

## E1

# Climate Change and Emissions Reduction

*We lower the GHG emissions profile of our internal activities, and of our portfolio of technologies and services, to meet the goals of the Paris Climate Accord, which seeks to limit global warming to well below 2°C compared to pre-industrial levels. As a result of these efforts, we also help our customers decarbonize their operations and reduce their emission footprints. We are committed to a sustainable energy future and have work underway to improve our energy efficiency and advance clean energy development. For more information on our Company's commitments, please refer to our [Climate Change Statement](#) on the Halliburton website.*

## 2021 HIGHLIGHTS

### Sustainable Energy Priorities

Halliburton has set science-based targets to reduce Scope 1 and 2 emissions by 40% by 2035 from our 2018 baseline. We have made progress on our targets by quantifying and executing on opportunities, which puts us on track to reduce emissions and meet reduction targets.



### Our Climate Change Sustainability Commitments

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



#### Nigeria Cuts Diesel Fuel Use by More Than 58%

In Nigeria, the installation of a power transformer at our facility led to a greater than 58% improvement in diesel consumption, generating cost savings as well as emissions reduction. With this change, we reduced the number of shipments and, therefore, the number of trucks on the road.



#### Custom SeaQuest® and ScaleFightR Solution Cuts Emissions in the Gulf of Mexico

The Halliburton Stim Star IV field operations team combined our SeaQuest® seawater-based fracturing fluid system with our ScaleFightR scale-inhibitor chemicals to overcome the technical challenges associated with operations in sea water and barium-rich formations. Compared to the freshwater fracturing fluids that are typically used to stimulate reservoirs and that require multiple vessels to carry barrels of fluid to the wellsite, the patent-pending combination eliminated the requirement for extra supply vessels.

## Climate Risk Scenario Analysis

In 2021, Halliburton conducted a detailed climate risk scenario analysis. A team of 24 internal cross-functional stakeholders, along with external consultants, assessed the significance of climate-related risks and opportunities, aligned to TCFD guidance.

We completed a systematic process for our climate risk scenario analysis:

1. Assessed the significance of climate-related risks and opportunities
2. Identified and defined a range of scenarios
3. Mapped business impacts
4. Determined potential responses

The analysis considered the International Energy Agency (IEA) Stated Policies Scenario (STEPS) and Sustainable Development Scenario (SDS), as well as the Intergovernmental Panel on Climate Change (IPCC) Climate Scenario SSP3-RCP7. Our use of published scenarios that consider a range of alternative future outcomes helps to inform our understanding of climate-related risks and opportunities and supports our development of resilient strategies for a complex and dynamic future.

We categorized transition risks and opportunities according to their market, policy, technology, and reputation impacts. We categorized physical risks as chronic, such as extreme heat and drought, or acute, such as hurricanes and flooding. We assessed these impacts based on a review of:

- Input from climate experts and consultants
- Review of relevant reports, including those from American Petroleum Institute (API), IPIECA, and Energy Workforce and Technology Council, and IEA and IPCC transition scenarios
- Existing risk disclosures from suppliers, peers, and customers (CDP and other disclosures)

The takeaways from our climate risk scenario analysis support our ERM process and reinforce our sustainable energy strategic priorities:

- 1** Help our customers meet their goals for reducing GHG emissions
- 2** Reduce our internal emissions in alignment with our science-based targets
- 3** Advance clean energy solutions through Halliburton Labs

## Sustainability Labels

Using sustainability labels, we identify the emissions footprint of our critical products and services in the field. We expect that disclosing this information will help our customers make informed product selections and meet their decarbonization targets.

As part of our organization’s digital transformation, Halliburton PSLs will work to integrate sustainability labels into digitized workflows so we can generate labels before we execute jobs and compare those labels with operational data and actual post-execution results. Access to this data will help our PSLs better understand whether opportunities exist during technology development to reduce emissions and prioritize the opportunities for our customers’ benefit.

