FACEBOOK Sustainability

# Sustainability Report 2019

sustainability.fb.com/sustainabilityreport2019

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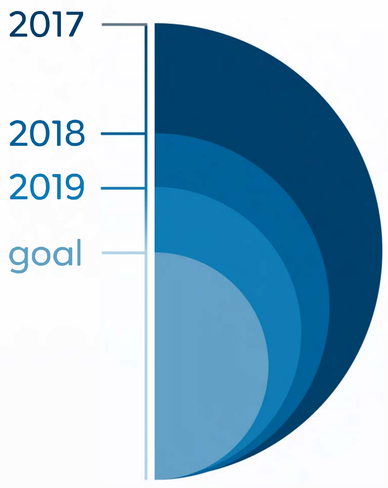
**At Facebook, we believe sustainability is about more than operating responsibly. It's an opportunity to support the communities we're a part of and make a bigger impact on the world.**

We believe that climate change is an urgent issue facing the world today and we are committed to doing our part to address this challenge. That is why we're working to minimize the impact of our energy, emissions and water usage, protect workers and the environment in our supply chain, and partner with others to develop and share solutions for a more sustainable world.

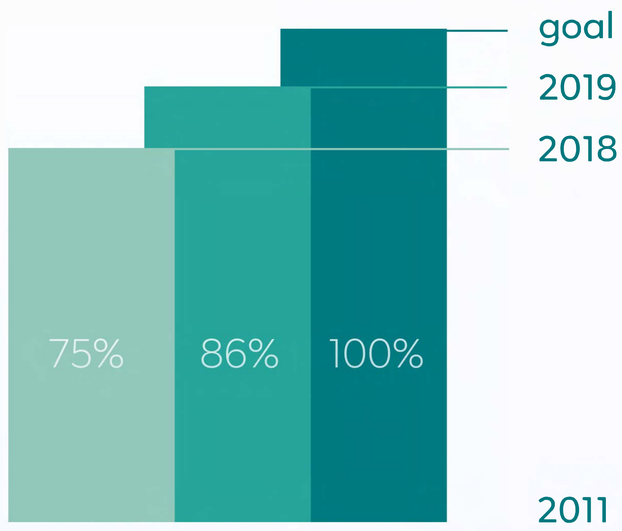
# 2019 HIGHLIGHTS




## CLIMATE

**59%** reduction in operational GHG emissions

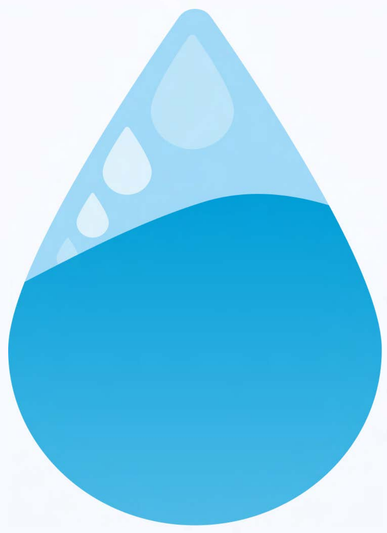
In 2019, we achieved a 59 percent reduction in operational GHG emissions, compared to 2017 levels.




## RENEWABLE ENERGY

**86%** renewable energy supporting our operations

In 2019, we achieved 86 percent renewable energy for our operations and now have over 1.3 gigawatts of wind and solar projects online.



## WATER STEWARDSHIP

**206,000** cubic meters of water per year contracted

In 2019, we contracted four new water restoration projects that will restore 206,000 cubic meters of water per year in our data center communities.

## INNOVATION

We launched the **Climate Conversation Map** to provide partners with information to advance climate action, helping them understand how engagement around climate-related news conversations ebbs and flows throughout the world and over time.


## COLLABORATION

We were proud to be a World Water Week community partner for the first time and trained more than 500 water stewardship practitioners on ways to optimize Facebook's capabilities to advance their water efforts.

### RESPONSIBLE SUPPLY CHAIN

We issued our annual **Anti-Slavery and Human Trafficking Statement**, which outlines our commitment, policies, and practices to prevent and address slavery and human trafficking issues in our business operations and supply chain.

### SUSTAINABLE DATA CENTERS

Four of our data center buildings in the U.S. officially earned LEED Gold certification. Our second building in Luleå, Sweden is our first to achieve LEED Platinum, the highest rating possible.

### SUSTAINABLE WORKPLACES

We created a new sustainable design program for new offices, leading to three LEED certifications. We also partnered with our employees to host 40 events across 25 global offices in celebration of Earth Week.

At Facebook, sustainability means more than operating responsibly and minimizing our environmental impact – it means having a positive effect on communities around the world and within our supply chain. In the last decade, climate change has become one of the most urgent global challenges. We are committed to help tackle this challenge – not only by minimizing our environmental impact – but by connecting people around this topic and building solutions.

This inaugural "Sustainability Report" provides a closer look into our sustainability progress in 2019, as well as our broader commitment to address climate change. We've come a long way since we announced our first sustainability commitment to support our operations with 100 percent renewable energy in 2011 and supporting the Paris Climate Agreement in 2017 by joining the We Are Still In Coalition.

In 2019, we made significant progress toward our 2020 climate and renewable energy goals, reaching 59 percent reduction in our operational greenhouse gas emissions over 2017 levels and achieving 86 percent renewable energy. We have also accelerated our support in local communities, including investing in water projects that will restore 206,000 cubic meters of water per year in our data center communities and financing projects that strengthened the renewable energy market.

We are also excited about the positive impact that collaborations and partnerships have in addressing this global challenge. In 2019, we collaborated with academic and nonprofit partners to develop the Climate Conversation Map. This innovative new tool will allow partners to better understand how climate discussions are unfolding around the world on the Facebook app, providing insights to help inform and spur further climate action. We're excited to see how new solutions like this can positively impact communities around the world.

All that said, we know there is more work to be done. Now more than ever, businesses need to think not only about managing their operational impact but about working with others to leverage their technical strengths to address sustainability challenges. For us, this means driving down our emissions, supporting the renewable energy transition, deepening supplier partnerships to advance positive impact and leveraging our platforms and technology to scale innovations that drive climate action.

**— Rachel Peterson**

Climate change impacts everyone and is one of the most urgent issues facing our world today.

In 2017, we were one of the first companies to pledge our support for the Paris climate agreement by joining the We Are Still In coalition and since then have ramped up our efforts to tackle this growing global challenge by minimizing our own greenhouse gas emissions, while partnering with others to develop and share climate solutions for a more sustainable world.

## Reducing Our Carbon Footprint

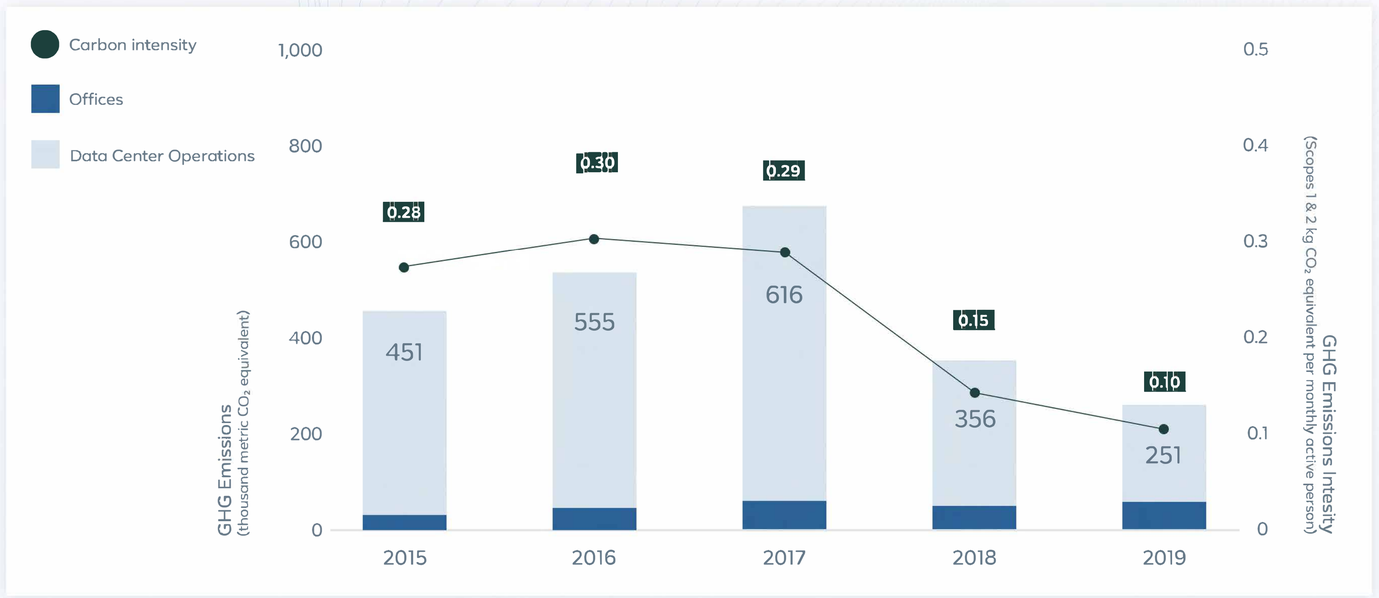
Throughout our global operations, we've taken action to minimize our environmental footprint by setting a science-based target of reducing our operational (Scope 1 and 2) greenhouse gas emissions by 75 percent by the end of 2020, compared to our base year of 2017.

