# Connect, Respond, and Impact

Sustainable Impact Report 2020

## arm

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## **About Arm**

Arm's technology is at the heart of a computing and connectivity revolution that is transforming the ways people live and businesses operate. Our advanced, energy-efficient processor designs have enabled intelligent computing in more than 180 billion chips. Over 90 percent of the world's population is using products enabled by Arm technology, from the sensor to the smartphone to the supercomputer. Arm Research continues to map emerging technologies, leveraging our unique position to create positive impact through responsible technology and innovation.

## Participation, Recognition, and Awards

Over the last year, Arm has participated in and supported key external initiatives and partnerships, and has received widespread recognition for our efforts.

#### Global Reporting Initiative

Arm continues to produce sustainability reporting in accordance with the GRI Core Standard. We believe this helps demonstrate a level of transparency to all stakeholders.

#### UN Global Compact

Arm reports at the Advanced Level to the UNGC and promotes delivery of the 10 Principles addressing human rights, labor rights, and environmental responsibility.

#### World's Most Ethical Companies

In 2020, Arm joined the prestigious group of World's Most Ethical Companies by Ethisphere.

#### CIPS Excellence in Procurement Awards 2020

Arm's e-tablet project developed with the World Health Organization and the International Telecommunication Union (ITU) came highly commended in the Best Sustainability Project category.

## Bett Awards

Arm's Education program was shortlisted for the Higher Education or Further Education Digital Services award for work in addressing the skills gap in computing and STEM (science, technology, engineering, and mathematics).

## **From Our CEO**

It's impossible to talk about 2020 without mentioning COVID-19.

The pandemic brought loss and hardship to so many, causing huge disruption to families, societies, and economies across the globe. But it also brought swift and unprecedented levels of cooperation; a determination to work together across political and geographical boundaries to accommodate life in an unfamiliar environment.



Almost overnight, our lives became digitized; everything from conferences to classrooms moved online, and connectivity shifted from being a luxury to a necessity—a tool for survival in a strange, new world.

As individuals, we turned to our devices to connect to our families, our offices, and essential services, but as a society, we turned to technology to provide solutions to some of the pandemic's most pressing challenges.

As the gravity of the situation became apparent, we quickly explored how Arm could help meet these challenges at a local, national, and global level. Our response, summarized in this report, ranged from community initiatives addressing food poverty and social isolation to support for our partners developing medical devices and vaccine delivery solutions.

Amid so much disruption on every level, it would have been easy to overlook our ongoing work to support delivery of the United Nations Global Goals for Sustainable Development. However, in this moment of crisis, it became more important than ever, and we continued to work with our partners to address issues such as education, access to information, and health equality.

Toward the end of the year, we expanded on our existing commitment to reach carbon neutrality by 2023 by committing to achieve net-zero carbon by 2030. This means we will cut absolute emissions from our business operations by at least 42 percent, investing in accredited carbon sequestration projects to offset remaining emissions.

"As a society, we turned to technology to provide solutions to some of the pandemic's most pressing challenges."

"During these unprecedented times, our Core Beliefs—We, not I, Passion for progress, and Be your brilliant self—have never been more important."

During these unprecedented times, our Core Beliefs— We not I, Passion for progress, and Be your brilliant self—have never been more important. They act as a North Star for every member of the Arm family, reminding us that together—through our people, our products, and our partnerships—we can unlock the power of technology to effect positive change and spark the world's potential.

I hope this report will inspire you and show exactly how we are making a difference.

Simon Segars CEO, Arm

## Arm at a Glance

## Focus on Responsibility

By 2035, it's predicted that there will be more than 1 trillion connected devices. We are outsourcing more of our lives to technology, including our personal connections and essential services. This demands a robust and trusted approach to how we secure those devices and protect our societies.

### Ethics and Code of Conduct

In 2020, Arm was named one of the World's Most Ethical Companies by the Ethisphere® Institute, making us one of only 132 companies globally to earn the distinction. Arm's approach to ethical business is defined in the Company's Code of Conduct, which lays out our commitments to human rights, and to operating fairly, openly, and with integrity.

## Data Security and Privacy

For decades, Arm has been working with researchers and other technology companies to secure devices from chip to cloud. Security is at the forefront of everything we do, and we are working with policymakers and private sector partners to promote the highest standards of device and data security. Read more about Arm's leadership in our security manifesto.

## **Bringing Brilliant People Together**

Sparking the World's Potential is about more than just bringing ideas to life—it's about inspiring our partners, engineers, and developers to push the boundaries of what's possible wherever computing happens. We're creating a future designed by millions of minds to enable so much opportunity for a globally connected world.

## Our Diversity and Inclusion Pledge

We are proud of our unique and diverse company, with people from all walks of life, from all over the globe, making a home at Arm.

We continued to work hard during 2020 to foster an inclusive environment where everyone can thrive and feel valued and empowered to be their brilliant self. We have seen a growth in affinity groups across the business and celebrated the first Black at Arm Conference in November.



