E2

Environmental Management

We use the Halliburton Management
System (HMS) to manage environmental
risks and identify opportunities to mitigate
our environmental impact. It encompasses
a comprehensive set of policies, business
practices, and procedures for how we work,
including how to reduce our energy use and
GHG emissions, improve water quality and
conservation, use chemicals in environmentally
safe ways, decrease waste, protect the quality
and biodiversity of our environment, and
manage environmental practices in our supply
chain. To read about the HMS in more detail,
please visit the Halliburton Management System
section of our website.



Our Environmental Improvements Sustainability Commitments

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

2021 HIGHLIGHTS

Facility Certifications

The HMS, along with all associated processes and procedures, conforms to industry-standard certification programs, including ISO 14001 and API RP 75. Individual Halliburton facilities and PSLs are externally certified to ISO 14001, based on business requirements. In 2021, 73 Halliburton facilities held ISO 14001 certifications, representing 17% of our active global properties.

Environmental Awareness Training

In 2021, we initiated a campaign to raise awareness of environmental compliance and stewardship. We provided our workforce with a training module focused on environmental compliance and reporting. The campaign aimed to ensure that all employees, regardless of their roles, understand their impacts on the environment and their stewardship responsibilities.

Environmental Incidents

The majority of reported environmental incidents are spills that occur at Halliburton facilities and field locations. In 2021, 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

We responsibly manage the environmental risks posed by our chemical products and services over their lifecycle. To improve our chemical stewardship processes and systems, the Global Chemical Stewardship (GCS) team collaborated with internal users to launch a new workflow application, the Chemical Request Management System (ChRMS, pronounced as "charms").

The new system allows users to track the progress of requests for compliance purposes. It also helps us balance the protection of intellectual property with the rights of the chemical manufacturer.

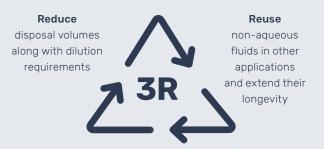
Together, in one centralized system and with incorporated global master data, these features deliver a higher level of compliance assurance and facilitate smoother workflows for our personnel. In addition, the integration includes our Safety Data Sheets (SDSs) with information about the safe use of chemicals. Our SDSs are available in 37 languages in more than 70 countries and 20 jurisdictions.

We keep all information related to global chemical stewardship updated and available to users around the world. The development of ChRMS aligns with our Halliburton 4.0 approach to digitize the value chain and create internal efficiencies.



Sustainable Water Initiative

The 3R initiative at liquid mud plants aims to accomplish the following:



Repurpose waste fluids in applications in which fluid quality is less critical

We work with customers to "3R" all fluids to the fullest extent possible – even proactively cleaning, blending, and reusing most feedstock to help achieve habitual environmental conservation. Not only does this practice save water, but it can prevent some of the emissions associated with the manufacture, transfer, and mixing of new fluids and their components.

Water and Effluents

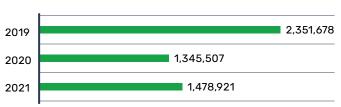
We work with our customers to reduce their water usage. Although customers purchase and control the water they use at hydraulic fracturing sites and at wellsites, we provide solutions to assist customers with water usage.

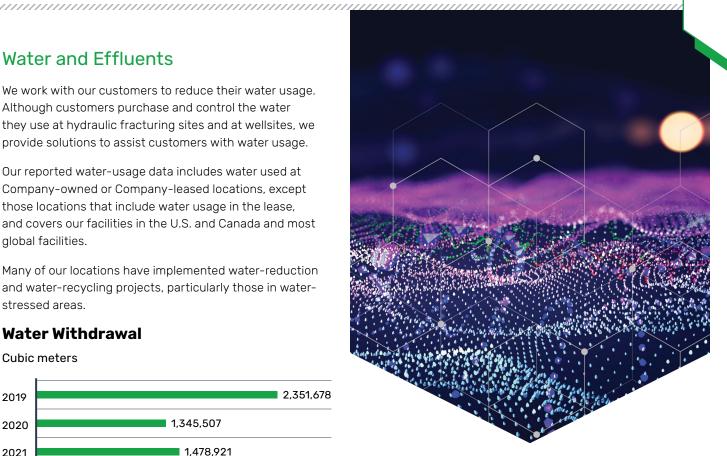
Our reported water-usage data includes water used at Company-owned or Company-leased locations, except those locations that include water usage in the lease, and covers our facilities in the U.S. and Canada and most global facilities.