Within a year of our 2018 announcement to reduce emissions, we realized a 42 percent reduction from our 2017 levels, despite growth in our business. As of the end of 2019, we were well on our way at 59 percent reduction, compared to 2017 levels – equivalent to 364,000 metric tons of $CO_2$ emissions. Although not part of our original 2018 commitment, we have also begun reporting on some key Scope 3 activities, including business travel, employee commuting and construction impacts.

We're well on our way to our

**75%**

emissions reduction goal for 2020




**Annual Market-Based Greenhouse Gas Emissions**

Annual emissions for the average person on the platform are less than the carbon impact of making one cup of black coffee.

## Increasing Climate Resilience

As we continue to expand our operations, we understand the importance of strengthening our resilience and adaptation to climate-related hazards and natural disasters. In 2019, our climate risk assessment portfolio grew to 260 total sites, including data centers, offices and supplier locations, looking at risks such as sea level rise, heat stress, typhoon and hurricanes and water stress.

Bancroft Station Solar project in Georgia

This approach is especially important for facilities in regions already severely impacted by extreme weather events and climate change. Our global Sustainability team uses these insights to identify opportunities to incorporate climate-related considerations into our overall sustainability strategy, advancing progress across key areas such as water stewardship and sustainable building design.

For our global supply chain, we use the same risk-based approach to help our suppliers understand and minimize their environmental impacts. Through similar climate-related risk assessments that we do for our own operations, we work closely with suppliers to ensure they are prepared for the climate risks they face – such as sea level rise, heat stress and water stress – and have climate resilience integrated into their emergency planning and business continuity practices.

For the first time in 2019, we offset emissions from employee business travel for some teams, as well as air travel to 11 major internal events. As a result, we offset more than 100,000 metric tons of carbon emissions – equivalent to taking 22,000 passenger cars off the road for a year.

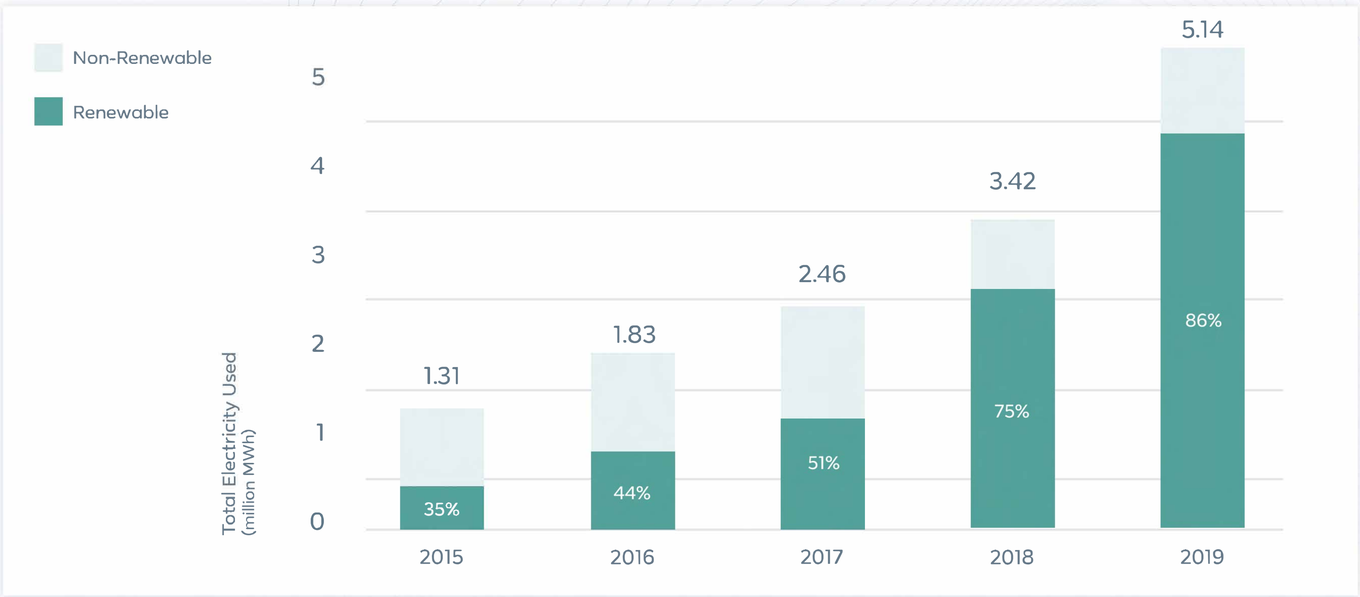
## Partnerships to Scale Impact

In addition to the **We Are Still In** coalition, we were proud to support bills like H.R. 9 in the U.S., the 116th Congress (2019-2020): Climate Action Now Act. We participate in the UN's annual session of the Conference of Parties (COP), working closely with the **UNFCCC** to drive virtual engagement with the public. We also participate in **Greenpeace's Clicking Clean Initiative**, receiving an "A" rating for our efforts to accelerate the global transition to a more greener internet.

We are committed to accelerating the transition to renewable energy in the communities where we operate, which is why all of our renewable energy projects are on the same electrical grids as the data centers they support.

## Supporting Our Operations with 100 Percent Renewable Energy

In 2011, Facebook was one of the first companies to commit to supporting our facilities with 100 percent renewable energy. We have since set an aggressive goal to support our global operations with 100 percent renewable energy from 2020 onward. As of the end of 2019, we are proud to say that we are 86 percent of the way there.




### Electricity Mix

Renewable energy made up over 86 percent of our overall electricity mix in 2019. We have steadily increased our renewable energy since 2013 on our pathway to 100 percent in 2020.

