

2021 Sustainability Report



For a Better Reality.

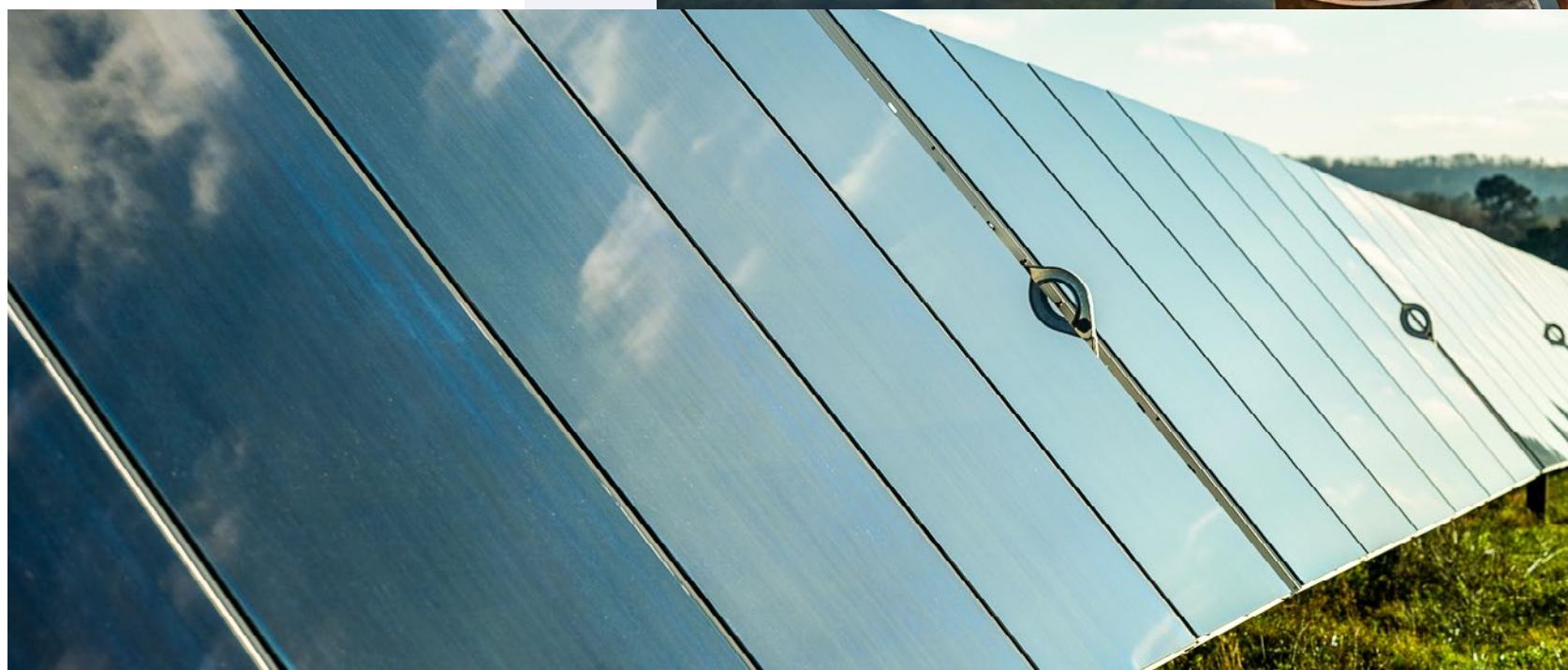


Photo courtesy of Ørsted

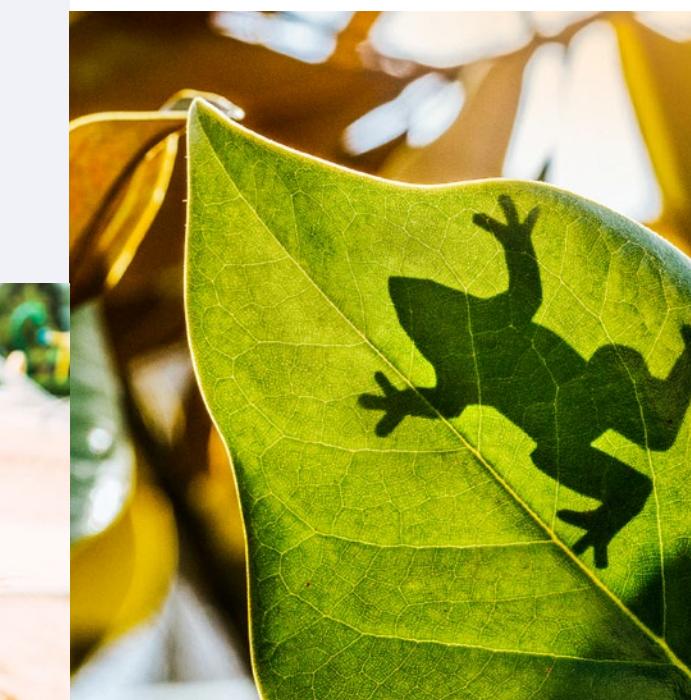


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216 million people could be forced to migrate within their own countries by 2050 because of climate change.



Leadership Messages

“The possibilities our technology will unlock for people only matter if we have a safe and thriving planet.”

— Mark Zuckerberg

A Message from

Nick Clegg & Mark Zuckerberg

President of Global Affairs

Founder, Chairman, and Chief Executive Officer

At Meta, we're building technology that will help shape the next chapter of the internet and the future of social connection. These long-term investments are in service of a vision for the future where everyone can be present with each other, create new opportunities, and experience new things.

We view our sustainability work with this same eye to the future. After all, the possibilities that our technology will unlock for people only matter if we have a safe and thriving planet.

We think about our work here in three areas: limiting the environmental footprint of our

operations and devices; driving climate action with our products; and forming partnerships to scale our impact.

On our operations, thanks to innovations in our data center and office designs, we've driven up efficiency and driven down our environmental footprint. But we have more work to do. We've

achieved net zero emissions in our global operations and set a goal to reach net zero emissions across our value chain in 2030.

We've also set an ambitious goal for our global operations to be water positive by 2030, meaning we'll restore more water than we consume.

On driving climate action, we've expanded our Climate Science Center to reach millions of people around the world with authoritative information about climate change. And we're working closely with experts to combat false or misleading information.

On partnerships to scale our impact, we recently announced a joint \$925 million commitment alongside Stripe, Shopify, McKinsey, and Alphabet to accelerate the development of carbon removal technologies over the next 9 years. This is just one of many ways we're collaborating with others across industry, nonprofit, academia, and government to combine forces for greater impact.



Our 2021 Sustainability Report dives deep on the progress we're making across these areas. As we work to provide people around the world with equitable access to opportunities, we've also committed to upholding the UN Global Compact's Ten Principles and to advancing the Sustainable Development Goals. We're committed to the UN Guiding Principles on Business and Human Rights too. Sustainability, human rights, economic opportunity—these are all interconnected and we're taking a holistic approach to make sure we're driving positive change globally.

The defining quality of the metaverse will be a feeling of presence—like you are right there with another person or in another place. That feeling of presence is an incredibly powerful tool to build empathy, understanding, and collaboration. Students will be able to take field trips to the melting ice caps or a wind farm, without leaving their classroom. Journalists will be able to tell immersive, first-person stories of climate refugees that help their audience feel the impact on people's lives. Experts from around the world can get together around a virtual table to discuss solutions and advance climate action.

We're optimistic about the role technology will play in helping us address the climate crisis. But the task ahead is massive. As both a company and a platform for social connection, we take our responsibility seriously. We'll continue our sustainability work across our business and products—and will share our progress through reports like this one.

Hi Urs

MR 38



A Message from

Rachel Peterson

Vice President of Infrastructure

Our mission is to give people the power to build community and bring the world closer together. The surge in traffic we observed on our platforms when the COVID-19 pandemic began demonstrated the ever-growing role Meta plays in keeping people connected across the world. Meaningful connections are not possible without a safe and healthy world—one in which diverse experiences are respected, accurate information is amplified over the noise, and bold climate action is truly making a difference.

We can all agree that changes to global temperature and climate present overwhelming challenges—both environmental and social. We take our role, and the responsibility that comes with it, seriously.

At our core, we strive to protect both people and the planet through responsible operations. For the last decade, we have invested in ways to make our own operations more water-and energy-efficient with a focus on sustainable solutions for the resources we do use. Put simply, we aim to use less—less water and less energy—and to reduce unnecessary waste.

As of 2020, our global operations reached net zero emissions and are supported by 100% renewable energy. We are now reaching toward the goals of net zero emissions across our value chain and becoming water positive throughout our operations, aiming to achieve both of these milestones in 2030.

Although this report looks back on 2021 and all the progress we have made, I cannot help looking forward and thinking about all the questions yet to be answered and the work yet to be done. One thing that became clear in 2021 as we mapped out our net zero strategy was the difficulty in

driving pathways for consistent reductions across our operations for a rapidly growing business.

We know our Scope 3 emissions are increasing—and will continue to increase in the near term—as we grow to support the global demand for the services we provide. For example, to support the infrastructure necessary to connect people around the world, we are building more data centers and networks that will provide capacity and reliability on our platforms, and will enable our transition to the metaverse. We will work to address our Scope 3 emissions by optimizing for low carbon in our business

decisions, collaborating with our suppliers to reduce emissions and exploring interventions that decarbonize our broader value chain, both upstream and downstream.

In addition to focusing on carbon reductions, we realize the need to be innovative and push for new ways to collaborate with others. After all, the challenge of reaching net zero is an industry-wide problem, and as an industry, we will need to collectively realize our goals for the climate by working together.

A MESSAGE FROM RACHEL PETERSON



Our recent investment in [Frontier AMC](#) is just one example of our belief that we can do far more for the climate through industry collaborations—and the ways we are working with corporate partners to push for faster advancement of technological carbon removals. We continue to partner with leading thinkers to develop new ways to accelerate adoption of sustainable materials and fuels for construction, hardware and transportation. Industry leaders, governments and other stakeholders know that Scope 3 emissions are difficult to measure and reduce. We remain committed to leading internal and external discussions and partnerships to drive industry standards and reductions throughout our value chain.

Finally, as we look forward, we believe that we must build on achieving our 100% renewable energy goals by optimizing our energy strategy to drive emissions reductions at a grid-scale. We will do this by maintaining our commitment to 100% renewable energy; creating innovative approaches to drive emissions out of the sector while improving reliability; and collaborating with peers, grid operators, utilities and other stakeholders to advance the zero emissions, reliable grid of the future.

Despite the unknowns, from the planning and analysis we completed in 2021, we know our ambitious 2030 targets will require significant shifts in how we build infrastructure, increase operational discipline and invest in existing and emerging nature-based and technological solutions to reduce and remove emissions. We will work to do all of this while growing our business to meet the demands of tomorrow.

We are humbled by these challenges and grateful to be part of a community of climate leaders, sustainability-focused organizations, government leaders and committed corporations all coming together to allow us to scale our efforts and enable bold climate action.

This is hard and very important work. It is how we will bring the world closer together—and together, how we will help the world move closer to better.

Switching to a clean economy could raise \$2.8 trillion through carbon price revenues and the redirection of fossil fuel subsidies to public investments.



Q&A with

Edward Palmieri

Director of Global Sustainability



Edward Palmieri joined Meta in 2010 and served as a member of the company's legal team for many years, while nurturing his passion for environmental justice and sustainability. As a new parent, Palmieri decided it was time for a shift in career focus. He joined Meta's Global Sustainability team as Director, allowing him to merge his work with his passion.

What is your vision for the future of Meta's sustainability strategy?

We have made a lot of progress over the past decade—driving up efficiency and driving down our environmental footprint, especially in how we design, build and operate our global offices and data

centers. But, we have so much more important work to do.

For example, we have worked for years to drive sustainability into our value chain through our responsible supply chain program. Meta's sustainability strategy in the coming years will be to expand our value chain and partnership programs to

include working with internal Meta teams and our global partners to fight climate change through emissions reductions and removals, water stewardship and biodiversity projects, and meaningful collaborations to invest in new solutions and scale our work.

Our strategy comes to life through three pillars:

1. How We Operate—protecting the well-being of people and our planet through our processes, operations and global supply chain
2. What We Create—amplifying scientists and climate leaders through our products and platforms
3. How We Collaborate—engaging with experts and supporting established initiatives in the climate space

How is Meta approaching its journey to net zero value chain emissions?

We embrace our responsibility as a global company to address the climate challenge that impacts us all. On our journey to reach net zero emissions across our value chain, we will lead by example while following what science tells us must be done to align with the Paris Agreement.

We are focusing on reducing our Scope 3 emissions, which means radically changing the way we operate and helping our suppliers to set their own climate targets. This work to use less, choose better, embrace low-carbon technology and collaborate with our suppliers will be a very long and complex journey. For us, our net zero goal is more than an announcement; it is a program designed to drive real emissions reductions and lasting changes to our infrastructure and supply chain.



How will the metaverse impact sustainability?

At Meta, we are committed to building tools that make choosing to connect virtually easier than ever. And while we are at the beginning of what will be a long and constantly changing journey, we are excited about giving people the ability to choose options that have a smaller environmental impact.

Still, the metaverse is new and the growth of our business to support the creation of these new tools presents challenges. The expansion of hardware, construction and operation of new data centers and other capital goods means that we must continue to drive toward more sustainable construction and operational business practices.

Q&A WITH EDWARD PALMIERI

At Meta, we are building tools that make choosing to connect virtually easier than ever.

We are now beginning to investigate how we can support our business growth while integrating with low-carbon technology, renewable energy, hardware circularity, reduced water usage and other climate-conscious initiatives included in this report.

Despite all the progress we are making and our plans for the future, the path to a sustainable metaverse will not always be easy. For example, at first, we expect to see an increase in our emissions. But, ultimately, the work we are doing during these

foundational years will drive the innovation and collaboration across our business that enables us to grow sustainably.

How are the sustainability and human rights agendas connected at Meta?

The shared values and aspirations of the human rights and environmental movements are increasingly apparent. The primary victims of environmental harm are often marginalized communities where people cannot claim their rights to live in a healthy environment. Linking our sustainability and

human rights agendas at Meta is an important step forward—whether that means taking into consideration the populations most impacted by transitioning to a zero-carbon economy or investing in the well-being of workers across our supply chain. Not only is this the right thing to do but also it signals to our employees and stakeholders that we are committed to protecting the rights we all deserve.

1,200+ companies have set science-based targets in line with net zero emissions.

What gives you confidence that Meta can be a driving force for industry change?

Our people and our commitment to real impact at scale give me confidence. With the technical and professional talent we have assembled, our team is poised to evolve the way Meta and the technology industry approach sustainability. Our employees truly care about this. Sustainability is not an add-on for us. It is a driving force in itself that motivates innovation in what we do and how we do it.

Our scale also gives me confidence. We have the global reach, expertise and platforms to make a meaningful difference in markets. We are working to support lower-emissions solutions across our business, which we believe will translate to market availability for others as well. We are doing this through our own direct investments (like with our renewable energy projects) and through partnerships (like our investments

in carbon removal and reduction solutions and technologies). In fact, one of the most wonderful things about working in the sustainability field is how collaborative it is. When we look at the [Open Compute Project](#), for example, we have seen the power of collaboration. I know we can do even more to set an example for better technologies and capacity-building in our supply chain.



Our Mission

Give people the power to
build community and bring
the world closer together.



ABOUT META

Note: On October 28, 2021, Facebook, Inc. changed its name to Meta. To maintain consistency, we will be referring to Meta throughout this report by its present name, even with regard to events that took place prior to the name change.



OUR VALUES

We updated our company values to reflect who Meta is as a global community with a wide-reaching impact. These values capture how we must work to bring our vision to life.

Move Fast helps us build and learn faster than anyone else. This means acting with urgency and not waiting until next week to do something you could do today. At our scale, this also means continuously working to increase the velocity of our highest priority initiatives by methodically removing barriers that get in the way. It is about moving fast together—in one direction as a company, not just as individuals.

Focus on Long-Term Impact emphasizes long-term thinking and encourages us to extend the timeline for the impact we have,

rather than optimizing for near-term wins. We should take on the challenges that will be the most impactful, even if the full results will not be seen for years.

Build Awesome Things

pushes us to ship things that are not just good but also awe-inspiring. We have already built products that are useful to billions of people, but in our next chapter, we will focus more on inspiring people as well. This quality bar should apply to everything we do.

Live in the Future guides us to build the future of distributed work that we want, where opportunity is not limited by geography. This means operating as a distributed-first company and being the early adopters of the future products we are building to help people feel present together, no matter where they are.



Be Direct and Respect

Your Colleagues is about creating a culture where we are straightforward and willing to have hard conversations with each other. At the same time, we are respectful, and when we share feedback, we recognize that many of the world's leading experts work here.

Meta, Metamates, Me is about being good stewards of our company and mission. It is about the sense of responsibility we have for our collective success and to each other as teammates. It is about taking care of our company and each other.

Our four-point company plan drives the way we approach business strategy and our sustainability strategy:

1. Continue making progress on the major social issues facing the internet and our company
2. Build new experiences that meaningfully improve people's lives
3. Grow the business by supporting millions of small businesses
4. Communicate more transparently what we stand for

ABOUT META



workplace
from Meta



Meta Quest



Meta Portal



from FACEBOOK



META AT A GLANCE*

Meta builds technologies that help people connect, find communities and grow businesses. When Facebook launched in 2004, it changed the way people connect. Apps like Messenger, Instagram and WhatsApp further empowered billions around the world.

Now, Meta is moving beyond 2D screens toward immersive experiences like augmented and virtual reality to help build the next evolution in social technology. Our products connect more than three billion people around the world.



ABOUT THIS REPORT

2021 Environmental Sustainability Progress

Meta first reported its Scope 1 and 2 greenhouse gas (GHG) emissions in 2011 and began reporting Scope 3 emissions in 2019.



Meta's Sustainability Report reflects our sustainability progress during the 2021 fiscal year (January 1–December 31, 2021). Understanding our impacts on society and the environment is core to how Meta operates. We continue building transparency

into the way we report on our strategy to minimize our impact. In preparing this report, Meta referenced guidance from the Global Reporting Initiative (GRI); Sustainability Accounting Standards Board (SASB), Internet and Media Services

Industry Standards; Task Force for Climate-Related Financial Disclosures (TCFD); and the United Nations Global Compact.

In 2021, external auditor, Apex Companies, LLC, audited our environmental data. You can access audit certifications [here ↗](#).

ABOUT THIS REPORT



Stakeholder Identification and Engagement

Whether we are building new products or processes, we have to involve affected communities, particularly those whose perspectives have been historically overlooked or who might be disproportionately impacted by the use or even the existence of a given technology.

We believe the best way to ensure our efforts are focused on the right priorities is through open dialogue and a combination of formal and informal meetings with stakeholders, including end users, colleagues, communities, suppliers, industry peers, nongovernmental organizations (NGOs), policymakers and investors. These conversations help inform our sustainability programs and advance our work.

The 100 least-emitting countries generate 3% of total emissions.
The 10 largest emitters contribute 68%.



Environmental, Social and Governance (ESG) Priority Topics

We conduct regular assessments to understand the ESG topics that are most important to our stakeholders and our business over the short, medium and long term.

This helps ensure that Meta's ESG topics are identified, prioritized, addressed and reported in an inclusive, robust and effective manner.

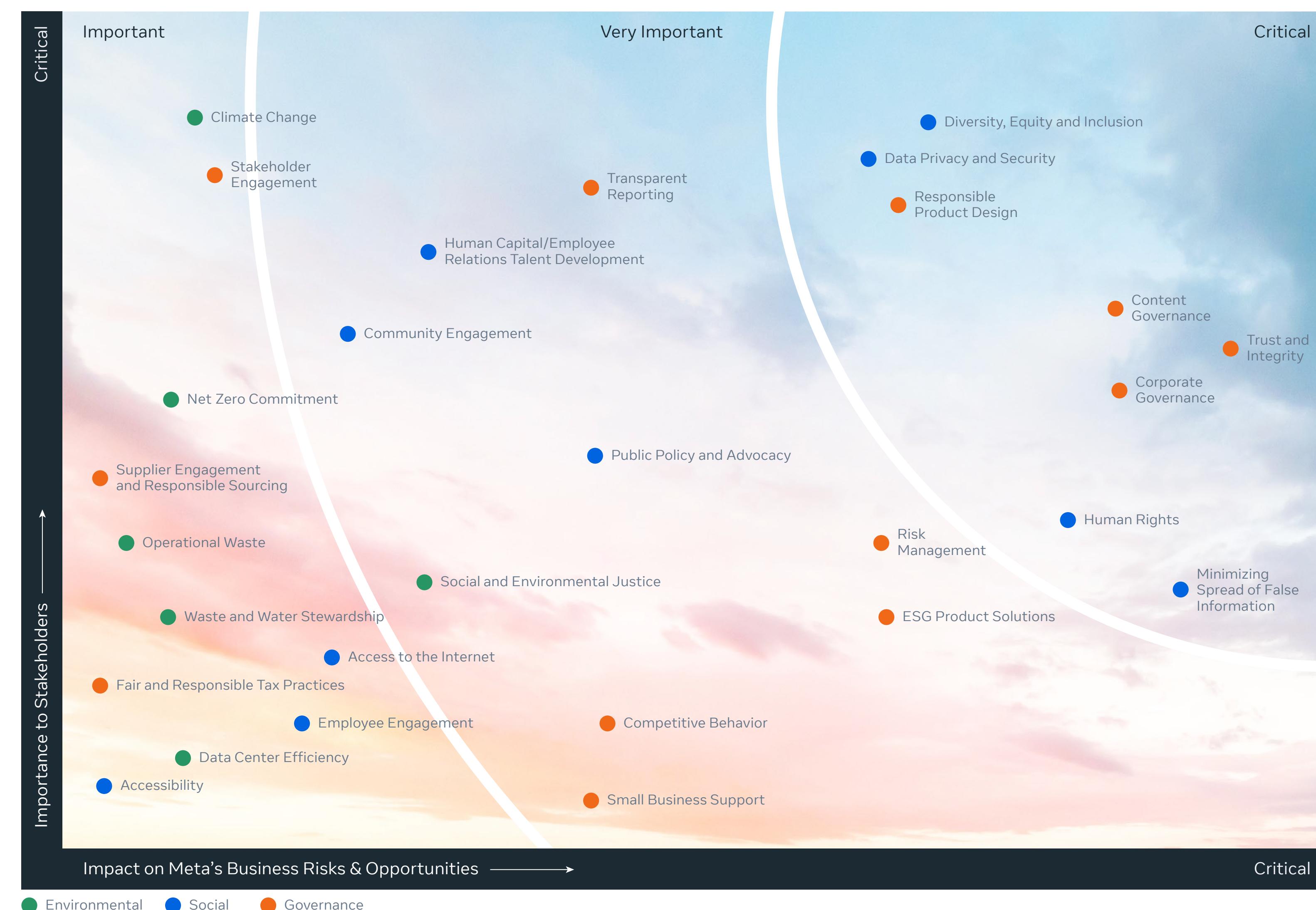
ABOUT THIS REPORT



Meta's Priority ESG Topics

While Meta works to address all the topics outlined in our priority topics map, this report focuses on the key environmental topics, as well as the connected social and governance areas. Definitions for our priority topics covered in this report can be found in the data index. Please visit our [Environmental, Social and Governance Resource hub](#)¹ for information on how we address other priority topics. We value and welcome feedback from all stakeholders.

To avert the worst impacts of climate change, global temperature increase must be limited to 1.5°C above pre-industrial levels. Global temperatures are already 1.1°C warmer.



¹ Refers to **material environmental, social and governance** topics that have or can potentially have a direct impact on Meta or its stakeholders; **Does not refer to materiality as defined under Federal Securities Law.**

United Nations

SUSTAINABLE DEVELOPMENT GOALS

The United Nations Sustainable Development Goals (SDGs) call upon business, government and civil society to address social, environmental and economic challenges and to drive progress for humanity to build a more sustainable world for all in 2030.

Our sustainability and broader corporate initiatives can be tied to each of the 17 SDGs, and we plan to continue mapping our progress against the goals to transparently communicate our efforts. At this time, we are reporting on the areas in which we see the [biggest potential for impact ↗](#).



UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

**UNSDG #3**
Good Health & Well-Being**2** Billion+People connected to accurate COVID-19 and vaccine information through Facebook's [COVID-19 Information Center](#)**12** Million

Pieces of misleading COVID-19 information removed from Facebook

3,000

Pages and groups removed for repeatedly violating our rules against spreading COVID-19 misinformation

\$175 Million+

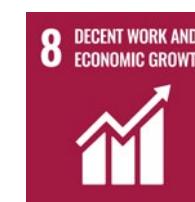
Raised for COVID-19-related fundraisers globally on Facebook and Instagram

**UNSDG #5**
Gender Equality**1** Million Women
in 28 CountriesEquipped with training and mentorship to grow their business on the Facebook platform through our [#SheMeansBusiness program](#)**600,000**Facebook users reached through two global surveys on [Gender Equality at Home](#) in more than 200 countries**12**Nonprofit leaders, activists and academic experts in Meta's [Global Women's Safety Expert Advisors group](#) to help inform the new [Women's Safety Hub](#)

Across the world, women are more likely than men to be affected by climate-related food insecurity.



UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

UNSDG #8
Decent Work and Economic Growth

\$1 Billion



Committed to diverse suppliers annually

\$40 Million



In grant funding to Black businesses most impacted by COVID-19

50% of Our Workforce



Will be from underrepresented communities by 2024

31 Countries



Included in a survey of small businesses to understand views on climate change and priorities for investments in water infrastructure

234,000 Users



Across Meta's educational programs

2.38 Million Unique Visitors



To the Facebook Social Media Marketing Professional Certificate landing page

368,000



Unique Visitors to the Facebook Marketing Analytics Professional Certificate landing page

1,870 Job Applications



Submitted for 280 jobs offered by 211 companies in the hiring consortium

63% Career Success Rate



Of those who completed one of the marketing professional certification programs, 18% got a new job, 25% got a salary increase, 15% got a promotion, 9% started a business, 32% grew a business, and 70% feel more confident in their marketing abilities after certification

Achieving 50%-70% renewable energy could generate up to 600,000 jobs in wind, solar and battery storage.



UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

**UNSDG #9**
Industry, Innovation and Infrastructure**300** Million People

Provided with fast, reliable internet access thanks to collaboration between our Connectivity team and partners

\$200 Billion

In economic growth for sub-Saharan Africa, the Association of Southeast Asian Nations (ASEAN) and Latin America over the next five years through Meta partnerships and digital access infrastructure

**UNSDG #13**
Climate Action**3.8** Million

Global subscribers to the Climate Science Center

\$130 Million

Donated by 3.5 million Facebook and Instagram users to combat climate change

100%

Renewable energy for our global operations

**UNSDG #13**
Climate Action**Net Zero**

Greenhouse gas emissions for our global operations

Net Zero

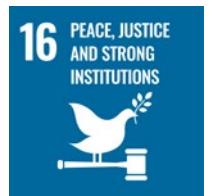
Across our value chain in 2030

76,328

Facebook users reached with the Climate Change Opinion Survey to provide insights into public views on climate change across 31 countries

40,000

Meta employees working on safety and security on our global content review teams

**UN SDG #16**
Peace, Justice and Strong Institutions

UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

**UNSDG #17**
Partnerships for the Goals**4** PartnershipsTo advance progress on the SDGs through [Project 17](#)**580+**

Data for Good partners equipped with insights needed to make decisions to advance humanitarian response and the SDGs

Nearly 50 MillionPeople will be impacted by water and sanitation interventions over the next five years because international nonprofit World Vision recently leveraged Facebook's high-resolution population density maps [to develop their strategic plan for water and sanitation](#)

Net Positive Water Impact is a cornerstone concept for accelerating progress on UNSDG #6-Clean Water and Sanitation for all.



Our Sustainability Vision

We envision a just and equitable transition to a zero-carbon economy.



OUR APPROACH TO SUSTAINABILITY

We are in the business of building better realities—and not just virtual ones.

More than 130 countries and 400 of the largest companies have net zero targets aimed for 2050 or earlier.



OUR VISION

We envision a just and equitable transition to a zero-carbon economy, and we are working with others to scale inclusive solutions that help create a healthier planet for all, ensuring that no one is left behind.

We will not realize this vision on our own. We see our role as protecting people and the planet through responsible operations—minimizing our energy, emissions and water impact, while protecting workers and the environment in our supply chain.