## **8**m

Arm cores in the Fugaku, crowned the world's fastest supercomputer in 2020. Fugaku doesn't only top the supercomputer performance list, it also ranks within the top five most power efficient. It was used in the quest to find a COVID-19 vaccine

## 55

licenses signed by Arm partners in the first half o 2020—including a record 15 for technology still in development



## \$750,000

raised by our employees with Arm-matched funds to 125 causes in communities surrounding 16 Arm offices during 2020



95%

market share for mobile phones

81% response rate for the Life at Arm engagement survey in 2020

## **Our People**

At the heart of our business are dedicated teams managing relationships with customers, partners, investors, and employees to ensure that their needs are regularly addressed. It's this teamwork that enables us to create the impact we do.

## Our culture is guided by our Core Beliefs:

- We, not I: Collaboration first, egos last
- · Passion for progress: Innovations to make lives better
- Be your brilliant self: Skillful individuality, performance, and fun

We believe in hiring people based on their skills and experience regardless of any other factor, and do not tolerate harassment or discrimination on any grounds. Our policies, systems, and processes are efficient, impactful, and meritocratic, enabling a high-performing, highly engaged organization.

We are committed to progressing equal pay. During 2020, we worked with an external consultancy to analyze the legitimate factors that drive gender pay globally, creating a statistical model to calculate the expected salary for all individuals based on those factors. This formed the basis for a whole company fair pay review addressing promotion rates, pay increases, bonuses, and other factors across groups and countries.

Beyond ensuring fair pay, we offer other incentives to support the well-being of our people.

One of the ways in which we have done this over the past year is through providing our people with regular "Days of Care." These are additional days off work provided to all our people on a quarterly basis. Days of care effectively put the whole company in "quiet mode" making it possible to leave Arm behind for a day, focus the mind elsewhere and recharge.

## Black at Arm

The first Black at Arm Conference was delivered virtually in November 2020, with over 200 attendees. Its purpose was to bring the Black at Arm community together to share experiences, gain career development knowledge, and determine their future as a group. According to 84 percent of attendees, the networking sessions were a valuable opportunity to meet colleagues with shared interests, and the overall event was rated 4.9 out of 5.

Black at Arm's mission is to cultivate and nurture multiskilled, diverse black talent to help drive an inclusive and innovative Arm culture. Our objectives for 2021 are to continue to build our community, adopt collaborative career and technical learning sessions, and amplify our voices and experiences internal and external to Arm.

### Affinity Groups

Black at Arm is one of several affinity groups in the company. These are voluntary, employee-led networks of underrepresented groups in Arm. Connecting through online chat platforms, and with in-person and virtual meet-ups, other groups include the Women's Network and Pride Network (LGBTQ+and allies).

### Groups of Common Interest

Similar in some ways to affinity groups, Arm encourages participation in groups of common interest. These include Neurodiversity, Mental Health and Well-being, D&I Champions and Working Groups, and Returners to Work. These groups aim to give staff the chance to ask questions and get answers, as well as provide a space for discussions around challenges and opportunities.



"As a global technology company whose technology is being used by 70% of the world's population, I see Arm's work on diversifying its workforce to be imperative to building innovative products and our future success."

Susan Graham

Technical Director & Engineer, Arm U.S.

## Our Targets: Net Zero by 2030

2020 saw us achieve our ten-year company carbon and energy targets, and at the year's end we set a bolder goal for the next ten years: to achieve net zero across all our operations by 2030–20 years ahead of the Paris Agreement target. We are at the start of this journey, and are working to understand where we can have the biggest impact.

## "Doing good is good business: sustained and sustainable growth benefits all stakeholders."

We will be following a best practice approach to defining net zero, achieving absolute reductions wherever possible in both our direct and indirect emissions before we consider investments in offsetting initiatives. We will also seek to move to purchasing 100 percent renewable electricity across our global estate.



"If we are to be successful, we must be ambitious about reducing our carbon impact ... and acknowledge the role that decarbonizing computing will play in a low-carbon economy."

Simon Segars CEO, Arm

## **Environmental Sustainability**

Arm was founded on energy-efficient technology, so our business has been built on an aspect of sustainability. 180 billion chips contain our high-performance, low-power technology, which allows tiny energy savings to be replicated on the grandest scale.

While 2020 obviously had an impact on work-related travel, we took the opportunity to lay the foundations for the future by reviewing how we will reduce travel after the pandemic. We are also working on energy-efficient improvements to our offices, and toward sourcing 100 percent renewable electricity across our global estate. Over 70 percent of electricity consumption in our offices is from renewable sources (unaudited).

We aim not just to meet environmental regulations, laws, and codes of practice but to exceed them. As a member of Caring for Climate, a signatory of the UN Global Compact (UNGC), and an ISO 9001-compliant business, we're committed to monitoring and reporting on all aspects of our environmental impact, as well as developing and promoting green technologies.

Our approach to sustainability depends on:

- Building Trust—Aiming at all times to operate safely, ethically, and responsibly, in a way that protects our planet, our people, and the security of their information.
- Enabling Our People—Finding and nurturing talent, driving innovation through our research, embedding sustainability in all our practices, and evolving to become sustainability leaders.
- Improving Lives—Supporting education and smart technology for people, homes, and cities, making everyday life safer, healthier, and more efficient.
- Realizing Global Goals—Fostering collective knowledge, expertise, and imagination, as well as collaborations that harness the power of technology to innovatively transform our world.
- Collaborating—Working with global partners that share our values to increase our impact and scale-up proven technologies for the broadest benefits.