Many of our locations have implemented water-reduction and water-recycling projects, particularly those in waterstressed areas.

Water Withdrawal

Cubic meters







UK

In Scotland, the Aberdeen Maintenance and Sperry Drilling departments have tanks that store water previously used in function testing activities until the water can be reused. This eliminates the requirement to use fresh water for every test.



Thailand

Our water treatment system cleans and separates oil discharge from water. The Thai government allows Halliburton to sell the water to a recycling company.



Argentina

At the Añelo Field Camp, we built a water-treatment plant that we completed in January 2022. The plant enables us to reuse 88% of the wastewater generated in our washbays.

Waste Reduction

At Halliburton, we develop waste minimization and management plans to reduce the amount of waste generated at our offices, workshops, field camps, manufacturing facilities, and wellsites under our control.

Our waste-generation data covers all U.S. locations, all manufacturing locations, and any non-U.S. location that has a building footprint larger than two acres (8,092 m²) and that houses those activities identified as having the largest potential for waste generation.

As we look to 2022, we are in the process of standardizing and digitizing waste-reduction tools and resources across our facilities to identify waste-reduction opportunities and effectively execute on them.

Waste Disposal

Metric tons





Argentina

In 2021, our collaboration with waste-management providers has resulted in the recycling of 37% of our total solid waste output. We send these materials — which include wood, pallets, cardboard, paper, and large bags — to waste-treatment facilities for processing as raw materials and conversion into other products.



UK

Our waste contractors installed skids that route hard plastic materials for recycling, in addition to softer plastic materials from packaging.

UK and Africa

In Scotland, we diverted 32 metric tons of wood waste including dry timber, used crates, pallets, and solid wood from a biomass plant to a local charity in Aberdeenshire, Wood RecyclAbility. This organization repurposes wood waste to make many beautiful, high-quality products that it sells to the public, such as furniture, various household products, and bespoke products. However, what makes this organization truly special are the opportunities that it provides to its trainees, who are adults with a range of additional support needs. Their work with Wood RecyclAbility gives them a purpose, life skills, wood-working skills, and, in some cases, has led to their full-time employment.

In Africa, we repurposed wood from original packaging to build new boxes for material exportation.



Brunei

Halliburton worked with a local recycling company to convert paper waste into toilet paper. We collect non-confidential paper waste from our Brunei facilities — including from our offices, workshops, bulk plants, vessels, and rigs — and store them at designated recycling bins. On a monthly basis, recyclers collect the material and then transform it into a 100% recyclable toilet paper product. In 2021, Halliburton recycled 300 kilograms of paper.









Biodiversity

Our commitment to environmentally sound and sustainable business practices includes minimizing disturbances to the land where we develop our offices, field camps, chemical facilities, and service centers. To support this commitment, we conduct proper environmental due diligence and permitting when establishing new facilities and ensure regulatory compliance through the life of each facility. Additionally, we recognize the inherent value in threatened lands and species, and we evaluate programs and methods to protect sensitive habitats around our locations.

Our employees took part in many biodiversity initiatives at our facilities around the world. We planted trees at many of our global sites, including our Coca Base in Ecuador, Añelo Field Camp in Argentina, Saihat facility in Saudi Arabia, Malaysia facilities, and the forests in Cabinda, Angola.