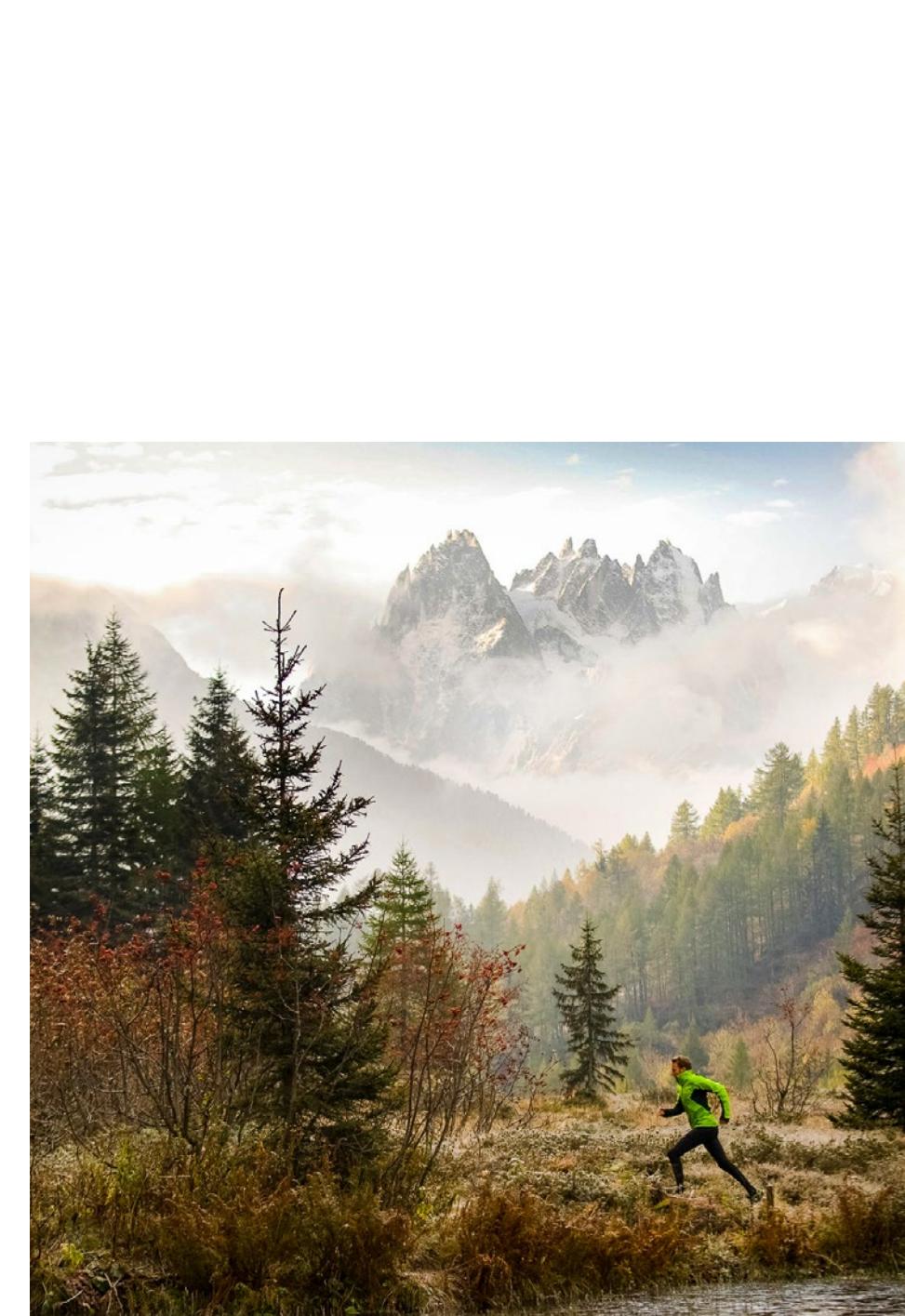


At the same time, we collaborate with community members, climate action leaders and scientists to innovate beyond what is possible today. We are leveraging our core products and services to enable access to climate science information and to accelerate action-oriented resources for tomorrow.

Our strategy is anchored by three components—How We Operate, What We Create and How We Collaborate—and supported by science-based targets to help drive change across the many communities in which we operate.

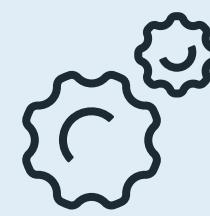


We are making rapid progress in many areas associated with each component. In other areas, we know we have further to go, and we intend to get there. We are committed to making a difference for our product users and workers throughout our supply chain.



OUR APPROACH TO SUSTAINABILITY

For a Better Reality



How We Operate

We are committed to protecting what is truly important:
The well-being of people and our planet.

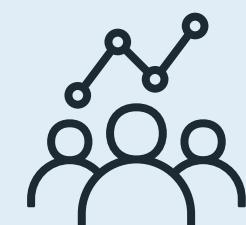
- Take bold climate action by minimizing our footprint, championing renewable energy, restoring water resources, engaging our suppliers and supporting climate justice
- Respect human, labor and civil rights in our operations and supply chain
- Cultivate diversity and inclusion in our operations
- Boost energy and water efficiency in our data centers



What We Create

We push the boundaries of what is possible, creating solutions where none existed and building products that enable change.

- Provide access to new ideas, accurate information and ways to take action via content on our platforms
- Amplify content from scientists and climate action leaders
- Design new products with diverse needs and values in mind
- Elevate small businesses and spur economic growth
- Integrate circular practices in our facilities and hardware



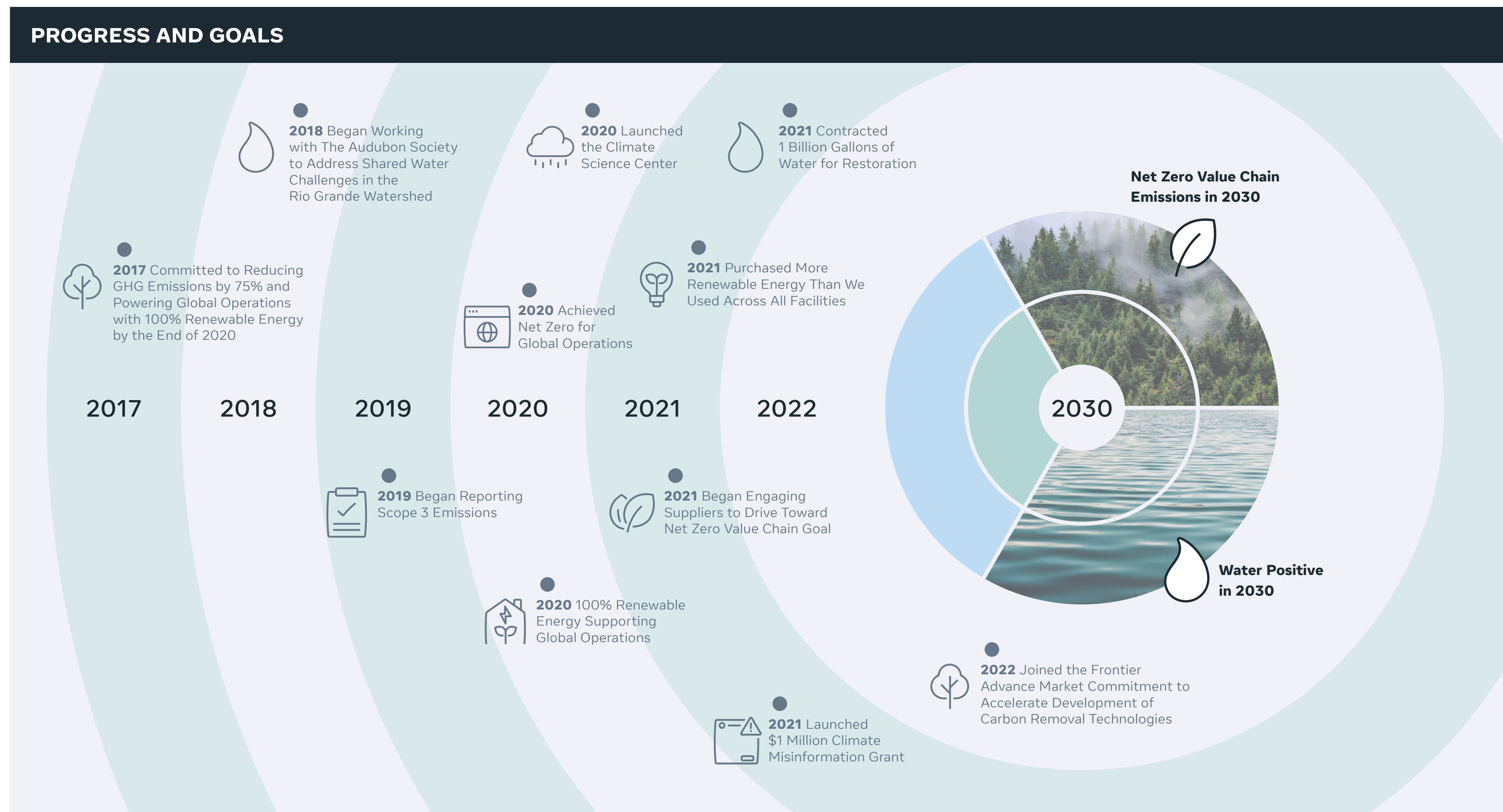
How We Collaborate

We tackle the important issues by creating partnerships and joining established initiatives.

- Engage experts to guide our sustainability and social impact initiatives
- Connect researchers with insights
- Join forces with NGOs and community organizations to create and implement locally beneficial environmental initiatives

- Work with local power utilities to enable our facilities and local businesses to procure renewable energy
- Share our environmental learnings and practices throughout the tech industry and beyond

OUR APPROACH TO SUSTAINABILITY



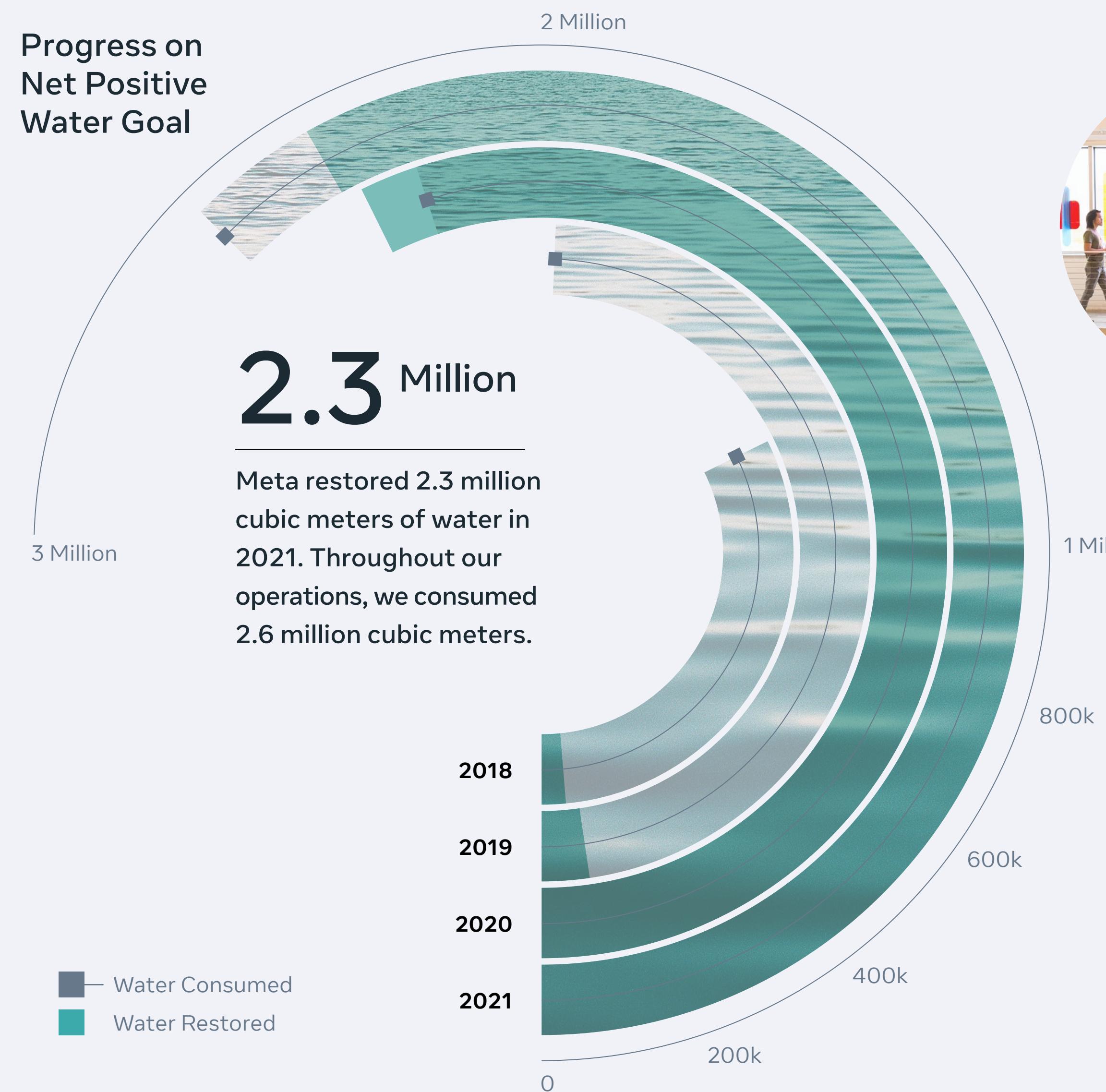
2021 Highlights

Celebrating today.
Working toward tomorrow.

2021 HIGHLIGHTS

Through operational improvements and product innovations, we made significant progress toward a better reality in 2021. We are proud of how far we have come—and we are ready to go so much further.

Progress on Net Positive Water Goal



2.3 Million

Meta restored 2.3 million cubic meters of water in 2021. Throughout our operations, we consumed 2.6 million cubic meters.

Water Consumed
Water Restored

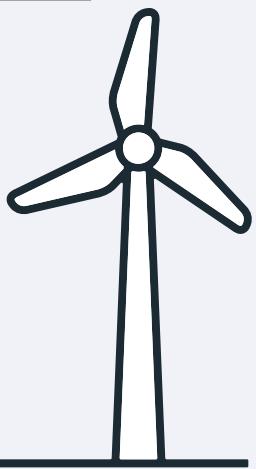


38%

Meta offices opened in 2021 were 38% more water efficient than LEED baseline.

7,500 MW

As of 2021, we had contracts in place for more than 7,500 megawatts (MW) of renewable energy.



3 Million SQ FT LEED Gold



The six new data center buildings we opened in 2021 were awarded LEED Gold certification, totaling 3 million square feet.

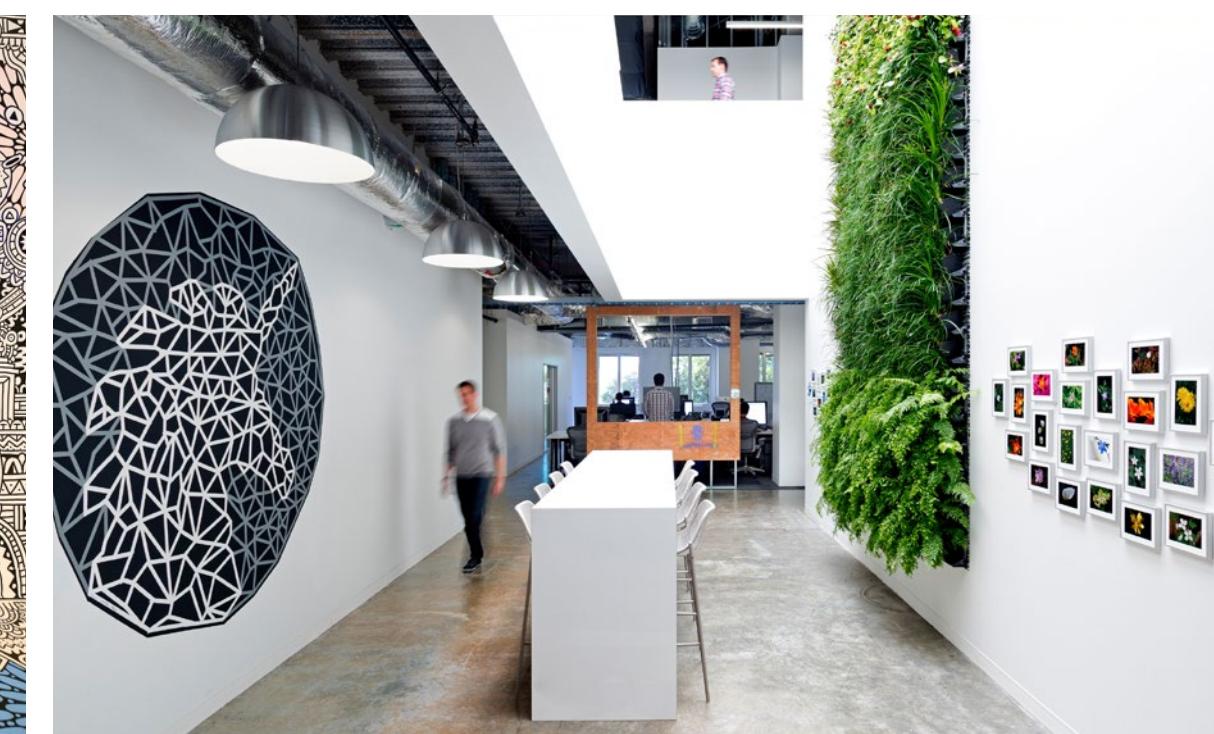
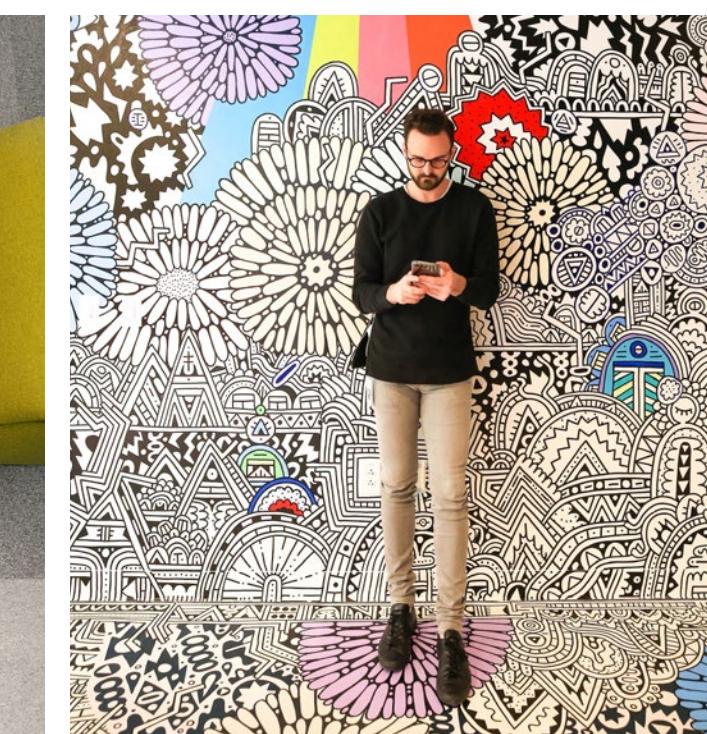
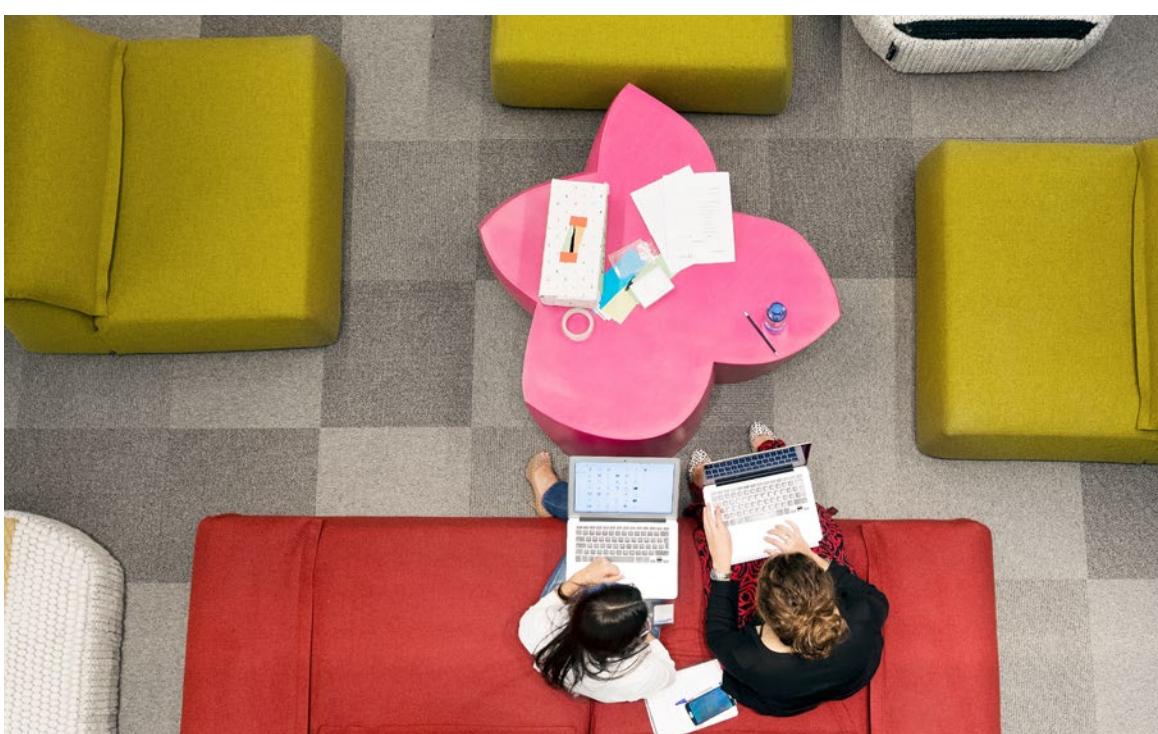
2021 HIGHLIGHTS

Protecting People and Planet Through Responsible Operations

Thanks to our sustainability-focused real estate development teams, the [21 Meta offices](#) that earned [Leadership in Energy and Environmental Design \(LEED\)](#) certifications in 2021:

- Were 38% more water efficient than [LEED baseline](#), avoiding 10.5 million gallons of water annually
- Recycled 86% of construction waste, saving 32,000 tons of waste from going to landfill or incineration

Through our innovative server cooling process, [data centers](#) operating in 2021 were at least 80%¹ more water efficient than the average data center. Our six data center buildings that received LEED Gold certification in 2021 recycled over 50,000 tons (82%) of construction waste.



2021 HIGHLIGHTS

**Accelerating
Access to Accurate
Information via the
Climate Science Center**

In 2020, we started working with the [Intergovernmental Panel on Climate Change \(IPCC\)](#) ↗ to provide access to science-based and dynamic climate information via the [Climate Science Center \(CSC\)](#) ↗.

[In 2021, Meta expanded the CSC](#) to more than 150 countries, attracting more than 3.8 million followers. The CSC provided more than 100,000 daily visitors with data from the IPCC and other organizations active in climate science.

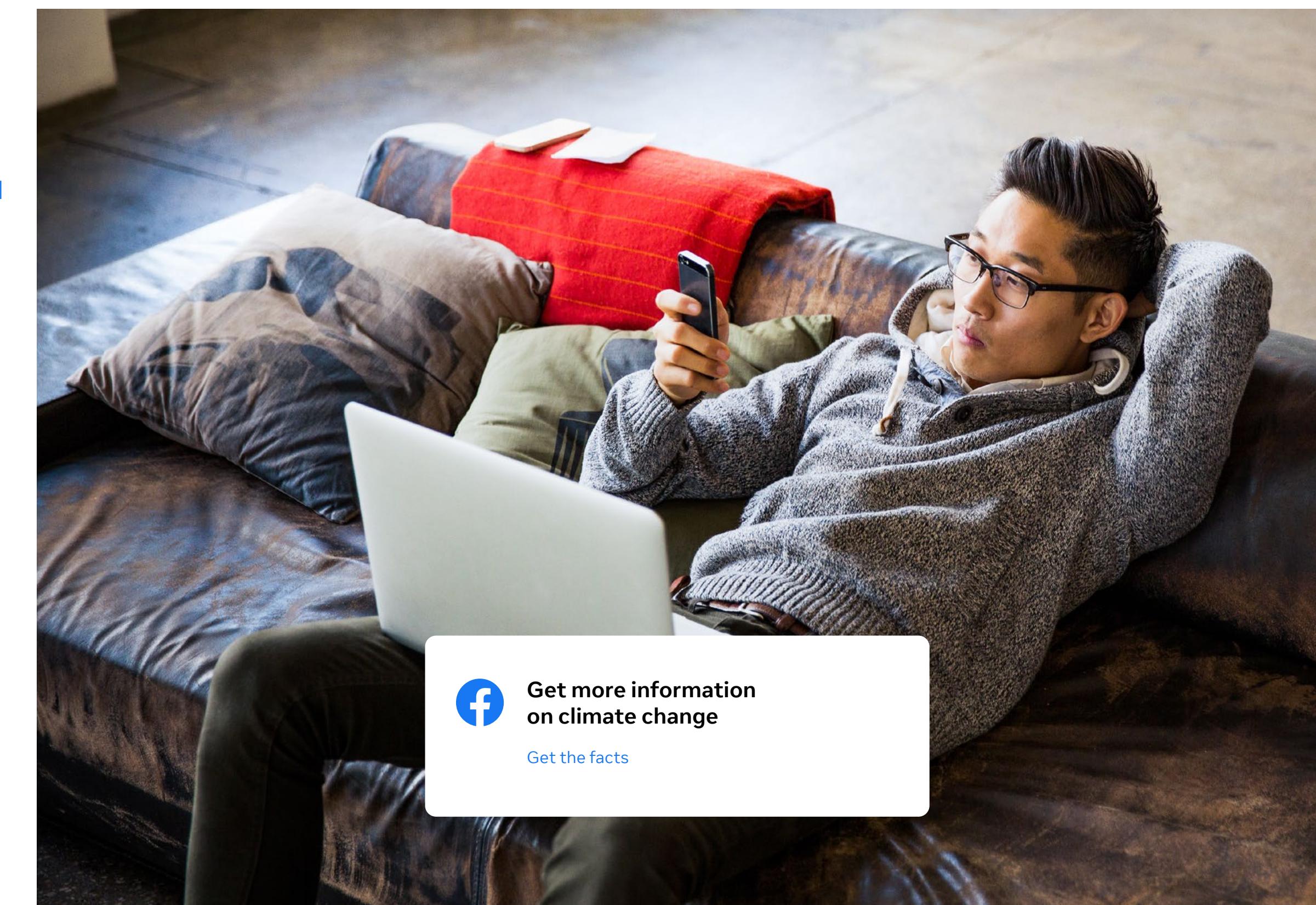
**Tackling Climate
Misinformation**

Climate misinformation on our platforms tends to spike periodically when climate change conversations are elevated, such as during extreme weather events. That is why we work with a global network of over 80 independent fact-checking organizations to review and rate content in more than 60 languages.

Indonesia and the U.S. are the countries with the highest shares of climate change deniers.



To supplement that program, in 2021, we launched the \$1 million [Climate Misinformation Grant](#) in partnership with the [International Fact-Checking Network](#) ↗. Through this program, we will fund partnerships and proposals from fact-checkers, climate organizations and solution providers working to combat false and misleading information about climate change.



Get more information
on climate change

[Get the facts](#)

2021 HIGHLIGHTS

Expanding Net Zero from our Operations to our Value Chain

On our path to [net zero value chain](#) emissions in 2030, we are committed to an approach that prioritizes emissions reductions. Key strategies to reduce emissions include using fewer new materials by reusing server hardware components and choosing construction materials with a smaller emissions footprint, such as low-carbon concrete.



We began working with a select group of our suppliers in 2021 to calculate and report their greenhouse gas (GHG) emissions. In 2022, we will provide capacity-building training to our top 100 suppliers on measuring their GHG impact, setting reduction goals and identifying ways to reduce their emissions.

To address any emissions we cannot reduce, we will remove an equivalent amount of GHG emissions through verified carbon removal projects that prioritize social and environmental benefits.



Scope 3 emissions fall within 15 categories, though not every category will be relevant to all organizations.



Our emissions footprint includes our business operations and data centers, as well as the indirect emissions upstream and downstream.

Scope 1 covers direct emissions that come from sources that are owned or controlled by Meta.

Scope 2 covers indirect emissions from the purchased or acquired energy consumed by Meta.

Scope 3 includes all other indirect emissions that occur in Meta's value chain, including supply chain operations and end-product usage by customers.

2021 HIGHLIGHTS

Becoming Water Positive

We follow a water stewardship strategy that focuses on sourcing water responsibly, driving water efficiency across our facilities and operations, and investing in critical water restoration projects in the same watersheds where our facilities are located.



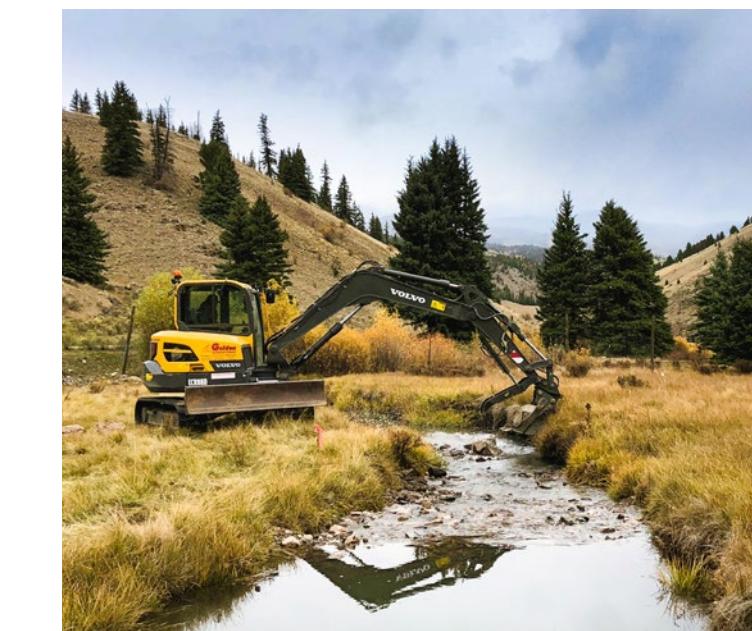
In 2021, we added seven new water restoration projects in Arizona, New Mexico, and Texas, totaling approximately 377 million gallons of water per year.

We announced our goal to be [water positive in 2030](#), and in 2021, we reached the milestone of contracting 1 billion gallons of water per year for restoration.