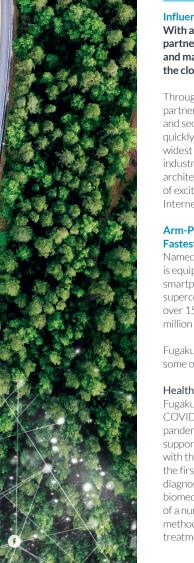
**35%** overall energy reduction during 2020



Arm Sustainable Impact Report 2020 07

## Our Unique Ecosystem

Our diverse and evolving ecosystem inspires world-changing ideas



Influencing Our Ecosystem to Drive Impact With an ecosystem of more than 1,000 technology partners, Arm is at the forefront of designing, securing, and managing all areas of computing, from the chip to the cloud.

Through our <u>Arm Innovator Program</u>, we support partners to build their products in an efficient, affordable, and secure way, so that they can reach consumers as quickly as possible and unleash new technologies on the widest possible range of markets. Arm innovators are industry-leading experts committed to extending the Arm architecture and sharing their knowledge in a wide variety of exciting areas, such as artificial intelligence, automotive, Internet of Things (IoT), and security.

## Arm-Powered Heart of World's Fastest Supercomputer

Named after the Japanese term for Mount Fuji, Fugaku is equipped with the computational ability of 20 million smartphones. Recently named as the world's fastest supercomputer for the third time in a row, it features over 150,000 Fujitsu A64FX processors containing 8 million Arm cores.

Fugaku is being used to bring positive change in tackling some of the most challenging issues of our time.

## Health and Longevity

Fugaku has already been used in the fight against COVID-19, carrying out simulations early in the pandemic to identify how the virus spreads. Next, it will support innovative drug-discovery infrastructure to assist with the creation of highly efficient new drugs. And for the first time, scientists will be able to analyze big data on diagnostics and genomics, as well as conduct large-scale biomedical simulations. This will increase understanding of a number of conditions and allow research on methods of prevention, early detection, and personalized treatment plans.

## Disaster Prevention and Global Climate Challenges

This unprecedented technology will also empower the development of integrated simulation systems for hazards and disasters induced by earthquakes and tsunamis. Utilizing big data, scientists will also be able to make more accurate predictions of extreme weather events and man-made environmental effects, and, in turn, contribute to policies for environmental protection.

## Energy Challenges

Computational power will allow large-scale simulations for the creation, conversion, and efficient use of energy. This helps accelerate the development of energy technologies like low-cost, long-lasting fuel cells, and large-scale wind power farms at sea.

Arm's chips are typically associated with smaller technology like mobile devices, but our experience in lowpower computing development meant Fujitsu was able to design the Fujitsu A64FX processor to deliver world-leading performance at efficiency levels rarely seen in high-performance computing (HPC).

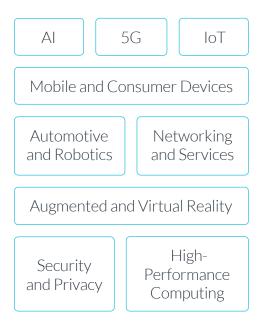
Fugaku will also be used to support the creation of new industries, and in space discovery. By combining precise calculations with experimental and observational data, the supercomputer will give scientists more power to learn about the fundamental laws and evolution of the universe than ever before.



## Architecting a Smarter World

From smartphones to supercomputers, from medical instruments to agricultural sensors, and from base stations to servers, Arm is at the front line, not only of technological innovation but of economic and social change. From the chip to the cloud, from the simple to the sophisticated, Arm's architecture provides the foundation for much of the world's technological innovation: helping build safer homes, more sustainable cities, and more secure connectivity, and harnessing the good of technology for consumers around the world.





## **Core Principles**

Open source, open innovation, and flexible access are the core principles of our business thinking, ensuring that innovation happens as rapidly as possible and benefits as many people as possible.

### The open-source software community and the

innovation it enables is essential to the success of the Arm ecosystem, and permeates every aspect of our work. We maintain open-source projects for the benefit of our partners and the wider community, including Arm Mbed OS (a free, open-source IoT operating system that includes all the necessary features to develop a connected product).

Our licensing model: Arm has two revenue streams: licensing and royalties. We license our technology designs to a wide network of partners. These designs are then used to develop new products. Arm receives a royalty on sales of new products that use our chips.

Arm Flexible Access: Arm provides low-cost access to a wide range of our intellectual property designs, central and graphics processing units (CPUs and GPUs), interconnects and security blocks, support tools, and training.

Fugaku, the world's most powerful supercomputer



Our reach:

+90% of the global population uses products enabled by Arm technology

95% of the world's shipped smartphones use Arm Cortex CPUs

## 2030Vision

## Scaling Up Global Goals Through Partnership

Seventy percent of the 169 targets defined in the Global Goals can be directly supported by advanced technologies, which means the tech industry has a significant role to play in addressing some of the world's greatest challenges.

Hosted and facilitated by the World Economic Forum, and co-chaired by Achim Steiner of UNDP and Simon Segars of Arm, 2030Vision aims to forge partnerships between governments, companies, investors, academia, non-profits, and civil society to fast-track Fourth Industrial Revolution (41R) innovations in pursuit of the Global Goals. 2030Vision supports countries to identify and match technologies, unlock tech barriers, and cultivate an enabling environment for 41R innovations.