We're proud our Menlo Park headquarters is supported by

**100%**

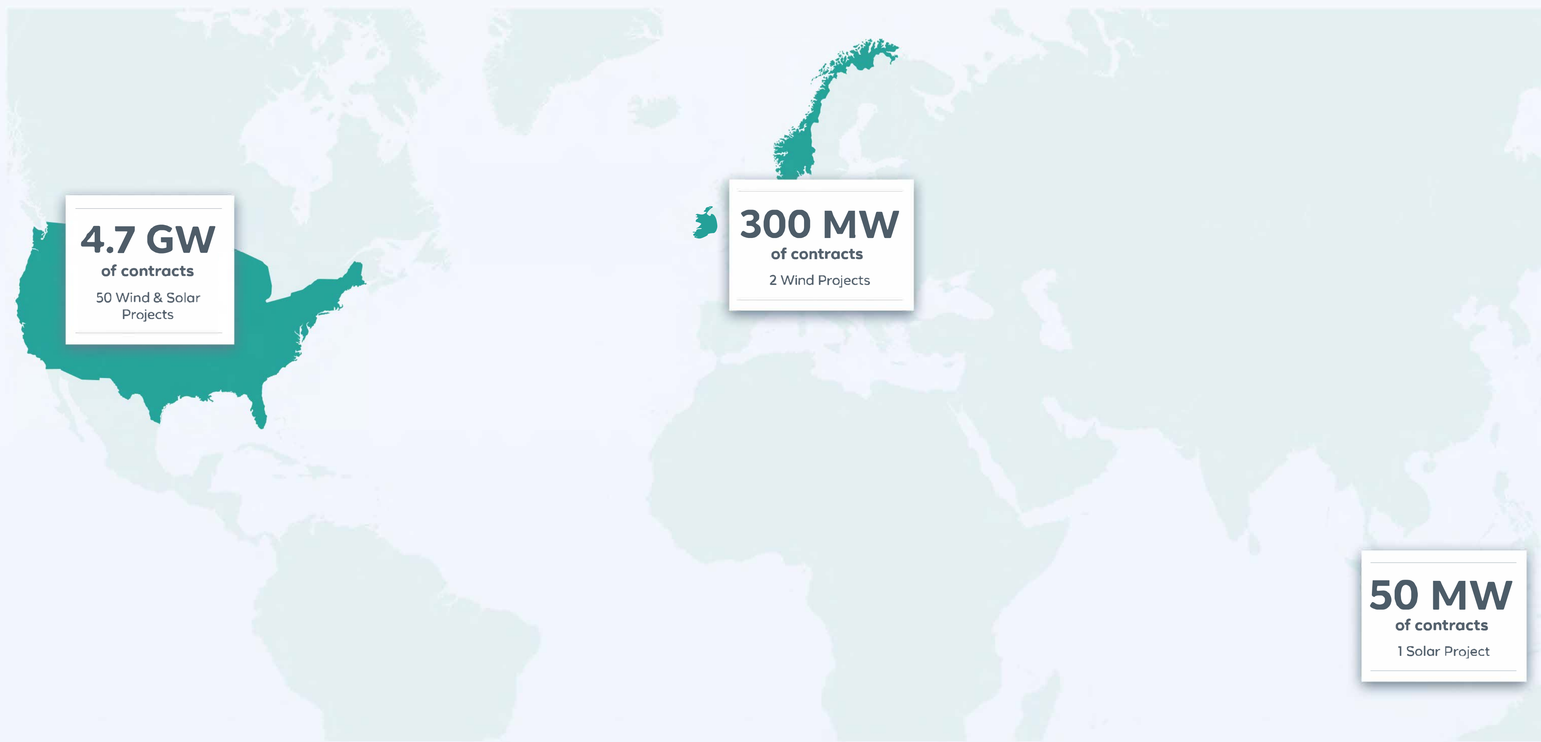
renewable energy

In 2019, we were a leading corporate purchaser of renewable energy globally, recognized as the #1 corporate buyer of renewable energy in the U.S. by the Renewable Energy Buyers Alliance and #2 in the world by Bloomberg NEF. Last year, we also committed to our first direct investment in a renewable energy project with the 300 MW Prospero Solar Project in Texas. Facebook is the sole tax equity investor and will be purchasing the majority of the renewable energy attributes from the project.

## Adding to Local Grids Around the World

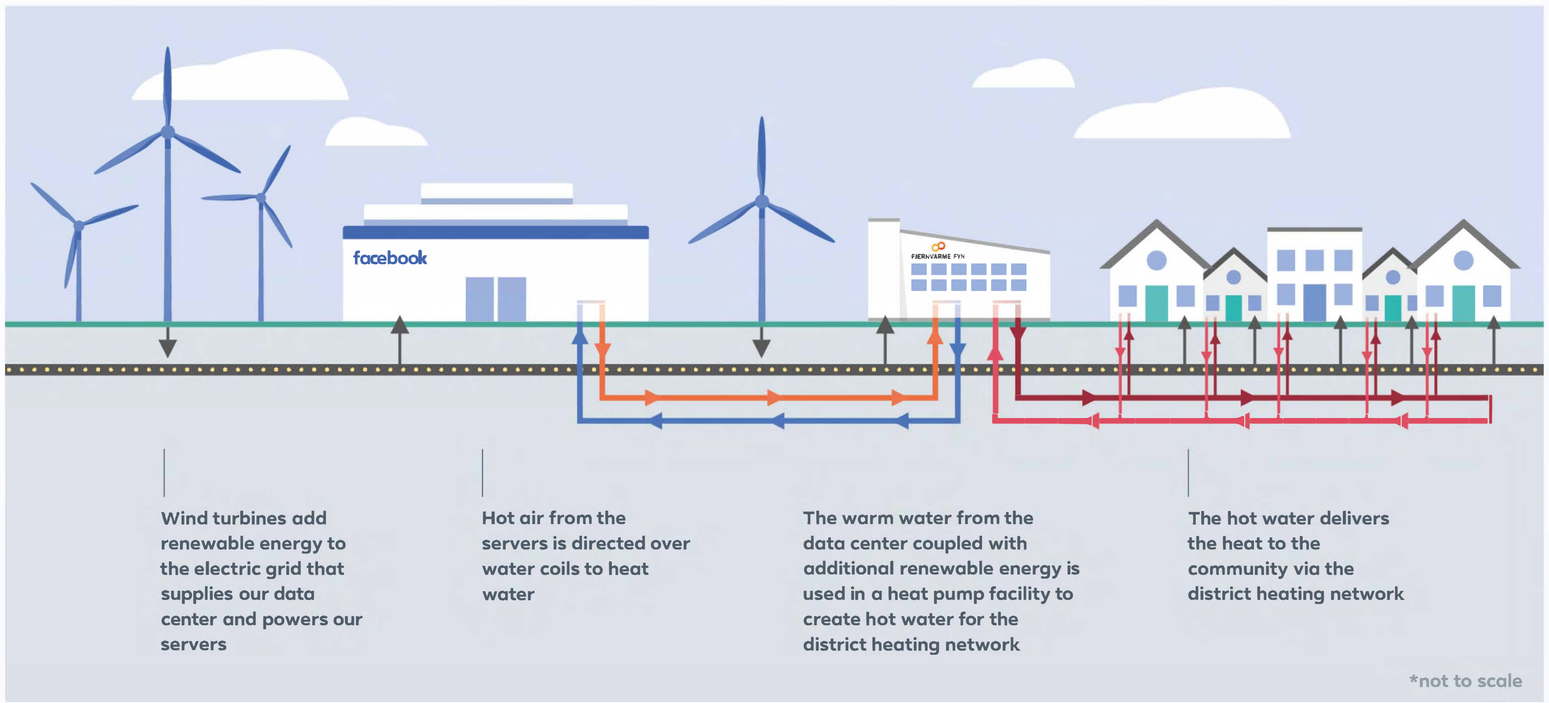
Globally, at the end of 2019, we had more than 5 GW of renewable energy projects under contract and over 1.3 GW of projects online generating clean electricity in support of Facebook's operations. In 2019 alone, we contracted for 1.7 GW of new renewable energy projects. Facebook has contracted for enough renewable energy to power more than 1.6 million U.S. households.[1]

*[1]Based on U.S. Energy Information Administration estimates of household electricity consumption.*



We contribute to local communities by adding new renewable energy capacity to the same electricity grids as the data centers they support. In certain regions, our operations are also benefiting local communities by contributing to the region's efforts to address environmental challenges.

For example, our data center in Odense, Denmark includes infrastructure to capture and deliver heat generated by our servers to the district heating system, operated by a local district heating company. The project is currently ramping up to provide 100,000 MWh of energy per year - enough to warm 6,900 homes in the neighboring community. Our project is helping the city to accelerate its efforts to phase out the use of coal by summer 2022 ahead of the initial goal of 2030.



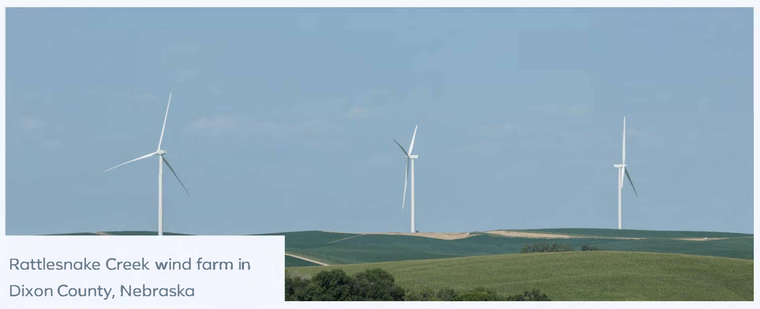

## Driving Industry Access to Renewable Energy

Beyond efforts to support our global facilities with renewable energy, we are committed to continue strengthening renewable energy markets around the world and supporting the clean energy transition. We strive to increase access to renewable energy resources for other companies and organizations through **green tariffs**, added infrastructure, or providing access to a specific project. Our direct investment in the Prospero Solar Project is another example of our efforts to help unlock new options for more organizations to meet their own renewable energy goals and grow the market.

In 2019, of our total 1.7 GW of new contracted renewable energy projects, we executed 1 GW of contracts in partnership with four local utility providers including Dominion Energy (Virginia), Rocky Mountain Power (Utah), Pacific Power (Oregon) and Walton Electric Membership Corporation (Georgia). Additionally, we partnered with our colocation service provider, Digital Realty, on the first back-to-back utility-scale renewable energy transaction by a data center provider landlord linking renewable energy supply directly to an end customer.

We share results and exchange ideas with peers through participation on the Board of Directors of the **Renewable Energy Buyers Alliance**, **RE-Source** and the **American Council on Renewable Energy**.

Aerial view of the Prospero solar farm in Texas



Rattlesnake Creek wind farm in Dixon County, Nebraska

### Bancroft Station Solar

Facebook's first solar project in the state of Georgia, Bancroft Station Solar, began operations in December 2019. The project has yielded tangible economic benefits across the state, with our partner employing more than 675 people to construct the project using locally-manufactured PV modules.

