAL FOOTPRINT** **2030:** 50% reduction in Scope 1 & 2 GHG emissions **2050:** Net Zero Scope 1 & 2 GHG emissions	**SUSTAINABLE SOLUTIONS** **2025:** Significantly reduce carbon footprint of facilities we design and build for customers
	UPSTREAM SCOPE 3	SCOPE 1 & 2	DOWNSTREAM SCOPE 3
	McDermott as an EPCI contractor is uniquely positioned to influence the complete value chain of GHG emissions. Our greatest contribution is offering engineered or technology-based solutions to support our clients & suppliers in achieving emissions reduction.		
Emissions Reduction Approach	Supplier Engagement Strategy	Decarbonization Strategy	ArborXD and Proactive, Early-Stage Customer Collaboration

McDermott's position as an integrated EPCI company with customized sites, yards, vessels, and project teams uniquely positions us to measure, control, report, and reduce our carbon emissions consistently from concept through commissioning. Our program to track GHG emissions across locations, project sites, and vessels creates reliable reporting and improves emissions-reduction strategies for our suppliers, through to our operations and customers.

We set an internal target incorporated into our executive compensation to reduce our operations carbon intensity by 5 percent from the 2020 baseline. In 2021, we reduced our overall carbon intensity from 3.77 tonnes of CO_2e/1,000 workhours to 2.70 tonnes of CO_2e/1,000 workhours. This is a 28.5 percent reduction in overall carbon intensity for the year. Globally, fabrication activities emissions were reduced due to implementation of sustainability initiatives such as sourcing renewable energy power. Overall Construction and Fabrication GHG emissions intensity was reduced from 1.62 tonnes CO_2e/1,000 workhours in 2020 to 1.13 tonnes CO_2e/1,000 workhours in 2021. This represents a 30 percent reduction in GHG intensity for the year. Marine carbon intensity declined in 2021 due to an increase in project activity and improved vessel utilization. The marine vessel GHG intensity globally reduced from 5.76 tonnes of CO_2e/hours of operation in 2020 to 4.14 tonnes of CO_2e/hours of operation in 2021, a 28 percent reduction for the year.

Total Scope 1 and 2 Emissions by Year

Total Scope 1 and 2 Emissions by Source by Year

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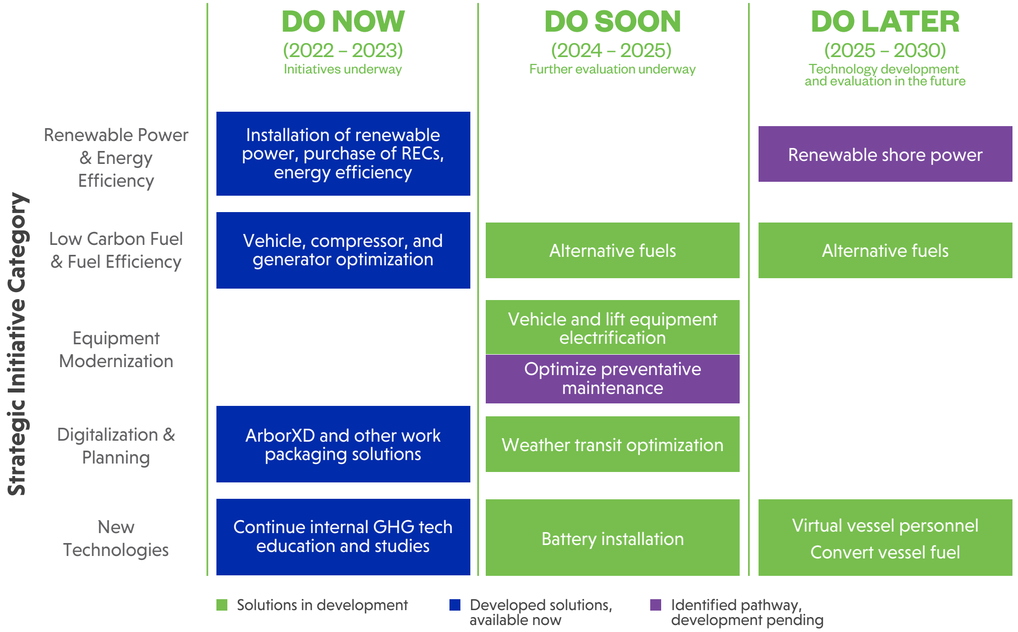
McDermott's Decarbonization Strategy: Marginal Abatement Cost Curve