"The world needs strong multistakeholder partnerships like 2030Vision that focus on the technological innovations required to achieve the 2030 Agenda ... I welcome 2030Vision for its leadership and ambition towards attaining our shared Goals for People and Planet by 2030."

#### António Guterres

Secretary-General of the United Nations



## Arm DevSummit 2020

Amid lockdowns, closures, and restrictions, 2020 gave us plenty of time for reflection. Many of us have questioned how we can better drive change, improve lives, and feel the positive impact of our work. 2020's inaugural Arm DevSummit brought partners together to consider these issues, share ideas and innovations, and work toward developing the solutions required by the Global Goals.

Among technical deep dives, we also looked at ways for tech companies to work with global development partners to drive sustainability. Examples from our partners included solutions to monitor human-wildlife conflict, build contactless identification for vaccine delivery, predict flooding, and spot COVID-19 using data-pattern prediction. "Arm DevSummit is a new kind of hands-on and minds-on technology event. It's built around the notion of connections: global communities of software developers and hardware engineers in one forum, collaborating to create a successful future for all."

Simon Segars CEO, Arm

## Responding to Urgent Needs

Uniting to meet the pandemic's extraordinary challenges The coronavirus pandemic quickly revealed humanity's extraordinary capacity to adapt, adjust, and invent, with technology forming a foundation for much of this resilience.

The Arm team stepped up with great positivity to establish the "new normal." We have grown as a company during the crisis, and proved that we are a business that cares for our people, our partners, and our communities even through the very toughest of times, reaching out beyond our own concerns—as our staff volunteers did—to provide practical support to the communities around us.

We established a global COVID-19 Response Team to engage with communities, governments, and other partners to understand where and how we could most meaningfully make a difference. We allocated \$2 million toward response efforts, channeling half of that to community programs. But there was much more we could do. That's involved us partnering with Amplio to provide critical COVID-19 information through its Talking Books to some of the poorest communities in the world, supporting Simprints with its touchless ID system designed for pandemic response, and working with the Rosetta@home project to accelerate diagnostics that can help businesses and schools reopen. "Life has changed, and can be expected to change further, and while it has undeniably brought many difficulties, it is heartening to see how the world has pulled together to bring hope and comfort to those who need it most."

Simon Segars CEO, Arm



## Responding Through Our Ecosystem

COVID-19 has had a profound effect on almost every aspect of our lives, yet the overall picture painted by our ecosystem partners is one of resilience, cautious optimism, and interest in the opportunities offered by the new ways of working and living.

The scale and reach of our ecosystem proved vital during the year, and there were many ways we were able to make an impact.

## How We Responded

**1,500+ Volunteer Hours:** From preparing food for hospital workers to 3D-printing personal protective equipment (PPE) at the local markerspace or remotely mapping unmapped areas of low-income countries, Arm people contributed more than 1,500 hours of their time supporting COVID-19 specific projects to help their local communities.

**Critical Customers First:** We identified customers who supply critical health services, councils, and elderly care and lone-worker alert solutions. Any requests for these customers were flagged with key teams, expediting their resolution and allowing them to provide continuity of care.

Free Arm Technical Training From Sales and Partner Enablement: Over 70 partners—representing 754 individuals—registered for free technical training sessions, delivered via a live virtual classroom or ondemand videos.

## Support for Global Ecosystem Solutions

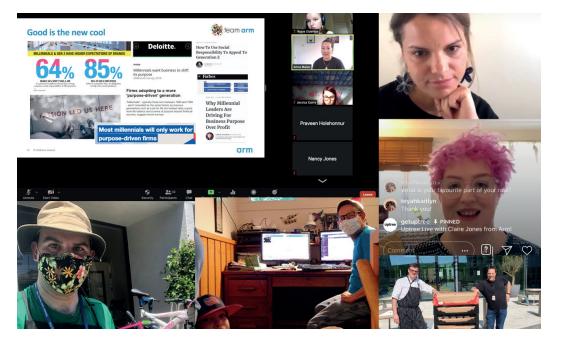
Vaccine Research: Finding a vaccine to beat COVID-19 through two leading protein folding research projects— Folding@home and Rosetta@home. Both projects have been widely used by volunteers to support large-scale distributed COVID-19 vaccine research. With Arm 64-bit support—released by ecosystem partner Neocortix, a mobile distributed computing company—billions of Armbased Android mobile phones, Raspberry Pi, and Armbased servers are now able to offer spare compute cycles to help solve the world's most urgent research problem.

**CRIL:** N-Tidal: We helped port the respiratory device to Mbed and the Arm Pelion IoT platform to accelerate production at scale and are exploring a commercial contract for a new version.

Managed Medical Device Cloud: We worked with healthcare software specialists L2S2 to transform the delivery of secure, connected medical systems at scale. This partnership is designed to transform the delivery of regulatory-compliant connected medical devices and digital health systems, reducing time, costs, and risks.