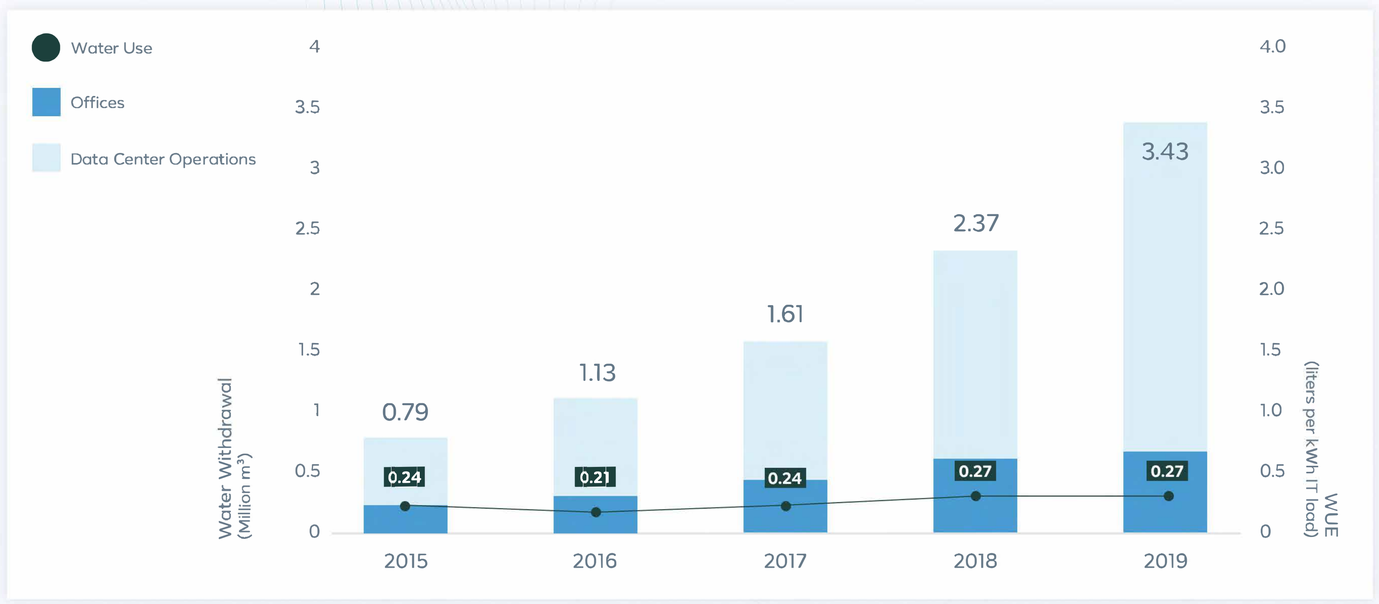
The project incorporates an innovative approach that creates more than 20 additional long-term, high-value jobs in a rural, economically distressed county, while keeping the property in agricultural production and generating significant environmental benefits. Adaptively-managed grazing livestock, diverse plant life, pollinator habitat and wildlife all work together to revitalize degraded soils, enhance biodiversity, increase the ecosystems' resilience, improve the watershed, and sequester carbon in the soil.

Water is an important, finite resource and we believe that every drop matters. We prioritize water stewardship across our global operations as a core part of our sustainability program and are transparent about how much water we consume.

## Conserving Water

Minimizing water use is a key focus of our sustainability program, so we implement various solutions in our global offices and data centers to reduce our water use as much as possible. Within our operations, we have installed water-efficient systems in our kitchens and bathrooms and meter outdoor water use by **planting native species and re-using rainwater where feasible**. In our data centers, we have implemented **highly efficient cooling designs** that use less water by relying on outside air. In 2019, we began piloting a program that optimizes acceptable indoor environmental conditions in our data halls to reduce the amount of water we use for humidification. This pilot project at our New Mexico data center is yielding 40 percent water savings and we hope to expand to other locations in 2020. As a result of these efforts, we are proud to say that our data centers are among the most water efficient in the world.

At our workplaces, we reduce our impact by investing in circular systems within our facilities that reuse water as many times as possible before directing it to wastewater treatment plants. A recent example includes our **first district-scale blackwater treatment system** in California, where landscaping water for our two new 46,000-square-meter buildings comes from water we have filtered and treated from our kitchen faucets, sinks, showers, and toilets. The system's microbiological and oxidative treatments make the water safe for reuse in landscaping, resulting in a loop that allows us to minimize our environmental impact. This new system, which became operational in 2019, is the largest system operating in a commercial building in California when it was deployed and will process more than 60,000 cubic meters of water each year.




**Annual Water Withdrawal**

We use water to keep our data centers cool and to keep our offices running smoothly.

We've optimized our water use to achieve exceptional efficiency, but we're also making sure that we get more out every drop we use.

Our renewable energy procurement has also resulted in substantial water savings when compared with sourcing energy from the standard utility energy mix. In 2019 alone, our water savings totaled 11 million cubic meters (over 3 billion gallons).

We publicly report our water data, including water withdrawal and consumption from both data centers and facilities, and the data is **third-party verified**. We have measured and reported on our water withdrawal for years but in 2018 started reporting our consumption as well. As a metric, water withdrawal tells us how much water we purchase for our operations, but a large amount of that water is returned to local wastewater treatment plants and can be used again further downstream. Water consumption tells us what we actually evaporate in our operations and gives us a better idea of our true impact.

## Restoring Local Watersheds

Given that water is a shared resource, we strive to be a good steward in the communities where we operate by investing in projects that restore local watersheds.

For facilities that are located in water-stressed regions, we support water restoration projects that promote long-term sustainability of local watersheds. In 2019, we invested in four new water restoration projects in **New Mexico** and Oregon, restoring 206,000 cubic meters/year (54,525,000 gallons/year) of water in our data center communities, bringing the total cumulative volume contracted to 683,000 cubic meters/year (180,535,000 gallons/year) of water at the end of 2019.

**Middle Rio Grande Restoration Project**

Before

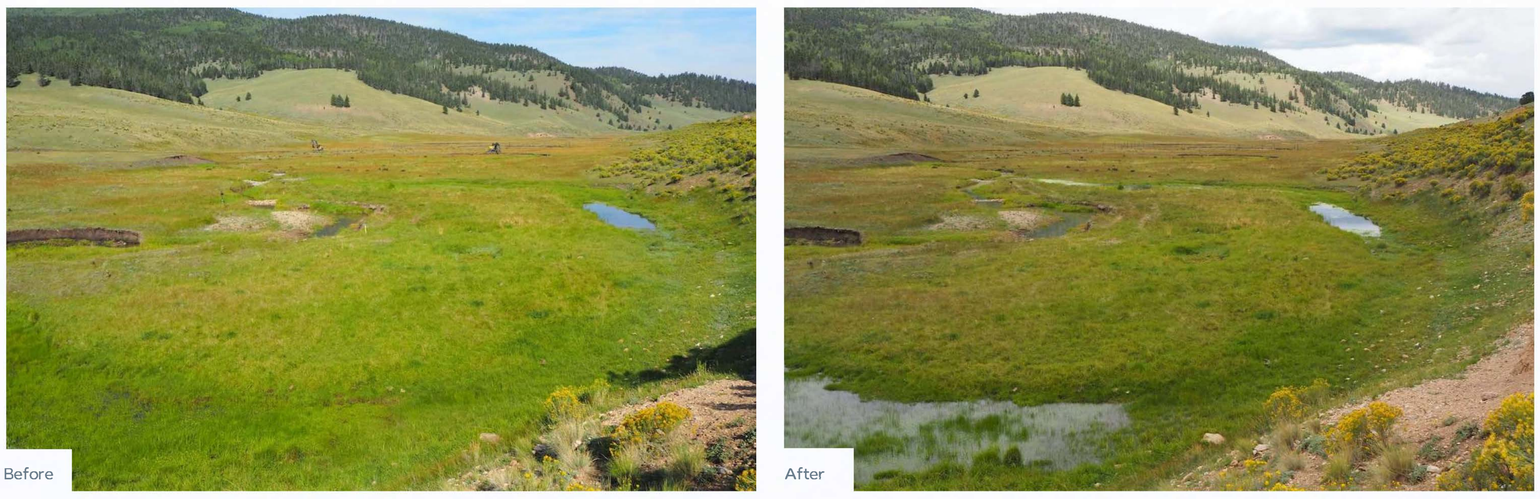
Photo by Paul Tashjain, Audubon New Mexico, 2018

After

Photo by Paul Tashjain, Audubon New Mexico, 2019

We completed our first large-scale infrastructure utility restoration project that will reuse wastewater in 2020 to irrigate parks in Utah. In New Mexico, we have partnered with environmental organizations like The Audubon Society and The Nature Conservancy to find sustainable solutions to restore the hydrology in a beneficial way and contribute toward reducing shared water challenges in local and regional watersheds. In addition, we contributed to an Aquifer Storage and Recovery Project, which will deliver millions of gallons of stored water from the aquifer to our operations in Prineville, Oregon and other community users near our data center. The project is expected to become fully operational in 2021.