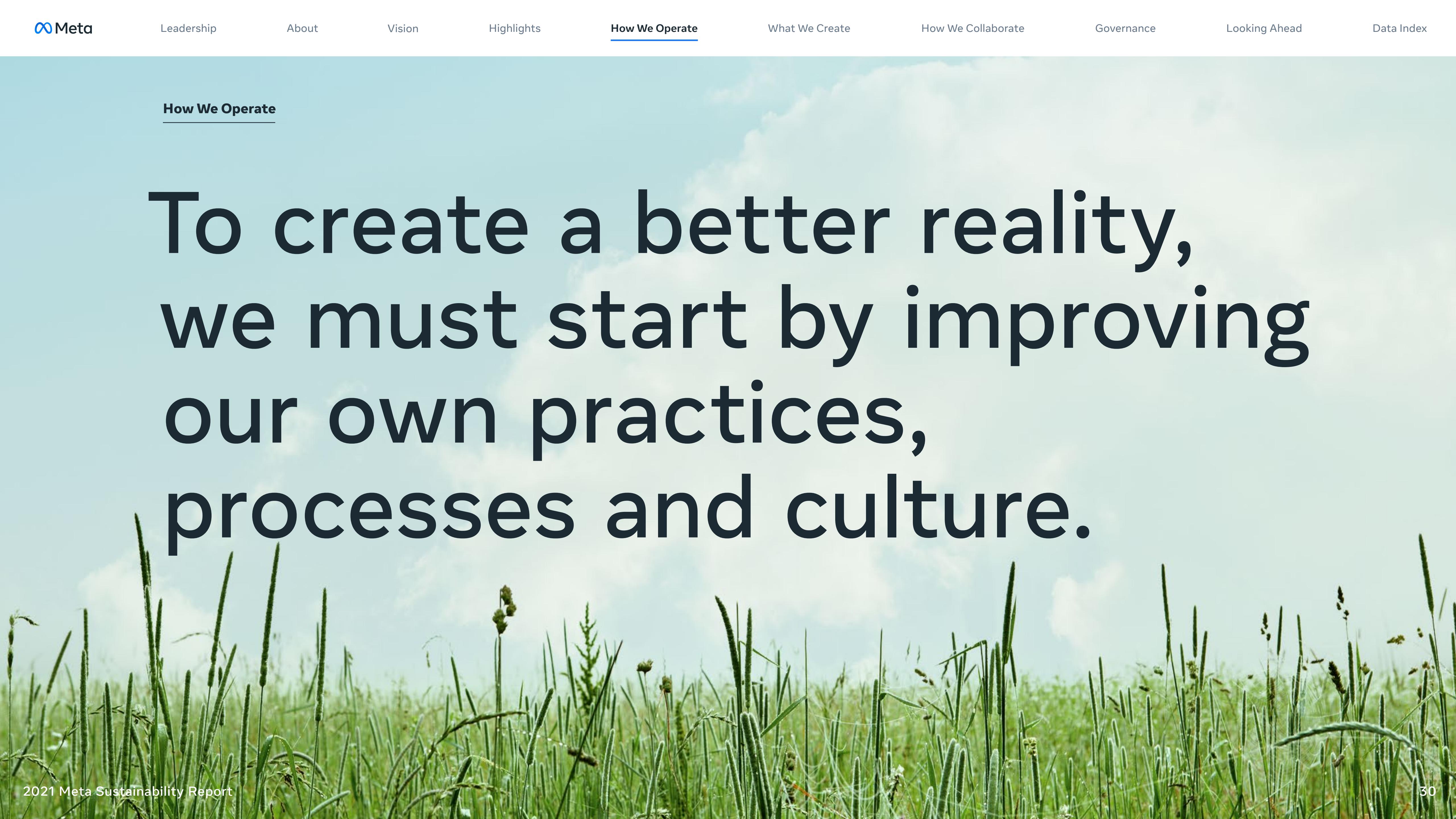
Though they cover only around 6% of the earth's land surface, 40% of all plant and animal species live or breed in wetlands.



Photo courtesy of TNC



Photos courtesy of Craig Sponholtz, Watershed Artisans Inc.

How We OperateA photograph of a lush green field of grass under a bright blue sky with scattered white clouds. The grass in the foreground is tall and textured, with some small flowers or seed heads visible.

To create a better reality,
we must start by improving
our own practices,
processes and culture.

HOW WE OPERATE

Assessing and addressing climate risks.

Early warning systems for disasters can deliver benefits up to 10 times the initial cost.



Because climate-related issues are inherently uncertain, assessing risks and evaluating actions is an ongoing process.

For the last decade, we have invested in ways to minimize our footprint, champion renewable energy, restore water supplies and support climate justice. As of 2020, our global operations have reached net zero emissions and are supported by 100% renewable energy².

To maintain forward progress as our business grows and evolves, we regularly conduct climate-related risk and opportunity assessments to better understand and manage future transitional and physical risks associated with climate change. This helps us take the right measures that contribute to our company's and our world's resilience.



To guide our work, in 2021, we incorporated recommendations of the Task Force on Climate-Related Financial Disclosures. This process helps provide a view into how we understand and manage the risks and opportunities associated with climate change, and it informs how we prepare to navigate the evolving disclosure landscape (including potential U.S. and EU regulations and requirements). We are committed to completing a full TCFD scenario planning in 2022.

Transitional risks can occur as businesses recalibrate to a cleaner, green economy. To assess our transitional climate risks, we consider potential changes to climate policies as well as technological, market and reputational risks. We believe we are better positioned for the transition to a greener future through our efforts to support our operations with 100% renewable energy and our goal to reach net zero emissions across our value chain in 2030.

HOW WE OPERATE

Our climate resilience toolkit provides checklists and key questions for each type of physical risk to help develop resiliency plans.



To address our physical climate-related risks, we execute assessments using models and potential risk scenarios. We use the intermediate and business-as-usual scenarios based on IPCC Representative Concentration Pathways [4.5 ↗](#) and [8.5 ↗](#) to better understand how acute and chronic physical risks may impact our global facilities, data centers and supply chain.

We have assessed physical risks, such as wildfires, sea-level rise, water stress, floods, hurricanes and heat stress, completing

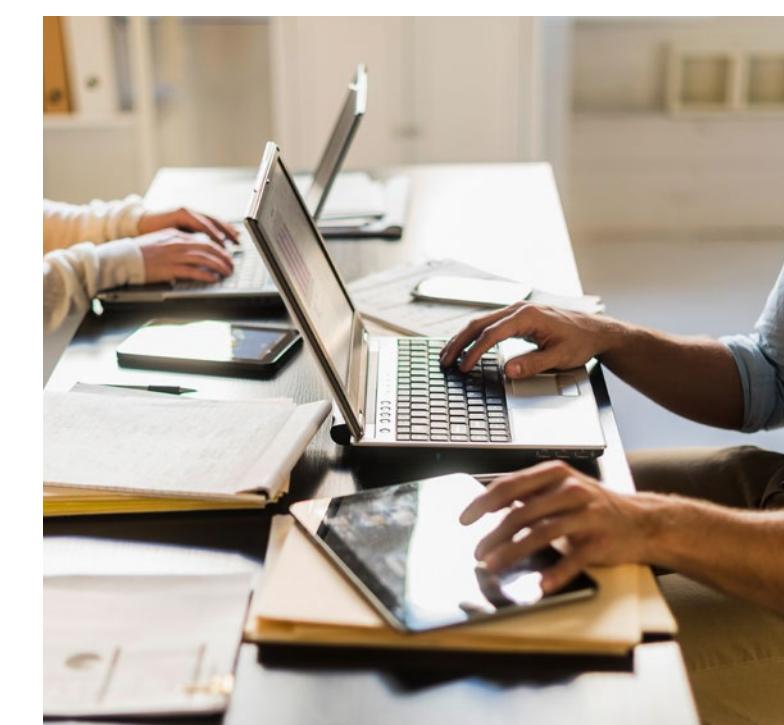
climate risk assessments for over 500 priority sites. Insights from these assessments help inform our operational strategy and identify key opportunities to weave climate-related considerations into our long-term resiliency strategy.

We strengthen our climate resilience when we incorporate the results of these assessments into key business decisions. Our

67% of Americans perceive a rise in extreme weather.



climate resilience toolkit provides checklists and key questions for each type of physical risk to help develop resiliency plans. Teams also conduct tabletop exercises to practice responses to disruptive extreme weather events.



RESPONSIBLE SUPPLY CHAIN

Sustainability across our value chain.



Meta is part of a complex value chain that touches lives and communities around the globe. Our Responsible Supply Chain (RSC) program strives to empower workers and protect the environment—through open and frequent communication with our suppliers, deep understanding of core sustainability issues and initiatives that support safe, healthy and fair working conditions.

Our approach begins with establishing clear expectations with our suppliers through our standards and policies, including the [Responsible Business Alliance \(RBA\) Code of Conduct](#).

Meta is opposed to all forms of human trafficking, slavery, servitude, forced labor and all other trafficking-related activities



The RBA Code of Conduct, [Meta's Anti-Slavery and Human Trafficking statement](#) and [Meta's Conflict Minerals Policy](#)

serve as some of the RSC program's core tenets and are a guidepost for the expectations we set with our suppliers.

Supply chains generate around 60% of all carbon emissions globally.



as noted in our Anti-Slavery and Human Trafficking statement.

Our statement includes information on preventing forced labor risks in our supply chain, including risk assessment and due diligence processes. In support of these human rights commitments, our suppliers are also expected to follow Meta's policy requirements in creating and ensuring a [respectful workplace](#). Additionally, we expect our suppliers to understand and conform with our [Corporate Human Rights Policy](#).

RESPONSIBLE SUPPLY CHAIN

Evaluating and Addressing Risk

We extend our approach to risk assessment to our global supply chain, working closely with suppliers to help them understand, prevent and mitigate risks in and to their business. Assessments come in multifaceted forms that include independent audits, supplier questionnaires, on-site visits or conversations.

In 2021, we continued to identify meaningful areas of improvement by engaging with workers directly through mobile surveys that provided key worker sentiment.

Surveys have led to improvements in worker satisfaction through focus group discussions, stronger new employee onboarding and improved grievance mechanisms and analysis. We have taken a more holistic approach to worker well-being thanks to survey feedback that includes physical and emotional health and ideas for managing stress.

Meta experts address identified issues with direct supplier engagement and corrective action. When needed, we also look to external partners for support in the areas of labor, health and safety to help suppliers identify areas for improvement and create structured action plans with measurable outcomes.

Net Zero Supplier Engagement

“For a Better Reality” is about building a better future. Business as usual must fundamentally change to move away from what is obviously an unsustainable path. This shift is an enormous undertaking affecting all levels of the supply chain, an undertaking even a company the size of Meta cannot tackle alone. What

we can control right now is how we operate, what we create and how we collaborate to collectively solve this giant challenge. We have developed a supplier engagement program to help us reach net zero emissions across

our value chain in 2030. We focus on working together with vendors to determine their Scope 1, 2 and 3 emissions, training them to set reduction targets and to take the actions to achieve those targets.



Flooding is the No. 1 form of natural disaster.



RESPONSIBLE SUPPLY CHAIN

Assessing resilience to climate change is crucial to ensuring our supply chain is prepared for climate risks.

We engaged with 40 suppliers in 2021 to identify GHG reduction opportunities within their operations. For example, we conducted an energy-efficiency assessment for a data center hardware supplier in 2021. We identified nearly 9,000 megawatt hours (MWh) of potential annual energy savings within the supplier's mechanical and electrical facility-level equipment.

Potential projects include installing higher efficiency equipment, replacing valves and damaged insulation, and implementing automatic variable operation controls for chilled water pumps and air handling units.

The facility will be able to save not only energy (and related indirect emissions) but also energy costs, with payback periods ranging from less than one year to up to four years.

Supply chain emissions are, on average, 11.4 times higher than operational emissions.



We are also working with suppliers to ensure they understand the climate risks they may face, including floods, heat stress, typhoons, hurricanes, water stress and sea-level rise. Assessing resilience to climate change is crucial to guiding our efforts to ensure the people and communities within our supply chain are prepared for climate risks.

Happiness Series

Meta's value chain spans the globe, relying on technology, innovation and, most importantly, people from all cultures and walks of life.

Our Happiness Series is an initiative launched in 2020 that strives to increase supply chain worker morale and sense of belonging. In 2021, our

team worked to deepen their understanding of what workers want from their jobs and their lives and what they are passionate about.

After spending time at a supplier factory in China, our team was inspired by the employees' vast interest in education for personal growth and investment in their

families. To honor the workers' commitment to their families and to encourage them to focus on enriching their own lives, we installed a "smart" library at the factory. More than 11,000 workers can access nearly 2,000 books—books that empower women to take control of their own destiny and books workers can share with their children.



Photos courtesy of Meta Supplier

"The Happiness Series extends beyond code compliance," explained Leslie Collins, Head of Responsible Supply Chain Sustainability for Meta. "It's about wanting to do good and working to elevate joy in the lives of workers."

WORKPLACES

Healthy, safe and sustainable workplaces.

The construction and operation of buildings account for nearly 40% of CO₂ emissions.



With nearly 72,000 employees across 80 cities, providing workplaces that are healthy, safe and sustainable exemplifies our commitment to building a better reality—and directly engages our employees in our vision.

We focus equally on what “better” means for the people inside our workplaces and the natural environment around them. Our approach is driven by climate action, supporting biodiversity, practicing circularity and promoting well-being.

In 2021, the majority of our workforce continued to work from home due to the COVID-19 pandemic. In alignment with our 100% renewable energy commitment, we purchased renewable energy to cover

the electricity used by Meta employees working from home.

As we reopen our offices globally, we are following best practices to ensure our facilities remain not only energy and water efficient but also safe for re-entry. The majority of our global offices are [WELL Health-Safety Rated](#). This third-party rating assesses

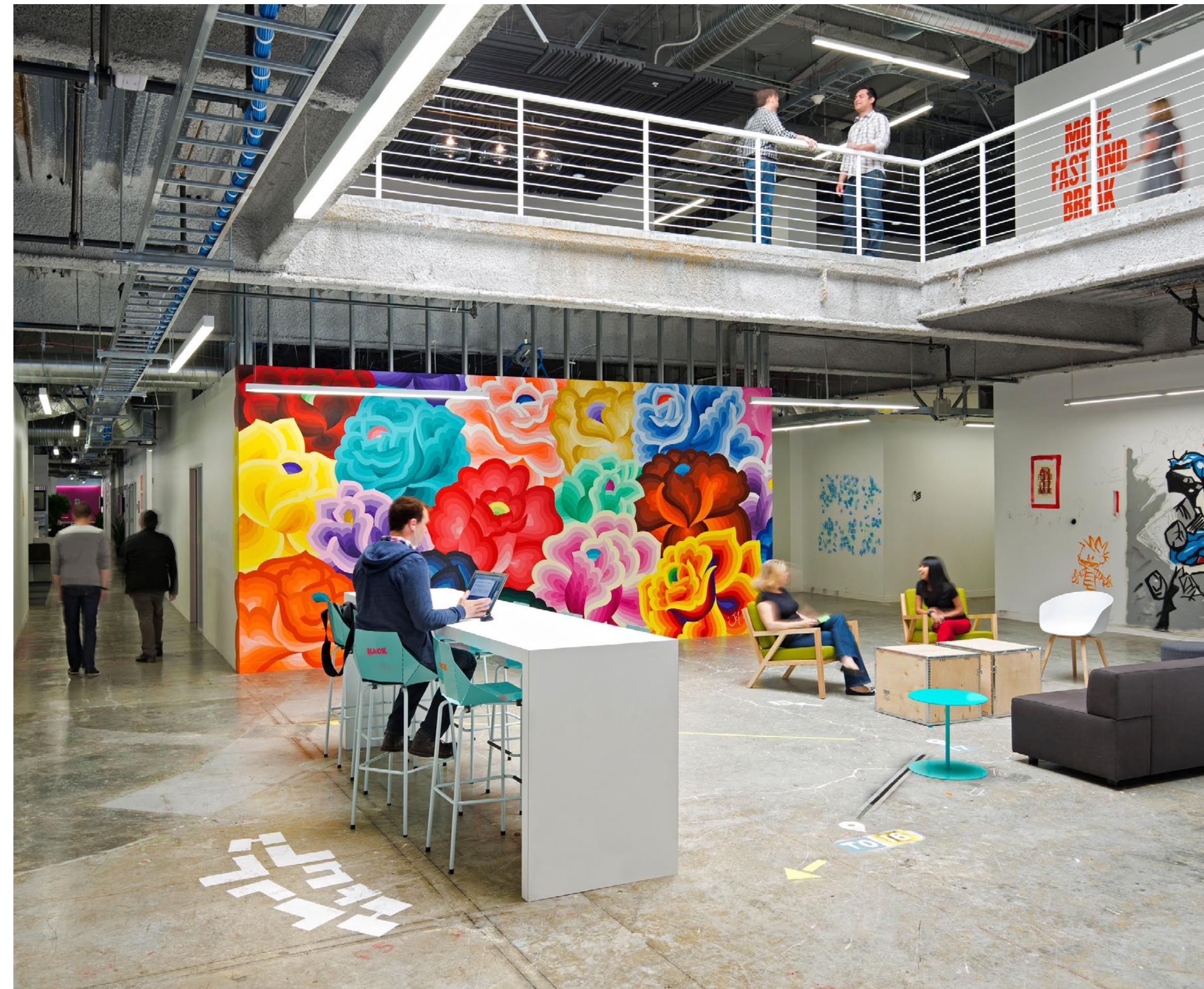
our operational policies, maintenance protocols and emergency planning related to COVID-19 response. Through this effort, we enhanced our policies and procedures targeted at cleaning and sanitization, emergency preparedness, health service resources, air and water quality management and health-safety communication.



WORKPLACES

Healthy and Sustainable Workplaces

Expanding our Healthy and Sustainable Materials Program—which focuses on reducing embodied carbon and avoiding chemicals of concern—to address product [Global Warming Potential](#) is a critical step in reaching our goal to reduce the embodied carbon of facility building materials by 40% in 2030 from a 2019 baseline. Embodied carbon refers to the CO₂ emissions generated by the manufacturing and transporting of building materials as well as the construction process. The plan imposes limits on carbon-intensive construction materials, such as concrete, steel, drywall, carpet and furniture.



Many of our offices are certified by LEED—a globally recognized third-party verification standard for sustainable buildings developed by the [U.S. Green Building Council \(USGBC\)](#). All of our new offices over 100,000 square feet pursue LEED Gold Certification or higher. To date, we have 50 offices globally that are LEED certified.

In 2021:

- 21 offices received LEED Gold certification (Dublin, Seattle, Denver, Chicago, Los Angeles, and multiple cities in the San Francisco Bay Area)
- Hong Kong office achieved [World Green Organisation's Green Office & Eco-Healthy Workplace Award](#)
- Sydney, Australia office received [Green Star Certification](#) (6-Star Level)
- Fremont, California, campus earned [Fitwel](#) Certification (2-Star Level)
- Dublin and London offices were re-certified under [ISO 50001 Energy Management Certification](#)

85% of employees working in LEED-certified buildings say access to outdoor views and natural light boosts their productivity and happiness.



WORKPLACES



Office Spotlight

Our new Dumbarton campus in Fremont, California, is LEED Gold and Fitwel Certified. The campus buildings are clustered around a central courtyard that extends to a variety of outdoor

spaces, providing opportunities for communal and restorative activities. Within the buildings, office neighborhoods are located along the perimeter to maximize views to the landscaped areas. Ample sunlight penetrates deep into floor plates through the use of skylights and clerestories.

The buildings will use 25% less energy and 45% less water than the LEED baseline. We align construction material procurement with our Healthy and Sustainable Materials Program.

The food system accounts for roughly 30% of global energy use.



Culinary Sustainability

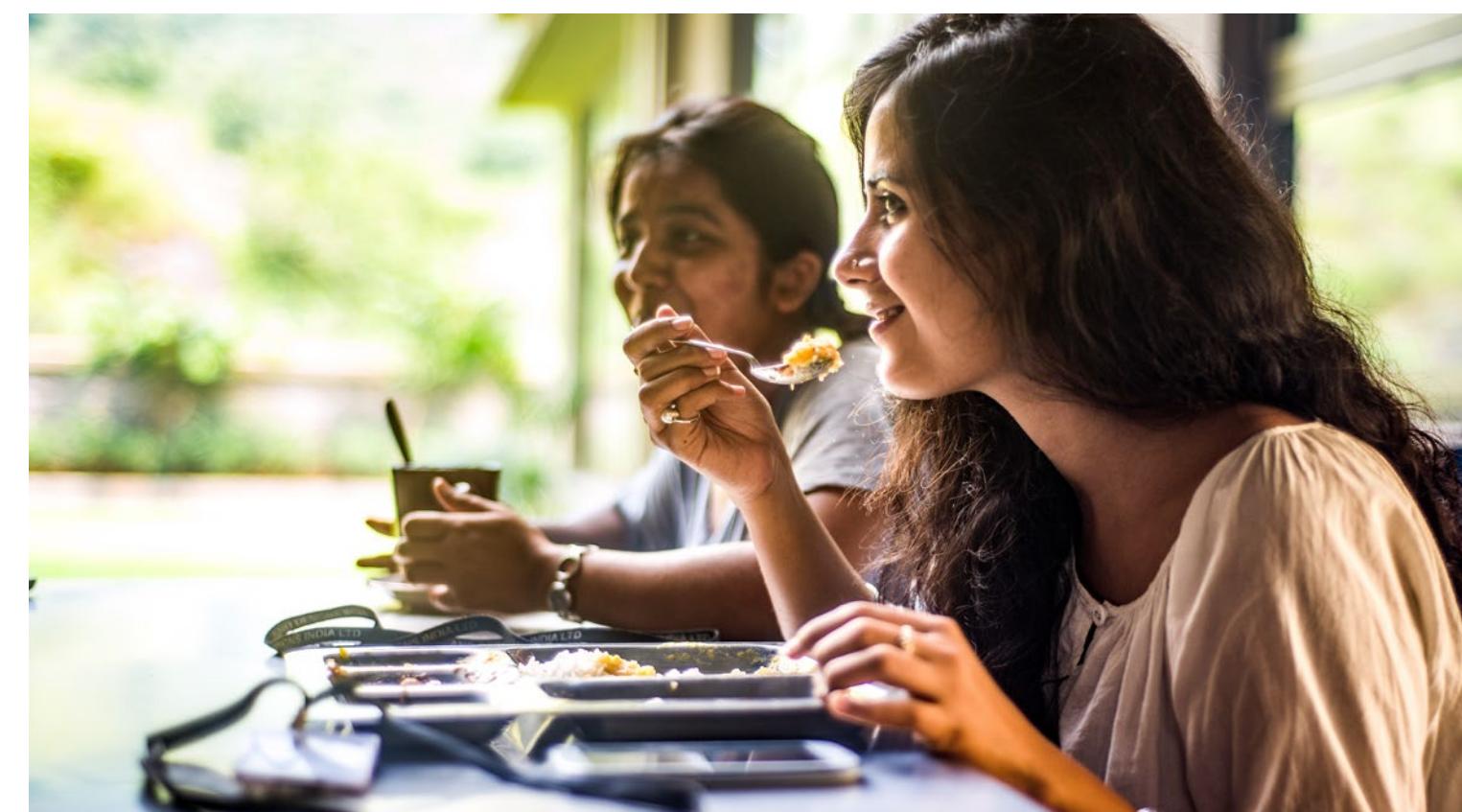
Our Culinary team nourishes the Meta community through responsibility, culture and hospitality.

We operate more than 60 cafes and 700 microkitchens globally, where we serve our employees and visitors healthy, delicious snacks and meals. Before the COVID-19 pandemic, 110,000 meals were served daily, and we expect this to continue. To help ensure this offering aligns with our climate commitments,

in 2021, we launched our first Culinary Sustainability Program focused on embedding environmental and social responsibility into culinary operations.

As part of this program, we aim to:

- **Reduce food waste** through innovative food preparation and serving practices, as well as waste tracking and sorting technology
- **Reduce packaging waste** by integrating circular economic practices into



our culinary offering and reducing single use—we have eliminated plastic water bottles for our facilities globally

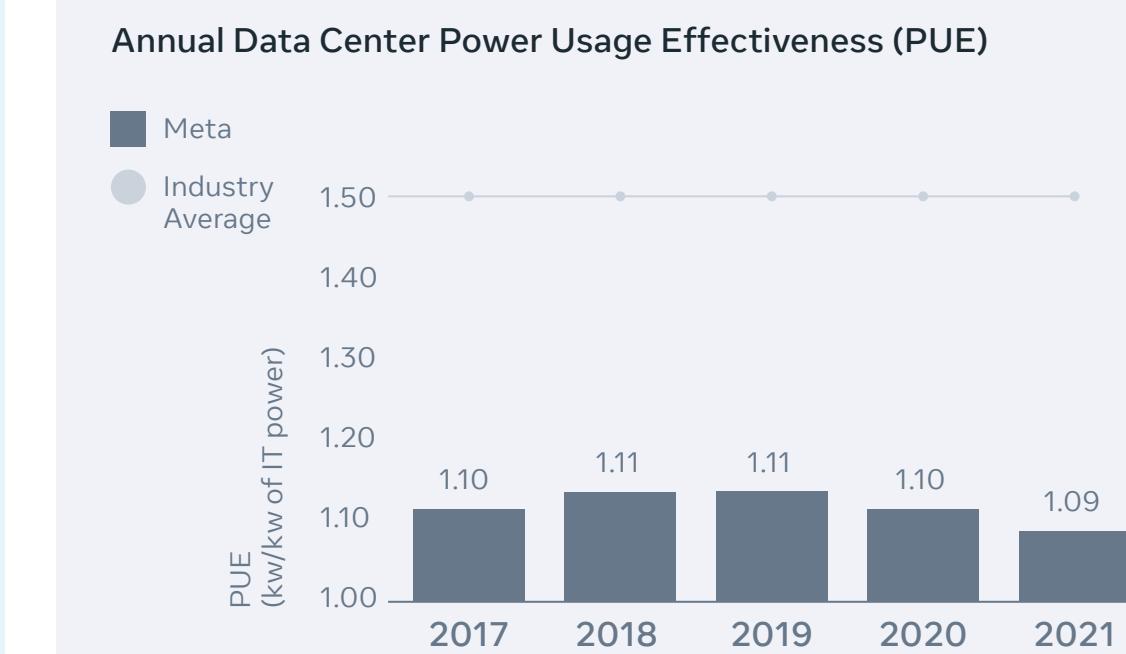
- **Reduce the carbon intensity** of our ingredients through creative plant-forward menus and supporting regenerative food systems
- **Reduce the carbon impact** of cooking through increasing our use of all-electric kitchens

DATA CENTERS

Building and operating sustainable data centers.

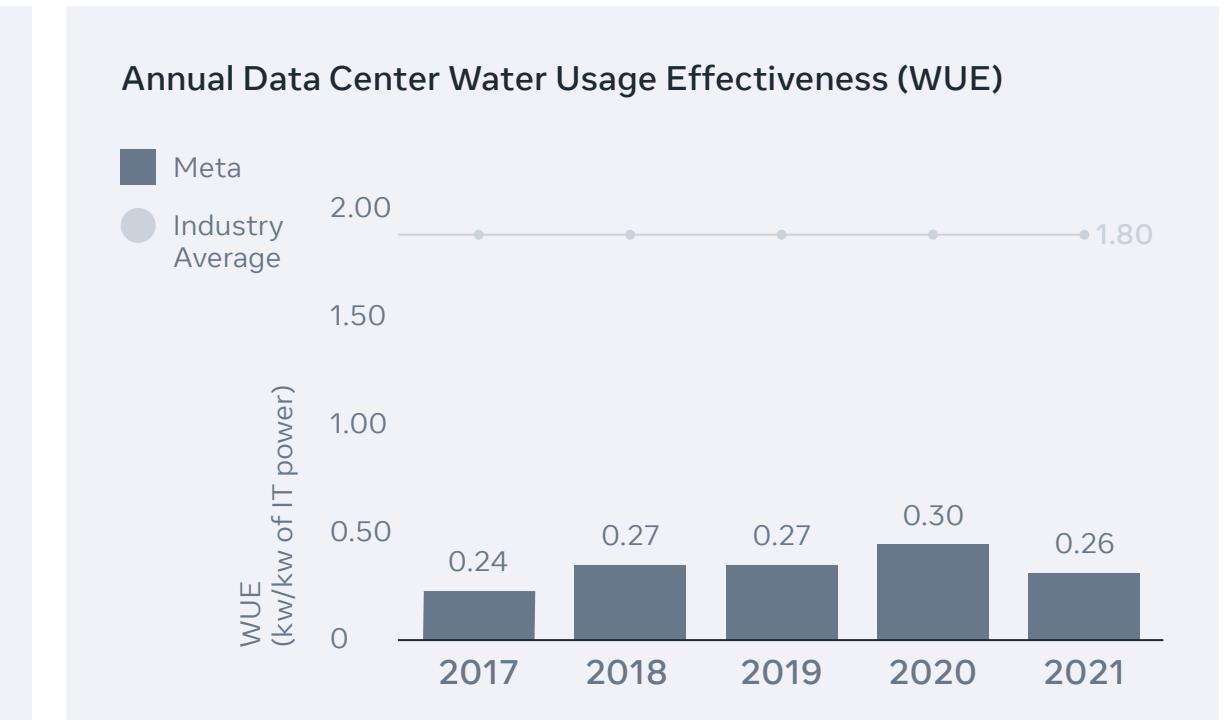


Data centers are at the heart of the connections we enable. They power the internet and make digital communication possible. Data centers also account for the highest percentage of Meta's energy use, water use and GHG emissions.



Our Odense data center earned Green Data Center of the Year honors for Special Contribution to improving Energy Efficiency at the Data Center World Awards. The site also earned the Sustainable Data Center Award at the Data Cloud Global Awards.