#### UNDP/Hackster.io COVID-19 Detect & Prevent Challenge: We launched a joint initiative with

the UN Development Programme and <u>Hackster.io</u> to rally 1 million+ developers to create new low-cost tools to detect virus carriers and help slow disease transmission.



the world, delivering food and medicines in their local communities, conducting virtual work experience for students, and providing micro:bit-based education lessons for those homeschooling

Arm people volunteered across

**1,500+** volunteering hours by Arm staff, a number only limited by some of the restrictions in place around the world during the pandemic

## Responding With Our Partners

## Arm and UNICEF tackle COVID-19

Through our long-standing strategic partnership with UNICEF, we're collaborating on pilot projects and other initiatives to identify where we can better contribute our technology to further enable our shared mission. This partnership has delivered real social value by leveraging UNICEF's global presence and Arm's expertise and network. The COVID-19 pandemic has created both immediate and long-term health and welfare threats to children and their families. These negative impacts are felt most intensely by those already affected by poverty, disability, or social exclusion.

In the face of national lockdowns and global disconnectedness, we worked with UNICEF to connect the most vulnerable and isolated in society, aiming to:

- Engage the global tech community
- Strengthen local tech ecosystems
- Advocate for inclusive tech
- Drive employee engagement

#### Providing Trusted Information to Young People

UNICEF's messaging tool <u>U-Report</u> empowers young people to engage on issues that matter to them. With Arm's support and networks, U-Report has been integrated across popular messaging platforms such as Facebook Messenger, WhatsApp and Viber, allowing the program to reach more young people.

The use of U-Report in the COVID-19 response allowed for the exchange of critical information for millions of young people. Aiding the global coronavirus response effort, a new <u>COVID-19 chatbot</u> feature (built on top of the U-Report platform) created a two-way communication stream to tackle disinformation about the virus, and reached vulnerable groups such as refugees and migrants.

## Supporting Financial Inclusion

As a result of COVID-19, millions around the world are out of work or facing an unstable economic future. With our funding, UNICEF, in collaboration with financial services company ING, launched the pilot <u>Fintech For</u> <u>Impact</u> program that aims to develop financial technology solutions for the financially excluded. The program uses a collaborative approach, working with start-ups to co-create solutions for a greater positive impact in emerging markets.

#### **Accelerating Connectivity**

The pandemic has highlighted the link between technology and education, with lower-income countries experiencing huge setbacks. As schools and essential services around the world shut down, countries with limited infrastructure faced significant challenges in the switch to online learning. This demonstrated the need to accelerate connectivity to provide online learning and other initiatives for children and local communities.

We are proud of our partnership with UNICEF and feel a strong connection to our purpose to improve lives through technology. Through collaboration we can leverage the power of technology for good, helping young people to access the resources they need to thrive.



**10m** U-Reporters worldwide

## Responding in Our Communities

We care for the communities in which we operate even in the toughest times. Team Arm is our employee community engagement program, which supports our staff to use their skills to contribute to the Global Goals through volunteering, campaigning, and fundraising.

As the effects of the pandemic deepened and widened, a priority was to enable our employees to lead our community response. We set up a COVID-19 matchedgiving campaign, pledging \$500,000 in company funds to match staff donations to local charities and non-profits.

Arm raised a total of \$750,000 including matching, thanks to generous donations from more than 1,500 colleagues. More than 20 offices set up fundraisers to support their local food banks, healthcare providers, homelessness charities, and more. In addition, we established a COVID-19 Community Fund to provide more medium-term support to our communities by providing grants to charities and non-profits supporting those most significantly affected by COVID-19 in the communities where we live and work. Colleagues were invited to nominate causes, resulting in grants totaling \$670,000 awarded to 125 charities and non-profit organizations in the communities surrounding 16 of our offices.

#### Image credit: Tony Buckingham



## Some of the Charities and Non-Profits Supported

- Central Texas Food Bank Foundation
- Bangalore Hospice Trust (Karunashraya)
- The Akshaya Patra Foundation
- Second Harvest of Silicon Valley
- The Cambridge City Foodbank
- World Health Organization's COVID-19 Solidarity Response Fund

#### **CoFarming Comes to the Fore**

In 2019, a donation from Arm helped to kick-start a community farm in Cambridge that has ambitions to scale across the U.K. and beyond. During the 2019–20 growing season, over 4.5 tonnes of organic vegetables were harvested and distributed across eight emergency food hubs. This was supported by over 250 volunteers from the community contributing over 3,000 hours of their time.

In 2020, Arm made a further donation to CoFarm Foundation to expand and address hunger-related critical local needs compounded by the impacts of COVID-19. As a consequence of the many related impacts, CoFarm, based in central Cambridge, pledged all its produce in 2020 for donation and distribution through emergency food hubs in the city.

"Our aim is to make local, organically grown, affordable fruit and vegetables accessible to everyone, provide opportunities to learn about sustainably growing food, and contribute to the community's physical and mental well-being," said Gavin Shelton, CoFarm's founder.

"Arm's generous support is providing much-needed materials, including thousands of organic fruit and vegetable seedlings, while allowing us to engage expert horticulturalists to guide our local volunteers as we support our local community."

CoFarm's purpose is to bring people together to grow and share delicious, nutritious food and help build stronger, healthier ecosystems and communities. Aside from the food outputs, the project has provided a safe place for our volunteers to connect with others and with nature and manage their mental and physical health throughout a very challenging period.

By 2030, in alignment with the UN Global Goals, CoFarm's vision is that everyone in the U.K. will have access to local, sustainably produced food and opportunities to enjoy growing and sharing it with others.