**Comanche Creek Project**




Photos by Craig Sponholtz, Watershed Artisans, Inc.

These water restoration projects provide critical habitats for wildlife and improve ecosystem health in the regions where we operate. We also fund local community projects that serve to educate people on the importance of conserving water.

## 2019 Contracted Water Restoration Projects

| PROJECT NAME | STATE | WATERSHED | VOLUME CONTRACTED (CUBIC METERS/YEAR) |
|---|---|---|---|
| **Middle Rio Grande Flow Restoration**<br>*Water rights leasing for environmental flows* | New Mexico | Rio Grande | **123,000** |
| **Cedro Creek Restoration**<br>*Increased infiltration* | New Mexico | Rio Grande | **74,000** |
| **La Jara Wetland**<br>*Wetland restoration* | New Mexico | Rio Grande | **3,000** |
| **Ingram Meadow Restoration**<br>*Wetland restoration* | Oregon | Columbia River | **6,000** |
| **TOTAL VOLUME CONTRACTED IN 2019** | | | **206,000** |

## Driving Industry Standards for Water Stewardship

We recognize that water stewardship is a shared responsibility and that industry collaborations can play a role in scaling impact. To drive broader industry change, we partner on projects that assist public and private organizations in measuring the benefits of water stewardship across industries, supporting projects such as **Volumetric Benefit Accounting Methodology** and **Guidance for Calculating Water Use Embedded in Electricity Purchasing**. As a member of the **Context-Based Water Targets** Expert Advisory Group, we are working to help create metrics that will enable businesses to set meaningful goals around water.

Facebook is a member of the World Resources Institute's **Aqueduct Alliance** and we are a part of the Bonneville Environmental Foundation's **Change the Course Program** to advance water restoration projects within our communities.

Beyond our efforts to reduce our operational footprint and form partnerships designed to drive change, a core part of our sustainability strategy is addressing and adapting to the impacts of climate change.

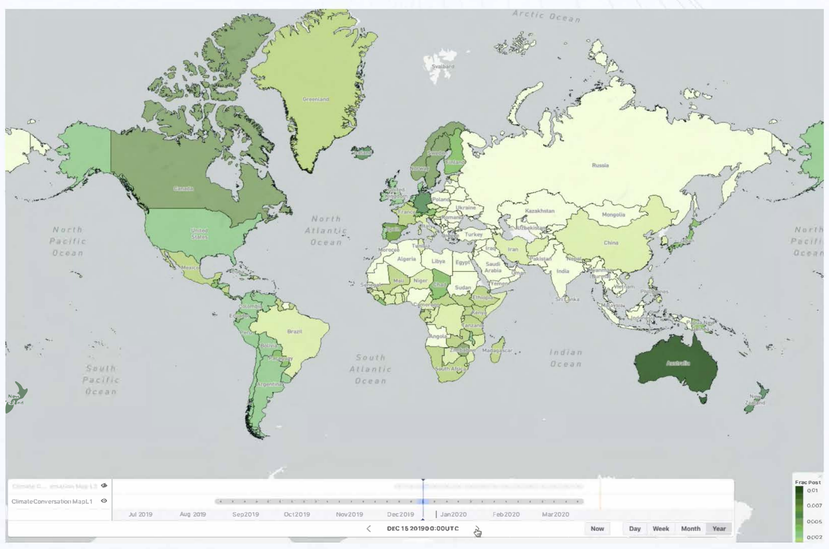
This will require innovative solutions that build on the world's understanding of how it affects businesses and local communities. In 2019, we accelerated our work to advance sustainability solutions that drive climate action through our core products and services.

## Leveraging Data for Good

We use de-identified, aggregated data to develop and release new features on our platform that allow users to communicate with friends and family during times of crisis and natural disasters. In 2014, we debuted Safety Check to allow Facebook users to let their network know they are safe while in crisis zones. In 2017, our **Data for Good** team launched Disaster Maps to help first responders and humanitarian organizations quickly assess the impact of natural disasters on a region, providing real-time insights that allow for more dynamic responses and effective deployment of aid to vulnerable communities.

In 2019, we began developing the Facebook **Climate Conversation Map**, a new tool that will provide organizations with information to advance climate action, including insight into what drives climate conversations and how they ebb and flow throughout the world and over time. Using data science research, computing power and anonymized platform data that are aggregated weekly, the map provides partners with a way to understand the level of engagement with climate-related news in various regions.

Informed by and available to academic and NGO partners like the World Resources Institute and The Yale Program on Climate Change Communication, the Climate Conversation Map is an example of how collaboration plays an important role in Facebook's approach to innovation. In addition to the joint effort between multiple teams at Facebook, we worked closely with partners to refine the tool and companion tools like the CrowdTangle **Climate Conversation Live Display**. This publicly available dashboard searches for "climate change" and "global warming" in the same 21 languages used in the Climate Conversation Map.




Climate Conversation Map

## Innovating Through Collaboration

At Facebook, our people are our greatest assets, and the fight against climate change is a great example of how our employees have come together to put their passion and technical skills to use. In 2019, our Sustainability team hosted the first Sustainability Hackathon to accelerate the development of climate solutions. This hackathon approach allowed us to evolve project ideas into viable products and test opportunities to launch on Facebook's family of apps. Facebook engineers and designers across the company participated in this initial hackathon, working with the team to bring four project ideas to life.

Our teams also work closely with other organizations to help them better understand and use our capabilities to advance their sustainability efforts. For example, our Social Good Partnerships team helps nonprofit organizations such as the World Wildlife Fund, The Nature Conservancy and The Ocean Cleanup, leverage Facebook's platform for their fundraising and marketing efforts. By 2019, our platforms raised more than $2 billion in support of nonprofits and causes that are important to our users. Since 2017, there are no fees associated with donations made through our Fundraising tool to charitable organizations, resulting in 100 percent of the funds raised going directly to the nonprofits being supported.

As we continue to advance our own operational efforts and work with others, the need and demand for more innovative solutions to drive climate awareness and impact will only increase. According to our latest **Topics and Trends Report** , which analyzes topics of conversations on our platform across various countries and cultures, sustainability emerged as one of the top five key macro-level trends to watch, demonstrating a growing behavioral shift in how people respond to sustainability-related topics and issues.

As a company with a mission to give people the power to build community and bring the world closer together, collaboration and partnerships are an essential component of our sustainability strategy.

The reality is that the challenges we face as a global community are too great for any of us to solve alone. This is why we build partnerships with globally renowned organizations that are leading the way and enable communities to tell their stories and connect with one another.

Through collaborations and partnerships with nonprofits, businesses, and civil society, we aim to help share information about the impacts of climate change and harness the strength of our platforms – Facebook, Messenger, Instagram, WhatsApp and AR/VR – to catalyze climate action.

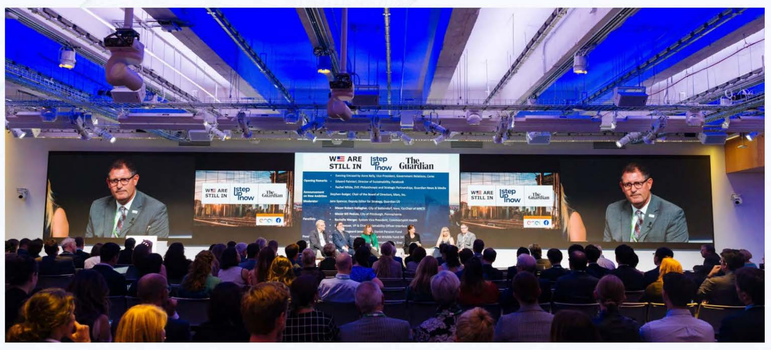
## United Nations Framework Convention on Climate Change

Beginning in 2015, and in each subsequent year, Facebook has partnered with the United Nations Framework Convention on Climate Change (UNFCCC) to bring a Facebook Live Studio to their annual climate convening, providing participants and attendees the ability to share their experience with communities around the world.

We supported the UN and UNFCCC in launching the People's Seat Campaign on Facebook and Instagram and the ActNow.bot via Messenger. The People's Seat campaign alone has reached heads of state and more than 1 billion people. The ActNow.bot via Messenger, which launched in 2018 at the UN's annual climate change conference (COP24), empowers climate change advocates to take personal action to reduce their own environmental footprint.

In 2019, we continued to partner with the UNFCCC during COP25 in Madrid, Spain, showcasing the potential of our family of apps and services as a means to drive climate change solutions. For the fifth year in a row, we were on the ground hosting a Facebook Live Studio enabling policymakers, advocates, businesses and nonprofits - including signatories of the U.S. delegation and We Are Still In coalition - to broadcast progress, challenges and reflections around the urgency of climate change to global audiences. We hosted a total of 49 sessions, with notable guests including Carolina Schmidt, president of COP25; Tijjani Muhammad-Bande, president of the UN General Assembly, among others.