We can have the largest impact on overall emissions reductions by designing, building and operating some of the most sustainable data centers in the world. Data center buildings we completed in 2021 exhibit a Power Usage Effectiveness (PUE) of 1.09 and Water Usage Effectiveness (WUE) of 0.26.



Data centers consume 10-50 times the energy per floor space of a typical commercial office building.



DATA CENTERS

For the Earth

For Meta, efficiency and renewable energy are key components of our approach to designing, building and operating sustainable data centers. We focus on eliminating waste, boosting wellness, incorporating sustainable products and being a good neighbor in the communities where we have operations.

Since our first Prineville data center building earned the LEED Gold certification in 2011, we have continued to achieve Gold certification levels, or higher, for all data center buildings. To date, we have certified 28 LEED Gold data center buildings, totaling nearly 17 million square feet. In 2021, six of our new construction



data center buildings, in the following locations, were awarded LEED Gold certification, totaling over 3 million square feet:

- One in Los Lunas, New Mexico
- One in New Albany, Ohio
- Two in Prineville, Oregon
- Two in Henrico County, Virginia

As a leader in efficiency and renewable energy, we are a Platinum member of the U.S. Green Building Council and active on the LEED Advisory and Technical committees to help shape the future of its green rating system for data centers.

Each site is designed to promote biodiversity, plant native and adaptive landscape, mimic the natural hydrology of the site and reduce urban heat island effect. As of 2021, we have

protected more than 1,000 acres of open space on our data center campuses. We choose plant species, efficient irrigation, alternative water sources when available, and smart scheduling technologies that together save 80% more water using the [EPA's WaterSense Water Budget Tool](#), saving more than 80,000 kilogallons (kGal) of water per year.

Urban heat islands occur when natural land cover is replaced with pavement, buildings and other surfaces that absorb and retain heat.



Each data center site is equipped with electric vehicle charging stations and the electrical infrastructure for future expansion.

We work to keep construction and demolition waste out of landfills and incineration facilities by recovering, reusing and recycling materials. Building projects completed in 2021 recycled over 50,000 tons of construction waste.

We source only [Forestry Stewardship Council \(FSC\)](#) certified new wood products. FSC certification confirms environmental protections for responsible forest management, protects customary rights of indigenous people and prohibits the use of highly hazardous chemicals.

DATA CENTERS

For Our People

Meta's data centers are designed by engaging multidisciplinary teams of designers and innovators. Dedicated to the highest design standards, we create spaces that are sustainable, inclusive and focused on how employees feel and perform at work. We design our sites and buildings with features intended specifically for human delight and the celebration of culture, spirit and place.



Data center workspaces maximize natural light, provide views to outdoor landscaping, include artworks from local artists, and mimic local geographic features via biophilic building and landscape architectural designs.

In 2021, we adopted strategies into our data center design to improve interior acoustics for better privacy and concentration, as well as lighting quality to better simulate natural light and improve visibility.

Following LEED guidelines, we design our data centers to increase fresh air in our office spaces by 30% to improve cognition. Each data center building completed in 2021

passed rigorous indoor air quality testing, confirming we have reduced indoor air contaminants, which is proven to improve occupants' comfort, lower absenteeism and increase productivity.

Health transparency goals for material ingredients are achieved through certifications, including [Health Product Declaration](#), [Cradle to Cradle certification](#) and the [Declare label](#).

The concentration of indoor air pollutants can be 2-5 times higher than typical outdoor concentrations.



DATA CENTERS



Efficient Construction

Construction has traditionally been an industry that generates a lot of waste. Typically, raw materials are shipped to the site and then skillfully crafted to construct spaces to meet societal needs. Through building strategies like prefabrication, manufacturing, industrialization, and Design for Safe Manufacturing and Assembly (DfSMA), the Infra Construction Management team can reduce the volume of raw materials brought to site and construction waste generated,

In collaboration with our construction partners, [Hardhat in Hand](#), our premier construction training program and workforce development initiative, launched across data center sites.

We work with Hardhat in Hand to expand the local skilled trades talent pipeline, increase diversity in the construction industry and provide a path to reliable, well-paid job opportunities in a growing industry.

We have seen that virtual reality increases engagement, helps with education, reduces surprises and increases transparency.

thereby reducing the overall carbon footprint. This not only enables the teams to work within available labor resources to build more and faster, but also has the added benefit of reducing waste generation on site while maintaining our high quality and safety standards.

We have seen that virtual reality increases engagement, helps with education, reduces surprises and increases transparency. We use

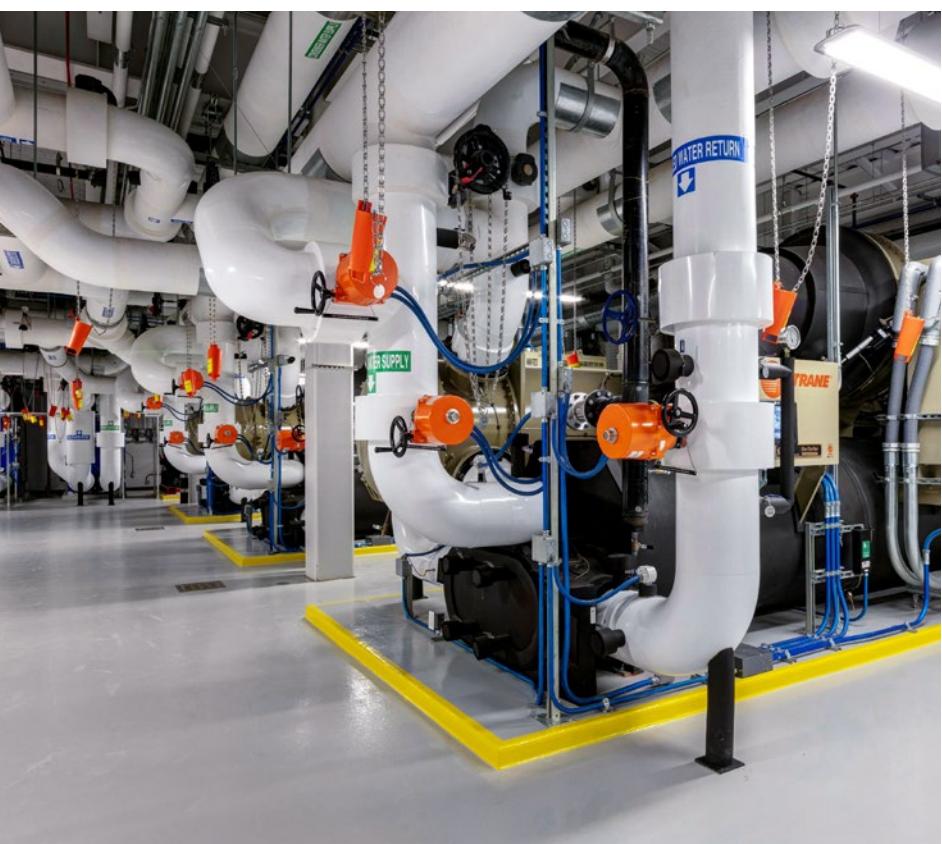
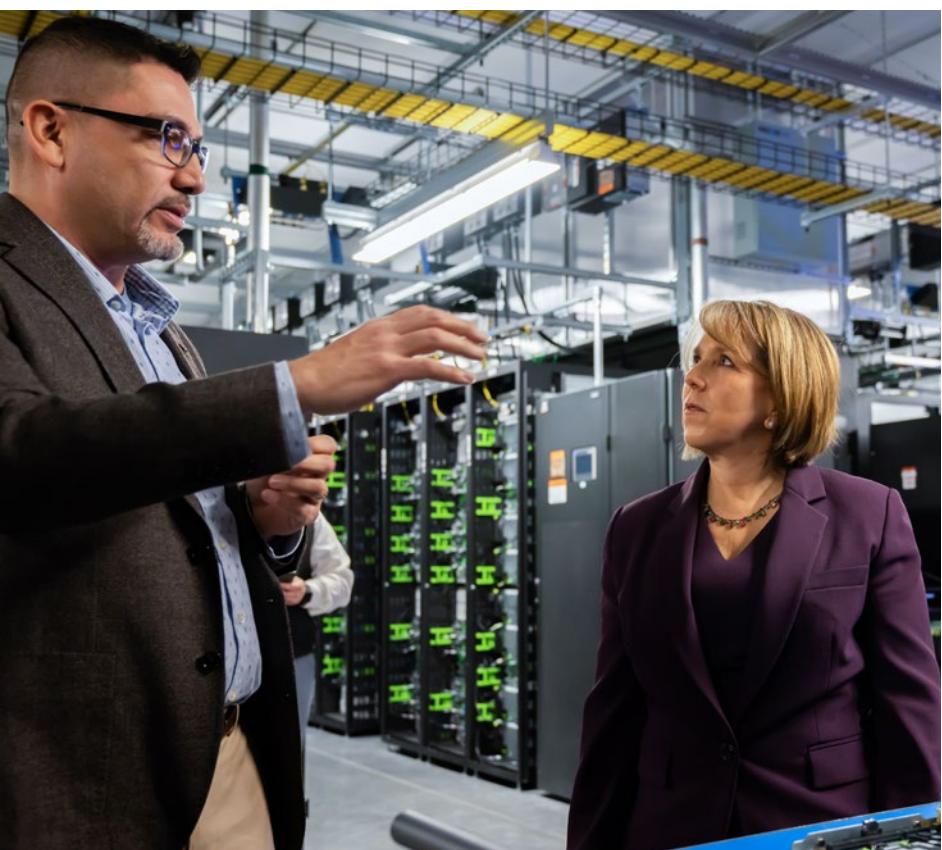
3D Terrestrial Laser Scanners to create point-cloud to compare the installation to the model.

At each stage, we capture 360-degree progression photos to document building installation and take remote field site walks. We use drones to track construction progression, site logistics and volume calculations to right-size materials to the site's conditions.

In Altoona, Iowa, we are testing low-emission construction equipment, including solar hybrid lighting towers, temporary power generators with battery backup and electric heaters. We are partnering with general contractors and equipment suppliers to thoroughly evaluate the performance of this equipment using a triple bottom-line approach with the hope that we can eventually scale the use of this equipment across our construction sites globally.



DATA CENTERS



Data Center Water Efficiency

Because data centers rely on water to cool servers and maintain humidity levels, our teams are always looking for ways to reduce our water use. One method we use to conserve water is through direct evaporative cooling, which relies on outside air.

Traditional technologies, like chilled water plants and cooling towers, rely on water to reject heat. In areas facing specific environmental challenges, such as high levels of dust, extreme humidity or elevated salinity, using direct cooling could severely impact IT equipment.

In these cases, we use indirect cooling systems to minimize the risk to our buildings and

One method we use to conserve water is direct evaporative cooling.

the servers housed within. In partnership with Nortek Air Solutions, we have developed an indirect cooling technology called the [StatePoint Liquid Cooling \(SPLC\) system](#). The first of its kind to be deployed to data centers, SPLC produces cold water instead of cold air. The system uses less water than a typical indirect cooling system because it uses air to cool water instead of using water to cool air.

Based on evaluation of our current water use, we have identified winter humidification needs as an area of opportunity to further improve our operating efficiency by optimizing our relative humidity (RH).

We piloted the [RH adjustment](#) at our data center in Los Lunas, New Mexico, and found by lowering our current 20% minimum RH to 13% minimum RH, we were able to reduce water use by 40% over nine months.

We have rolled out the RH minimum changes across our existing data centers and updated design standards for new construction. We expect this change will allow us to reduce water use 10% to 65% annually.

Oceans absorb more than 90% of the heat that reaches Earth's surface.



CIRCULARITY

Our approach to circularity.

The quantity of raw materials extracted from the earth has more than doubled over the past three decades.



We see circularity as key for the essential evolution from a linear system that is extractive, polluting and finite to a circular one that is sustainable. We also see it as our responsibility to use our products, family of apps and knowledge to catalyze circularity in our industry and beyond.

To help ensure alignment across all of Meta's program pillars, team leads meet quarterly in a cross-functional working group to share program updates, identify potential new project collaborations and learn from their peers about this rapidly evolving field.

CIRCULARITY

Data Center Design Circularity

Embedding circularity principles into how we design, build and operate our data centers helps us elevate resource efficiency to reduce water and waste.

Our circularity principles also extend to the kinds of materials we use. To lower the carbon impact of concrete—a large source of global GHG emissions—we expanded our partnership with researchers from the University of Illinois at Urbana-Champaign's civil engineering and computer science departments to use an [artificial intelligence \(AI\) model to generate low-carbon mix designs](#). These alternatives use high amounts of byproducts from other industries, such as fly ash and slag, as a replacement for

cement. We incorporated lessons learned from the first pilot phase to train the model's AI to identify concrete mixes that optimize for early strength gain while lowering the carbon footprint.

We also piloted the use of recycled ground glass as a substitute for cement in various concrete applications in our data center locations in northern Huntsville, Alabama, and Gallatin, Tennessee. These pilots explored the feasibility of replacing cement with powdered glass from products such as bottles or window-panes that would otherwise end up in landfills. If successful, these efforts have the potential not only to lower the carbon footprint of the concrete we use but also to create a market demand for discarded glass products.



CIRCULARITY

We are prioritizing the use of recycled materials in new system designs, in addition to our continued focus on ensuring hardware is easy to disassemble and reuse.



We understand that most of the [embedded emissions](#) from our data center infrastructure come from manufacturing, and circularity will be key to improving resource efficiency.

Starting with design and material selection, we are prioritizing the use of recycled materials in new system designs, in addition to our [continued focus](#) on ensuring hardware is easy to disassemble and reuse.

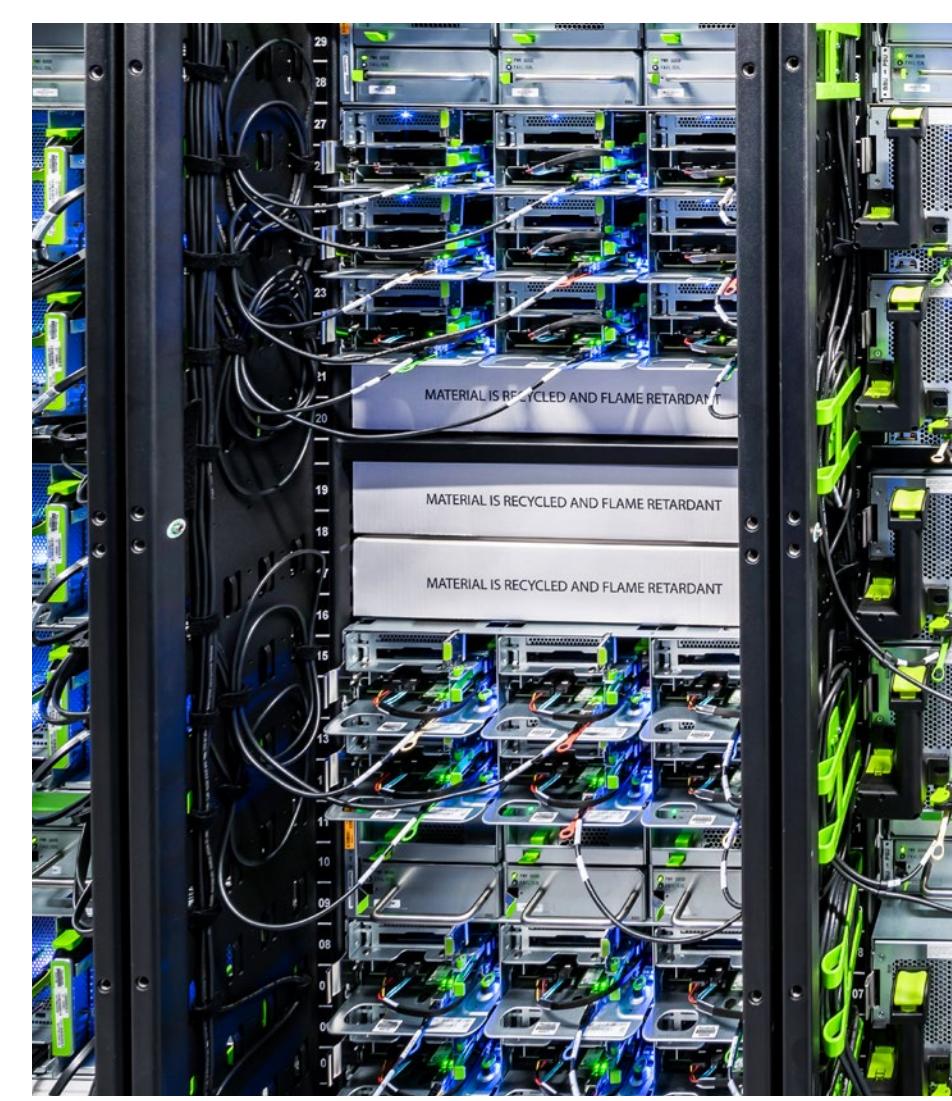
In 2021, Meta's Sustainability team partnered closely with Quality and Engineering teams to co-create an internal Design for Circularity guide to integrate principles of design for reuse and design for end of life into the product development process. We are also focused on Design for Serviceability, making our equipment easy to repair in the field so our data center technicians are able to quickly

and safely identify and resolve issues, thereby extending the lifespan of our hardware.

To continue to improve resource efficiency, we are exploring ways to extend the life of racks and components used in our data centers. We shared an example of this thinking in 2020 with [battery backup units](#), and we are continuing to drive toward our goal of enabling a circular supply chain. By conducting internal reliability studies, configuring the logistics and developing necessary financial and asset tracking systems, we have extended the life of certain racks within our data centers. We are working toward harvesting and redeploying components and systems at scale that continue to meet our reliability standards for both critical spares and for integration into new racks.

In 2021, after many months of planning and conducting internal reliability studies, we focused our attention on the opportunity to extend the lifetime use of memory within our racks. Critically, memory is a carbon-intensive component within our infrastructure, and the opportunity to use this resource to its fullest extent is a key net zero strategy to “use less” and avoid emissions in our upstream supply chain.

Beyond circularity efforts within our data centers, we also work closely with our downstream partners to find a second life for parts outside of our data centers through secondary markets and to ensure all residual materials are responsibly managed.



Plastic pollution has increased tenfold since 1980.



GREENHOUSE GAS EMISSIONS

Driving toward a net zero value chain.



Meta is committed to addressing GHG emissions across our global operations, value chain and beyond. This is the most

direct way we can tackle climate change—the single largest threat to the well-being of people, the environment and businesses alike. A better reality will not

truly be possible unless we, our partners and our suppliers work together to strategically reduce GHG emissions.

GREENHOUSE GAS EMISSIONS

In 2020, we announced our goal to expand our net zero goal to include our value chain in 2030.

We have laid the foundation to reach our 2030 climate target:

- Our climate program is aligned with the [Science Based Targets initiative \(SBTi\)](#) and is guided by the latest science on what is necessary to transition to a zero-carbon future.
- In 2020, we achieved net zero GHG emissions in our direct operations (Scopes 1 and 2) by reducing our emissions by 94% compared to 2017 levels.

- As we focus our attention on decarbonizing our Scope 3 emissions, we are working now to identify solutions that can scale as our business grows.

The climate impact associated with building the metaverse is something we are spending a lot of time thinking about and analyzing. New tools, products and facilities to support this growth will be a major challenge on the road to meet our already ambitious target.



We are actively building highly efficient data centers to offset the carbon footprint of building the metaverse.

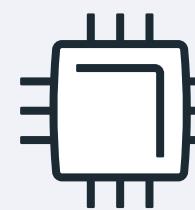
The rapid expansion of hardware, data centers and offices to support our business means we must boldly innovate and optimize for efficiency. Early on in this decade, we do not expect decarbonization and growth to be in harmony. In fact, our emissions increased 11% from 2020 to 2021, and as we return to our offices, that number will remain high. This reality is clear and underscores the need for us to drive collaborative and innovative solutions across our business and with our suppliers today so that growth can happen sustainably.

CO₂ emissions are increasing more than 250 times faster from human activity than from natural sources after the last Ice Age.



GREENHOUSE GAS EMISSIONS

Our strategy to reach net zero in our value chain entails three steps:



1. We will focus on decarbonizing where we have the most direct control in the choices we make. Principles such as hardware circularity and integrating low-carbon technologies will be vital to reduce the emissions of our new and existing facilities.



2. We will engage with our suppliers. Helping our suppliers set their own climate targets will reduce their emissions associated with our footprint while hopefully spurring decarbonization beyond Meta.



3. Finally, we will support carbon removal projects of the highest standards to address the residual emissions that we cannot reduce.



Photo courtesy of TIST

Reducing Our GHG Emissions

Reducing GHG emissions across our global operations and value chain is our top priority and the most effective strategy to reach net zero. We will do this by:

- 1.** Using less and opting for what makes sense to do our work
- 2.** Choosing better and prioritizing efficiency in our supply chain, construction and other purchases
- 3.** Selecting alternatives, such as materials with low-carbon impact, that are easily recyclable

As we build the metaverse and the technology that comes with it, we will continue to focus on hardware circularity and efficiency to minimize our emissions as we grow. Because much of our emissions footprint is outside of our operational control, assisting our suppliers and vendors to set reduction targets through our supplier engagement program is critical to cutting our total emissions.

Cutting Workplace Emissions in Half

We are targeting a 50% reduction in the carbon impact of our workplace operations in 2030 on a per headcount basis. To achieve this goal, we are focused on achieving the following reductions from a 2019 baseline per capita:

- 40% energy use reduction
- 50% waste reduction
- 100% sustainable employee commuter shuttle fleet
- 40% reduction in drive alone commuter trips
- 40% reduction in embodied carbon of building materials
- 60% reduction in carbon intensity of culinary offerings

Shifting to a green economy could produce over 65 million new low-carbon jobs.



GREENHOUSE GAS EMISSIONS

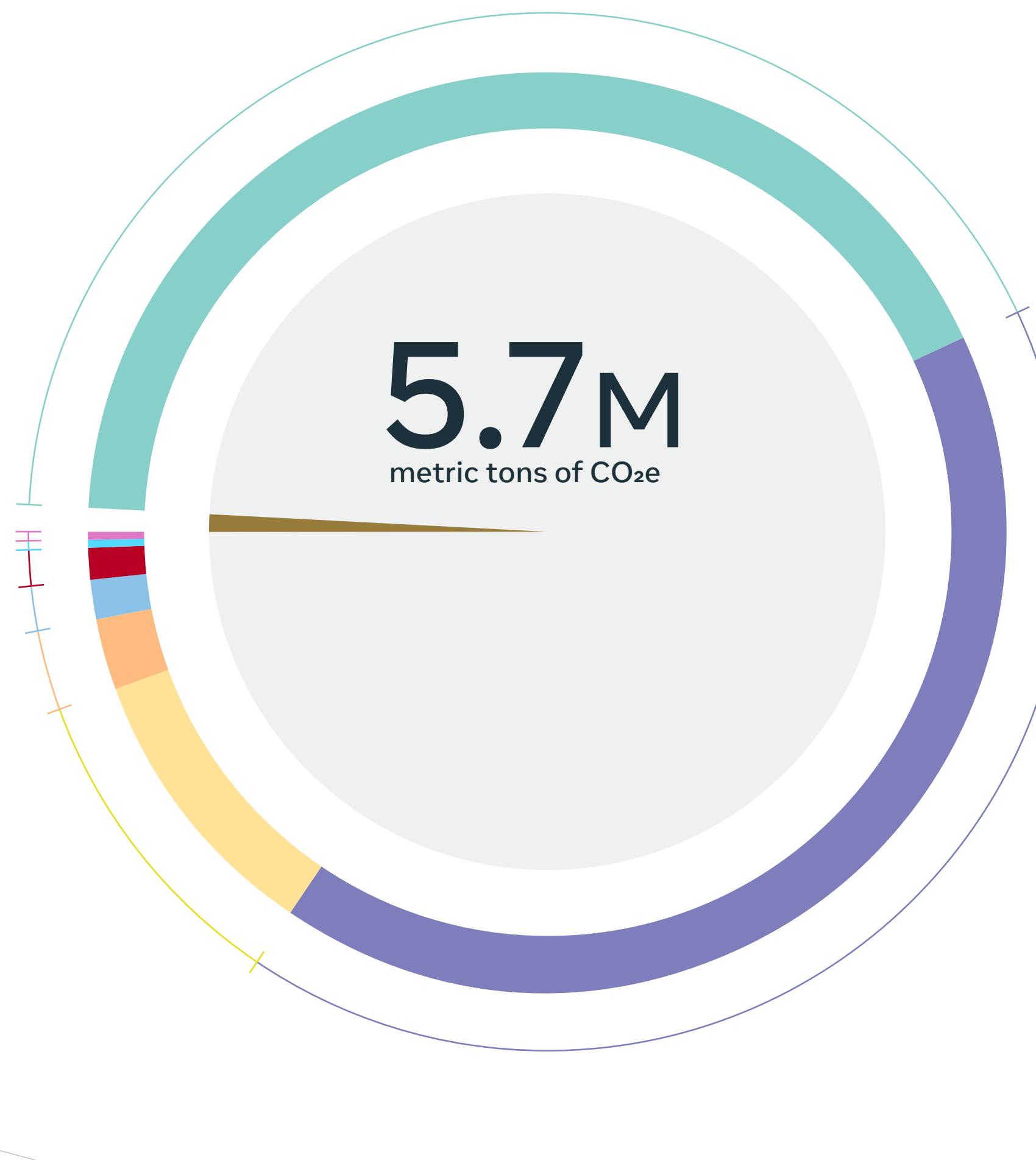
GHG Accounting

We disclose our GHG emissions annually based on the [Greenhouse Gas Protocol](#). Our GHG footprint includes the emissions associated with running our business and data centers, as well as the indirect emissions created upstream from our operations and downstream in our products.

We quantify our emissions via activity data, life cycle assessments (LCAs) and financial data. We prioritize calculating our emissions through activity data

that directly measures an activity that results in GHG emissions, such as kilowatt hours (kWh) of electricity. Due to the complex nature of our business and value chain, we use proxy methods to help calculate our emissions when activity data is not available. We are focused on increasing granularity and using the most accurate methods available to calculate our emissions. Our emissions are verified by a [third party](#) and we invite you to learn more about our methodology [here](#).

Scope 3 emissions usually account for more than 70% of a business's carbon footprint.



META'S 2021 NET CARBON FOOTPRINT

	mt CO ₂ e
1% Scope 1	55,000
<1% Scope 2	2,000
99% Scope 3	5,651,000
42% Capital Goods	2,410,000
42% Purchased Goods & Services	2,371,000
10% Use of Sold Products	558,000
3% Upstream Transportation & Distribution	180,000
1% Fuel & Energy Related Activities	75,000
1% Other	29,000
<1% Employee Commuting	22,000
<1% Business Travel	5,000

These market-based emissions were **43% smaller** than our location-based emissions (9.9 M mt CO₂e). Our market-based emissions adjust for emissions reductions from purchasing decisions we have made. This includes our contracting of over 7,500 MW of renewable energy and purchase of over 700,000 gallons of sustainable aviation fuel for business travel, which has an up to 80% lower carbon footprint than traditional jet fuel.



We removed **90,000 tons of CO₂** through carbon removal projects to cover our Scope 1 and 2 emissions.

GREENHOUSE GAS EMISSIONS



Photo courtesy of The Northern Rangelands Trust/Paul Wambugu

CO₂ remains in the atmosphere for up to 1,000 years, nitrous oxide for up to 120 years and methane for up to 10 years.



Supporting Carbon Removal Projects

Our commitment to net zero means that for any emissions we cannot eliminate, we will purchase carbon removal credits to sequester an equivalent amount of CO₂ from the atmosphere.

In 2021, we supported carbon removal projects in Kenya and Mexico that represent over 200,000 tons of carbon sequestration via forests and soil. We partner with nonprofits, peers and other experts to inform the composition of our project portfolio and ensure that our due diligence process is rigorous.

The projects we select reflect our responsibility to address the social and environmental impacts of our emissions. We prioritize carbon removal projects that:

- Are designed to be a reliable and additional source of carbon sequestration
- Are quantified using existing standards and verified by a third party
- Do not create adverse impacts elsewhere
- Prioritize climate justice and equity

Technological carbon removals are a small but important component of our net zero strategy. Because technological carbon removals are in their infancy and not yet available at a meaningful scale, forward-looking

companies like Meta must invest today to ensure removals are viable and available in the future. Among the ways we are helping to drive development in the sector are collaborative actions that will aggregate the resources of multiple companies to create rapid change at a large scale.

In 2022, our contribution to the [Frontier advance market commitment](#) will help catalyze a market for technological carbon removal credits and unlock the opportunity to learn from global scientific leaders on emerging carbon removal technologies.

Driving Demand for Sustainable Aviation Fuel

As a founding member of the [Sustainable Aviation Buyers Alliance \(SABA\)](#), we are supporting efforts to drive market demand for sustainable aviation fuel. Spearheaded by [RMI](#) and [Environmental Defense Fund \(EDF\)](#) and supported by their founding companies, SABA aims to accelerate the path to net zero aviation by driving investment in and adoption of sustainable aviation fuel, which could substantially reduce emissions from air travel.

ENERGY

Meta is one of the largest corporate buyers of renewable energy.

We are driving the transition to renewable energy in our communities by selecting projects that are on the same electricity grids as our data centers. At the end of 2021, Meta had contracts in place

for more than 7,500 megawatts (MW) of solar and wind energy across our global portfolio. Of that, over 4,900 MW of new renewable energy is now operating.



4,900 MW is enough
to power 3.6 million
U.S. homes.



ENERGY



Photo courtesy of Apex Clean Energy

Wind power, sold at a fixed price over a long period of time, mitigates the price uncertainty associated with traditional energy sources.