In 2021, McDermott developed a marginal abatement cost curve (MACC) to identify sustainability initiatives with abatement potential organized by economic cost. The MACC was developed to provide initial framing and help prioritize decarbonization options for further evaluation by grouping data and inputs and providing a broad cost/benefit overview. We used the results of the MACC to identify global "move forward initiatives" that form the basis of our decarbonization strategy in 2022. Examples of initiatives evaluated include installation of onsite solar panels, accessing renewable energy via power purchase agreements or energy attribute certificates, compressor optimization, electrification of site vehicles, and conversion from onsite diesel generated to grid power.

MACC – Informs McDermott's Decarbonization Strategy and Priorities



SCOPE 3

Supply Chain Emissions

In 2020, we identified our top 10 categories of suppliers to establish our baseline emissions and refine our methodology for calculating Scope 3 supply chain emissions. We have set a goal to reduce our supply chain GHG emissions by 35 percent over 10 categories - steel products, static equipment, logistics (including marine support vessels), civil contractors, cable, fuel, E&I equipment, valves, structural mechanical and piping subcontractors, and rotating equipment.

In 2021, we performed a spend-based assessment of our purchased goods (Scope 3, category 1) emissions. This helped us to verify our top emissions sources in the supply chain through an input-output analysis of our supply chain spend. Further to this, we developed an internal embedded carbon calculator to support project teams in performing embedded carbon (Scope 3) estimates of project design Scope, to make more informed decisions around material selection and to reduce the project embedded carbon footprint.

In the 2020 sustainability report, we disclosed Scope 3 emissions estimates related to business travel, offsite waste treatment, and electricity provided by customers or subcontractors. Over the last year, our teams have worked to align our Scope 3 calculation and tracking methodologies to the GHG Protocol across the business. We look forward to disclosing robust Scope 3 emission data across all material categories of the GHG Protocol in the future.

Downstream Emissions

In 2021, McDermott launched our ArborXD tool that we will use to track our downstream Scope 3 emissions (customer's operating emissions). We plan to use the ArborXD platform to forecast and reduce the emissions of at least three projects in 2022.

To learn more about ArborXD, please visit the Innovation and Digitalization section of the report.

Energy Use

McDermott is committed to greening our integrated global fabrication facilities by increasing the percentage of renewable energy on-site, thereby reducing Scope 2 emissions.

FOCUS ON RENEWABLE ENERGY

In 2021, McDermott engaged Schneider Electric to conduct a renewable energy assessment of our four major fabrication facilities. The assessment identified opportunities to reduce our Scope 2 greenhouse gas emissions through a variety of strategies. We evaluated onsite and offsite renewable energy supply through installation of solar panels, energy attribute certificates, and power purchasing agreements. The results of this study led to immediate actions in 2021 at our Batam fabrication yard, which accessed renewable energy through energy attribute certificates. We have integrated other recommendations from the study into our long-term renewable power strategy. Our executive compensation plans include commitments to increase our use of renewable energy for McDermott offices and operations.

To further action the results of the renewable energy assessment, in 2021 we established our Renewable Energy Coalition, a global group of operations personnel focused on implementing renewable energy through our sites. The coalition also provides a platform to share knowledge, lessons, and best practices via a support network focused on renewable energy implementation.

Energy Purchased by McDermott

YEAR	TOTAL ELECTRICITY	TOTAL FUEL
2020	129,481 MWh*	720,194 MWh*
2021	109,535 MWh	702,000 MWh

*Numbers corrected from 2020 report (electricity 2020 reported: 124,501 MWh; fuel 2020 reported 48,436,314 liters)

In 2021, we reduced electricity consumption by 15 percent and fuel consumption by 3 percent.

Spotlight: Batam Fabrication Yard

In 2021, our Batam fabrication yard continued to rank as our busiest fabrication facility. In 2020, Batam was also considered the highest emitting site. In 2021, McDermott's Batam fabrication yard converted almost all energy generation from diesel power to electrical grid power. In 2021, we further reduced carbon emissions at Batam fabrication yard through the purchase of Renewable Energy Certificates (I-RECs). Through this purchase, our Batam fabrication yard derived an estimated 98 percent of its electricity generation from sustainable sources. In 2022, Batam plans to further progress ambitions towards achieving 100 percent renewable energy through installation of onsite solar panels.