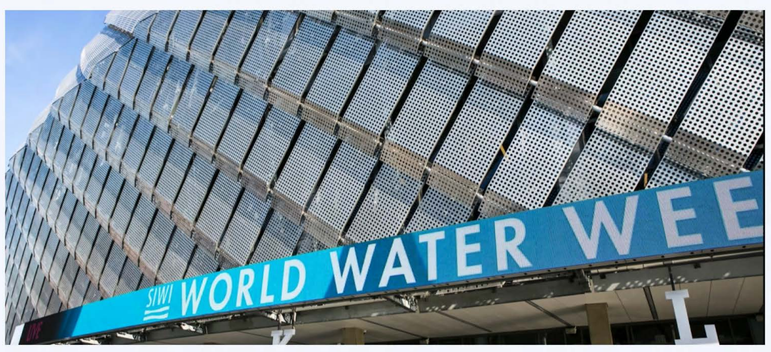
## Partnering with We Are Still In During Climate Week


We continue to do our part to fulfill the spirit of the Paris Climate Agreement through our ongoing support of the We Are Still In coalition and its initiatives.

At Climate Week NYC in September 2019, we partnered with We Are Still In, Step Up Now, and the Guardian to host a discussion and reception, highlighting sub-national action against climate change and continued support for the Paris Climate Agreement.

## Stockholm International Water Institute at World Water Week





*Photos by Mikael Ullén for the Stockholm International Water Institute*

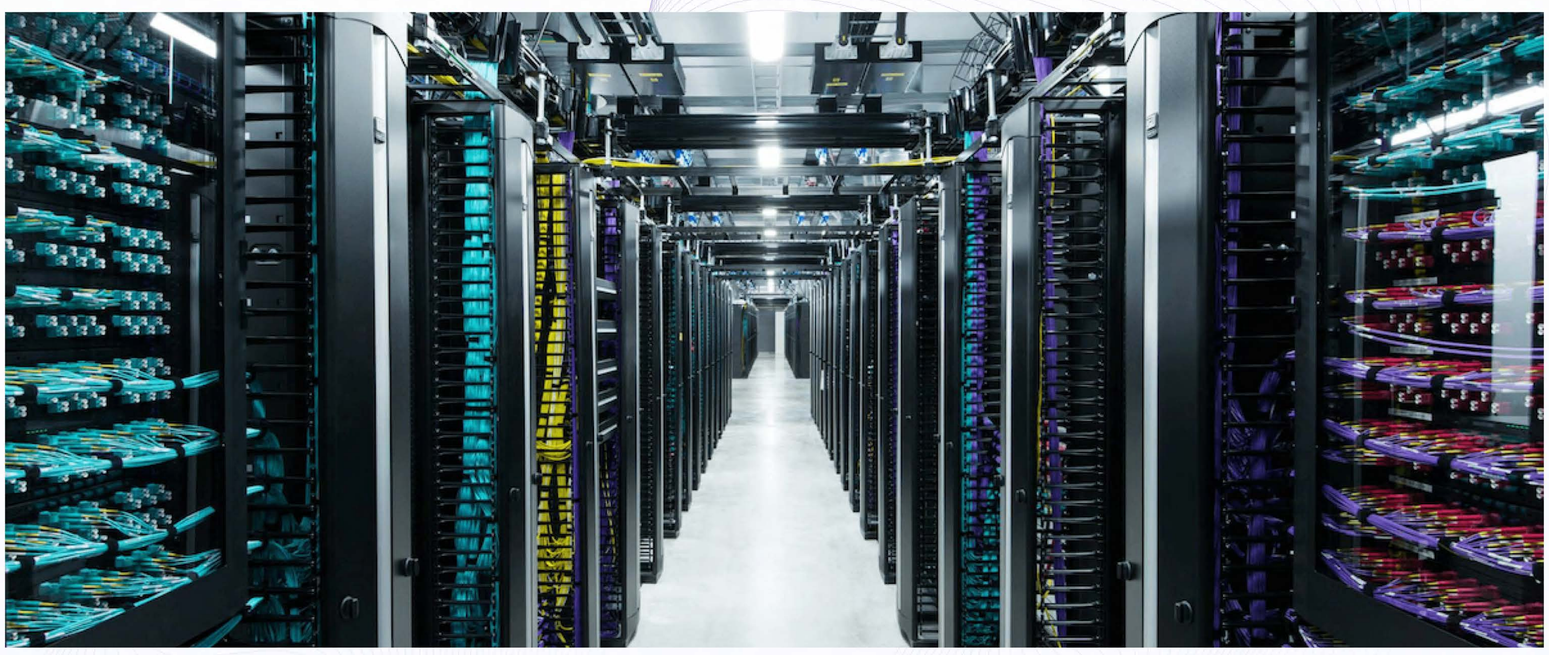
The Stockholm International Water Institute (SIWI) hosts and organizes World Water Week, an annual water conference drawing 4,000 delegates from 138 countries. We were proud to be a World Water Week community partner for the first time in 2019.

As part of the global event, we supported Facebook Live streaming of the World Junior Water Prize presented by Prize Patron H.R.H. Crown Princess Victoria. We hosted a storytelling learning zone and gallery, providing resources and training on building content, fundraising and engagement on Facebook and Instagram.

More than 500 water stewardship practitioners joined for sessions throughout the week. Our gallery space featured multi-media content highlighting voices from the broader water and climate community.

We strive to ensure safe, healthy and fair working conditions for all workers within our global supply chain, while minimizing our environmental footprint.

Through a Responsible Supply Chain program, we engage meaningfully and proactively with Facebook's supply chain partners, build supplier capacity and respond quickly to challenges as they arise.



## Setting Standards for Our Suppliers

We developed a framework of standards and expectations to guide our supplier business relationships, including through adoption of the Responsible Business Alliance **Code of Conduct**, which sets out standards on labor, environment, health and safety, ethics and management systems. To effectively prioritize our efforts, risk assessments are conducted to help us map and identify the most critical issues areas and suppliers. We proactively engage with suppliers through dialogue, independent audits and assessments and collecting worker sentiment to understand issues that are most relevant to their individual work environments. Additionally, Facebook's Electronics Reuse and Recycling Standard provides expectations for recyclers that manage the end-of-life treatment of our hardware.

## Engaging Suppliers More Deeply

Enhancing the well-being and livelihoods of workers, as well as the environment, in our supply chain is at the core of our program. In 2019, we partnered closely with our priority suppliers to address areas that have the greatest impact and potential to create lasting change. We made progress in advancing visibility into social and environmental issues within our supply chain and deepened supplier partnerships, expanding supplier engagement through a program that is focused on direct feedback from workers via surveys. We used sentiment and insights from these surveys to help suppliers improve management systems and working conditions, taking a holistic approach that included on-site consulting, training, awareness building and other activities.

We work to understand our suppliers' environmental challenges and help to reduce their impact by collecting data to see where and how we can engage with them more deeply. Our suppliers' environmental data are benchmarked against our standards and we tailor our approach based on the maturity of their sustainability strategy. Depending on the supplier need, our program engagement ranges from building capacity on data reporting to supporting on-site energy assessment to identify energy reduction opportunities.

In 2019, we launched a program to ensure suppliers would be prepared for the climate risks they may face, sharing key learnings from our own operations. Implementing the same risk-based approach we use to evaluate our own operations, we conducted a physical climate risk assessment of our global manufacturing supply chain footprint, looking at risks such as sea level rise, heat stress, typhoon and hurricanes and water stress. We partnered with suppliers facing some of the highest risks to ensure they had climate resilience integrated into their emergency planning and business continuity practices.

## Partnering with Others to Drive Industry Change

Beyond our own operations, we continue to look for ways to collaborate and share ideas with others, developing solutions that promote best practices for a responsible supply chain. We are members of the Responsible Business Alliance, a multi-stakeholder initiative dedicated to advancing sustainability globally, the Responsible Minerals Initiative and the Responsible Labor Initiative.

In May of 2019 we filed our annual **Conflict Minerals disclosure**. In June of 2019 we issued our annual **Anti-Slavery and Human Trafficking Statement** that outlines our commitment, policies, and practices to prevent and address forced labor issues in our supply chain. Public disclosures like these advance transparency and accountability in this space.

Since breaking ground on our data center in Prineville, Oregon in 2010, sustainability and efficiency have been core drivers of how we design, build and operate our infrastructure.

We incorporate a comprehensive set of sustainable design elements and construction practices that conserve energy and water, source materials responsibly, create healthy workspaces and keep waste out of landfills by recycling as much as possible. Now with 15 data centers globally - both online and under construction - we operate some of the most sustainable data centers in the world.

## Building Sustainable Data Centers

Energy efficiency and renewable energy are the foundations of our data center sustainability strategy. Thanks to smart design decisions that add up across the full stack of technology inside them - from the servers that keep our platform running to the systems that power them up and keep them cool - our data centers save significant amounts of energy and water.