Enabling the Transition to Renewable Energy

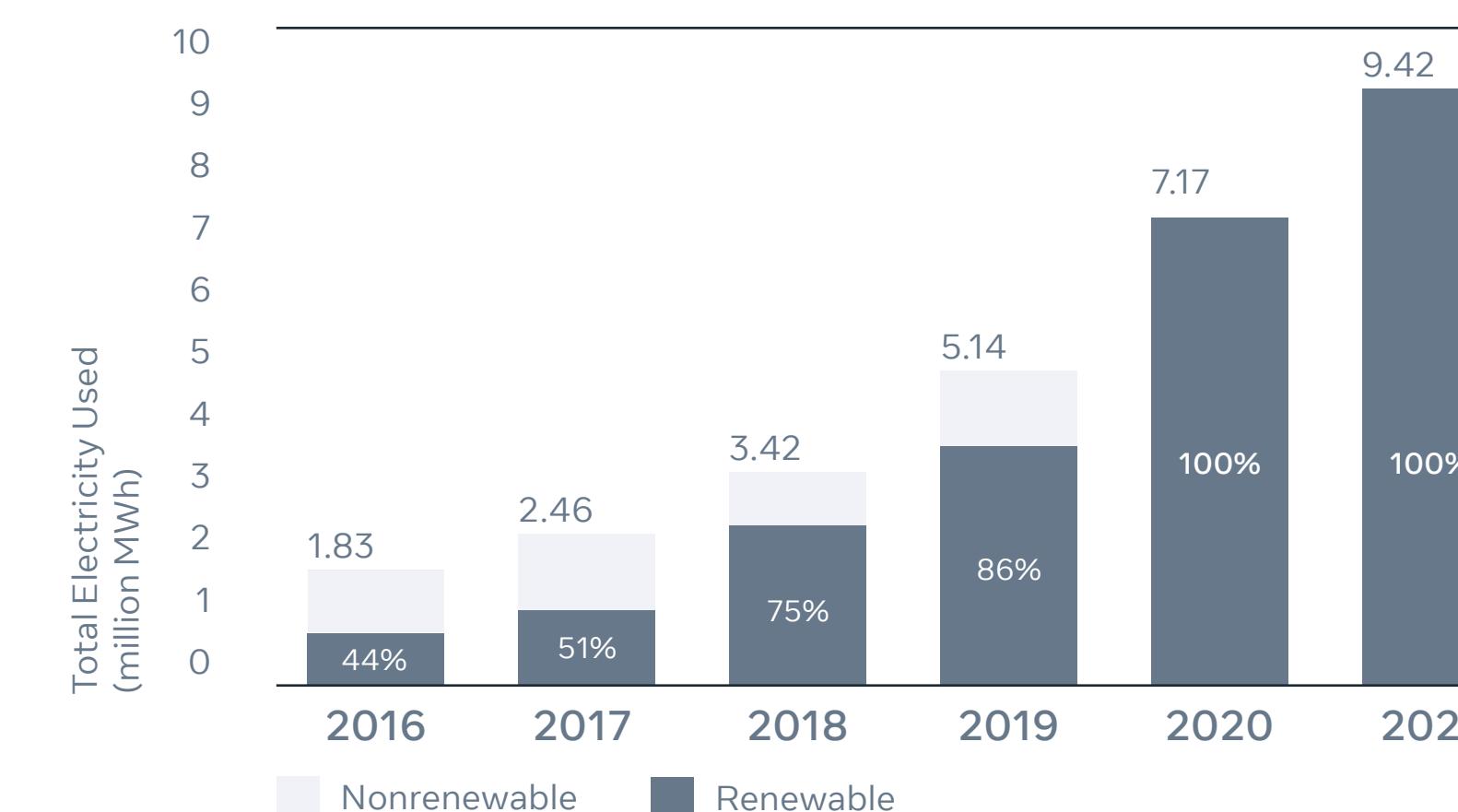
Transitioning to renewable energy at the scale our world needs requires systems-level changes. So when we switch to renewables, we are not creating sustainable solutions only for ourselves. We help lead the changes that make clean energy solutions more accessible to other companies.

Not all utilities offer electric rates (or “tariffs,” as utilities call them) that allow customers to support their facilities with renewable energy. When this is the case, we work with utility partners to create new green tariffs or pursue other new renewable energy arrangements to maintain our goal of supporting our global operations with 100% renewable energy.

These utility offerings allow large energy customers to purchase renewable energy and renewable energy credits via their retail electricity service and address their sustainability goals. The green tariffs and renewable energy arrangements we have supported account for over 4,000 MW of new wind and solar capacity.

In 2021, we worked with the local utility, Salt River Project (SRP), to establish a new renewable energy supply agreement to support our Mesa, Arizona, data center. Of the 500 MW of solar that will be added in the next few years, 450 MW will support our 960,000-square-foot Mesa data center with 100% renewable energy, leaving 50 MW for SRP to offer residential and small business customers, supporting broader customer access to renewable energy.

Renewable Energy Progress



ENERGY

Our portfolio of solar and wind projects spans 18 states and 46 counties.

Economic Impact

To fully understand the impact of Meta's renewable energy projects on jobs and the economy, we released a [study](#) in May 2021 that looked at the economic impact of 55 solar and wind projects that support our U.S. data centers. The projects studied total 5,763 MW—some of which are operating today and others that will come online over the next three years—and represent an estimated

\$7.4 billion in investment. During construction, these renewable energy projects have supported or will support over 42,000 jobs across the country and contribute more than \$4.3 billion in U.S. gross domestic product (GDP).

Our portfolio of solar and wind projects spans 18 states and 46 counties, and many of these projects have benefited under-resourced communities. Of the 55 U.S. solar and wind projects in our portfolio studied, 96%

The amount of sunshine that continuously strikes the earth equates to more than 10,000 times the world's total energy use.



are located outside of major metropolitan areas and 82% are located in counties with poverty rates above the national average. The analysis showed that construction of these renewable energy projects have generated or will generate \$2.6 billion of

labor income for workers, and project operations will generate \$70 million in annual employee compensation.

Energy Storage

Demand for electricity varies significantly throughout the day. Fossil fuel generators can be quickly activated or deactivated to account for these variations. Renewable energy technology, like wind and solar, are weather-dependent, so they do not necessarily match the variations in electricity demand on their own. However, energy storage can help to smooth the small deviations in energy production on the system to help integrate greater volumes of renewable energy.

Additionally, to prevent wasted energy when demand is low on sunny or windy days, and to support grid reliability on cloudy, calm days, large-scale storage is critical. Adding energy storage to the grid is



an important tool that enables utilities to move the electricity produced from a solar project, for instance, into times of the day when sunshine is not available. This provides greater reliability and flexibility to the utility system and enables a much lower carbon footprint, as utilities integrate even more renewable energy on their grids.

Meta is also providing funding for added storage to local utilities, allowing them to prepare for and transition to the zero-carbon grid of tomorrow.

Near our Los Lunas data center in Valencia County, New Mexico, we partnered with our local

utility, Public Service Company of New Mexico (PNM), to add 50 MW of battery storage alongside the addition of 240 MW of solar through our innovative green tariff. This unique commercial structure allows customers like us to directly pay for capacity resources like energy storage to offset the need to add nonrenewable energy resources to the system.

In total, Meta has worked with utility partners, PNM and Tennessee Valley Authority, to add 130 MW of battery energy storage to the grid in New Mexico, Kentucky, and Mississippi.



WATER

In 2021, we announced our goal to become water positive in 2030.



All living things rely on water. Without it, ecosystems dwindle and communities suffer. So when it comes to this precious resource, using less is not enough.

Rising temperatures can lead to deadly pathogens in freshwater sources, making the water dangerous for people to drink.



WATER



Photo courtesy of Craig Sponholtz, Watershed Artisans Inc.

To achieve this goal, Meta will restore 200% of the water we consume in high water stress areas, and 100% of the water we consume in medium water stress areas. Our water restoration projects always have a hydrological connection to the source water consumed in our operations and are verified by independent third-party verifiers. Since 2017, we have supported a total of 18 water restoration projects in six watersheds.

Together, these projects are expected to restore more than one billion gallons of water annually. In regions experiencing high levels of water stress, these projects have already restored about 617 million gallons of water as of 2021.

Often the most impactful contributions to the sustainability of a watershed go beyond projects that return volumetric

benefits. That is why we are also supporting capacity-building projects that might have a catalytic effect in watersheds around the world. These projects could include supporting local environmental nonprofits, governance, research and other non-volume-generating activities.

We also strive to be good water stewards by working with others to advance industry

understanding and practices. In 2021, we joined the [Rio Grande Water Fund](#) and the [Texas Water Action Collaborative](#) to support collective action initiatives in these important regions. We are also members of the [World Resources Institute's Aqueduct Alliance](#) and sponsors of the Swedish International Water Institute's World Water Week conference.

2021 Water Data

Unit: Cubic Meters

	2017	2018	2019	2020	2021
Water Withdrawal	1,609,000	2,367,000	3,430,000	3,726,000	5,043,000
Water Consumption	838,000	1,279,000	1,971,000	2,202,000	2,569,000
Water Restoration	—	132,000	145,000	2,250,000	2,336,000

*Reported volumes represent total volume restored through water restoration projects for each year, not including contracted projects not yet implemented.

WATER

Meta partnered with DigDeep to fund water systems for Navajo families.

Water quality and quantity are often very local issues, so we have joined forces with nonprofit and community partners to create and implement water restoration initiatives that benefit the areas in which we operate.

Here are a few of the projects we supported in 2021:

Navajo Community Water Supply

Jadito Wash Watershed, Arizona

The Navajo Nation is the largest contiguous Native American reservation in the continental U.S. Located within the Four Corners region of the American Southwest, its borders span 71,000 square kilometers.

One-third of the Navajo Nation population lacks access to running water. Navajo households pay 70 times more for the water they must haul into their homes compared to water users in typical urban areas.

In 2021, Meta partnered with [DigDeep](#) to fund water systems for Navajo families that lack access to water in Dilkon, Arizona. Each system includes a 1,200-gallon water tank, indoor plumbing, power connections to provide running water, and recurring water delivery to refill the water tank (managed by Navajo community partners). The water is supplied from existing, deep groundwater wells. Meta's contribution will install tanks at 14 households, providing approximately 300,000 gallons of water per year to families.

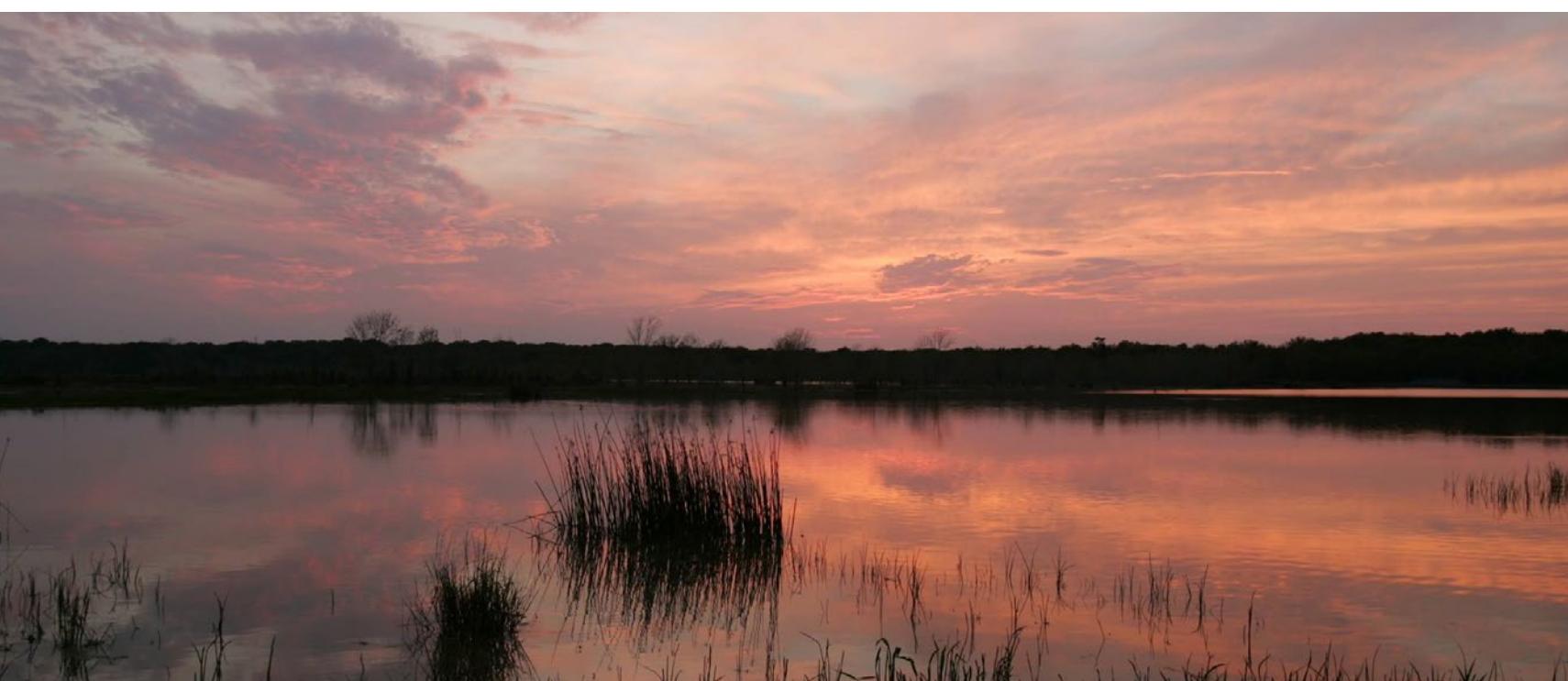


"Throughout the pandemic, DigDeep's Navajo Water Project team members have shown great tenacity and innovation in their efforts to expand clean water access on the Navajo Nation. With the lessening of

COVID-19 restrictions, we are thrilled to share that we have finally been able to resume the in-home installations of our Home Water Systems. Meta's continued support of DigDeep's Navajo Water Project has been

instrumental to helping us get tapped water into more homes during this crucial time."
—BJ Davis, Chief Relationship Officer at DigDeep

WATER

**Restoring Wetlands**

Richland Creek Wildlife Management Area, Texas

Texas's Richland Chambers Reservoir has been addressing the growing water supply needs of the Dallas-Fort Worth region since the 1980s. Construction of the 40,000-acre reservoir resulted in the loss of substantial floodplain, riparian hardwood forest and wetland habitat within the Richland and Chambers Creeks watersheds.

The Richland Creek Wildlife Management Area (WMA) was created to help offset habitat loss. An extensive wetland treatment system covers over 5,000 acres of the WMA and helps treat raw Trinity River

Water before it is delivered to municipal and industrial water users in Dallas-Fort Worth.

[Ducks Unlimited](#) has been working to build wetland habitat at WMA since 1987, constructing over 5,000 acres of wetland so far. In 2021, Meta partnered with Ducks Unlimited to fund a new wetland habitat in the Upper Trinity River basin.

Water from the Trinity River floods this newly created wetland complex during the winter season, providing habitat for a diverse array of shorebirds, waterfowl and raptors. The wetlands naturally treat the surface water by filtering out sediment, nitrogen and phosphorus from the water, which flows back into the Trinity River in spring. This project will restore over 200 million gallons of water annually.

Mason Lane Ditch Piping

Verde River Watershed, Arizona

Oak Creek, one of the few remaining perennial streams in Northern Arizona, is a tributary of the Verde River. It runs through high desert canyons and the famous red rocks of Sedona before joining with the Verde River. Oak Creek provides recreation and supports a

The Trinity River wetland will restore over 200 million gallons of water annually.

vibrant ecosystem of mammals, birds and aquatic species, including the endangered Gila Chub and Gila Topminnow.

Along Oak Creek, 19 separate ditches divert irrigation water to residents. Although the ditches are important contributors to the local economy, most are more than 150 years old and limited capital exists to invest in infrastructure upgrades to meet the needs of water users and aquatic habitat.

The Mason Lane Ditch provides water to over 220 acres of irrigated land along its five-mile path. Degradation throughout the canal resulted in leakage and

seepage, threatening its ability to meet agricultural water needs. Erosion in one particular section of the canal formed several large leaks, spilling seven cubic feet of water per second from the ditch and reducing Oak Creek's flow by 15%.

Meta provided support to [Bonneville Environmental Foundation](#), which allowed for a partnership between The Nature Conservancy and the Mason Lane Water Users Association to install 5,280 feet of piping to reduce transmission losses and reduce the volume of water diverted from Oak Creek. This project will restore over 180 million gallons of water to Oak Creek per year.

In addition to projects that return volumes, we are investing in projects that have catalytic impacts on watersheds. In 2022, we will continue to support new water restoration projects in the watersheds where we operate, collaborate with other stakeholders in collective action to address shared water challenges, and invest in technologies to improve our water efficiency.

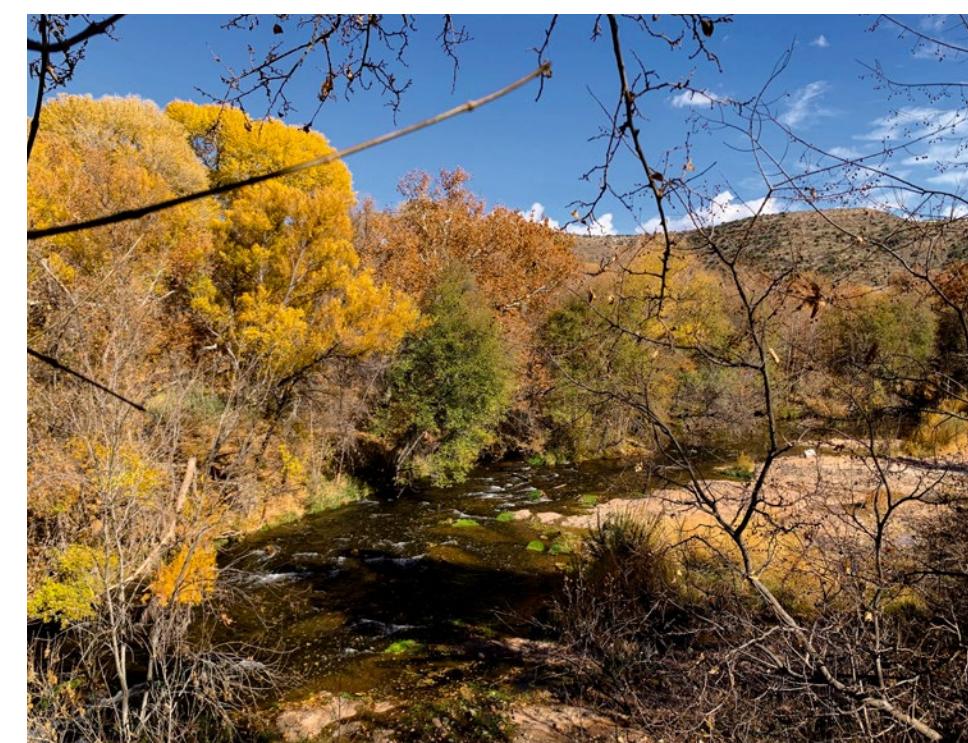


Photo courtesy of Michael Matosich/TNC

WATER

Q&A with

Stefanie Woodward

Sustainability Program Manager for Water



For Stefanie Woodward, her role is more than a job—it's personal. Having grown up in Arizona, she understands the impact of water stress on local watersheds and has spent her career focused on water conservation in both the nonprofit and private sectors. Stefanie's hope is a world in which future generations can continue to enjoy the natural wonders in her home state and many others around the world.

How did your passion for water conservation and resource preservation lead you to Meta?

My education focused on climate resilience, corporate sustainability and water. After grad school, I worked in the nonprofit sector developing guidance on corporate water stewardship and helping companies establish water stewardship programs as a consultant. My role with Meta gives me the opportunity to synthesize all of these experiences, and I am really excited about where our program is headed.

How can a company like Meta address environmental issues?

We all have to do our part to ensure a safe, clean water supply. Private companies like Meta can work in collaboration with environmental nonprofits, utilities and the public sector to address shared water challenges on a broader scale.

Why is becoming water positive a priority for Meta?

Water is an essential element in operating a tech company, and data centers can have a big water footprint. While we have some of the most water efficient data centers in the world, we also recognize that to be good water stewards, we need to collaborate with stakeholders beyond our own operations.

Since 2017, we have partnered with environmental organizations and water utilities to restore water in the watersheds where we operate. In 2021, we announced our commitment to becoming water positive in 2030, and the program has since grown to 18 projects in six watersheds.

How do you explain to your family and friends what you do at Meta, and what do they think?

At first, I got a lot of questions about how exactly a tech company uses water. Now they understand and love hearing about the wide variety of water projects we support—from restoring wetlands to providing



clean water to those without access to working with farmers or restoring landscapes with beaver dams. Some of the most gratifying projects to me are the ones benefiting communities and ecosystems in my home state of Arizona—especially those in the same creeks where I love to hike with friends and family.

40% of the global population lacks access to clean and safe drinking water.



BIODIVERSITY

Biodiversity is critical to ecosystem health.

In the last hundred years, more than 90% of crop varieties have disappeared from farmers' fields.



Below is Morning Glory Pool in Yellowstone National Park. Pigments from microbes in this thermal pool create the various vibrant colors.



The loss of biodiversity—the rich assortment of living organisms that includes plants, bacteria, animals, insects; every living thing—has critical implications

for humanity, from the collapse of food chains and health systems to the disruption of entire supply chains. According to the [World Economic Forum's 2022 Global](#)

[Risks Report](#), biodiversity loss is listed as the third most severe risk on a global scale over the next 10 years.

BIODIVERSITY

We continuously take steps to both mitigate impacts from our offices and data centers and seek opportunities to protect and promote biodiversity where we operate facilities.



Of the 100 crop species that provide 90% of the world's food, over 70 are pollinated by bees.



Protecting Our Pollinators

Pollinators play a key role in supporting ecosystems, ensuring food security and providing ecosystem services such as clean air and soil stability. Given their critical importance, we aim to support pollinators where possible. In 2021, we installed beehives at our Seattle, Dublin and New York offices, housing over 180,000 bees, and continue

In 2021, we installed beehives at our Seattle, Dublin and New York offices, housing over 180,000 bees.

to support pollinators where we operate:

- We are providing nearly 30 acres of improved pollinator habitat at our data center site in Gallatin, Tennessee
- At our data center in Clonee, Meath, Ireland, we implemented a beekeeping program to help cultivate beehives and planted a variety of native plants on site to provide resources for over 500,000 bees
- We partnered with the London Beekeepers Association to provide habitat on our terraces that support nearly 500 species of insects native to the U.K.



BIODIVERSITY



Green Roof

Our Menlo Park headquarters features a 12.5-acre green roof that provides a diverse landscape for local species, offering habitats ranging from grasslands to oak savannas and meadows. The roof serves as a home to over 600 trees and, to date, 5,300 birds representing 50 avian species have been found foraging and

nesting on the roof by the Santa Clara Valley Audubon Society during monthly surveys.

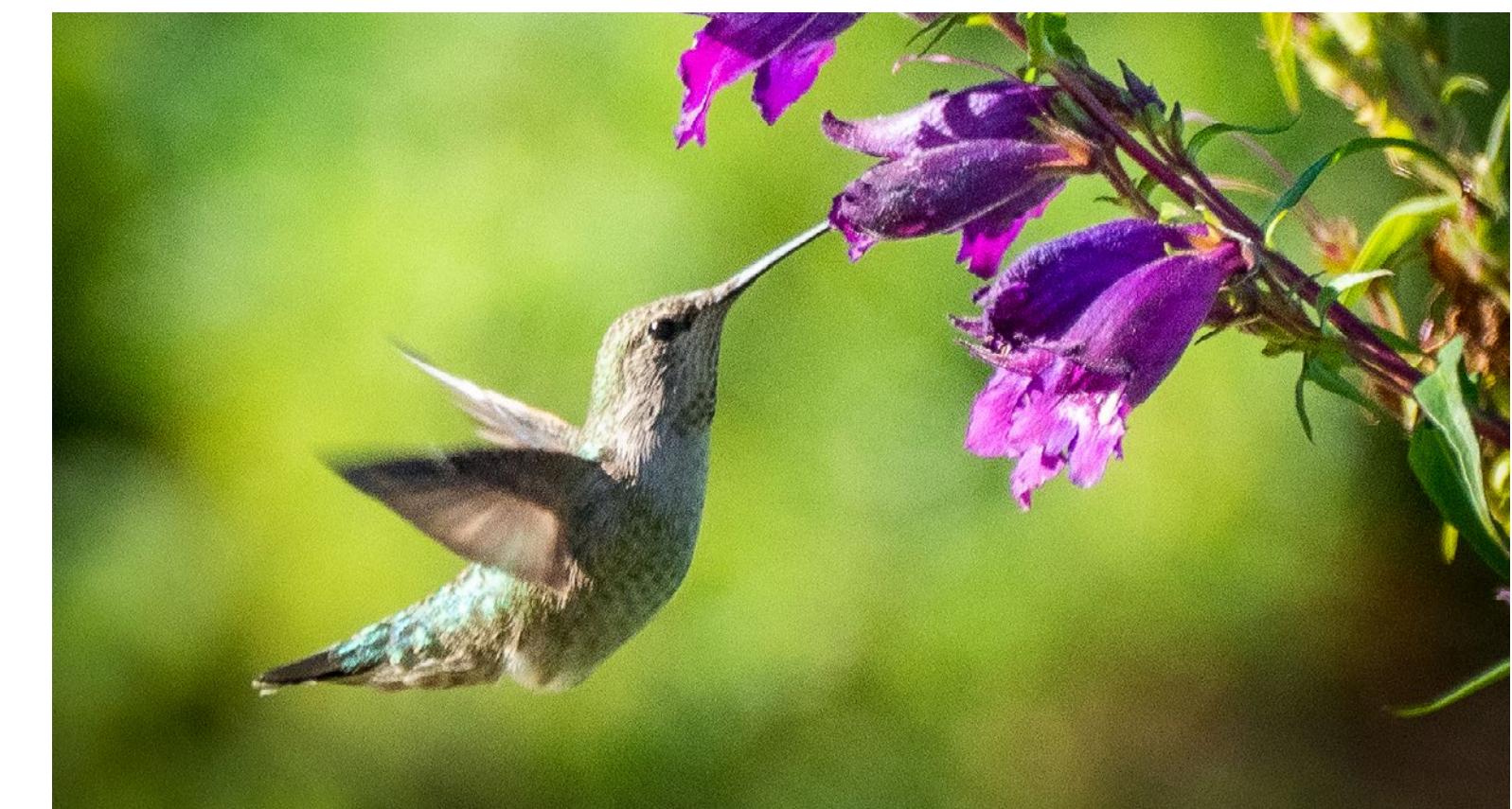
In 2021, we continued to develop our 80-acre Bayfront Campus in Menlo Park, California, by creating an 11-acre park. We focused on diversifying tree species, particularly oaks (*Quercus*), both to avoid monoculture and to transition to species adapted to

our changing climate, which is getting warmer and dryer. Over the past eight years, we have planted 2,650 new trees.

We also partner with a number of local nonprofits striving to promote biodiversity and improve habitats near our Menlo Park headquarters, including [Canopy](#), whom we partnered with to plant trees in the Belle

Photo courtesy of Marion Brenner Photography

Haven neighborhood of Menlo Park; [Save The Bay](#), which focuses on restoring and protecting wetlands in the Bay Area; and the [San Francisco Bay Bird Observatory](#), which restores habitat for endangered bird species, such as the snowy plover and burrowing owl.



BIODIVERSITY

**Leveraging Our Platforms to Protect Wildlife**

Meta has strong standards and policies in place to help prevent illegal wildlife trafficking from happening on our platforms. For example, our Community Standards prohibit the sale of live animals between private individuals (i.e., non-brick-and-mortar stores) on our platform and the publishing of content that coordinates or supports the poaching or selling of endangered

species and their parts. Meta's [Commerce Policies](#) are even stricter, prohibiting the sale of any live animals, pets, livestock or animal parts.

Content reviewers are trained on these topics, including modules on ivory and specific species known to commonly surface. These policies align with the [Convention on International Trade in Endangered Species \(CITES\)](#) Appendix I.

