

## E3

# Environmental Management

Halliburton's environmental management efforts are facilitated by the Halliburton Management System (HMS), which helps the Company manage environmental risks and identify areas where we can reduce or mitigate our environmental impact. HMS comprehensively details policies, business practices, and procedures that guide work at the Company. You can read more about HMS on the Halliburton [website](#).

## Using Existing Technology to Reduce Costs and Emissions

Our Colombia team, a 2022 Sustainability Recognition Program award winner, helped a customer address a challenge in their deep-well drilling environment by installing and utilizing our existing BaraG-Force™ vertical cuttings dryer system. BaraG-Force™ enabled the customer to efficiently clean oil-based mud (OBM) from their cuttings and maximize fluid recovery. This helped the customer reduce oil retention in their cuttings, which in turn reduced the cost of cutting transportation and CO<sub>2</sub> emissions generated during final disposal. It also helped the customer recover OBM to reuse in their well and other operations. This was the first time the customer utilized this technology, and all of the above was accomplished with zero safety incidents and zero non-productive time (NPT).

Our Halliburton Completions technologies help a number of customers effect significant reductions in emissions by giving them access to technologies specifically designed to reduce rig time without sacrificing safety or quality. These technologies, such as ESTMZ™, Endurance Hydraulic Screen®, and Multilateral completions, reduce the rig time, equipment mobilization needs, and man hours per completion required for well construction and completions operations.



## Our Environmental Management Sustainability Commitments



- Establish and achieve activity-based waste-reduction targets in our major facilities.
- Create water-use improvement plans in our major facilities located in water-stressed areas.

As Halliburton seeks to be a responsible steward of the environment, we are engaged in concerted efforts to reduce energy use and GHG emissions, conserve water and optimize usage, use chemicals in environmentally safe ways, decrease waste, protect the health and well-being of employees, manage the impact of our operations on biodiversity, and manage environmental practices in our supply chain.

## Facility Certifications

The HMS, and all processes and procedures encompassed within it, comply with industry-standard certification programs, including ISO 14001 and API RP 75. Based on business requirements, many Halliburton product lines and facilities are externally certified according to ISO 14001. In 2022, 69 Halliburton facilities held ISO 14001 certifications.

# 69

Halliburton facilities held ISO 14001 certifications.

## Sustainability Project Ideas and Recognition

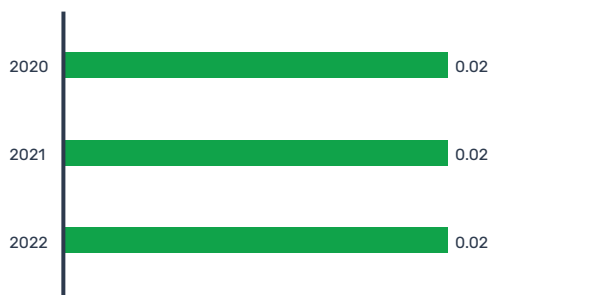
In 2022, Halliburton developed and launched Sustainability Project Ideas, a platform our workforce can use to submit new sustainability ideas. We also recognized exceptional employee accomplishments and highlighted impactful projects via our other recognition awards programs, including the Sustainability Recognition Program and the HSE, Service Quality, and Continuous Improvement Award Recognition Program.

## Environmental Incidents

In 2022, we had no significant environmental noncompliance spill incidents and no significant environmental fines.

### Recordable Environmental Incident Rate

Incidents per 200,000 hours worked



## Chemical Stewardship

Chemical stewardship is a critical part of Halliburton's responsible environmental impact management. We utilize automated regulatory tracking alerts that are integrated into chemical import and export transactions globally, and our proactive risk-impact analysis supports sustainable market development.

We also utilize our Chemistry Scoring Index (CSI) to assess and compare the risks associated with using Halliburton's chemical products in oil and gas operations. All of our chemical products are backed by a Safety Data Sheet that complies with the latest regulatory requirements. The chemical constituents of our hydraulic fracturing fluids comply with state laws and voluntary standards.