In 2021, Batam implemented a biodiesel B30 fuel site-wide and is further investigating opportunities to source renewable diesel, which would have even greater emissions reduction potential.

The successes of the Batam yard demonstrate that global efforts to decarbonize will take a variety of strategies. We are proud that the combination of our technologies and improved power sourcing resulted in a 32,959-tonnes reduction of GHG emissions at the facility. Overall, the carbon intensity of the entire Batam site was reduced from 454 tonnes of CO_2e/200,000 workhours in 2020 to 81 tonnes of CO_2e/200,000 workhours in 2021– a 76 percent reduction.

2020

454 tonnes of CO_2e/ 200,000 workhours

POWER PLANT 7.2 mVA → GRID 9.2 mVA

October 2020

Emission Reduction from Fuel Consumptions (after full grid supply) **1,147,420** liters of diesel or **3,120.98** tonnes of CO_2

August 2021

Schneider renewable energy assessment and Asset XD POC complete

January 2021

Implementation of Biodiesel 30% blend (B30) site wide

Q2 2021

440 tonnes of CO_2e/ 200,000 workhours

July 2021

Proof of Concept for crane and forklift utilization improvement (Asset XD)

December 2021

Purchase RECs to account for the full grid sourced electrical load in 2021

81 tonnes of CO_2e/ 200,000 workhours

2021

Total emissions reduced

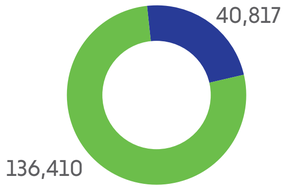
32,959 tonnes CO_2e

Waste Management

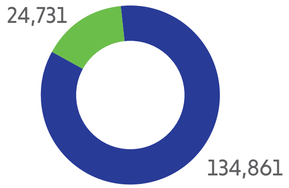
We are committed to reducing the environmental impact of our operations while using materials and resources efficiently to prevent pollution and minimize waste. We have set ambitious waste reduction targets, including a target of zero office waste to landfill by 2025 and 50 percent reduction in waste by 2030.

Achieving these targets will require strong corporate processes, programs, and policies, as well as a concerted effort by all McDermott employees. We require every McDermott site to develop a Waste Management Plan. We are proud of our progress to date against this goal and have achieved a 85 percent waste diversion rate in 2021 compared to 23 percent in 2020, saving over 24,000 tonnes of waste from landfills in 2021.

Waste in 2020 (tonnes)



Waste in 2021 (tonnes)



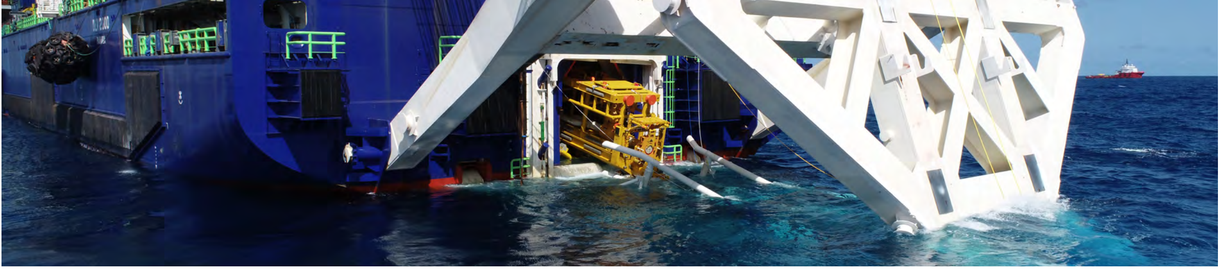
Waste by the Numbers

Waste Management Hierarchy

We apply the following waste management hierarchy to every McDermott site:

OUR PROGRESS REDUCING WASTE FROM OFFICES:

In our Europe, Africa, and Middle East (EMEA) region, four of McDermott's offices have already achieved the goal of zero waste to landfill, well ahead of our 2025 target. These include our offices in the Hague, London, Brno, and Doha, which was our first Middle East office to achieve zero waste to landfill. Our teams continue to monitor the availability of country infrastructure to further align our office waste disposal to corporate goals as methods become available in-country.