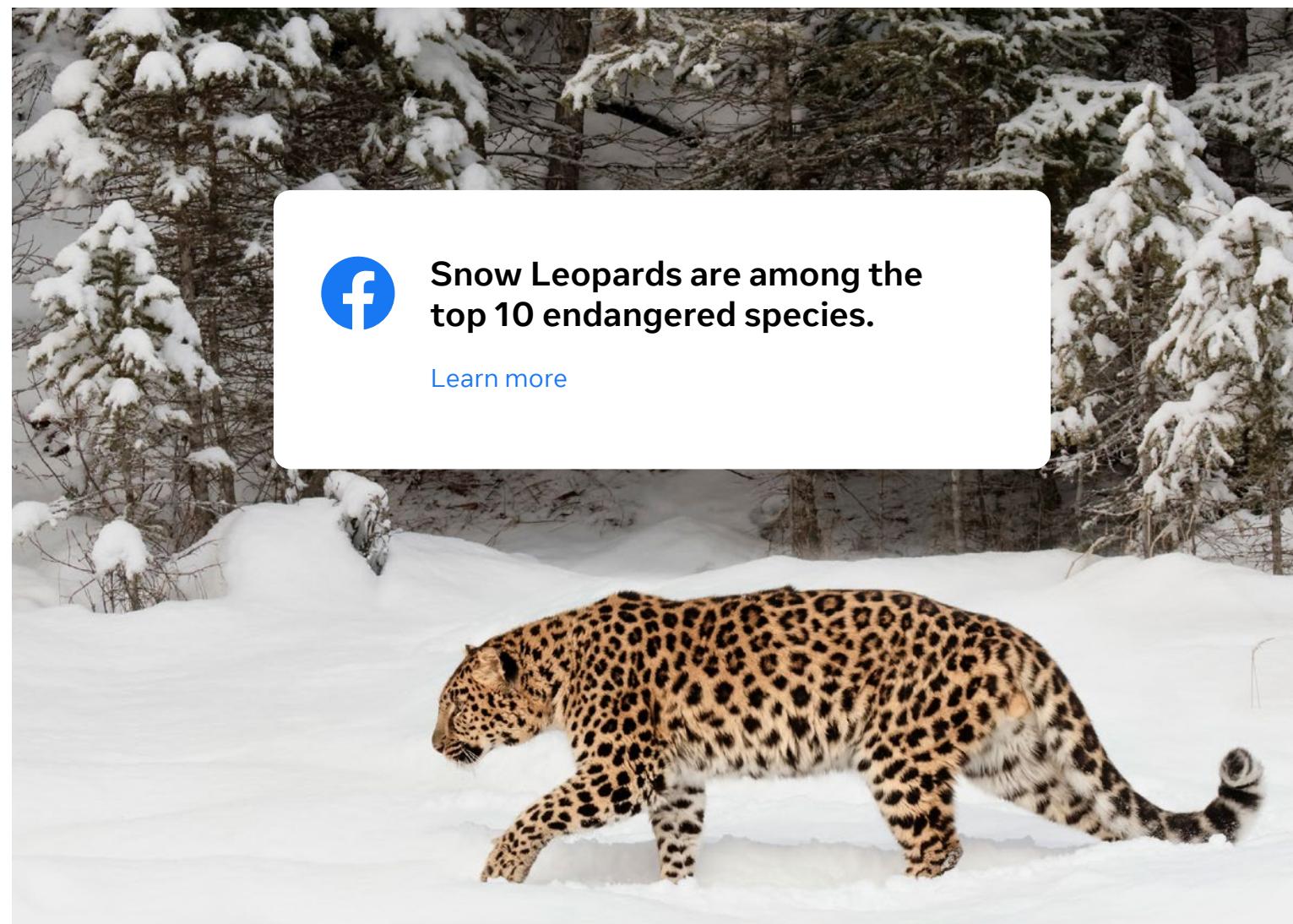
Educational alert features on Facebook and Instagram are designed to prevent [wildlife trafficking](#) online and inform people about the harmful impact of wildlife exploitation.

Our teams completed a project that permanently blocked 25 hashtags related to endangered species across four markets.

When an Instagram user searches a hashtag associated with harmful behavior to animals, such as #tigerselfie or #elephantivory, or a Facebook user searches linked terms such as "buy antique ivory," an advisory will warn about these dangers and provide an opportunity to learn more.

We also took proactive measures to prevent the creation and searchability of violating content by blocking specific hashtags on Instagram known to be associated with the sale of endangered species across different geographies.

As a result, in 2021, our teams completed a project that permanently blocked 25 hashtags related to endangered species across four markets to prevent users from searching for or creating them on the platform. In 2022, we plan to expand this effort to further limit the creation or sharing of this type of content and raise further awareness on protecting endangered species.

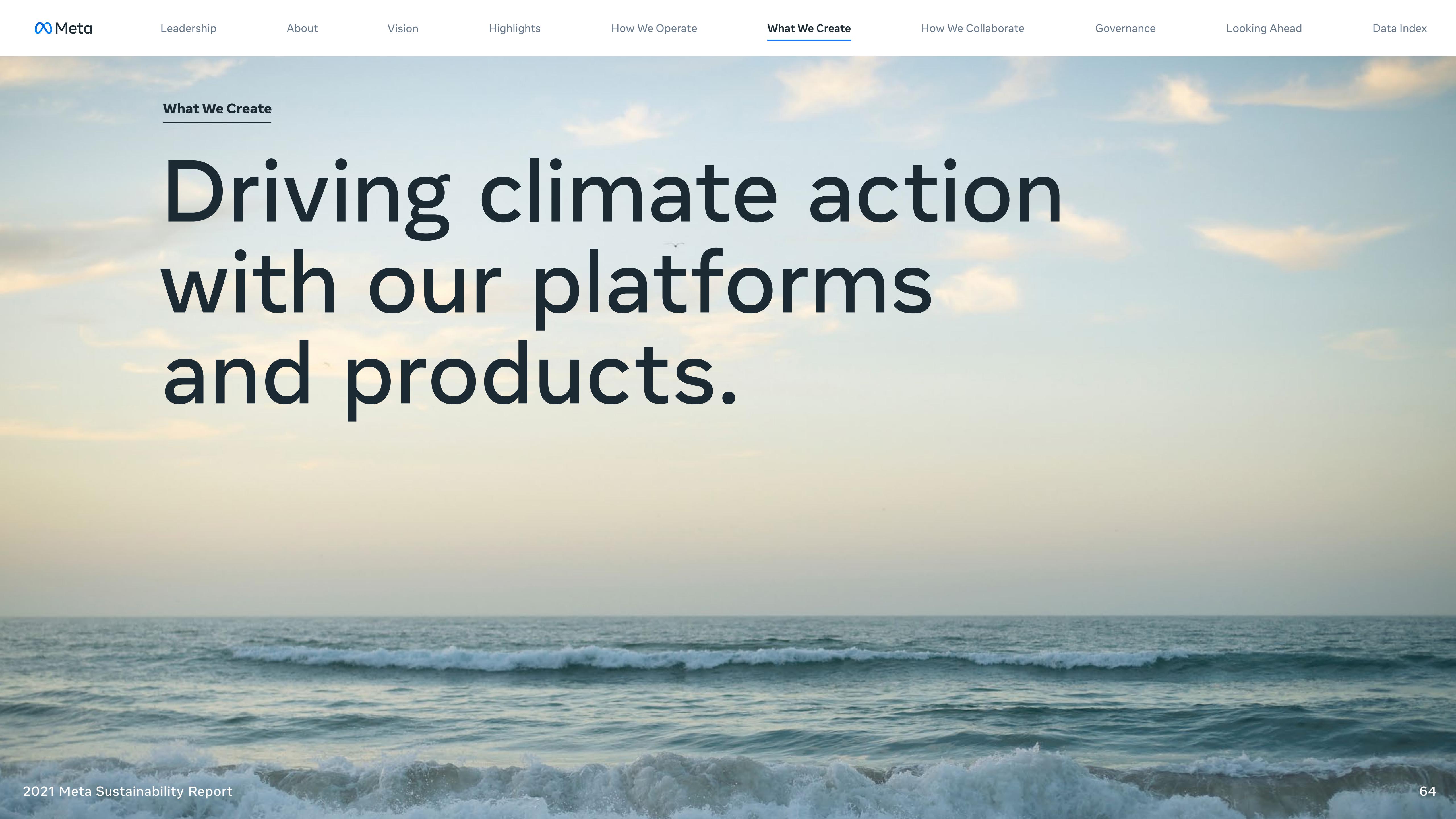


To protect just one tiger, we have to conserve an estimated 10,000 hectares of forest.



Partnerships Reduce Illegal Trading

Cross-sector collaboration and industry partnerships are crucial in scaling impact in this area. In 2018, in partnership with the [World Wildlife Fund \(WWF\)](#), the [International Fund for Animal Welfare \(IFAW\)](#), [TRAFFIC](#), and other leading businesses, we launched the [Coalition to End Wildlife Trafficking Online](#), aiming to reduce the illegal trade in ivory and other wildlife products by 80%.

What We CreateA wide-angle photograph of a sunset over the ocean. The sky is filled with soft, warm orange and yellow hues, transitioning into cooler blues and purples at the top. The ocean waves are visible in the foreground, crashing onto the shore. The overall atmosphere is peaceful and inspiring.

Driving climate action
with our platforms
and products.

WHAT WE CREATE

Our world is facing challenges that no one has faced before, with climate change topping the list.



Meta was born to innovate, ask questions and build products that enable people to change and grow.

So, in conjunction with our efforts to operate for a better reality, we leverage the capabilities

of our platforms to drive climate action through our core products. We create solutions that connect people not only with each other but also with resources, information, tools and opportunities.

On the current path of CO₂ emissions, temperature could increase by as much as 4.4°C by the end of the century.

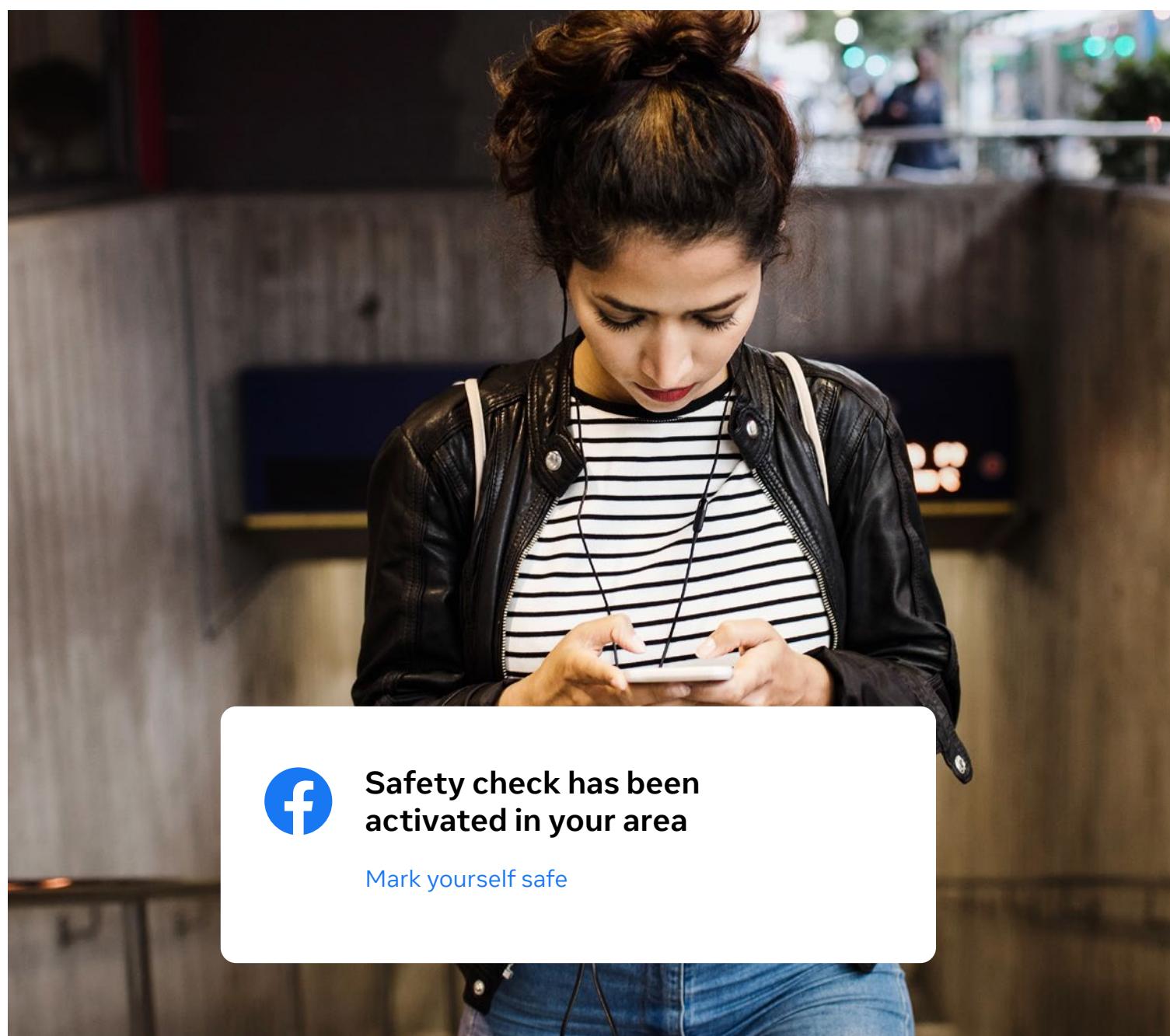


WHAT WE CREATE

Peace of Mind

When a natural disaster or other crisis strikes, it is not only those on the frontlines who are affected. Our [Crisis Response](#) product allows individuals to mark themselves safe and give their loved ones peace of mind. In 2021, 12 million people marked themselves safe in 70 countries.

The tool also connects people who want to help with ways to help. More than 73 million people visited the Crisis Response page, while about 227,000 community help posts were generated and about \$2.2 million was raised through the product.



There were 20 separate billion-dollar weather and climate disasters in 2021 in the U.S. alone.



It is estimated that nearly two billion adults know little to nothing about climate change.³

At the same time, misinformation about climate change continues to spread both online and offline.

This reality led to the creation of the Climate Science Center (CSC). The CSC increases access to science-based and dynamic climate information to drive awareness and inspire more people to take action.

We work with the world's leading climate science organizations, including the [IPCC](#), the [UN Environment Programme \(UNEP\)](#), [The National Oceanic and Atmospheric Administration \(NOAA\)](#), [World Meteorological Organization \(WMO\)](#) and others, to ensure that the information we feature is timely and accurate.



³ Facts about climate change

RAISING AWARENESS



2021 Climate Science Center Updates

Meta expanded the CSC's reach to more than 100 countries, attracted more than 3.8 million followers, and served more than 100,000 daily visitors.

We also partnered with experts from Monash, Yale and Cambridge to directly address climate myths. The [Facts About Climate Change](#) section includes misconceptions about

the existence and causes of global warming, as well as the impact it has on humans and other life on Earth.

In collaboration with the UN Foundation, we featured their four-part Say it with Science series on the CSC, which features conversations between IPCC scientists and youth climate advocates from around the world, exploring the links between climate change and food, oceans, health and resilience. The goal of Say it with Science

is to make climate science more accessible and engaging for younger audiences and to elevate the voices of young climate advocates.

Data for Good partnered with the Yale Program on Climate Change Communication to conduct a global [Climate Change Opinion Survey](#) across 31 countries and territories on Facebook.

The survey provided new [insights](#) about public knowledge, attitudes, policy preferences and behaviors about climate change. For example, we found that more than six in 10 respondents across countries surveyed say they want more information about climate change, highlighting a global gap in knowledge about the subject and underscoring why Meta continues to provide authoritative information through tools such as the CSC.

Climate Talks

A six-episode podcast series, [Climate Talks](#), features Meta team members, partners, scientists, activists and influencers. Hosted by Sophia Li, each episode allowed us to facilitate conversations examining various sustainability topics from multiple angles.



The Future of Business Is Green

Over 200 million businesses use Meta's platforms to support their businesses. [Our Sustainability for Business](#) site provides resources for advertisers to find ways to decarbonize.



Sustainable Opportunity

In 2021, we introduced our first program for small and medium-sized enterprises (SMEs) in Europe, the Middle East and Africa (EMEA). Working with the [SME Climate Hub](#) and our partners across Europe, [Meta Boost Guide to Green](#) provides training and resources to help users grow their businesses sustainably.



Worldwide, just 38% of small businesses have invested in adapting to environmental risks, compared to 60% of large ones.



TACKLING CLIMATE MISINFORMATION

Encouraging collaboration to combat false and misleading information.

“Greenwashing” refers to when companies misrepresent the sustainability of their products, services or operations.



We are committed to fighting the spread of climate misinformation on our platforms. We partner with more than 80 independent, third-party fact-checking organizations who are certified through the nonpartisan [International Fact-Checking Network \(IFCN\)](#) to identify, review and take action on this content.

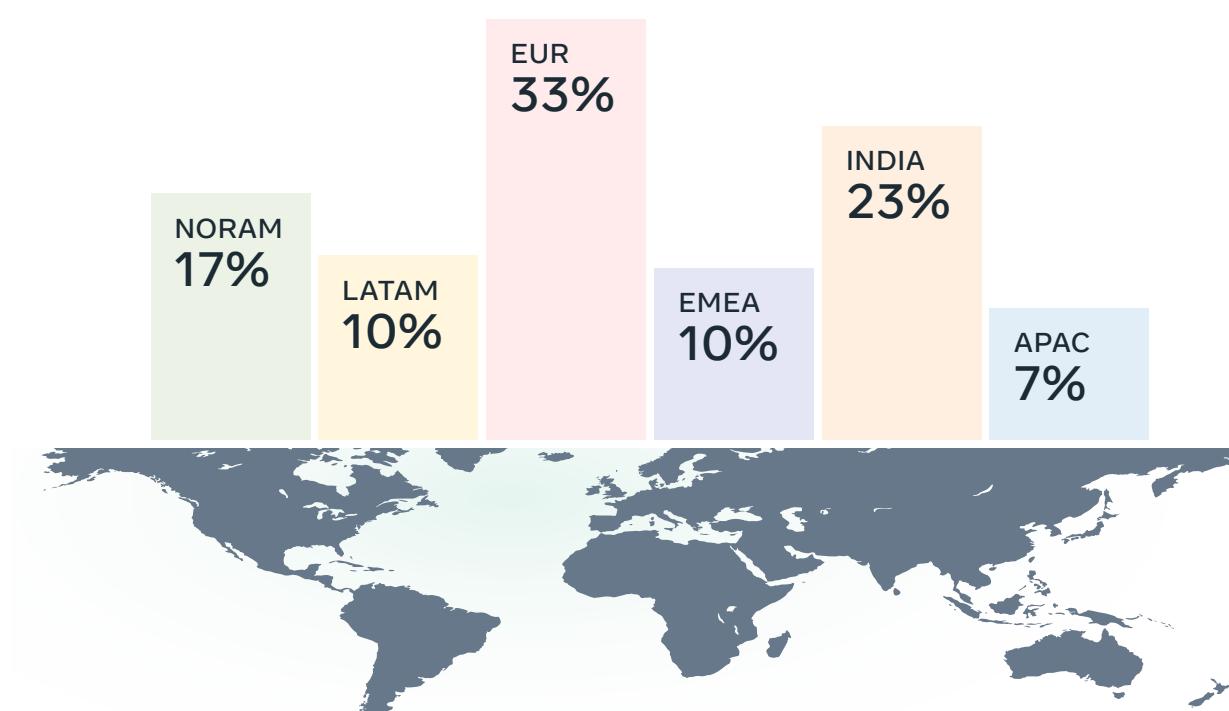
As with all types of claims rated false by our partners, we reduce the distribution of these posts in Feed so fewer people see them, and we show warning labels with more context for

people who do see them, try to share them or already have shared them. Accounts that post misinformation repeatedly, including climate misinformation, will see their overall distribution reduced and may lose the ability to advertise or monetize.

Climate Misinformation Grant

In partnership with the IFCN and an independent six-member judging panel of climate domain experts, we launched the [\\$1 million Climate Misinformation Grant](#).

Geographic Distribution of Global Applicants



to fund partnerships and proposals from fact-checkers, climate organizations and solution providers working to combat false and misleading information about climate change.

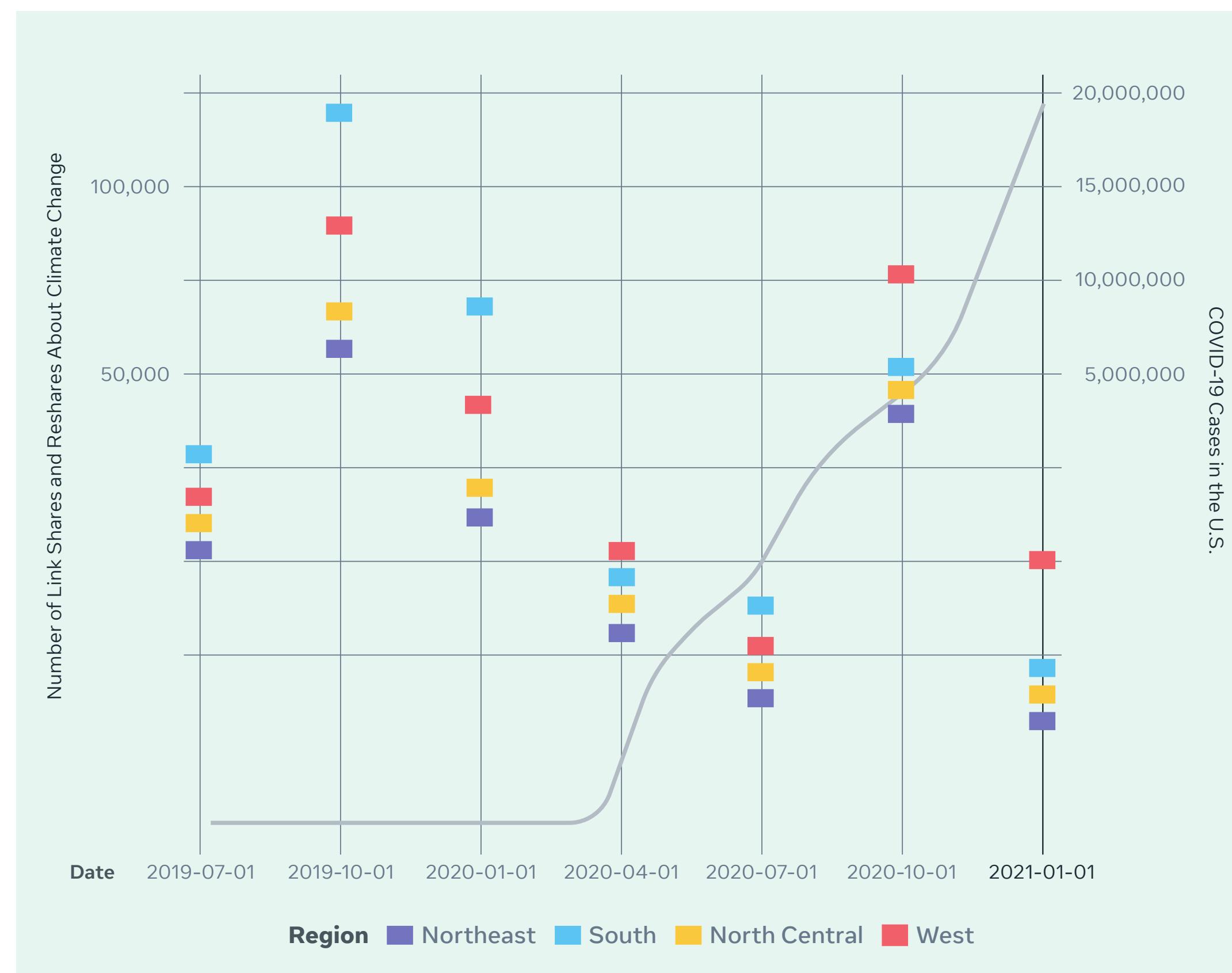
We received applications from around the world. Of the 30 global semifinalists, representing 71 entities, nine grantees were selected.

The grant was structured to encourage collaborative partnerships among applicants with diverse backgrounds, supported by the IFCN's fact-checkers. The proposals we have received include innovative approaches to fact-checking, media literacy, capacity-building and awareness raising and cover the full spectrum of climate information—authoritative content, debunking of misinformation and inoculation approaches.

TACKLING CLIMATE MISINFORMATION

"Misinformation about climate change is a huge, interconnected problem, and solutions need to be equally large and interconnected. Adding capacity to the fact-checking community to skillfully and promptly respond to climate misinformation is a crucial part of the puzzle. In particular, we need stronger links between fact-checkers and experts in climate science and solutions. This grant program will lay the foundation for important future work in fighting back against misinformation that confuses the public about climate change and delays desperately needed climate action." —John Cook, research fellow at the Climate Change Communication Research Hub at Monash University

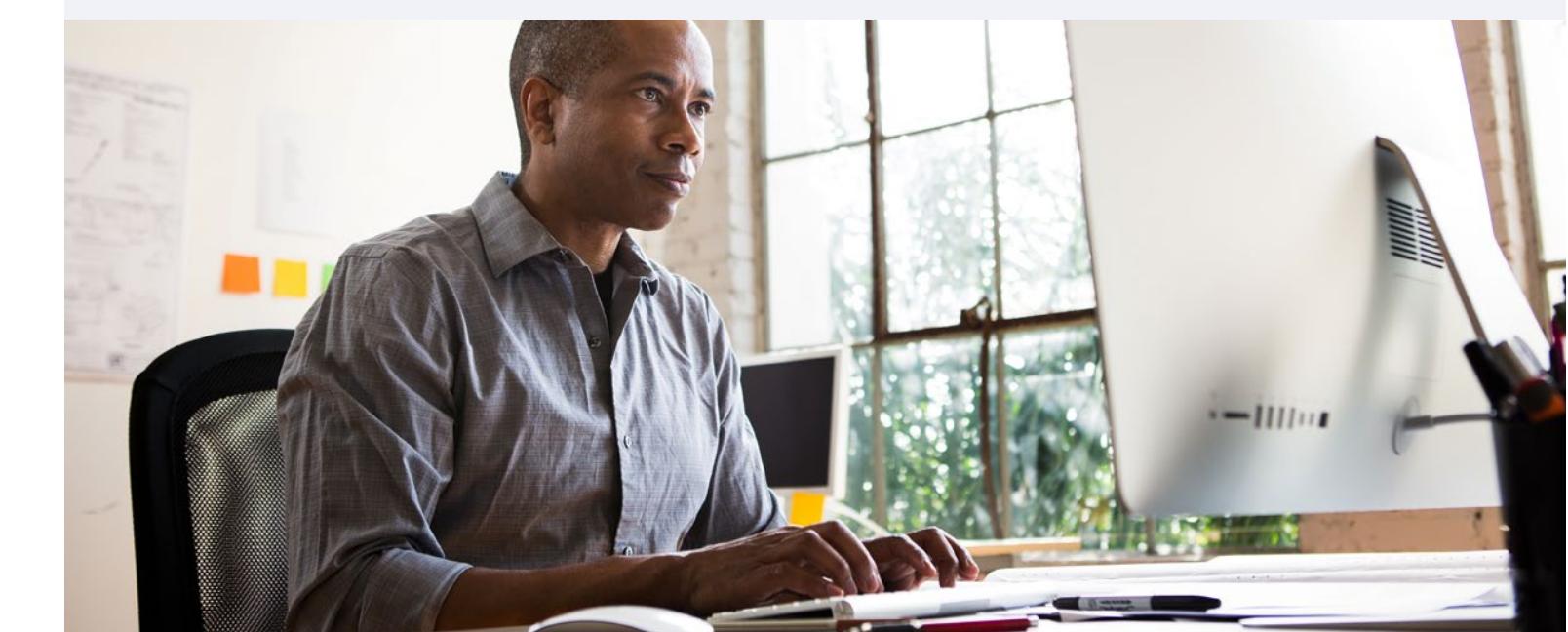
Does climate change interest wane as other global threats capture attention?



Large-scale decrease in the social salience of climate change during the COVID-19 pandemic ↗

There are concerns that climate change attention is waning as competing global threats intensify. To investigate this possibility, we analyzed all link shares and reshares on Meta's Facebook platform (e.g., shares and reshares of news articles) in the United States from August 2019 to December 2020 (containing billions of aggregated and de-identified shares and reshares). We then identified all link shares and reshares on "climate change" and "global warming"

from this repository to develop a social media salience index—the Climate SMSI score—and found an 80% decrease in climate change content sharing and resharing as COVID-19 spread during the spring of 2020. Climate change salience then briefly rebounded in the autumn of 2020 during a period of record-setting wildfires and droughts in the United States before returning to low content sharing and resharing levels. This fluctuating pattern suggests new climate communication strategies—focused on "systemic sustainability"—are necessary. Read more in [journals.plos.org](#) ↗.



BUILDING THE METAVERSE

We are committed to building the metaverse sustainably.

Augmented reality uses a real-world setting while virtual reality is completely virtual.



At [Connect 2021](#), our CEO Mark Zuckerberg introduced [Meta](#), which brings together our apps and technologies under one new company brand. The metaverse is an immersive, embodied successor to the mobile internet.

Our focus will be to bring the metaverse to life, helping people connect, build communities, grow businesses and unlock new ways they can participate in the transition to a just, low-carbon economy.

We are already developing exciting new technologies that will help people connect and explore in the metaverse, including our virtual reality (VR), augmented reality (AR) and wearable hardware technologies and devices. Our [net zero commitment](#) is inclusive of

these products, and we are committed to building the metaverse sustainably.

In 2021, we began conducting LCAs of our Reality Labs products, including Quest 2, to better understand the environmental impacts associated with each phase in the product life cycle—materials, transportation, use phase and end of life. These LCAs enable teams to identify opportunities to incorporate circularity and reduce GHG emissions in our product development process.



BUILDING THE METAVERSE

Allowing customers to purchase refurbished products for our devices delivers the same user experience while giving gently used products new life.



The Reality Labs team has already started on our journey to move the needle toward reducing the carbon footprint of our products, including:

- Evaluating opportunities to incorporate plastics and metals with recycled content into products as these materials are available
- Prioritizing the use of [FSC](#) or [Programme for the Endorsement of Forest Certification](#) certified fibers in our consumer packaging
- Transitioning segments of our logistics network to lower-carbon modes of transit, such as leveraging ocean freight instead of air freight

- Educating product development teams on hardware circularity principles through release of our internal Design for Circularity guide, with the intent of continuing to reduce waste, enable disassembly and improve material recovery

Meta is committed to doing our part to extend the life of our products. In 2021, we launched our Meta Quest “[As Good As New](#)” program, enabling customers to purchase refurbished products for our flagship devices, including Quest 1 and Quest 2. These devices have all the same features, performance and quality, while also giving our gently used products new life.



The impact from refurbishing a device is, on average, three times less than that of producing a new device.



How We Collaborate

Partnerships enable us
to scale positive impact.



HOW WE COLLABORATE

We must work together to realize systems-level change.