#### **Meeting Needs With Arm India**

Through 2020, the Arm India team carried out a matching contribution program with employees, donating around \$26,000 to the Prime Minister's care fund toward support and relief efforts in the communities impacted by COVID-19. A small volunteer team from Arm India distributed ration kits—containing rice, wheat flour, black gram, pulses, salt, and cooking oil—to 150 families of sex workers in Delhi's G.B. Road area. This is a collaboration with the Robin Hood Army, which helped in taking care of the permissions, logistics, and distribution during the pandemic.

The Arm India team has also been active in supporting other causes, including partnering with the <u>Sankara Eye</u> <u>Foundation</u> to work toward ending avoidable blindness in rural India. Arm has continued supporting a Vision Rehabilitation Centre in Bangalore, which brings a lifeline to visually impaired patients who had lost hope elsewhere. In 2019 and 2020, the operating theater was responsible for 20,000 vision restoration surgeries.



## Responding Where We Can Make a Difference

Partnering to drive positive change where it's most needed

## We understand that we will only reach the Global Goals with strong partnerships across governments, communities, and industry.

Energy-efficient, low-cost Arm-based technologies are ideal for use in applications that can be scaled across every part of the world, including the hardest-toreach communities. To facilitate this, we partner with organizations and individuals who are experts in their fields, offering our technological expertise to progress their philanthropic programs.

#### **Building Digital Inclusion for Young People**

Around the world, 3.7 billion people do not have access to the internet, a vital resource for education and development. During the COVID-19 pandemic, disruptions to education exacerbated the exclusion many young people face who are unable to connect to remote learning.

Giga, an initiative launched by UNICEF and the International Telecommunication Union (ITU) aims to connect every school to the internet and every young person to information, opportunity, and choice.

Giga brings together global leaders in finance and technology, including Arm, to accelerate the innovations and investments critical to closing the digital divide. As well as supporting the immediate response to COVID-19, Giga is exploring how connectivity can create stronger infrastructures of hope and opportunity after the pandemic.

Through our ongoing collaboration, Arm and UNICEF will engage with current and potential partners, including governments, the wider tech industry, and other players to bring the power of meaningful connectivity to fasttrack young people's access to the educational resources and opportunities to grow and thrive.

## **+900,000** schools mapped in 36 countries

Giga's mission is founded on four pillars:

## Map

Giga's <u>Project Connect</u> maps schools globally to identify connectivity gaps and help countries assess their existing infrastructure and to connect schools to the internet.

## Finance

Giga works with governments and advises them on building affordable and sustainable countryspecific models for finance and delivery, subsidizing market creation costs and incentivizing private sector investment.

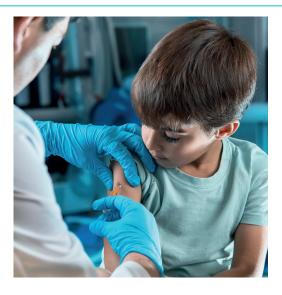
### Connect

In partnership with industry, and based on the mapping results, Giga will advise on the best possible technical solutions to provide schools with connectivity and countries with safe, secure, reliable, fit-forpurpose infrastructure to support future digital development needs.

#### Empower

Once connectivity has been established, Giga works with partners—including the Digital Public Goods Alliance, Reimagine Education, End Violence, Generation Unlimited, and others—to deploy digital solutions, offering safe, meaningful access to information, opportunity, and choice.

## Improving Access to Healthcare, Fostering Innovation



### **Boosting Equitable Delivery of Vaccines**

A partnership between Arm and Gavi, the Vaccine Alliance is helping improve access to vaccines for millions of people in lower-income countries. Initially, the partnership is focusing on using digital identification technology to help countries digitize their health records, making it easier to reach the 20 million children worldwide who are under-vaccinated, and helping Gavi to ensure that COVID-19 vaccines are accessible by all.

The partnership is supported by a £1 million contribution from Arm, primarily delivered through our social innovation partner Simprints, whose biometric solution is focused on verifying coverage of essential healthcare interventions at the last mile. Through a shared vision of enabling stronger interoperability of technologies, modularity of tools, and visibility across the vaccine delivery chain, Arm and Gavi will work to overcome challenges that currently hold back efforts to protect every child against deadly vaccinepreventable diseases.

## Be He@lthy, Be Mobile

Healthcare workers in remote areas with limited electricity, poor connectivity, and harsh physical conditions are unable to access modern digital healthcare services, relying instead on inefficient paper-based records. In 2019, Arm, the World Health Organization and ITU set about solving this problem by creating the Be He@lthy, Be Mobile initiative. We collaborated with health, community, and government experts to conceptualize, develop, and test an economically and technically viable e-tablet for the healthcare market.

The prototype, featuring a rugged design, a three-to fourday battery life, SMS connectivity, and a flash camera for diagnostics, has now been field-tested in Bangladesh and Tanzania, with 100 percent of respondents in Tanzania asserting that the prototype would improve their overall delivery of healthcare, and 89 percent of all respondents believing it would help better manage critical health conditions, such as TB, malaria, and HIV. In 2020, Arm began identifying the right partners to take this project from prototype to reality, and enable millions of health workers to deliver better care for their patients. The need for this project has only grown with the outbreak of COVID-19 and the critical need for real-time digital healthcare data to help combat the pandemic.