In 2022, Halliburton adopted a new regulatory compliance program that facilitates more effective communication with our suppliers. We collect information about the chemical products we purchase to fulfill global chemical compliance requirements and sustainability goals. We do this by distributing chemical questionnaires to vendors, and store this data in a consistent, data-safe format while safeguarding the confidential information received from suppliers.

## Halliburton Wins the World Oil Awards 2022 Best Oilfield Fluids and Chemicals Award for BaraHib™ Gold Trackable Inhibitive System

Halliburton developed and customized the BaraHib™ Gold Trackable Inhibitive System to enable well operators to maintain wellbore stability while drilling in reactive clays. Applying this system, we successfully drilled with water-based fluid, replacing traditional invert emulsion fluids in a mature Norwegian oil field for the first time in over two decades. Use of this BaraHib™ system has the benefits of lower well costs, maximized drilling efficiency, and a customizable fluid system.

In 2022, Halliburton won the Best Oilfield Fluids and Chemicals Award from the World Oil Awards for the BaraHib™ Gold Trackable Inhibitive System.

## Water and Effluents

Halliburton's product lines are constantly on the lookout for ways they can reduce liquid waste, improve water quality, conserve water, and advance sustainable, cost-effective waste management processes for our customers as well as our operations. Although customers purchase and control the water they use at hydraulic fracturing sites and at wellsites, we offer solutions designed to help improve their water use practices.

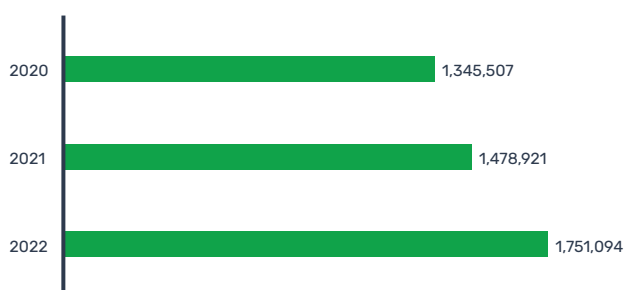
The Company pursues these goals on a global scale by working with customers to reduce, reuse, and repurpose — or "3R" — all fluids to the fullest extent possible. We proactively clean, blend, and reuse most feedstock as a habitual environmental conservation practice that saves water and helps prevent emissions associated with the manufacture, transfer, and mixing of new fluids.

Halliburton's reported water-usage data accounts for the water used at Company-owned and Company-leased locations (with the exception of locations that include water usage in their leases) in the U.S., Canada, and most of the Company's global facilities.

Using our climate-risk scenario analysis and the Aqueduct Water Risk Atlas published by the World Resources Institute, we identify facilities where it is best to prioritize water use improvements. Many Halliburton locations — particularly those in water-stressed areas, including two facilities in Latin America — have also implemented water-reduction and water-recycling projects.

### Water Withdrawal

Cubic meters



### Latin America

In 2022, Halliburton pursued multiple water and effluents-related conservation initiatives in Latin America.

In Suriname, the Halliburton team installed a rainwater collector to capture and utilize rainwater around local Company facilities, creating a sustainable way to make water facility consumption more efficient.

In Ecuador, local teams installed and began using a water treatment plant for industrial waters coming from the washbay. This plant makes it possible for industrial waters to be reused in the equipment and vehicle washing process, reducing the amount of new water withdrawn to facilitate Company operations. Per year, 216,000 gallons of treated water are reused in our vehicle washing process, which equals 95% of the water required for vehicle washing. This water is also used to feed an internal swamp after its parameters are controlled. By reusing treated water, our teams are able to reduce use of fresh water and save on disposal costs.