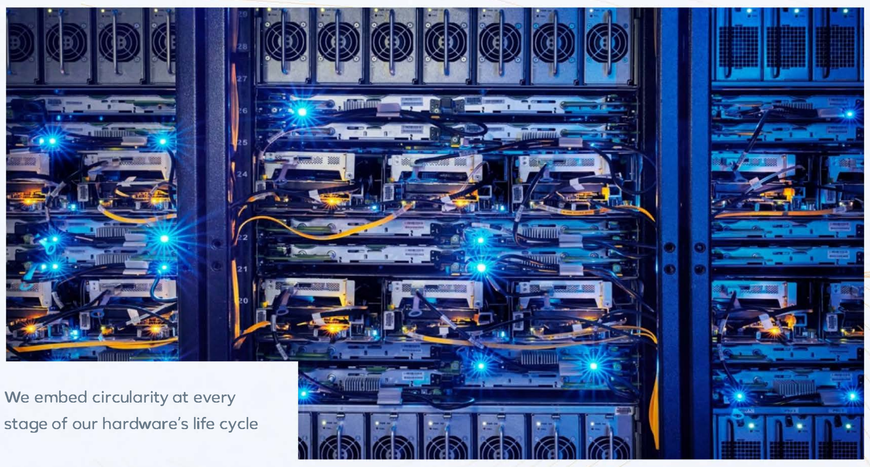
Data center in Luleå, Sweden

We use the U.S. Green Building Council (USGBC) green building rating system called Leadership in Energy and Environmental Design (LEED) to hold all of our data centers to a high sustainability standard. In 2019, four of our data center buildings in the U.S. officially earned LEED Gold certification. Our second building in Luleå, Sweden is the first to achieve LEED Platinum, the highest rating possible.

During construction, we aim to reduce our waste footprint and recycle as much of our materials as possible. By working closely with our general contractor and suppliers in Clonee, Ireland, we **promoted a zero-waste culture** and recycled 96 percent of the waste generated for the first three years of construction. This result helped our Clonee data center win Ireland's Green Construction Award in February 2019.

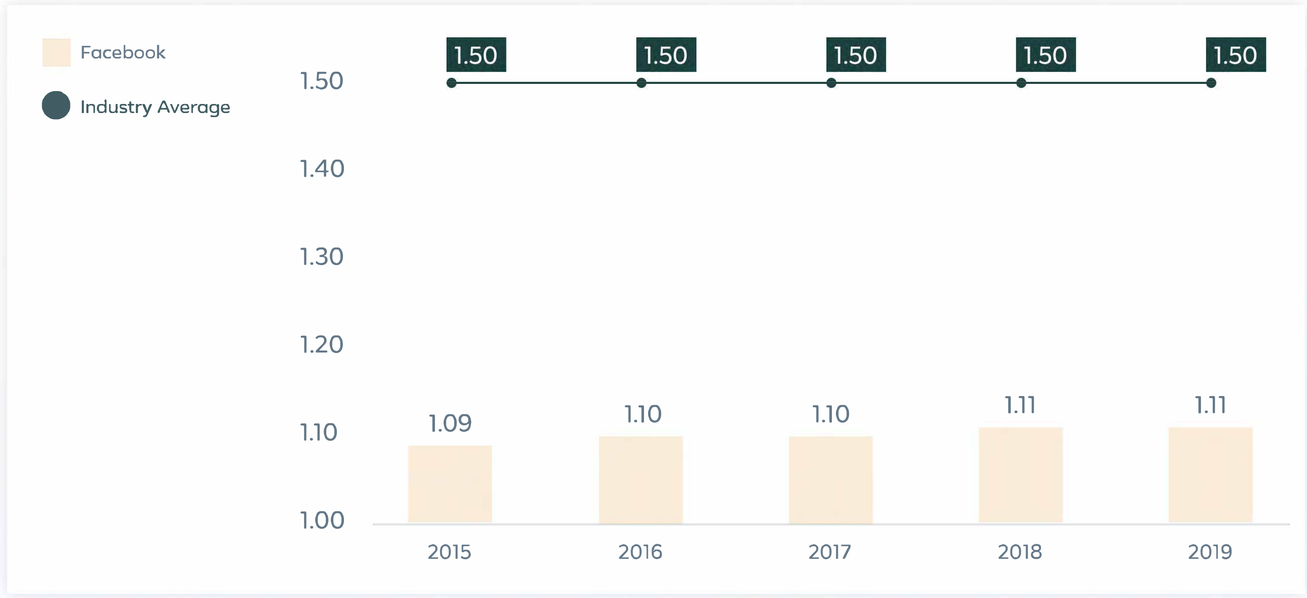
Aerial view of Clonee Data Center in County Meath, Ireland

Within our data center operations, we are constantly exploring ways to drive data center efficiency and sustainability by maximizing use of our server equipment to stay ahead of rising power demands while also reducing our impact.



We embed circularity at every stage of our hardware's life cycle

**Circular thinking** is an important component within this process, where we embed circularity at every stage of our hardware's life cycle by building repairability and recyclability principles into the hardware design process. We are also rethinking our approach to managing deprecated hardware, including server, rack and power equipment. By using hardware that are easy to repair and disassemble, we are able to redeploy and reuse various components of our hardware and systems, giving them a second life.



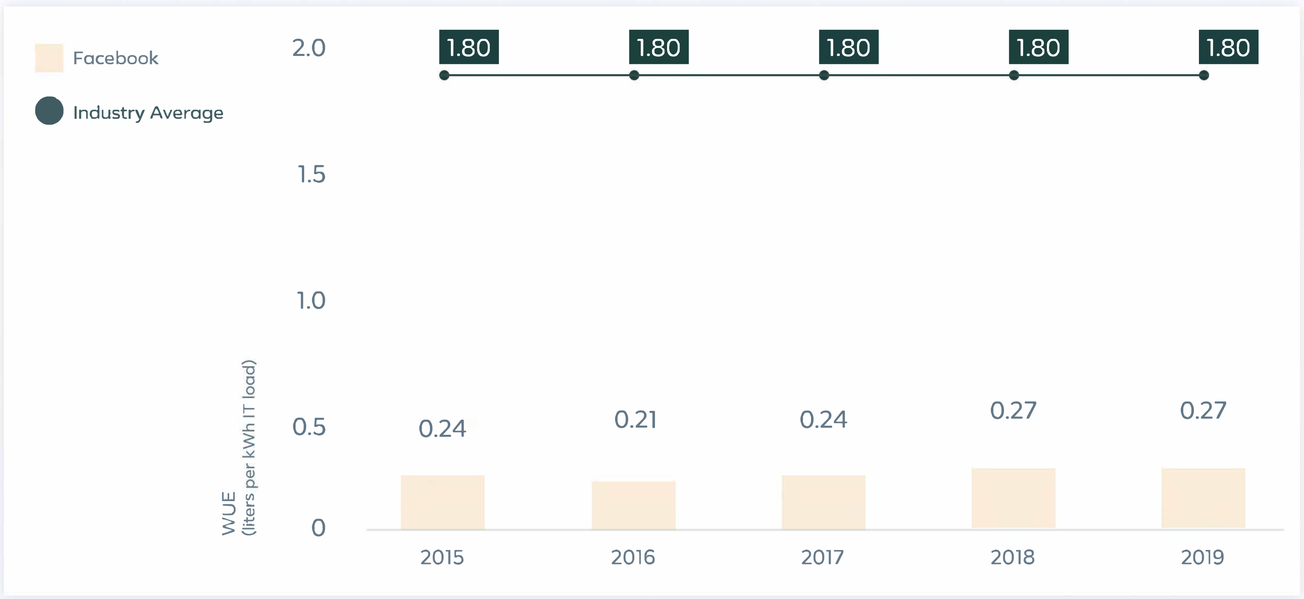

**Annual Data Center Power Usage Effectiveness (PUE)**

Power Usage Effectiveness (PUE) is used to measure how efficiently our data centers convert energy into compute power. To measure the operating efficiency of our data centers, we compare the total amount of power we source from our utility with the power used to run the hardware within the data center.

The "ideal" PUE is 1.0, meaning that every electron entering the site is used to power the hardware inside the data center. The industry average PUE is 1.5, and we're proud that our facilities have averaged 1.11 or below for the last five years. We still continue to look for additional ways to get even closer to 1.0.

**Annual Data Center Water Usage Effectiveness (WUE)**

Water Usage Effectiveness (WUE) is a water efficiency metric that compares the amount of water we use to the amount of energy that is used by our hardware. Since we started tracking and reporting on this metric in 2012, we have consistently kept our WUE stable - and extremely low. We are also proud that Facebook was the first to report this metric publicly and we are still one of the few companies to share it.