We are delighted to announce that the e-tablet achieved highly commended in the Best Sustainability Project category at the Chartered Institute of Procurement & Supply's Excellence in Procurement Awards 2020.



### Young SDG Innovators Programme

The Young SDG Innovators Programme is an opportunity for companies participating in the UNGC to identify young talent within their organizations to accelerate business innovation toward the Global Goals. This ten-month collaborative program invites future changemakers to develop innovative solutions through new technologies and business models to deliver on their company's sustainability objectives.

The Young SDG Innovators Programme aims to engage a company's brightest talent in not only advancing sustainability efforts but driving innovation that delivers tangible solutions with the added benefit of potential market value for the organization.

## Celebrating Success—Our SDG Pioneer

It was a proud moment as Arm's Social Innovation Lead, Fran Baker, was chosen by the UNGC Network UK as the U.K.'s SDG Pioneer for 2020.

The selection recognizes Fran's tireless work to drive progress toward the UN SDGs—in particular, her efforts to tackle sustainable development issues and showcase how business can be a force for good.

Six Arm staff will be taking part in the 2021 program.

Fran Baker, Social Innovation Lead



## Responding to Global Grand Challenges, Mapping Malawi's Floods

## Global Grand Challenge: Innovations for Water, Sanitation, and Hygiene (WASH)

With 1 billion urban dwellers lacking access to water, scaling up interventions to address this issue is a critical step toward achieving the Global Goals and improving global health.

The <u>Global Grand Challenges</u>, launched by the Bill & Melinda Gates Foundation, are a series of competitions aimed at attracting transformational solutions to the world's greatest health and development problems. Together with UNICEF and the Bill & Melinda Gates Foundation, we launched a Grand Challenges Exploration for WASH—a global call for digital innovations providing safe, clean, and affordable water.

This was one of the most popular Global Grand Challenges Explorations ever; we received 547 applications, with 15 finalists receiving \$100,000 seed funding.

## "Accelerating the achievement of the SDGs doesn't start at the top; it starts on the ground. UNICEF hopes to spark innovation and the development of digital public goods by working with partners to support social enterprises and companies looking to grow their reach and impact."

## Ibrahim Mahgoub

Digital Public Goods Advisor, UNICEF Innovation

Among the finalists are:

## H2Go–Mexico City, Mexico, and Bangalore, India:

Improving trucked water systems to the poorest and most underserved people

## Safisana–Accra, Ghana:

Circular production system turning waste from public toilets and organic waste into fertilizer and other usable materials

## Pit Vidura—Kigali, Rwanda:

Hygienic sanitation solution offering an alternative to the manual emptying of latrines

## H203-Kisumu, Kenya:

Solar-powered water ozonation system to disinfect water to make it safe for drinking

## Urban WASH—Birendranagar, Nepal:

Promoting entrepreneurship to convert waste into resources

Hector Montaner, Architecture Engineer at Arm and WASH Bootcamp Mentor, said: "A deep understanding of local circumstances is an indispensable part of tackling these challenges, and each team's determination and drive will help them to achieve great things."



H2Go team at work



Flood damage in Malawi-Image credit: UNICEF

## Using Technology to Predict Life-Threatening Floods in Malawi

A field trip to Malawi was the catalyst for a modeling and visualization challenge put to developers on Zindi a community of data scientists solving Africa's toughest challenges—asking entrants to predict the location and extent of Malawi's floods.

This insight could support preparedness efforts within Malawi, potentially acting as an early warning system and a planning tool for effective response.

Arm collaborated with UNICEF on this project, which aims to ensure that when the next flood hits, Malawi will be better prepared and able to respond and evacuate more quickly, thus saving livelihoods and lives.

## "The week we spent in Malawi showed how globally sourced, locally implemented innovation partnerships can deliver social impact at scale, made possible by organizations like UNICEF that have the infrastructure and relationships in place to deliver programs on the ground."

Graham Budd Arm's President and COO

547 proposals for water, sanitation, and hygiene projects were received from 47 countries

## Sparking the World's Potential

Starting in 1990 as a small team of engineers working from a barn in Cambridge, in 2020 Arm celebrated 30 years as a driving force in the global semiconductor industry, with our technologies reaching 70 percent of the world's population.

Following listing on the London Stock Exchange in 1998, Arm was worth a billion dollars, reflecting the undying spirit of ambition that drove early success. Now employing over 6,800 people around the world, we are a vital contributor to the global technology ecosystem.

2004 was a successful year as Arm targeted a range of industry needs by launching the Cortex A, R, and M processor families. Through the acquisition of intellectual property (IP) specialist Artisan, Arm also launched the DesignStart program, which enabled designers to create custom Arm chips faster and with less risk than ever before.

"In what has been a tough time it was great to have such an inclusive event to lift all our spirits. It really created a feeling of togetherness." Remaining patient and listening to our partners enabled us to scan the horizon effectively. We began researching how to bring our energy-efficient processing capabilities to the HPC space, and a decade later Arm-based silicon powered some of the most energy-efficient HPC machines in the world—including Fugaku, the world's fastest supercomputer. This taught us that patience and vision pay off.