Collaboration is core to everything we do. Throughout this report, we have shared example after example of how partnerships enable us to use our size and scale to make a lasting positive impact.

It will take everyone to make the systems-level changes required for a better reality: world-class experts in sustainability and social issues, climate leaders, academic researchers, local utilities, community nonprofits, suppliers and every one of our thousands of employees.

Here is a closer look at how we build new collaborations and support established initiatives, inside and outside of Meta.



Almost 90% of employees engaged in their company's sustainability work say it enhances their job satisfaction.



INTERNAL ENGAGEMENT

We empower employees to see themselves as part of the climate solution.

Corporate collaborations are most effective when they resolve an issue that is seen as critical to business continuity.



Meta's employees are integral to the success of our company's bottom line and to championing our company's culture, so the success of our sustainability program depends on having employee voices at the table. We invite all employees to join our efforts by participating in executive Q&A sessions, educational training, local Green@ chapters or climate-focused hackathons.

No matter their role at Meta, we empower employees to see themselves as part of the climate solution through year-round programming. In 2021, we offered several powerful new initiatives to engage and activate employees in fresh ways.

"To me, sustainability is the lens through which we need to view our future," said Christian Monzon, Technical Program Manager for Meta. "I feel a responsibility to do my part in addressing climate change and promoting sustainable solutions where I can.

Meta's core sustainability department is driving tremendously impactful work, but we would be significantly

limiting our impact potential if we didn't also create advocates and champions among our 70,000+ employees.

I help lead 12 Green@ chapters based in the Americas with the goal of fostering Meta's sustainability culture by introducing and encouraging sustainable choices and behaviors for all Metamates on and off our campuses," Christian continued.



INTERNAL ENGAGEMENT

Employee Activation

Across Meta, employees are integrating climate action into daily activities. Employees focused on local community action continued to grow our global Green@ chapters. Employee activation and discussion on Workplace led to expansion of major activations for Earth Day, Climate Week and executive Q&As. Employee advocacy inspired many to promote and enroll in the Climate Reality Project education series. And employees leveraged their technical expertise to sponsor the Fall Hackathon for the second year in a row.

SustainabiliTEA Talks

In 2021, we launched SustainabiliTEA Talks, a new live executive Q&A series on our internal communications platform, where Meta sustainability leaders engage in a dialogue about their personal passions, program work and ways for employees to get involved. Through this interactive forum, driven by employee questions, the broader community gets to see an honest portrayal of the challenges and opportunities in this space. Our first session featured Meta's net zero 2030 program and ways employees can contribute to reducing company emissions. Our second session highlighted Meta's participation in COP26 with policy leaders in the U.S. and Europe.



Earth Week, Climate Week and Sustainability Summit

In April 2021, we organized our third annual Earth Week Celebration, held live on our internal communications platform. Over five days, we hosted 12 live events, expanded global content across Europe and Asia, and initiated a virtual marketplace with 50 global vendors and the first #MyCarbonCounts employee action campaign to help individuals identify their biggest carbon usage categories and reduce their footprint.

In September 2021, we held our second Climate and Sustainability Summit, in alignment with Meta's Climate Week activations. This one-day virtual conference highlighted programming across Meta and celebrated the cross-functional teams that make this work a reality.

Climate Reality Project Leadership Corps

It is critical not only to connect employees with Meta's sustainability strategy and programming but also to provide access to the best-in-class educational resources. In 2021, we partnered with [Climate Reality Project Leadership Corps](#), AI Gore's premiere training organization, to promote five different global week-long trainings and give our employees the opportunity to view their work and personal activities through the lens of climate justice.

Hackathons

At Meta, many of our best and brightest ideas are born from company hackathons—these events are a core part of our culture that feed innovation into our sustainability programs as well. For the past five years, we have been working alongside a community of 500+ Sustainability Hackers to apply their technical expertise to product ideas for rapid iteration and fast feedback. In 2021, we co-sponsored the Fall Hackathon

for a second year. We had a total of eight projects put forth across the U.S. and EMEA, with 85 hackers participating.

We also centralized all employee resources (for learning, action and engagement) into a single, internal wiki page. In 2022, we look forward to expanding education opportunities for employees hoping to level up their climate action, climate science literacy and understanding of Meta's climate goals.



EXTERNAL PARTNERSHIPS

Supporting established partnerships and initiatives.

Unlike many materials, aluminum can be recycled infinitely.



Photo courtesy of The Northern Rangelands Trust/Kieran Avery

EXTERNAL PARTNERSHIPS



Climate change is a challenge too great for any of us to solve alone. But, by coming together, we have the power to make sustainable change.

Sometimes, that means joining regional collective action organizations. In 2021, we joined the [Rio Grande Water Fund](#) and the [Texas Water Action Collaborative](#), both of which bring together nonprofit organizations, companies and other stakeholders to address shared water challenges.

We also committed to funding the [African Forest Landscape Restoration Initiative \(AFR100\)](#), a country-led effort to bring 100 million hectares of land in Africa into restoration by 2030. Instagram partnered, through providing ad credit, with the [London School of Hygiene &](#)

[Tropical Medicine \(LSHTM\)](#) to support [Children, Cities and Climate](#), a study focusing on the intersection of climate change, cities, health and young people. LSHTM researchers carried out a global survey of over 3,000 young people and their parents to understand their views on the cities they live in and the

air they breathe, using promoted social media advertisements on Facebook and Instagram to recruit participants. The research also included an analysis of the child health benefits of improving air quality in 16 global cities, and a literature review of the child health benefits of decarbonization.

EXTERNAL PARTNERSHIPS

We also worked with [The Recycling Partnership](#) to create [Communities for Recycling](#), a personalized Messenger experience that provides recycling information based on where a person lives—and to intuitively improve recycling accuracy.

Following are additional organizations that Meta partners with or is a member of, focused on various aspects of sustainability and climate action.

Aqueduct Alliance

We are members of [the World Resources Institute \(WRI\)](#)'s [Aqueduct Alliance](#), a group of leading companies, governments and foundations, to gain strategic guidance and industry insight from the WRI's Aqueduct Water Risk Atlas team and water stewardship activities.



"Conflict minerals" include the metals tantalum, tin, tungsten and gold, which are often collectively referred to as "3TG".



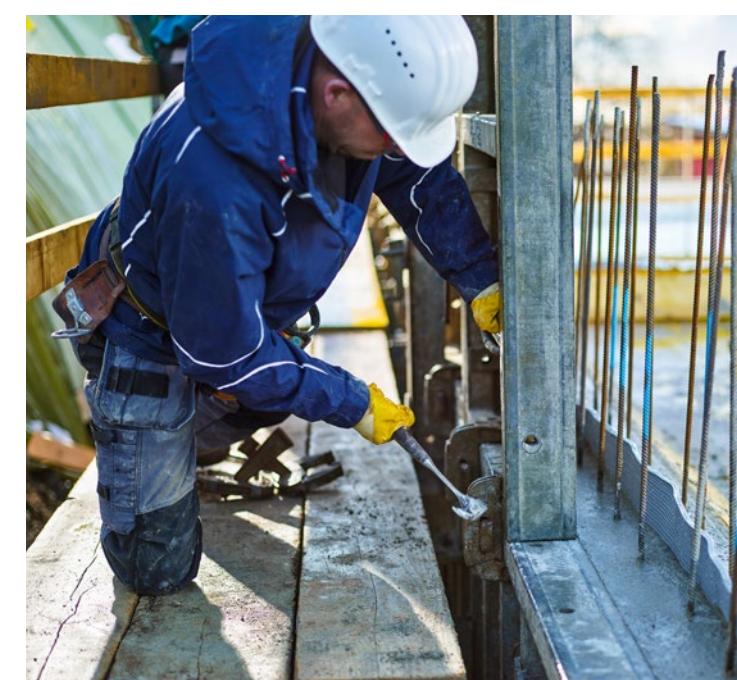
The Open Compute Project is a collaborative community focused on sharing solutions to efficiently support the growing demands on infrastructure.

Business Alliance to Scale Climate Solutions

In 2021, we joined the [Business Alliance to Scale Climate Solutions \(BASCS\)](#), a business-driven collaboration for climate solutions that generate results at the scale our world needs. This group provides a central, neutral platform for businesses and experts to meet, learn, discuss and act together as a "community of practice."

Open Compute Project

The [Open Compute Project \(OCP\)](#) is a collaborative community focused on redesigning hardware technology to efficiently support the



Responsible Business Alliance

Founded in 2004 by a group of leading electronics companies, the [RBA](#) is a nonprofit comprising electronics, retail, auto and toy companies committed to supporting the rights and well-being of workers and communities worldwide affected by the global supply chain. RBA members commit and are held accountable to a common Code of Conduct and use a range of RBA training and assessment tools to support continual improvement in the social, environmental and ethical responsibility of their supply chains.

The [Environmental Sustainability Workgroup \(ESWG\)](#) within the RBA convenes members to identify pressing environmental issues in climate change, water and waste, and collaborate on solutions that drive improvement not only within their organizations but also throughout their supply chains.

In 2021, we provided a case study to a Chatham House Rules discussion with members to share our approach to both reporting and calculation of Scope 3 emissions. We were also actively involved in the [Circular Materials Taskforce](#), which aims to help members adapt their business models and products to the circular economy by supporting integrated, international supply chains that further circular material use and protect human rights and the environment.

EXTERNAL PARTNERSHIPS



Responsible Minerals Initiative

The [Responsible Minerals Initiative \(RMI\)](#) is one of the most used and respected resources for companies addressing issues related to the responsible sourcing of minerals in their supply chains. RMI is a multi-industry initiative that promotes an understanding of and commitment to mitigating the impacts of extracting and processing raw materials.

We maintain a [Conflict Minerals Policy](#) and expect our suppliers to conduct their operations pursuant to this policy.



Responsible Labor Initiative

The [Responsible Labor Initiative \(RLI\)](#) is a multi-industry, multi-stakeholder initiative focused on ensuring that the rights of workers vulnerable to forced labor in global supply chains are consistently respected and promoted.

The UN Climate Change Conference in Glasgow (COP26) brought together 120 world leaders and over 40,000 registered participants.



Other Key Memberships

We are also proud to be members of other environmental nonprofit trade organizations, supporting their work to advance clean technologies and climate action policies that support economy-wide decarbonization and climate resiliency, including:

- [Clean Energy Buyers Association \(CEBA\)](#)
- [American Council on Renewable Energy](#)
- [Advanced Energy Economy](#)



ADVANCING INDUSTRY CHANGE

Comprehensive climate and clean energy policy is central to avoiding the impacts of climate change.

Climate action is critical to achieving a sustainable economy and protecting our planet. We are working internally to decarbonize our operations and supply chain and to reduce our overall environmental footprint. Beyond our operations, we engage with climate-focused stakeholders, organizations and policymakers to advance stewardship, climate science and policies that will help move us all closer to a cleaner and decarbonized world.

We know that industry, regulatory and stakeholder engagement are critical to realizing our own net zero goals and the progress the world needs to achieve in the coming years. Comprehensive and well-designed climate and clean energy policy is central to transitioning to a future that avoids the worst impacts of climate change.

In 2021, Meta showed support for key policies in the U.S. and Europe to advance sustainable policies and climate action.

In the U.S., we actively participate in organizations that advocate for policies that will spur further clean energy deployment and decarbonize the electric sector as a whole. Meta endorsed the [Climate Action Now Act \(HR 9\)](#) in the 116th United States Congress.



ADVANCING INDUSTRY CHANGE

Our goal is not just to be one of the most sustainable companies but also to make it easier for our users and employees to live more sustainably.

In January 2021, we supported the [call to the federal government](#) to prioritize transitioning to a zero-carbon energy economy led by CEBA. And, in October 2021, we released a [public statement](#) where we called on Congress to support the climate and clean energy provisions within the [Build Back Better Act](#) and [Infrastructure Investment and Jobs Act](#).

Meta is also fully committed to supporting the [European Green Deal](#), which provides the framework toward a more sustainable and climate-neutral Europe by 2050. We are partnering with the European

Union and the governments across the EU in making the ambitions of the Green Deal a reality. In 2021, Meta joined the [EU's European Climate Pact](#), which aims to engage European citizens on climate action, and we supported the [Corporate Leaders Group](#) sign-on letter in support of the EU Nationally Determined Contribution.

Being a leader in the fight against climate change means bringing our industry forward with us by actively sharing strategies and ideas with the broader technology industry, as well as across other industries that face similar challenges.

Enabling Climate Change Conversations

From official events to tackling misinformation on a daily basis, we are using our platforms to enable crucial conversations about climate change. Our goal is not just to be one of the most sustainable companies but also to make it easier for our users and employees to live more sustainably.

Our work in the lead-up to and during the [United Nations Framework Convention on Climate Change \(UNFCCC\)](#) demonstrates the way our platforms can serve as powerful tools to generate support for climate action.



During COP26, we featured experts and scientists in new content designed to inform and inspire action. We hosted a Facebook and Instagram Live studio at the UNFCCC pavilion, which included over 90 conversations with leading voices on climate change.

We featured the Say it with Science conversation series on the Climate Science Center on Facebook covering health and climate change. On Instagram, we launched the editorial series Our Planet in Crisis, which features the stories of activists and organizers who are dedicated to spreading awareness and

empowering others to take action in their local communities. We also debuted a new video series in Asia focused on climate change, called Forward Together, which shared new Data for Good tools and research on climate change and stories from community leaders in sustainability.

ADVANCING INDUSTRY CHANGE

Climate Week

We continue to do our part to support The Paris Climate Agreement through our ongoing involvement with organizations like The Climate Group. During Climate Week and the UN General Assembly (UNGA) in 2021, we were able to connect thought leaders for a series of [side events](#).

During these sessions, we discussed some of the world's most pressing issues, including communicating climate change, vaccine equity and the role of tech and open data flows in economic prosperity.

COP26

In 2021, Meta delivered our biggest activation at COP yet. At the core of our activation was our presence at the UNFCCC pavilion. Now in our sixth year, we ran a Facebook and Instagram Live Studio—a space for policymakers, advocates, businesses and nonprofits to broadcast progress, challenges and reflections on the urgency of climate change to audiences around the world. We had 90+ high-level visitors.

At COP26, we executed over 40 initiatives. In addition to a massive expansion of the CSC, we supported the UN in mobilizing action against climate change and encouraging conversations around this important topic.

The UN's ActNow chatbot was updated with 10 new actions for people to tackle climate change and was made available on Messenger and Instagram.

In support of this important moment, Meta developed new camera stickers to help people strike up a conversation by visually showing their support for climate action in their Story or group chat on Messenger and Instagram.

Our Meta delegation on the ground included team members from across the company and hosted:

- “Bridging the Gap between Climate Information and Action” in the Business Pavilion

- “How can ICT companies help enable Europe’s transition to net zero emissions by 2050” in the EU Pavilion
- A Reuters event on authoritative climate information
- Roundtables with youth

Ahead of COP26, Meta's Chief Operating Officer, Sheryl Sandberg, signed a [Glasgow Is Our Business](#) open letter that urged governments and companies to join in signatories in making meaningful emissions

commitments ahead of COP26. It ran as a full-page ad in The New York Times. Meta also joined the [Clean Energy Demand Initiative \(CEDI\)](#), led by the U.S. Department of State and CEBA, which was launched at COP26. CEDI is intended to signal corporate clean energy demand in constrained regions for renewable procurement, such as Asia-Pacific.

As key climate policy issues continue to be widely debated by governments around the world, our increased and continuously evolving focus on sustainability and climate policy (including but not limited to the activities described in this report) represents our heightened level of engagement in and attention to these important topics. We are looking forward to participating in COP27.



Governance

Our Board of Directors, its committees and our management provide oversight around our ESG and sustainability efforts.

GOVERNANCE

The Audit and Risk Oversight Committee of our Board of Directors is updated on climate, supply chain and overall program strategy annually. Meta leadership and senior management are engaged in assessing and managing sustainability risks and opportunities.

Environmental Data Governance

The environmental data found within this report is used for three main reasons:

1. **Measure** performance on issues that matter to Meta
2. **Analyze** performance over time against targets and standards
3. **Inform** stakeholders about Meta's sustainability performance



Utility-scale solar power declined in cost by 90% between 2009 and 2021. The cost of onshore wind power declined by 70% over the same period.



LOOKING AHEAD

With greater transparency and our vision to guide us, we will do even more to keep bringing the world closer together—and closer to a better reality for all. To learn more, visit our [sustainability page ↗](#).



Data Index



PRIORITY TOPICS

Our 2021 Sustainability Report focuses on the key environmental issues identified throughout our stakeholder engagement process.

Descriptions and links to additional information on the full list of priority topics Meta works to address can be found in the Priority Topics table.

Topic	Meaning	Link to Resource
Environmental Topics		
Net Zero Commitment	<ul style="list-style-type: none">Manage operational energy and emissionsInvest in energy-saving and renewable energy projects to support our supply chainInvest in renewable energy, carbon abatement and carbon removal projects throughout our operations and supply chain	Page 47
Data Center Efficiency	<ul style="list-style-type: none">Create the most efficient data centers possible by prioritizing energy efficiency; renewable energy; water efficiency and sustainable materials during design, construction and operation	Page 39
Water Stewardship	<ul style="list-style-type: none">Reduce workplace and data center water use and improve the quality of discharged waterInvest in water restoration projects in the watersheds where we operateSupport industry-wide initiatives and provide guidance to advance the field of water stewardship	Page 55
Climate Change	<ul style="list-style-type: none">Manage short-, medium- and long-term climate risks and opportunities that could significantly impact Meta's organizational goals and societyImplement board and management oversight of climate risks and opportunities	Page 34
Operational Waste	<ul style="list-style-type: none">Minimize waste generated in our facilities and workplacesManage the treatment and disposal of wasteExpand beneficial reuseRepair and reuse data center componentsDesign products and packaging with renewable materials and with end of life in mindEquip people with offerings that promote reuse such as Facebook Marketplace and community groups	Page 36

PRIORITY TOPICS

Social Topics		
Community Investment and Engagement	<ul style="list-style-type: none">• Leverage Meta's scale, people and technology to partner with communities on initiatives that create lasting positive impacts• Invest to address immediate needs such as hunger and natural disasters, as well as longer-term commitments to support education, economic opportunity and environmental progress	Page 77 Community Stories at Meta ↗
Accessibility	<ul style="list-style-type: none">• Design technologies and features that help people with disabilities get the most out of Meta's products and services	Facebook Help Center ↗
Access to Internet	<ul style="list-style-type: none">• Partner to close the gap in access to reliable internet• Devote resources to digital literacy, education and skills development• Promote access to culture and scientific advancement	Technology and Innovation News ↗
Data Privacy and Security	<ul style="list-style-type: none">• Treat data responsibly and adhere to stringent industry standards for privacy and data protection• Invest in data protection training• Build the tools to help users secure their personal information and make the right privacy choices	Privacy Tools and Information Security ↗
Small Business Support	<ul style="list-style-type: none">• Enable small and medium-sized businesses to grow by providing targeted product and service offerings, training and resources	Support Small Business Hub ↗ Meta Boost Guide to Green ↗
Minimizing Spread of False Information	<ul style="list-style-type: none">• Prevent and address misinformation on Meta platforms• Promote access to educational materials• Amplify reliable content• Improve access to data about the way our platforms are used	Page 66

PRIORITY TOPICS

Social Topics (Continued)

Human Rights	<ul style="list-style-type: none">Assess supply chain for violations to human rights standards and providing mechanisms to redress violationsImplement clear policies on labor rights, including child labor, forced labor and the right to collective bargainingMaintain a safe and healthy work environment for employeesProtect freedom of expression and privacy for people using our platformsProtect the safety and dignity of people using our platformsUphold a commitment to nondiscrimination	Page 33 Corporate Human Rights Policy ↗ Promoting Safety and Expression ↗
Human Capital/ Employee Relations/ Talent Development	<ul style="list-style-type: none">Invest in employee skill development and create paths to upward mobilityOffer meaningful retention programs and the ability to work flexiblyCommit to reporting on, and striving for, pay equity across groups, access to health care, mental well-being and responsive policies during crises	Meta Employee Benefits ↗
Employee Engagement	<ul style="list-style-type: none">Support an inclusive and welcoming work environment by providing employees with opportunities to contribute to and shape Meta's ESG strategiesRegularly solicit employee feedback and report on the outcomes of these engagements	Page 74
Diversity, Equity and Inclusion (DEI)	<ul style="list-style-type: none">Build a diverse, inclusive labor forceSupport programs that promote underrepresented groups in tech, provide equitable access to digital skills, and promote economic equity in under served communitiesReport on DEI metricsAssess any uses of our platforms that prevent DEI outcomes from being achievedGrow Meta's business in a way that promotes social and economic benefits throughout the value chainOffer Meta's products and services in a nondiscriminatory manner	Diversity and Inclusion ↗

PRIORITY TOPICS

Social Topics (Continued)		
Social and Environmental Justice	<ul style="list-style-type: none">• Track Meta's impacts on community projects and promote social justice more broadly on the platform• Implement accountability measures to mitigate barriers to social and environmental justice and freedom of expression	Promoting Safety and Expression ↗
Governance Topics		
Transparent Reporting	<ul style="list-style-type: none">• Issue reports on business activities and government data requests• Link to relevant standards and reporting data that is comparable, accurate and timely	Transparency Center ↗
Fair and Responsible Tax Practices	<ul style="list-style-type: none">• Practice corporate income tax responsibility and pay taxes in a fair and transparent manner• Respond to global taxes on energy use, carbon and other issues related to environmental and health damage	Tax Policy ↗
Corporate Governance	<ul style="list-style-type: none">• Ensure board and management oversight and prioritization of risks and opportunities, including those related to sustainability• Establish and enforce transparent policies to meet stakeholder expectations	Page 84 Governance Documents ↗
Trust and Integrity	<ul style="list-style-type: none">• Conduct business with integrity• Maintain compliance with legal and environmental policies• Promote ethical behavior from the top down• Offer training on ethical business, nondiscrimination and privacy and data protection• Enhance transparency, risk management and communication	Page 80 Investor Relations Website ↗
Competitive Behavior	<ul style="list-style-type: none">• Monitor and comply with antitrust laws	Code of Conduct ↗

PRIORITY TOPICS

Governance Topics (Continued)		
Public Policy Engagement and Advocacy	<ul style="list-style-type: none">Engage with governments and other stakeholders to promote a transparent business environment that enables sustainable growthParticipate in public policy dialogues on issues that support our business and sustainability strategies, and where we can contribute expertise to solve policy issues.Support organizations that advocate for policies that spur clean energy deployment and decarbonization	Page 80
Stakeholder Engagement	<ul style="list-style-type: none">Monitor and respond to feedback from corporate stakeholders, including criticsCollaborate with governments, NGOs, United Nations (UN) actors and other companies on shared priorities	Page 13
Supplier Engagement and Responsible Sourcing	<ul style="list-style-type: none">Work with suppliers whose policies on social and environmental impact and DEI align with Meta'sEnforce and track supplier adherence to code of conductMinimize environmental and social impacts of sourcing materials for our products and operationsWork with suppliers that adhere to human rights and environmental standardsChoose to support small and diverse businesses when possible	Page 33 Conflict Minerals Policy ↗
ESG Product Solutions	<ul style="list-style-type: none">Create and invest in products and features that deliver positive outcomes for societal and environmental health and well-being and empower users to track and reduce their environmental impactCollaborate with industry peers and other knowledgeable parties to develop and fund innovative solutions to address environmental and social challengesMinimize the environmental impacts of our physical products throughout the product life cycle	Page 64 ESG Resources ↗
Content Governance	<ul style="list-style-type: none">Developing controls to govern the inclusion, visibility and distribution of content on Meta platforms, and to prevent dehumanizing content and online abuseEnforce content policies with moderation and removalTrack and report the outcomes of content governance efforts	Community Standards ↗

PRIORITY TOPICS

Governance Topics (Continued)		
Risk Management	<ul style="list-style-type: none">Identify, assess and control threats to the organizationEmbed risk management throughout the governance structureManage connectivity interruptions and protect communication during crises	Leadership and Governance ↗
Responsible Product Design	<ul style="list-style-type: none">Design Meta's core products and algorithms in a responsible mannerConsider the social and human rights impacts, including mental health, of social media use and product designSelect appropriate and ethical advertising contentIncorporate policies that prohibit advertisers from targeting protected classes of usersPrioritize advertising that creates a positive social or environmental impactDevelop socially responsible artificial intelligenceCommit to sharing knowledge and resources with the tech community	Page 64 Advertising Policies ↗

ENVIRONMENTAL FOOTPRINT ^{1,2}

1.1 GHG Emissions ^{3,4,5,6}

Total GHG Emissions

Market-Based (In Metric Tons CO₂e)

	2017	2018	2019	2020	2021
Net Total	1,096,000	1,008,000	4,330,000	4,984,000	5,619,000
Carbon Removal (Carbon Credits Retired)⁷	-	-	-	145,000	90,000
Total	1,096,000	1,008,000	4,330,000	5,129,000	5,709,000
Scope 1	25,000	42,000	44,000	29,000	55,000
Percent of Total GHG Emissions (Scopes 1-3)	2%	4%	1%	1%	1%
Scope 2	591,000	314,000	208,000	9,000	2,000
Percent of Total GHG Emissions (Scopes 1-3)	54%	31%	5%	<1%	<1%
Scope 3	480,000	652,000	4,078,000	5,091,000	5,651,000
Percent of Total GHG Emissions (Scopes 1-3)	44%	65%	94%	99%	99%

Location-Based (In Metric Tons CO₂e)

	2017	2018	2019	2020	2021
Total	1,387,000	1,983,000	6,295,000	8,559,000	9,994,000

Greenhouse Gas Intensity

Market-Based Scope 1 & 2 (In Metric Tons CO₂e / Monthly Active Person)

	2017	2018	2019	2020	2021
Annual GHG Intensity	0.00029	0.00015	0.00008	0.00001	0.00002

ENVIRONMENTAL FOOTPRINT

Operational GHG Emissions

Market-Based Scope 1 & 2 (In Metric Tons CO₂e)⁸

	2017	2018	2019	2020	2021
Total Operational GHG Emissions	616,000	356,000	252,000	38,000	58,000
Data Centers Total	568,000	314,000	207,000	14,000	25,000
Altoona, IA	1,000	1,000	2,000	1,000	2,000
Clonee, Ireland	<500	<500	<500	1,000	1,000
Eagle Mountain, UT	-	-	-	-	3,000
Forest City, NC	136,000	53,000	9,000	<500	1,000
Fort Worth, TX	1,000	1,000	1,000	<500	1,000
Henrico, VA	-	-	<500	<500	5,000
Huntsville, AL	-	-	-	-	<500
Los Lunas, NM	-	1,000	1,000	<500	1,000
Luleå, Sweden	<500	<500	<500	<500	<500
New Albany, OH	-	-	<500	2,000	<500
Newton County, GA	-	-	-	-	<500
Odense, Denmark	-	-	<500	<500	3,000
Papillion, NE	-	<500	<500	3,000	2,000
Prineville, OR	239,000	137,000	1,000	3,000	4,000
East Coast Leased Data Center Facilities	98,000	102,000	188,000	-	<500
Other Data Center-Related Facilities	40,000	17,000	4,000	2,000	<500
Offices Total	48,000	42,000	44,000	24,000	32,000

ENVIRONMENTAL FOOTPRINT

Market-Based vs. Location-Based

Scope 2 Emissions (In Metric Tons CO₂e)

	2018		2019		2020		2021	
	Market-Based	Location-Based	Market-Based	Location-Based	Market-Based	Location-Based	Market-Based	Location-Based
Total Facilities GHG Emissions	314,000	1,241,000	205,000	1,885,000	9,000	2,718,000	2,000	3,080,000
Data Centers Total	308,000	1,181,000	197,000	1,813,000	2,000	2,650,000	2,000	2,989,000
Altoona, IA	-	346,000	-	483,000	-	555,000	-	425,000
Clonee, Ireland	-	82,000	-	143,000	-	159,000	-	187,000
Eagle Mountain, UT	-	-	-	-	-	-	-	63,000
Forest City, NC	52,000	201,000	8,000	208,000	-	202,000	-	165,000
Fort Worth, TX	-	212,000	-	295,000	-	399,000	-	378,000
Henrico, VA	137,000	-	-	3,000	-	69,000	-	146,000
Huntsville, AL	-	-	-	-	-	-	-	32,000
Los Lunas, NM	-	12,000	-	135,000	-	266,000	-	277,000
Luleå, Sweden	-	7,000	-	6,000	-	7,000	-	4,000
New Albany, OH	-	-	-	20,000	-	157,000	-	230,000
Newton County, GA	-	-	-	-	-	-	-	84,000
Odense, Denmark	-	1,000	<500	18,000	-	57,000	2,000	51,000
Papillion, NE	-	3,000	-	101,000	-	294,000	-	330,000
Prineville, OR	-	145,000	-	167,000	-	200,000	-	246,000
East Coast Leased Data Center Facilities	102,000	128,000	188,000	193,000	-	223,000	-	267,000
Other Data Center-Related Facilities	17,000	44,000	1,000	41,000	2,000	62,000	-	101,000
Offices Total	6,000	60,000	8,000	72,000	7,000	68,000	-	92,000

