

E1

Climate Change and Low-Impact Solutions

At Halliburton, we work to reduce emissions, improve efficiency, and advance clean energy development. We recognize that affordable, secure energy is key to global economic development, and that our industry has an important role to play in lowering emissions. For more information, please refer to our [Climate Change Statement](#) on the Halliburton website.

Emissions Reduction Target

Halliburton has committed to reduce Scope 1 and 2 emissions by 40% by 2035 from our 2018 baseline. In 2022, we executed on priorities set to help the Company progress toward our 2035 emissions reduction target.

Our absolute Scope 1 and 2 emissions trended upward from 2020 to 2021, driven by the post-pandemic global activity recovery of our business. In 2022, we saw the benefits of our emissions-reduction strategy start to play out as our total emissions decreased slightly despite an 16% increase in wellsite operating hours across our operations and increased job intensity in our North America frac business. Overall, we have reduced absolute Scope 1 and 2 emissions by 12% compared to our 2018 baseline of 4.2 million MTCO₂e. We continued to invest in electric frac units that have the ability to reduce the overall emissions intensity of our fleet year on year.



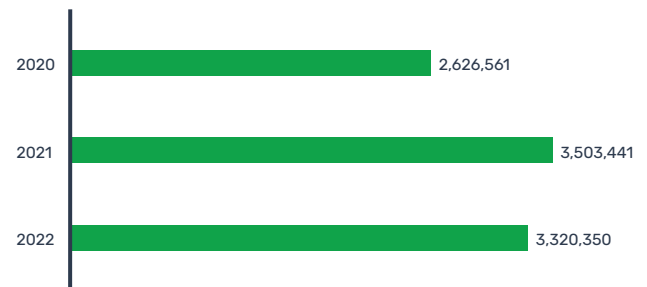
Our Climate Change Sustainability Commitments



- Achieve a 40% reduction of Scope 1 and 2 emissions by 2035 from 2018 baseline.
- Partner with Tier 1 suppliers to track and reduce Scope 3 GHG emissions.

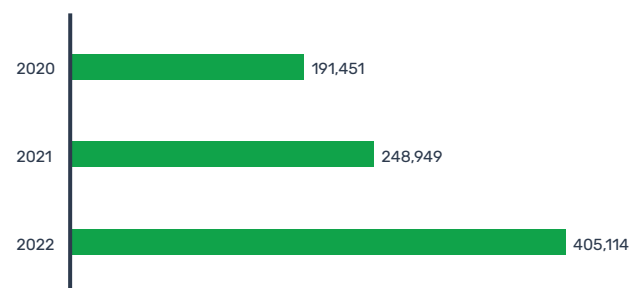
Scope 1 GHG Emissions

Metric tons CO₂e



Scope 2 GHG Emissions

Metric tons CO₂e



Since the rollout of new electric frac fleets occurs gradually over the course of the year, we expect to see the full benefit of each unit deployed after 12 months of operations as opposed to the calendar year when the fleets come into service.

To help meet our goals, we prioritize actions that reduce emissions from our largest emitting activities: hydraulic fracturing and real estate facilities.



Hydraulic Fracturing

We direct a portion of our capital expenditures to purchase electric fracturing equipment to meet customer demand, lower their operating costs, and improve efficiency, which also supports our emissions commitments. Electric units (e-frac) can be powered with electricity generated from a variety of sources, including reciprocating engines and grid power, which increases our opportunities to reduce emissions.

Real Estate Facilities

We engage in ongoing efforts to manage our real estate emissions footprint wherever possible. We also purchased renewable energy, installed energy-efficient building technologies, such as LED lighting, and installed solar panels in accordance with power-purchasing agreements.

Facility Improvements to Reduce Energy Use

As part of our commitment to reduce carbon emissions, we continue to integrate sustainability in our real estate work and decision-making processes. The Company assesses new real estate technologies and updates facilities to ensure we meet sustainability targets and comply with regulations. When we conduct building maintenance, we evaluate the technologies for major structural elements like heating, air conditioning, and ventilation; insulation; and windows to identify areas where technology updates might improve energy efficiency.

Solar Power

In 2022, Halliburton initiated new solar power projects, one in Singapore and one in Neiva, Colombia, that collectively added 1,025 kilowatt peak (kWp) of total solar power. These projects are part of our ongoing rooftop solar initiative, which now includes six major projects in Singapore, Malaysia, India, California, and Colombia. The Company is also evaluating the possibility of implementing similar solar initiatives in Mexico, Ecuador, and Brazil.