## 3R Initiative

Halliburton's 3R Initiative at liquid mud plants aims to accomplish the following:

- Reduce disposal volumes along with dilution requirements
- Reuse non-aqueous fluids in other applications and extend their longevity
- Repurpose waste fluids in applications in which fluid quality is less critical

The Company's Baroid product line builds on the 3R evaluation process to help manage and treat liquid muds. This initiative pushes for liquid muds to be reused, repurposed, and reduced. It has led to greater Liquid Mud Plant efficiency, improved fluids and constituents management, and reduced emissions from the manufacture, transport, use, and disposal of associated materials.

Halliburton's 3R Initiative and process has been expanded at our liquid mud plants to include other activities like energy use, waste reduction, water conservation, time, packaging, and safety.

## Waste Reduction

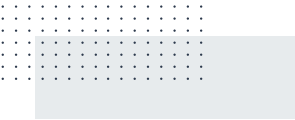
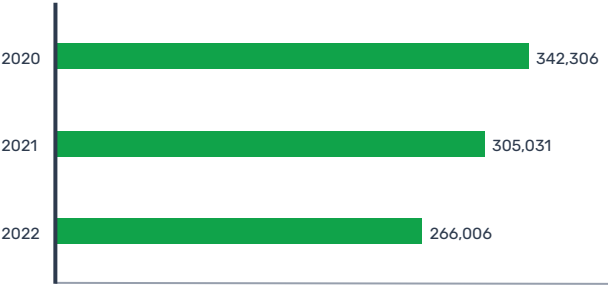
Halliburton develops and implements plans to minimize and manage waste in Company operations. These plans are designed to reduce the waste produced at the offices, workshops, field camps, manufacturing facilities, and wellsites where Halliburton possesses operational authority.

The Company's 2022 waste-generation data is inclusive of all U.S. locations, all manufacturing locations, and any non-U.S. location with a building footprint that exceeds two acres (8,092 m<sup>2</sup>) or that houses activities with potential for particularly high levels of waste generation.

In 2022, we developed readily accessible and easy-to-use tools to support water use and waste reduction at the facility level. This allows us to better collect and store water and waste-generation data. We worked with select locations that generate large volumes of waste to develop and roll out the toolkit and will work with these locations to establish activity-based waste-reduction targets.

Waste Disposal

Metric tons



Biodiversity

Halliburton follows environmentally sound and sustainable business practices in Company operations. This includes minimizing disturbances to the land where the Company builds and operates offices, field camps, chemical facilities, and service centers. We conduct proper environmental due diligence and permitting when establishing new facilities, and work to ensure regulatory compliance is maintained throughout the life of each facility.

In addition, Halliburton recognizes the value of threatened lands and species, and works with local communities to protect and restore sensitive habitats near Company facilities.

Halliburton promotes habitat preservation and biodiversity in a variety of ways. Company employees engage in many biodiversity initiatives at facilities and in local communities. Globally, Halliburton teams have participated and collaborated in reforestation activities around our and our customers' sites. Halliburton employees have also worked with local communities to preserve the environment and, where possible, help restore it to its natural state.



Mexico

iMPACT Mexico, one of our Employee Resource Groups, organized and participated in a sea turtle release at the "La Esollera" Turtle Camp in Sabancuy, Campeche. Their goal was to contribute to the restoration, protection, and conservation of an endangered group of sea turtles. Halliburton employees who attended this event were accompanied by family members and children. Together with other attendees, they assisted with and witnessed the release of these turtles to their natural habitat.



United States

In Wyoming, Halliburton Bentonite Performance Minerals, LLC (BPM) has performed voluntary reclamation on lands mined by other companies prior to the Open Cut Reclamation Act of 1969. The sites selected for this reclamation work were abandoned and left un-reclaimed when these other companies' mining work ended.

The Halliburton BPM team used its equipment to contour the surface on these sites and provide suitable soils and native seed mix to reclaim the land to their natural state. The result is the restoration of these lands to functional grazing land for local landowners, which creates positive benefits for local communities and wildlife.

Halliburton BPM was awarded the 2022 Wyoming Department of Environmental Quality (WDEQ) Excellence in Mining Reclamation Award for their efforts in this area.