ENVIRONMENTAL FOOTPRINT

Value Chain GHG Emissions

Scope 3 Emissions (In Metric Tons CO₂e) ^{9,10,11,12}

	2017	2018	2019	2020	2021
Total	480,000	652,000	4,078,000	5,091,000	5,651,000
Category 1: Purchased Goods and Services ⁹	-	-	1,428,000	1,846,000	2,371,000
Of Total (in %)	-	-	35%	36%	42%
Category 2: Capital Goods ⁹	-	-	1,671,000	2,516,000	2,410,000
Of Total (in %)	-	-	41%	49%	42%
Category 3: Fuel and Energy-Related Activities	-	-	264,000	56,000	75,000
Of Total (in %)	-	-	6%	1%	1%
Category 4: Upstream Transportation and Distribution	-	-	-	49,000	180,000
Of Total (in %)	-	-	-	1%	3%
Category 6: Business Travel ^{10,11}	246,000	397,000	529,000	129,000	5,000
Of Total (in %)	-	-	13%	3%	<1%
Category 7: Employee Commuting ¹²	43,000	71,000	90,000	61,000	22,000
Of Total (in %)	-	-	2%	1%	<1%
Category 11: Use of Sold Products	-	-	-	390,000	558,000
Of Total (in %)	-	-	-	8%	10%
Other Applicable Categories ^{9,12}	-	-	96,000	44,000	29,000
Of Total (in %)	-	-	2%	1%	1%

ENVIRONMENTAL FOOTPRINT

2.1 Electricity

Electricity Consumption by Facility (In MWh)

	2017	2018	2019	2020	2021
Total Electricity Consumption	2,462,000	3,427,000	5,140,000	7,170,000	9,421,000
Electricity from Grid (%)	100%	100%	100%	100%	100%
Data Centers Total	2,360,000	3,245,000	4,918,000	6,966,000	9,117,000
Altoona, IA	500,000	612,000	853,000	980,000	951,000
Clonee, Ireland	1,000	200,000	382,000	487,000	635,000
Eagle Mountain, UT	-	-	-	-	230,000
Forest City, NC	433,000	547,000	614,000	595,000	581,000
Fort Worth, TX	189,000	461,000	695,000	941,000	1,014,000
Henrico, VA	-	-	10,000	204,000	515,000
Huntsville, AL	-	-	-	-	85,000
Los Lunas, NM	-	26,000	289,000	571,000	718,000
Luleå, Sweden	301,000	337,000	373,000	369,000	306,000
New Albany, OH	-	-	38,000	270,000	511,000
Newton County, GA	-	-	-	-	215,000
Odense, Denmark	-	4,000	128,000	343,000	501,000
Papillion, NE	-	5,000	178,000	519,000	737,000
Prineville, OR	426,000	488,000	573,000	686,000	898,000
East Coast Leased Data Center Facilities	359,000	432,000	647,000	795,000	940,000
Other Data Center-Related Facilities	135,000	133,000	113,000	206,000	279,000
Offices Total	102,000	181,000	222,000	204,000	304,000

ENVIRONMENTAL FOOTPRINT

Electricity Mix (In % of Total Electricity Used)¹³

	2017	2018	2019	2020	2021
Renewable	51%	75%	86%	100%	100%
Nonrenewable	49%	25%	14%	0%	0%

2.2 Total Energy Consumed

Energy Consumption

Total Energy Consumed (In GJ)

	2017	2018	2019	2020	2021
Total Energy Consumption	-	-	-	27,075,000	36,993,000
Direct Energy Consumption	-	-	-	438,000	833,000
Indirect Energy Consumption	-	-	-	26,638,000	36,160,000

2.3 Fuels

Fuel Consumption

	2017	2018	2019	2020	2021
Natural Gas	-	-	-	-	6,305,000 therms
Diesel — Diesel Fuel	-	-	-	-	363,000 gal
Diesel — Distillate Fuel Oil No.4	-	-	-	-	6,023,000 gal
Gasoline	-	-	-	-	1,078,000 gal
Propane	-	-	-	-	659,000 gal

Renewable Fuels

Hydrotreated Vegetable Oil	-	-	-	-	6,000 gal
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ENVIRONMENTAL FOOTPRINT

2.4 Data Center Operations and Design

Power Usage Effectiveness ¹⁴

Annual Data Center PUE	2017	2018	2019	2020	2021
PUE (Data Center Energy Efficiency)	1.10	1.11	1.11	1.10	1.09

Sustainable Design

Green Building Standards for Data Centers and Offices (% of sq ft Covered by Green Building Standards and/or EnMS)	2017	2018	2019	2020	2021
Total	-	-	-	-	98%
Data Centers (LEED Gold or Above, or ISO 50001)	-	-	-	-	100%
Offices (LEED Gold or Above, or ISO 50001)	-	-	-	-	97%

3.1 Water Withdrawal ¹⁵

Water Withdrawal by Facility (In Cubic Meters)	2017	2018	2019	2020	2021
Total Water Withdrawal	1,609,000	2,367,000	3,430,000	3,726,000	5,043,000
Data Centers Total	1,139,000	1,730,000	2,731,000	3,000,000	3,418,000
Altoona, IA	106,000	139,000	145,000	151,000	140,000
Clonee, Ireland	10,000	188,000	395,000	615,000	928,000
Eagle Mountain, UT	-	-	-	-	58,000
Forest City, NC	129,000	99,000	85,000	68,000	64,000
Fort Worth, TX	98,000	269,000	322,000	300,000	254,000
Henrico, VA	-	-	-	42,000	80,000
Huntsville, AL	-	-	-	-	39,000

ENVIRONMENTAL FOOTPRINT

Water Withdrawal by Facility (In Cubic Meters) (Continued)					
	2017	2018	2019	2020	2021
Los Lunas, NM	-	25,000	92,000	140,000	153,000
Luleå, Sweden	66,000	53,000	58,000	49,000	39,000
New Albany, OH	-	-	33,000	35,000	121,000
Newton County, GA	-	-	-	-	105,000
Odense, Denmark	-	-	266,000	360,000	373,000
Papillion, NE	-	-	62,000	108,000	106,000
Prineville, OR	172,000	160,000	208,000	445,000	354,000
East Coast Leased Data Center Facilities	473,000	533,000	1,011,000	645,000	558,000
Other Data Center-Related Facilities	85,000	264,000	54,000	42,000	45,000
Offices Total	470,000	631,000	699,000	726,000	1,625,000
Water Withdrawal by Source (In Cubic Meters)					
	2017	2018	2019	2020	2021
Total Water Withdrawal	1,609,000	2,367,000	3,430,000	3,726,000	5,043,000
From Surface Water	-	-	-	-	-
From Groundwater	-	-	-	37,000	33,000
From Seawater	-	-	-	-	-
From Produced Water	-	-	-	-	-
From Third-Party Water (e.g. Municipal Water Supply)	-	-	-	3,689,000	5,009,000
Water Usage Effectiveness ¹⁴					
	2017	2018	2019	2020	2021
Annual Data Center WUE	0.24	0.27	0.27	0.30	0.26

ENVIRONMENTAL FOOTPRINT

Water Withdrawal Intensity (In Cubic Meters / Monthly Active Person)

	2017	2018	2019	2020	2021
Annual Water Intensity	0.000755	0.001020	0.001200	0.001130	0.001405

Water Withdrawal from Areas with Water Stress (In Cubic Meters)

	2017	2018	2019	2020	2021
Total Water Withdrawal	1,609,000	2,367,000	3,430,000	3,726,000	5,043,000
From Areas with High or Extremely High Baseline Water Stress	-	-	-	-	1,390,000
From Areas without Water Stress	-	-	-	-	3,652,000

Recycled Water (In Cubic Meters)

	2017	2018	2019	2020	2021
Total Water Recycled	469,000	673,000	854,000	643,000	580,000

3.2 Water Consumption

Water Consumption (In Cubic Meters)

	2017	2018	2019	2020	2021
Total Water Consumption	838,000	1,279,000	1,971,000	2,202,000	2,569,000
Data Centers Total	-	-	-	2,197,000	2,406,000
Offices Total	-	-	-	73,000	162,000

Water Consumption from Areas with Water Stress (In Cubic Meters)

	2017	2018	2019	2020	2021
Total Water Consumption	838,000	1,279,000	1,971,000	2,202,000	2,569,000
From Areas with High or Extremely High Baseline Water Stress	-	-	-	-	526,000
From Areas without Water Stress	-	-	-	-	2,043,000

ENVIRONMENTAL FOOTPRINT

3.3 Water Discharge

Water Discharge by Facility (In Cubic Meters)

	2017	2018	2019	2020	2021
Total Water Discharge	-	-	-	1,524,000	2,474,000

Water Discharge by Source (In Cubic Meters)

	2017	2018	2019	2020	2021
Total Water Discharge	-	-	-	1,524,000	2,474,000
To Surface Water	-	-	-	-	-
To Groundwater	-	-	-	-	-
To Seawater	-	-	-	-	-
To Third-Party Water (e.g. Municipal Sewers)	-	-	-	1,524,000	2,474,000

Water Discharge to Areas with Water Stress (In Cubic Meters)

	2017	2018	2019	2020	2021
Total Water Discharge	-	-	-	1,524,000	2,474,000
To Areas with Water Stress	-	-	-	-	864,000
To Areas without Water Stress	-	-	-	-	1,609,000

ENVIRONMENTAL FOOTPRINT

3.4 Water Stewardship

Water Restoration (In Cubic Meters)

	2017	2018	2019	2020	2021
Volumetric Water Restoration Benefits	-	132,000	145,000	2,250,000	2,336,000

Progress on 2030 Net Positive Water Goal (In Cubic Meters)

	2017	2018	2019	2020	2021
Total Water Consumption	838,000	1,279,000	1,971,000	2,202,000	2,569,000
Total Water Restored	-	132,000	145,000	2,250,000	2,336,000

FOOTNOTES

1. Values are rounded and totals are calculated before rounding throughout this report.
2. "Other data center-related facilities" includes facilities where Meta used less than 100,000 MWh of electricity in the reporting year, such as warehouses or colocation facilities. Owned, online data centers are always reported by site, even if they were below this threshold.
3. Meta's methodology for calculating greenhouse gas emissions can be found [here](#).
4. Scope 1, 2 and 3 greenhouse gas emissions are calculated annually based on the WRI/WBCSD [Greenhouse Gas Protocol](#).
5. (a) Scope 1 includes emissions from diesel, natural gas and refrigerants from offices and data centers and from diesel and gasoline in the transportation fleet owned and controlled by Meta.
(b) Scope 2 includes emissions from electricity of offices and warehouses leased, controlled and owned by Meta; electricity of data centers owned and leased (IT load) by Meta; natural gas of offices and warehouses leased and serviced by Meta; and purchased heat. Because Meta does not control building operations in leased data center facilities, as of 2017, only emissions associated with its IT load electricity are included in Scope 2 emissions.
(c) Scope 3 emissions are indirect emissions throughout Meta's value chain. Starting in 2019, Meta included emissions from all relevant categories in Scope 3. Scope 3 emissions for 2015 to 2018 include business travel, employee commute and construction.
6. In the 2021 reporting year, two updates to reporting were applied to 2020 and later inventories:
 - (a) Data from life cycle assessments for our hardware and sold products were used to calculate our Scope 3 emissions.
 - (b) 2020 use of sold product numbers were recalculated to improve accuracy.
7. Prior to 2020, Meta invested in avoided emissions offsets which are not considered carbon removal.
8. In the 2019 reporting year, three updates to reporting were applied to 2017 (baseline year) and later inventories:
 - (a) Vehicles operated by the Transportation team in support of commuting and inter-campus travel were previously counted in Scope 3 – Employee commute. After re-visiting Meta's operational control of these vehicles, it was determined that they should be accounted for in Scope 1.
 - (b) It was determined that Meta overestimated natural gas emissions by including estimates for offices which do not in fact use natural gas. Recalculations have been applied to the inventory to remove these inaccuracies.
 - (c) Fugitive emissions from refrigerant losses at offices not under Meta operational control were moved from Scope 2 to Scope 3.
9. In the 2020 reporting year, two emission factors updates significantly impacted the GHG inventory:
 - (a) Economic-Environmental Input-Output emission factors were updated and applied to relevant categories. 2019 numbers were updated to reflect these new emission factors.
 - (b) Waste emission factors were updated and applied starting in 2020.
10. In the 2020 reporting year, two updates to the methodology were applied:
 - (a) A new business travel methodology was developed, which was applied to 2019 and updated. Air travel still includes radiative forcing starting from 2017.
 - (b) Employee commuting now includes telecommuting, or work-from-home, emissions starting in 2020, for which the electricity portion is matched with renewable energy.
11. Sustainable Aviation Fuel was purchased in 2021 and associated emissions reductions are reflected in the inventory.
12. This includes the following categories in Scope 3: downstream transportation and distribution, waste generated in operations, upstream leased assets, and end-of-life treatment of sold products. Prior to 2020, emissions from use of sold products and upstream transportation and distribution are included in this category.
13. In owned and leased data center facilities included in Scope 2 and 3 emissions, Meta has matched building operations with renewable energy.
14. Power Use Effectiveness (PUE) and Water Use Effectiveness (WUE) is calculated based on best available data, including internal meters, design estimates and utility bills where applicable.
15. Not included in Meta's 2021 water withdrawal numbers are an additional 827,289 cubic meters of water withdrawn for the construction of Meta data centers.

GRI INDEX

Meta's 2021 Sustainability Report has been prepared with reference to the Global Reporting Initiative (GRI) Standards.

GRI is an independent international organization that helps businesses, governments, and other organizations understand and communicate sustainability impacts.

GRI100 - Universal			
GRI 102	General Disclosures	102-1 Name of the organization	Meta Platforms, Inc.
		102-2 Activities, brands, products, and services	Page 10
		102-3 Location of headquarters	Menlo Park, California
		102-4 Location of operations	Offices in 80+ cities worldwide and 18 data centers globally
		102-5 Ownership and legal form	Meta Platforms, Inc. is a publicly held holding company, listed as META
		102-6 Markets served	Markets served can be found in the Form 10-K ↗
		102-7 Scale of the organization	The scale of the organization can be found in the Form 10-K ↗
		102-9 Supply chain	Page 32
		102-10 Significant changes to the organization and its supply chain	In October 2021, we changed our corporate name from Facebook, Inc. to Meta Platforms
		102-13 Membership of associations	Page 76
		102-14 Statement from senior decision-maker	Page 4
		102-16 Values, principles, standards, and norms of behavior	Page 10
		102-18 Governance structure	Page 83 and on the Investor Relations website ↗
		102-43 Approach to stakeholder engagement	Page 12
		102-44 Key topics and concerns raised	Page 86
		102-45 Entities included in the consolidated financial statements	Entities included in the report can be found in the Form 10-K ↗
		102-46 Defining report content and topic Boundaries	Page 13
		102-47 List of material topics	Page 86
		102-49 Changes in reporting	This is Meta's first GRI index
		102-50 Reporting period	January 1, 2021 to December 31, 2021
		102-51 Date of most recent report	2020
		102-52 Reporting cycle	Annual
		102-54 Claims of reporting in accordance with the GRI Standards	Meta is reporting in reference to the GRI standards listed within this index
		102-55 GRI content index	Pages 103-106
		102-56 External assurance	Meta's greenhouse gas emissions are verified externally ↗

GRI INDEX

GRI200 - Economic

GRI 204 - Procurement Practices

GRI 103	Management Approach	103-1	Explanation of the material topic and its Boundary	Page 34
		103-2	The management approach and its components	Page 34
		103-3	Evaluation of the management approach	Page 34

GRI 207 - Tax 2019

GRI 103	Management Approach	103-1	Explanation of the material topic and its Boundary	Tax Policy ↗
		103-2	The management approach and its components	Tax Policy ↗
		103-3	Evaluation of the management approach	Tax Policy ↗
GRI 207	Tax 2019	207-1	Approach to tax	Tax Policy ↗
		207-2	Tax governance, control and risk management	Tax Policy ↗
		207-3	Stakeholder engagement and management of concerns related to tax	Tax Policy ↗

GRI300 - Environmental

GRI 302 - Energy

GRI 103	Management Approach	103-1	Explanation of the material topic and its Boundary	Pages 52-54
		103-2	The management approach and its components	Pages 52-54
		103-3	Evaluation of the management approach	Pages 52-54
GRI 302	Energy	302-1	Energy consumption within the organization	Page 97
		302-3	Energy intensity	Page 98
		302-4	Reduction of energy consumption	Pages 53, 98

GRI 303 - Water and Effluents

GRI 103	Management Approach	103-1	Explanation of the material topic and its Boundary	Pages 55-59
		103-2	The management approach and its components	Pages 55-59
		103-3	Evaluation of the management approach	Pages 55-59
GRI 303	Water	303-1	Interactions with water as a shared resource	Pages 100-102
		303-3	Water withdrawal	Pages 98-100
		303-4	Water discharge	Page 100
		303-5	Water consumption	Page 101

GRI INDEX

GRI 304 - Biodiversity					
GRI 103	Management Approach	103-1	Explanation of the material topic and its Boundary	Pages 60-63	
		103-2	The management approach and its components	Pages 60-63	
GRI 304	Biodiversity	304-2	Significant impacts of activities, products and services on biodiversity	Pages 60-63	
		304-3	Habitats protected or restored	Pages 60-63	
GRI 305 - Emissions					
GRI 103	Management Approach	103-1	Explanation of the material topic and its Boundary	Pages 47-51	
		103-2	The management approach and its components	Pages 47-51	
		103-3	Evaluation of the management approach	Pages 47-51	
GRI 305	Emissions	305-1	Direct (Scope 1) GHG emissions	Pages 50, 91	
		305-2	Energy indirect (Scope 2) GHG emissions	Pages 50, 94	
		305-3	Other indirect (Scope 3) GHG emissions	Pages 50, 95	
		305-4	GHG emissions intensity	Page 92	
GRI400 - Social					
GRI 401 - Employment					
GRI 401	Employment	401-1	New employee hires and employee turnover	Human Capital section of the Form 10-K ↗	
		401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Benefits website ↗	
		401-3	Parental leave	Maternity Benefits and Paid Parental Leave website ↗	
GRI 405 - Diversity and Equal Opportunity (U.S. ONLY)					
GRI 103	Management Approach	103-1	Explanation of the material topic and its Boundary	Diversity and Inclusion website ↗	
		103-2	The management approach and its components	Diversity and Inclusion website ↗	
GRI 405	Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees	Diversity, Equity and Inclusion section of the Form 10-K ↗	
GRI 415 - Public Policy					
GRI 103	Management Approach	103-1	Explanation of the material topic and its Boundary	Page 80 and Transparency Report ↗	
		103-2	The management approach and its components	Page 80 and Transparency Report ↗	

GRI INDEX

GRI 415 - Customer Privacy				
GRI 103	Management Approach	103-1	Explanation of the material topic and its Boundary	Transparency Report ↗
		103-2	The management approach and its components	Transparency Report ↗
GRI 415	Customer Privacy	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Transparency Report ↗

SASB INDEX – INTERNET AND MEDIA SERVICES

Meta's 2021 SASB disclosures respond to metrics listed for the Internet and Media Services industry within the Technology and Communications sector.

Disclosure Number	Description	Unit of Measurement	Location / Response / Comments
Environmental Footprint of Hardware Infrastructure			
TC-IM-130a.1	(1) Total energy consumed	Gigajoules (GJ)	Pages 96-97
	(2) percentage grid electricity	Percentage (%)	Pages 53, 97
	(3) percentage renewable	Percentage (%)	Pages 53, 97
TC-IM-130a.2	(1) Total water withdrawn	Thousand cubic meters (m³), Percentage (%)	Pages 56, 98-100
	(2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m³), Percentage (%)	Pages 56, 98-100
TC-IM-130a.3	Discussion of the integration of environmental considerations into strategic planning for data center needs	Discussion and Analysis	Pages 39-43
Data Privacy, Advertising Standards and Freedom of Expression			
TC-IM-220a.1	Description of policies and practices relating to behavioral advertising and user privacy	Discussion and Analysis	Policies ↗
TC-IM-220a.4	(1) Number of law enforcement requests for user information	Number	Transparency Center at Government Requests for User Data ↗
	(2) number of users whose information was requested	Number	Transparency Center at Government Requests for User Data ↗
	(3) percentage resulting in disclosure	Percentage (%)	Transparency Center at Government Requests for User Data ↗
TC-IM-220a.5	List of countries where core products or services are subject to government-required monitoring, blocking, content filtering, or censoring	Discussion and Analysis	Content Restrictions Based on Local Law ↗
TC-IM-220a.6	Number of government requests to remove content, percentage compliance with requests	Number, Percentage (%)	Government Requests for User Data ↗
Data Security			
TC-IM-230a.2	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Discussion and Analysis	Protecting Privacy and Security ↗

SASB INDEX – INTERNET AND MEDIA SERVICES

Employee Recruitment, Inclusion and Performance			
TC-IM-330a.3	Percentage of gender and racial/ethnic group representation for (1) management	Percentage (%)	Annual Diversity Report ↗
	(2) technical staff	Percentage (%)	Annual Diversity Report ↗
	(3) all other employees	Percentage (%)	Annual Diversity Report ↗
Intellectual Property Protection and Competitive Behavior			
TC-IM-520a.1	Total amount of monetary losses as a result of legal proceedings associated with anticompetitive behavior regulations	Reporting currency	When relevant, see Part I, Item 3 and Part II, Item 8 in Note 10 in our annual report on Form 10-K ↗ .

PUSHPIN FACTS



FACT	SOURCE LINK
216 million people could be forced to migrate within their own countries by 2050 because of climate change.	https://www.mghihp.edu/academics-schools-departments-school-nursing/statistics-climate-change
Switching to a clean economy could raise \$2.8 trillion through carbon price revenues and the redirection of fossil fuel subsidies to public investments.	https://www.un.org/en/climatechange/science/key-findings
1,200+ companies have set science-based targets in line with net zero emissions.	https://www.un.org/en/climatechange/net-zero-coalition
Meta first reported its Scope 1 and 2 GHG emissions in 2011 and began reporting Scope 3 emissions in 2019.	Pages 93-96
The 100 least-emitting countries generate 3% of total emissions. The 10 largest emitters contribute 68%.	https://www.un.org/en/climatechange/science/key-findings
To avert the worst impacts of climate change, global temperature increase must be limited to 1.5°C above pre-industrial levels. Global temperatures are already 1.1°C warmer.	https://www.un.org/en/climatechange/net-zero-coalition
Across the world, women are more likely than men to be affected by climate-related food insecurity.	https://www.carbonbrief.org/mapped-how-climate-change-disproportionately-affects-womens-health/
Achieving 50%-70% renewable energy could generate up to 600,000 jobs in wind, solar and battery storage.	https://www.eesi.org/papers/view/fact-sheet-climate-jobs
Net Positive Water Impact is a cornerstone concept for accelerating progress on UNSDG #6-Clean Water and Sanitation for all.	https://ceowatermandate.org/resilience/net-positive-water-impact/
More than 130 countries and 400 of the largest companies have net zero targets aimed for 2050 or earlier.	https://www.forbes.com/sites/siemens-smart-infrastructure/2021/12/09/netzero-supply-chains-will-decarbonize-industry/
Indonesia and the U.S. are the countries with the highest shares of climate change deniers.	https://www.statista.com/chart/19449/countries-with-biggest-share-of-climate-change-deniers/
Scope 3 emissions fall within 15 categories, though not every category will be relevant to all organizations.	https://ghgprotocol.org/standards/scope-3-standard
Though they cover only around 6% of the earth's land surface, 40% of all plant and animal species live or breed in wetlands.	https://www.un.org/en/observances/world-wetlands-day

PUSHPIN FACTS



FACT	SOURCE LINK
Early warning systems for disasters can deliver benefits up to 10 times the initial cost.	https://www.un.org/en/climatechange/science/key-findings ↗
67% of Americans perceive a rise in extreme weather.	https://www.pewresearch.org/fact-tank/2021/10/14/67-of-americans-perceive-a-rise-in-extreme-weather-but-partisans-differ-over-government-efforts-to-address-it/ ↗
Supply chains generate around 60% of all carbon emissions globally.	https://www.accenture.com/us-en/insights/supply-chain-operations/supply-chains-key-unlocking-net-zero-emissions ↗
Flooding is the No. 1 form of natural disaster.	https://www.undrr.org/media/48008/download ↗
Supply chain emissions are, on average, 11.4 times higher than operational emissions.	https://www.epa.gov/climateleadership/supply-chain-guidance ↗
The construction and operation of buildings account for nearly 40% of CO ₂ emissions.	https://architecture2030.org/why-the-building-sector/ ↗
85% of employees working in LEED-certified buildings say access to outdoor views and natural light boosts their productivity and happiness.	https://www.usgbc.org/articles/employees-are-happier-healthier-and-more-productive-leed-green-buildings ↗
The food system accounts for roughly 30% of global energy use.	https://www.energypolicy.columbia.edu/sites/default/files/pictures/FoodandClimate-Infoguide-CGEP_v2G.pdf ↗
Data centers consume 10-50 times the energy per floor space of a typical commercial office building.	https://www.energy.gov/eere/buildings/data-centers-and-servers ↗
Urban heat islands occur when natural land cover is replaced with pavement, buildings, and other surfaces that absorb and retain heat.	https://www.epa.gov/green-infrastructure/reduce-urban-heat-island-effect ↗
The concentration of indoor air pollutants can be 2-5 times higher than typical outdoor concentrations.	https://www.epa.gov/report-environment/indoor-air-quality ↗
Oceans absorb more than 90% of the heat that reaches Earth's surface.	https://www.carbonbrief.org/scientists-clarify-starting-point-for-human-caused-climate-change/ ↗
Quantity of raw materials extracted from the earth has more than doubled over the past three decades.	https://news.un.org/en/story/2021/06/1093802 ↗

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FACT	SOURCE LINK
Plastic pollution has increased tenfold since 1980.	https://www.un.org/sustainabledevelopment/blog/2019/05/nature-decline-unprecedented-report/↗
CO ₂ emissions are increasing more than 250 times faster from human activity than from natural sources after the last Ice Age.	https://climate.nasa.gov/evidence/↗
Shifting to a green economy could produce over 65 million new low-carbon jobs.	https://www.un.org/en/climatechange/science/key-findings↗
Scope 3 emissions usually account for more than 70 percent of a business's carbon footprint.	https://www.unglobalcompact.org.uk/scope-3-emissions/↗
CO ₂ remains in the atmosphere for up to 1,000 years, nitrous oxide for up to 120 years and methane for up to 10 years.	https://news.un.org/en/story/2022/01/1109322↗
4,900 MW is enough to power 3.6 million U.S. homes.	
Wind power, sold at a fixed price over a long period of time, mitigates the price uncertainty associated with traditional energy sources.	https://www.energy.gov/eere/wind/advantages-and-challenges-wind-energy↗
The amount of sunshine that continuously strikes the earth equates to more than 10,000 times the world's total energy use.	https://www.energy.gov/articles/top-6-things-you-didnt-know-about-solar-energy↗
Rising temperatures can lead to deadly pathogens in freshwater sources, making the water dangerous for people to drink.	https://www.unicef.org/stories/water-and-climate-change-10-things-you-should-know↗
2.3 billion people live in water-stressed countries.	https://www.unwater.org/app/uploads/2021/12/SDG-6-Summary-Progress-Update-2021_Version-July-2021a.pdf↗
40% of the global population lacks access to clean and safe drinking water.	https://www.un.org/sustainabledevelopment/blog/2019/05/nature-decline-unprecedented-report/↗
In the last hundred years, more than 90% of crop varieties have disappeared from farmers' fields.	https://www.unep.org/news-and-stories/story/species-extinction-not-just-curiosity-our-food-security-and-health-are-stake↗
Of the 100 crop species that provide 90% of the world's food, over 70 are pollinated by bees.	https://bees.undp.org/↗

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FACT	SOURCE LINK
To protect just one tiger, we have to conserve an estimated 10,000 hectares of forest.	https://www.worldwildlife.org/species/tiger↗
On the current path of CO ₂ emissions, temperature could increase by as much as 4.4°C by the end of the century.	https://www.un.org/en/climatechange/science/key-findings↗
There were 20 separate billion-dollar weather and climate disasters in 2021 in the U.S. alone.	https://www.ncei.noaa.gov/access/billions/↗
Worldwide, just 38% of small businesses have invested in adapting to environmental risks, compared to 60% of large ones.	https://www.un.org/en/climatechange/science/key-findings↗
“Greenwashing” refers to when companies misrepresent the sustainability of their products, services or operations.	https://www.globalcitizen.org/en/content/greenwashing-what-is-it-and-how-to-avoid-it/↗
Augmented reality uses a real-world setting while virtual reality is completely virtual.	https://sopa.tulane.edu/blog/whats-difference-between-ar-and-vr↗
The impact from refurbishing a device is, on average, three times less than that of producing a new device.	https://www.backmarket.com/content/event/new-vs-refurbished-environmental-impact/68↗
Almost 90% of employees engaged in their company’s sustainability work say it enhances their job satisfaction.	https://www.neefusa.org/resource/winning-marketplace-and-workplace↗
Corporate collaborations are most effective when they resolve an issue that is seen as critical to business continuity.	https://www.bsr.org/en/our-insights/report-view/private-sector-collaboration-for-sustainable-development↗
Unlike many materials, aluminum can be recycled infinitely.	https://www.rts.com/blog/recycling-facts-statistics/↗
“Conflict minerals” include the metals tantalum, tin, tungsten and gold, which are often collectively referred to as “3TG”.	https://www.responsiblemineralsinitiative.org/about/faq/general-questions/what-are-conflict-minerals/↗
The UN Climate Change Conference in Glasgow (COP26) brought together 120 world leaders and over 40,000 registered participants.	https://www.un.org/en/climatechange/cop26↗
Utility-scale solar power declined in cost by 90% between 2009 and 2021. The cost of onshore wind power declined by 70% over the same period.	https://www.washingtonpost.com/business/energy/three-reasons-for-optimism-about-climate-change/2021/11/02/a458cd70-3bc8-11ec-bd6f-da376f47304e_story.html↗