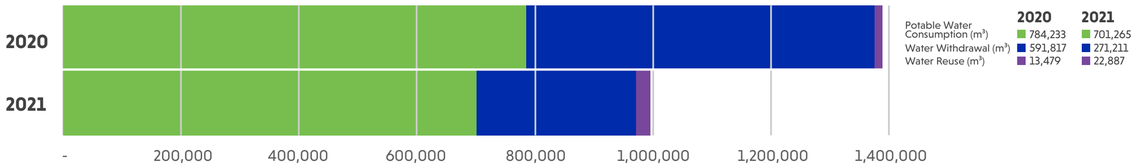
Water Stewardship

We take steps to minimize our impacts on water resources from our operations. Each of our sites conducts a survey to identify the risks and potential impacts of its operations, activities, products, or services that use water or may affect water quality. The results of these surveys inform the development of plans for managing stormwater, preventing spills, and controlling erosion; the completion of inspections and audits to ensure regulatory and management system compliance; and the deployment of training and awareness initiatives to boost employee efforts and promote water stewardship.

Our operations consumed 972.47 million liters of water in 2021, a 29 percent reduction against 2020. Our primary use was potable water, including water provided by a utility, as well as water withdrawn from surface or groundwater sources. This water is used for drinking, hygiene and sanitation, construction, and marine activities, such as hydrostatic testing, flushing, concrete works, dust control, and vessel ballast.

With water becoming a scare resource, our operations work towards reducing water consumption by optimizing the use, re-use, and recycling of water in alignment with our global management system water efficiency hierarchy guidelines. In 2021, we increased water re-use by 70 percent compared to 2020, accounting for 2.3 percent of total water consumption. Two major construction sites in Texas utilized self-contained mobile domestic wastewater processing units. These units replace individual portable toilets and convert domestic sewage into fully treated, filtered, and chlorinated reclaimed water. The reclaimed water can be used for on-site dust suppression or other construction activities. Our initiatives to increase the ratio of reclaimed water consumed in our fabrication facilities include re-use for dust suppression, equipment washing stations, irrigation for landscape greening, and other construction testing activities.

Water Use



Biodiversity and Land Use

McDermott's proactive EPCI planning process includes working with customers to avoid and/or mitigate the impacts our construction activities and facilities may have on the surrounding environment. We carefully evaluate the locations of our project sites, including evaluating the surrounding areas for potentially sensitive areas. Wherever appropriate, we implement avoidance and mitigative measures during the planning phase of each project.

SAUDI ARABIA BIODIVERSITY INITIATIVES:

Our Saudi Arabia operations collaborated with the Ministry of Environment, Water, and Agriculture and stakeholders to sponsor mangrove seed collection and planting in support of the Greening Saudi government initiative to enrich biodiversity and restore aquatic life. We collected over 57,000 mangrove seeds in Darin and planted 950 saplings in Tarout Island. We invited university students to participate in planting activities, and volunteers cleaned the neighboring mangrove habitat and beach to collect over 500kg of waste debris. In support of global campaigns, 475 plants adopted and planted for Earth Day, two underwater clean ups were held in celebration of World Ocean Day, and we collaborated with local communities for sowing of native seeds to enrich local biodiversity.

ASIA PACIFIC:

Our operational locations in Asia Pacific are well-known for their unique marine ecosystems, particularly with respect to the Coral Triangle Initiative (CTI) and Australian waters. We respect the ecological importance of these areas and apply our principles of environmental stewardship with exceptional care in the Asia Pacific region. We evaluate potential disturbance of marine habitat and interactions with cetaceans, sea turtles, and other marine mammals during marine transportation and installation at the early stages of these projects. To further protect biodiversity in this region, our local employees are trained on cetacean sightings and applicable local country regulations and guidelines.

Spill Prevention and Response

We take steps to protect our Environment from unplanned releases to air, land, and water. Our Spill Prevention and Controls Process covers our operations, products, and services. This process identifies areas of risk where potential spills or releases may occur and implements control measures to prevent and minimize impacts.