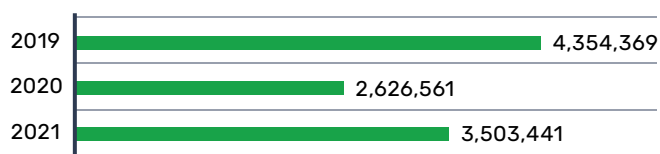
## Facility Improvements to Reduce Energy Use

Halliburton strives to reduce energy use in our facilities. In 2021, Halliburton reduced our global real estate footprint by more than 2%, which decreased our facilities’ energy demands. This is in addition to a 22% reduction of our real estate footprint in 2020.

To meet sustainability targets and to comply with regulations, we assess newer real estate technologies and update our facilities accordingly. As part of our building maintenance, we also evaluate technologies associated with major structural elements – including heating, air conditioning, and ventilation (HVAC), insulation, and windows – to identify potential updates for more energy-efficient performance.

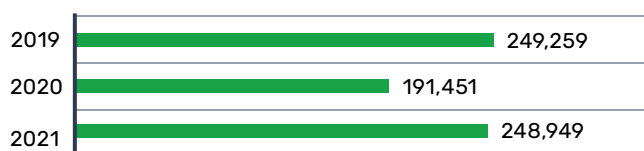
### Scope 1 GHG Emissions

Metric tons CO<sub>2</sub>e



### Scope 2 GHG Emissions

Metric tons CO<sub>2</sub>e



## Facility Improvements to Reduce Energy Use (continued)

Halliburton evaluates the use of artificial intelligence (AI) to help make our building automation systems for air conditioning and heating proactive, rather than reactive, to external forces. Typical building automation systems work in a sequence of events. They react to temperature changes and humidity, and then adjust interior spaces based on set points. Using AI, we can examine whether the automation system can predict what it must do to lower energy consumption while improving comfort in buildings. Select buildings at our corporate headquarters serve as a pilot location for this test.



### Solar Power

As part of an ongoing rooftop solar initiative that includes four major projects in Singapore, India, and California, Halliburton commissioned two new solar projects in Malaysia and Colombia in 2021.

At our manufacturing facility in Johor, Malaysia, Halliburton executed a 25-year solar power purchase agreement (PPA) in the first quarter of 2021. We installed and will maintain 2,247 fixed-tilt, roof-mounted solar panels totaling 999,915 kilowatt peak (kWp). This is the largest size solar array that the local regulations permit. The solar array will produce 1,000 megawatt hours (MWh) of electricity annually. It has offset approximately 22% of the facility's usage from August to December, 2021.

Additionally, at our field camp in Barrancabermeja, Colombia, Halliburton executed a 10-year solar PPA in the fourth quarter of 2021. We installed and will maintain 278 fixed-tilt, roof-mounted solar panels totaling 99 kWp. The solar array will produce 228,000 kWh of electricity annually, offsetting approximately 49% of the facility's current usage.

In 2022, we expect to explore similar projects elsewhere in Colombia, as well as in Mexico and Brazil.



### Energy-Efficient Lighting

In North America, we are nearing completion of LED lighting retrofits at 13 large facilities, which will reduce carbon emissions from lighting by 63% per year. At our Añelo Field Camp in Argentina, we completed LED renovations in our offices, then met the need for additional lighting along pathways and parking areas with LED lighting towers that are powered by solar panels and battery storage thereby avoiding almost 40,000 kWh in a year from the electrical grid. We are evaluating another 42 Halliburton sites in North America, Europe, Eurasia, and Sub-Saharan Africa for potential completion of retrofits in 2022.



### Green Electricity

As we establish new electricity supply contracts, Halliburton purchases green electricity from the grid when available and feasible. In 2021, we signed two three-year agreements for 100% green electricity with 12 accounts in Alberta, Canada, and two accounts in Pennsylvania in the U.S.