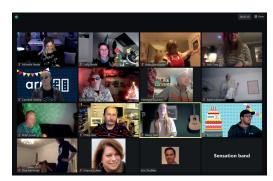
#### Marking the Milestone Together

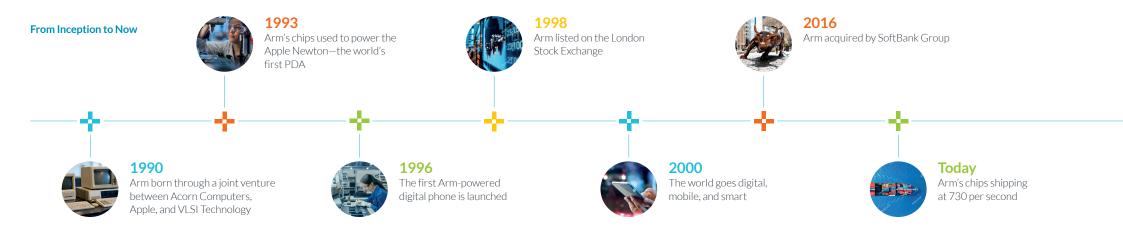
Despite the challenges of the pandemic, we felt that it was still important to bring our staff together virtually for our 30th birthday, to thank them and reflect together on our journey. We hosted a celebratory virtual event, which connected colleagues who had not met in their local offices for some time, as well as bringing together staff from around the world who had never met before.

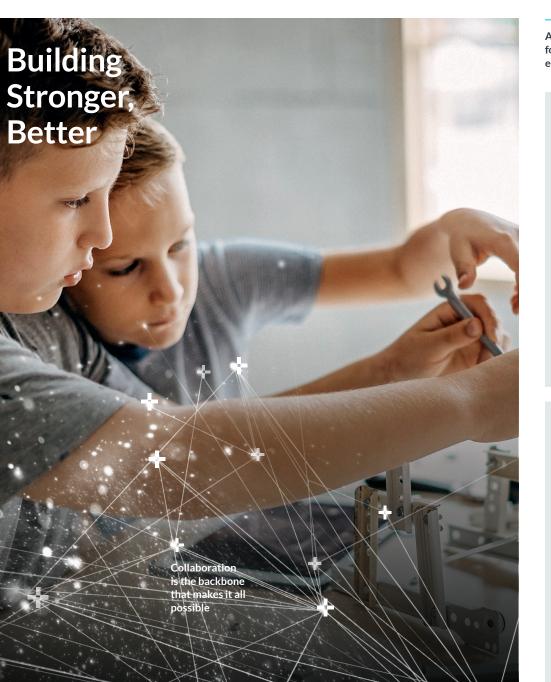
"The Arm30 celebration was perhaps the brightest highlight of the year for me," said Arm CEO Simon Segars. "In what has been such a tough time it was great to have such an inclusive event to lift all our spirits. It really created a feeling of togetherness."

Reflecting on Arm's journey, Simon said: "Even in our wildest start-up dreams we could never have imagined where we'd be today. It is incredible to think how far we have come—from a handful of engineers in a barn to now a global standard. We have changed how and where computing happens, and this has led to so much positive impact."









As we look forward to the next year and beyond, we want to continue investing in programs with the potential for positive impact, including contributing to the Global Goals at a range of scales. We believe in the power of embedding sustainability across our organization to improve lives around the world.

#### Pandemic Recovery Response

COVID-19 will be part of our lives for years to come as it shifts from being a pandemic to endemic. Arm technology and our ecosystem of partners and our people will continue to have a vital role to play in addressing the impact of COVID-19, most critically in tracking and mapping the disease, and in the process of genome sequencing and vaccine development as the virus mutates.

### **Closing the Digital Divide**

By working with our partners to connect everyone, everywhere to information and opportunity, we can bridge the gap between those who have access to digital technologies and the 3.7 billion who currently do not.

Through 2021, we will build on our global education outreach, continuing to donate education kits to universities and providing resources that help lower the barriers to teaching strategically important subjects like computer architecture. We will also continue working on projects that expand connectivity, such as Magma, an open-source software platform that allows operators to easily deploy mobile networks in hard-to-reach areas.

## **Decarbonizing Compute**

In 2021, we will announce our intention to move to 100 percent renewable energy consumption by 2023.

One of the most effective ways for us to go about decarbonizing compute is through increased power efficiency. Achieving more computing performance for every watt of electrical power has long been a key driver for Arm. Delivering more and more compute performance while simultaneously improving energy efficiency is what our partners ask from us every day. Decarbonizing compute makes both commercial and environmental sense and we look forward to reporting on our progress in enabling this.

#### Measuring Our Global Goals Progress

In 2021, the objectives of the 2030Vision partnership will be to realize the potential for rapid digitalization and the application of technology advancements to address mediumand long-term sustainable development needs, but also short-term needs around critical issues like vaccine delivery. A vital part of this is ensuring unrestricted access to digital public goods—a key pillar of the 2030Vision mission. Digital public goods such as opensource software, open data, open AI models, open standards, and open content that adhere to privacy and other applicable best practices do no harm and are of high relevance for attainment of the Global Goals. Achieving this multi-sector collaboration will be crucial to advancing the opportunities in pursuit of the Global Goals.

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