Energy-Efficient Lighting

In 2022, North America saw the completion of LED lighting installations at 13 large Halliburton facilities. This reduces lighting-related carbon emissions in those facilities by 63% per year. In addition, we announced a plan to pursue 24 energy-efficient lighting projects in North America and one in Norway that are expected to have similar results. We also completed lighting evaluations at 18 additional Halliburton sites in North America for future projects.



Singapore

Following the success of our Singapore solar project, Halliburton's Singapore manufacturing facility explored an opportunity to expand the solar farm to a newly constructed technology facility and other existing buildings on campus. With this new solar extension, which was accomplished in the fourth quarter of 2022, Halliburton Singapore established a 22-year supplementary solar power purchase agreement. The Company will install and maintain 1,466 fixed-tilt, roof-mounted solar panels totaling 879 kWp. The solar array will produce an average annual 964 megawatt hours (MWh) of electricity.



Colombia

The second photovoltaic solar plant in Latin America was installed successfully in Neiva, Colombia. We installed 270 panels with 146 kWp of total solar power. The solar array will produce around 213,000 kWh of electricity annually, offsetting approximately 60% of the facility's current usage. We are currently completing the final installation to connect it to the grid.

Climate-Risk Scenario Analysis

Halliburton follows the guidance from the Task Force on Climate-Related Financial Disclosures (TCFD) to perform qualitative climate-scenario analysis. As such, the impacts are categorized as Transition Risks (Policy, Reputation, Market, and Technology) and Physical Risks (Acute and Chronic).

Priority risks assessed include the following:

Transition Risks Basis: International Energy Agency (IEA) Stated Policies Scenario (STEPS) and Sustainable Development Scenario (SDS)	Physical Risks Basis: Intergovernmental Panel on Climate Change (IPCC) Climate Scenario SSP3-RCP7
Policy and Regulatory <ul style="list-style-type: none"> Fossil Fuel End Use Regulation Fossil Fuel Production Regulation 	Acute <ul style="list-style-type: none"> Hurricanes Flooding
Reputation <ul style="list-style-type: none"> Employee Attraction and Retention Increased Stakeholder Concern 	Chronic <ul style="list-style-type: none"> Extreme Heat Water Stress and Drought
Market <ul style="list-style-type: none"> Oil Demand Natural Gas Demand 	
Technology <ul style="list-style-type: none"> Cost to Transition to Lower Emissions Technology 	

Across Transition Risks, we look at the short-term (0-2 years) and medium-term (2-10 years) to determine potential financial impact to our business and prioritize strategy and capital decisions accordingly. This has reinforced our goals of collaborating with customers to help them achieve their decarbonization targets, continued investment in electric fracturing to reduce emissions in our core business, and continued work with start-ups through Halliburton Labs to uncover gaps in the broader energy value chains.

We consider Physical Risks in the short-term (baseline), medium-term (2040) and long-term (2050) to identify which of our facilities and operations may be exposed, if any, and determine concrete mitigation plans. Out of all the sites analyzed, weather-related potential risk areas include Texas and Louisiana sites at risk of events, such as hurricanes and flooding. Water stress and drought-related potential risk areas include multiple desert sites in the United States and Middle East, and possible extreme heat and rainfall projection risks at our Singapore manufacturing sites.

Over the years our locations have experienced weather events such as hurricanes, tornadoes, hailstorms, flooding, and winter snow/ice storms. Weather impacts typically

result in temporary delays with no long-term sustained impact. We closely monitor each acute weather event and weather trends to assess our response plans and reduce the possible business impact of these physical risks. Our diverse manufacturing base and supply chain also minimize the risk of local impacts.

In addition to local emergency response planning, we provide training and equipment to our workers in locations with possible extreme heat or cold exposure. In 2021 we used the Aqueduct Water Risk Atlas, published by the World Resources Institute, to assess our locations in water-stressed geographic areas. Working with our top potentially water-stressed sites in 2022, we established a toolkit to allow each facility to identify and implement location-appropriate water preservation actions.

In addition to outlining risks, our scenario analysis uncovered potential business opportunities in spaces such as carbon capture and storage, geothermal, and methane emissions management. Our approach to these different opportunities is outlined in [Chapter E2 Sustainable and Secure Energy Future](#) of this document.

We will continue to annually monitor IEA and IPCC scenario analyses and will adjust our risk-mitigation plans according to material changes.