These are the key elements of our Spill Prevention and Control Process

IDENTIFY	EVALUATE	PREPARE	TRAIN	MONITOR AND REPORT
Local laws and regulations	Geographic location	Site-specific Spill Response Plan	Identified key personnel	Update plans with significant change to site or activities.
Risk and controls for potential spills or release	Site /Vessel layout	Control measure implementation	Incident drill scenarios	Incidents, Near Miss and Lessons Learned
Available monitoring and controls	Potential risk areas and activities Most probable spill and worst-case scenario	Emergency response personnel and material	Familiarize third party responders to site where applicable	Continuous improvement

2021 STATISTICS

Level III: **3** releases | **(2)** Water and **(1)** Land | Total Loss of Containment **1177 L**

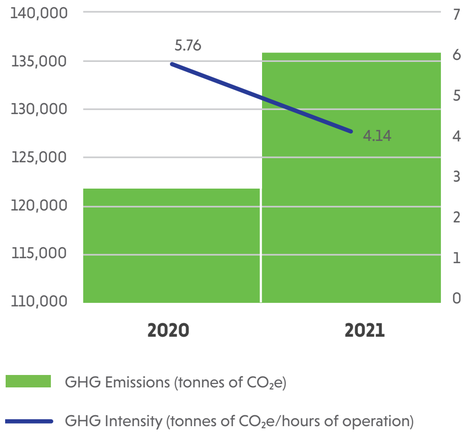
ENVIRONMENTAL MANAGEMENT ABOARD OUR VESSELS

Our Environmental stewardship extends to our marine operations. Aboard McDermott's custom fleet of marine construction vessels, we prioritize the same guiding environmental principles that we extend to our onshore operations.

Vessel Emissions

Marine vessels are the largest contributor to our Scope 1 GHG emissions. Unlike vehicles or heavy construction equipment onshore, vessels run continuously and are designed to be maintained with a small crew onboard to deter the effects of seawater and the harsh environment. McDermott works to operate our vessels efficiently year-round. We aim for our fuel use to be linked to productively building the energy infrastructure required to serve people in the future.

Our overall marine group saw an increase in activity which resulted in an increase in total emissions. Due to reduced idle time and improved vessel utilization on most of the vessels in our fleet, we reduced our vessel carbon intensity from 2020 to 2021 by 28 percent from 5.76 tonnes of CO_2e/hours of operation to 4.14 tonnes of CO_2e/hours of operation.



THE AMAZON VESSEL:

McDermott embraces automation as a tool used to help drive safety and sustainability goals with the conversion of the Amazon vessel. The Amazon vessel is undergoing a major renovation to become an ultra-deepwater J-lay vessel. Upon completion, it will have a highly automated multi-joint pipe production facility onboard utilizing robotic technology. Through the use of automated technology, the Amazon vessel will perform pipelay work with a smaller construction crew, decreasing the need for frequent crew and supply shipments as compared to similar competitor deep-water J-Lay vessels and ultimately reducing Scope 3 emissions.

McDermott vessels run on marine gas oil (MGO), which has a significantly lower sulfur content than heavy fuel oil (HFO). Use of MGO reduces sulfur oxide emissions that are harmful to humans and the environment. All McDermott vessels are equipped to use MGO and renewable diesel.

Each of our vessels is also equipped with a custom decarbonization roadmap. We plan to further decarbonize marine construction and reduce emissions aboard our vessels through:

- Cleaner marine diesel
- Engine retrofits to reduce fuel consumption
- Hybrid batteries
- Renewable shore power
- Alternative fuels

In addition, we have an internally developed GHG calculation tool, ArboxXD, based off real vessel data for our marine fleet. It enables us to predict emissions related to fuel use from a McDermott vessel for a particular project or through our yearly operations.

Vessel Waste

To promote waste minimization, McDermott has eliminated the use of single-use plastic water bottles onboard all McDermott vessels. We estimate that we've eliminated 1.5 million single-use water bottles in 2021 by implementing water filtration systems and water coolers throughout our fleet. Crew members were provided with reusable water bottles to refill for years to come. The overall positive impact is magnified by reduced fuel consumption from supply vessels that previously carried water bottles to our vessels.

We continue to explore ways to reduce waste onboard, and we include our crew members in the process through surveys and engagement to identify solutions they'd like to see in our ship modernization efforts.

Vessel Biodiversity Protection

The McDermott fleet works to minimize potential impacts to marine ecosystems through steps such as increased hull washing and complying with the international Ballast Water Management Convention to avoid the transmission of invasive species. Each of our global vessels is equipped with a Ballast Water Management Plan, which includes details on the proper operation of the specific treatment system installed.