## Helping Data Center Communities

Whenever we build a new data center, we are driving jobs and economic and sustainability impact for local communities. In 2019, we published a report quantifying that impact.

For example, our Luleå Data Center in Sweden supported 1,461 construction and operational jobs per year between 2015 and 2018, driving €520 million of labor income. In the same timeframe, our Odense Data Center in Denmark supported 1,843 construction and operational jobs per year, ultimately driving €315 million of labor income. We also directly spent €599 million locally for Danish goods and services.

We are also thinking about our sustainability impact in our data center communities through an annual community grant program that funds projects focused on addressing regional social and environmental challenges, such as wildlife conservation and reforestation. In 2019, we also deployed over $500,000 in one-time grants supporting major regional sustainability projects across the U.S., Europe and Asia.

## Driving Industry Standards

Beyond our efforts to build and operate sustainable data centers, we strive to help shape the industry's standard for high performing data centers by partnering with thought leaders and organizations that share our vision. We are a member of the USGBC and we volunteer on technical committees to ensure LEED maintains a high bar for sustainability performance, doing our part to shape the future of its green rating system for data centers.

It is this collaborative mindset that also led us to co-found the Open Compute Project in 2011. This organization encourages leading technology innovators to share their products and designs around data center infrastructure with an open source community, inspiring more transparency and pioneering development across the technology industry. The work of our Open Compute Project engineers and developers has played a crucial role in shaping how Facebook designs and builds some of the world's most efficient data centers.

At Facebook, we are proud to design, build and operate some of the most sustainable workplaces in the world.

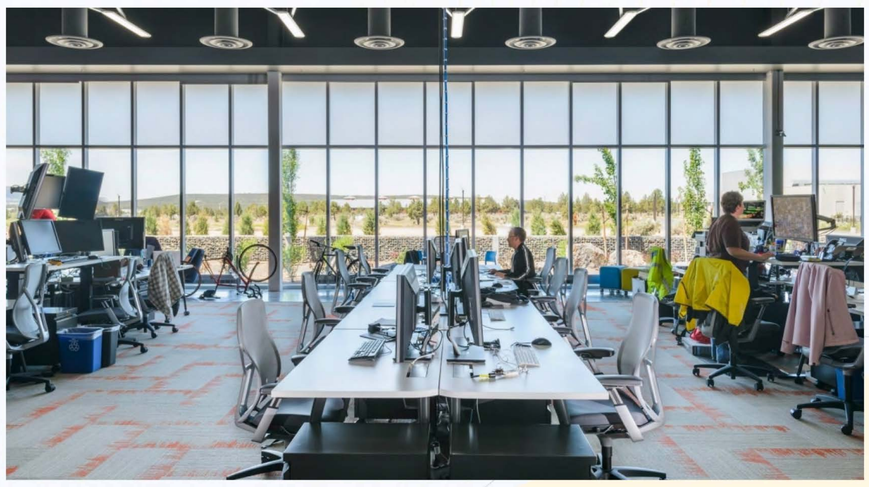
## Operating Sustainably

When designing and building our offices, we seek to create some of the most sustainable offices in the world by using materials with low environmental impact. We also strive to incorporate rigorous sustainable design standards and certifications – such as LEED®, Fitwel and WELL. Our Menlo Park headquarters has achieved LEED® Platinum and we use rigorous sustainable design standards across all of our global facilities. We also work with suppliers that share our commitment to sustainability. Beyond construction, we operate with high performance standards, optimize operational efficiency and reduce unnecessary waste to landfill.

We use demanding industry standards to realize key opportunities to make our operations more sustainable by optimizing our water and energy consumption. For example, we adopted the International Organization for Standardization for Energy Management (ISO) 50001 model and in 2019, we certified all of our UK and Irish offices. Through data gathering and benchmarking to determine our energy use baseline, we implemented effective energy management solutions that reduced our electricity and natural gas consumption at these facilities. Our facilities are recertified each year to ensure that they continue to operate efficiently.

Waste reduction is another example of our commitment to refining our operations and reducing our carbon footprint. Our Menlo Park headquarters diverts over 90 percent of our waste away from landfills through extensive recycling and composting efforts. We are partnering with recycling and composting organizations to reduce further. Additional reduction efforts are sought through our entire culinary program. Not only are our teams reducing waste by optimizing how food is procured and cooked, but our teams are also seeking healthy alternatives to carbon-intensive meat-heavy dishes. As of 2020, every cafe was offering a minimum of 50 percent of its entrees as a vegetarian or vegan option.

As we continue to expand our operations around the world, data insights and setting benchmarks will play a crucial role in our ability to scale efforts to create more sustainable workplaces and minimize our impact. In 2019, we established an operational goal to reduce the carbon footprint associated with global offices while meeting our goal to cultivate workplace productivity around the world. We focused our efforts on building a comprehensive, global approach to sustainable workplaces, expanding upon discrete initiatives to create a global program that helps us better understand the impacts and benefits of energy efficiency programs, projects and updates to buildings around the world. We created a global database to capture our water and energy consumption, as well as the amount of waste generated by our offices. This data-driven approach helped us set a baseline of operating standards, create tools for standard and efficient operations and increase the visibility of the sustainable operations of our global portfolio.



Every week nearly

**30,000**

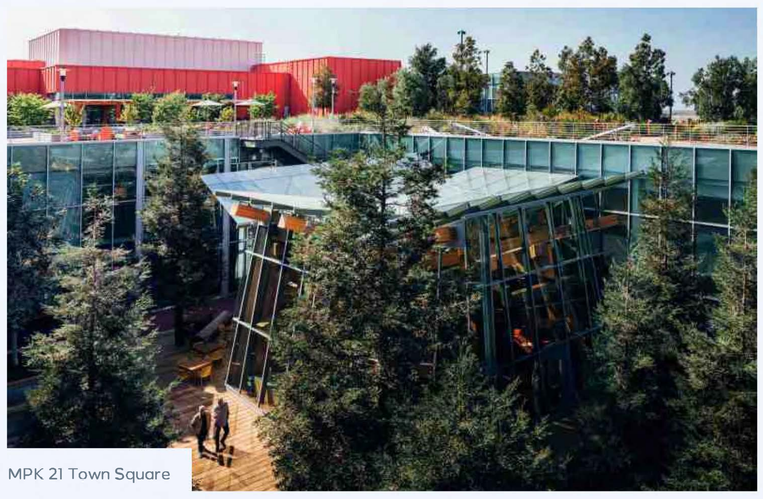
meals are delivered to local charities from our Menlo Park headquarters to avoid undue food waste.

## Community Impact

In communities where our campuses are located, we aim to reduce our footprint while protecting neighboring habitats by incorporating sustainable building and landscape design. In 2015, we completed construction on a nine-acre green roof in our Menlo Park headquarters, featuring more than 200 hundred trees and a half-mile pathway. The area has become a vital habitat for more than 4,000 resident and migrant birds.

Our Culinary teams in our Menlo Park headquarters avoid undue waste by delivering nearly 30,000 meals per week to local charities and we also collaborate with local farmers' trucks to offer communities low-cost farm shares.


Facebook Mobile Market



MPK 21 Town Square

## Driving Change Through Employee Engagement

When it comes to sustainability in the workplace, our employees are some of our greatest supporters. Their engagement and interest help support Facebook's ability to create and maintain sustainable working environments.

Throughout the year, we find opportunities to partner with employees on sustainability initiatives through internal engagement campaigns. For Earth Week in April 2019, we celebrated the moment by launching 40 employee events in more than 35 global locations. These events included a series of sustainability activations, such as local community cleanups, AR/VR demos, SDG fireside chats, expert panels, and smart building tours. More than 2,200 employees participated to learn more about Facebook's sustainability commitments in company operations and how to integrate sustainability practices into their personal lives. During Climate Week in September 2019, six global offices hosted events to educate employees about climate change and how to get involved.


Foodie Fair during Earth Week 2019

Across the company, we continue to see employee enthusiasm and involvement in our sustainability program increase dramatically. In 2019, we had 13 internal Green@ chapters, which grew 40 percent from the prior year and included more than 2,400 employees across the world. These employee resource groups are key partners to advancing sustainability initiatives at Facebook.


Foodie Fair during Earth Week 2019

From taking alternative transportation to participating in internal sustainability events, engagement from employees has allowed us to scale our impact in reducing our environmental footprint. In an effort to curb their own environmental footprint, 40 percent of employees across our global offices – and 50 percent at our Menlo Park headquarters – took alternative commute options to work in 2019. In 2019, we successfully reduced the use of single-use plastic water bottles across global workplaces. By working together with the employee-led Green@ teams, this initiative led to a 50 percent reduction of single-use water bottles, or nearly 6 million bottles annually worldwide.


SDG fireside chat with Edward Palmieri and Marcy Scott Lynn during Earth Week 2019