Within Reach

Global Goals Impact Report

Year Ending March 31, 2019

arm

In Conversation With Simon Segars

With 2030 in touching distance, the UN Sustainable Development Goals, known as the Global Goals, provide vital traction in addressing issues of global concern. We ask our CEO Simon Segars for his perspectives on the future.

Simon Segars,
CEO, Arm Limited

What role can Arm play in ensuring that technology is used for good?

Arm is committed to influencing and shaping the way that technology is being used to deliver the 2030 Global Goals. 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-to-reach communities. Through partnerships with the Gates Foundation, UNICEF, and others, we are applying our partnership-based business model to encourage inclusive innovation across the technology sector.

Arm is looking to a future of a trillion connected devices enabled by the fifth wave of computing, which is the convergence of AI, the Internet of Things (IoT), and 5G infrastructure. These trillion devices will be central to managing energy systems, water usage, traffic flows, retail stock, and harvesting crops while revolutionizing our health services through personalized care.

And how can we ensure that everyone benefits?

Our partnerships with UNICEF and the World Health Organization, as well as the support we offer to small technology-for-good start-ups such as Amplio and Simprints, play a significant role in Arm demonstrating the potential our technology offers. Our advocacy through these programs provides a powerful message to our partners and the wider ecosystem to support technology for good and consider new markets and customers that have been overlooked.

How will Arm technology shape the way people live their lives in 2030?

Arm's vision is for "technology that invisibly enables opportunity for a globally connected population." It should be intuitive and work seamlessly to make life better, easier, more efficient, and more sustainable—and we see this fifth wave of computing being fully embedded by 2030. Behind the scenes, technology will create a more sustainable world for people everywhere: using big data to create healthy, secure, and safe environments for us to live and work in, while safeguarding and maximizing vital resources.

The planet is on course for damaging levels of climate warming. What is Arm doing to respond to climate threats?

We've achieved our carbon reduction and energy use reduction targets for 2020 that we set back in 2010. This has reduced our emissions by 15 percent per person and our energy use by 30 percent. We are exploring a science-based set of targets to further reduce

> **Arm's vision is for 'technology that invisibly enables opportunity for a globally connected population.'"**

our footprint. Arm technology, particularly our network and IT (server) infrastructure solutions, can help reduce consumption demand, but we recognize that in our own business operations we need to play our role in reducing carbon and becoming more resource efficient.

If you could do one or two things to help achieve a more sustainable world, what would they be?

Without doubt—build trust and collaborative partnerships. I believe I can do something about this in my role and through Arm more broadly. The Global

About Arm

Arm's technology is at the heart of a computing and connectivity revolution that is transforming the way people live and businesses operate. Our advanced, energy-efficient processor designs have enabled intelligent computing in more than 150 billion chips. Over 70 percent of the world's population are using products enabled by Arm technology, from the sensor to the smartphone to the supercomputer. Arm Research continues to map 200+ emerging technologies, leveraging our unique position to create positive impact through responsible technology and innovation.

Our focus areas include:

- Internet of Things
- Mobile and Consumer Devices
- Automotive and Robotics
- Artificial Intelligence
- Augmented Reality
- Networking and Services
- Security and Privacy

Goals require collaboration across the private sector, governments, and civil society; targeted investment and innovation, and fresh thinking about economic paradigms and business models. There are also significant commercial opportunities available for those willing to see them, estimated at $12 trillion a year globally in revenue and cost savings and 380 million new jobs by 2030[1].

Technology needs to underpin all 17 Global Goals, and to achieve this our sector must be more collaborative and build public trust in new technologies. If we fail in this respect, the demand and market size for these technologies will be a fraction of current predictions, negatively impacting both society and future business. As an industry, we need to do more to earn trust in order to realize the true positive potential for society.
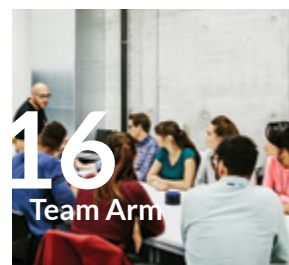
[1] Source: Business and Sustainable Development Commission

Terms Used in This Report: The terms "United Nations Sustainable Development Goals," "SDGs," "Global Goals," and "the Goals" are used interchangeably in this report. The Global Goals were adopted by world leaders in 2015 as part of the 2030 Agenda for Sustainable Development, also referred to as the 2030 Agenda.

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Advancing the Global Goals

Arm is proud to be part of the collective effort to bring the Global Goals closer for us all. We're inspired by a simple global purpose: to improve lives through technology. This is responsible technology—ensuring that everyone can benefit and no-one is left behind. This is technology with a critical role to play in tackling some of the world's greatest challenges.

Responsible technology is sustainable, fair to all, and developed within an ethical framework. Above all, it exists to make life better. Guided by this conviction, we seek to maximize our global reach and enable SDG-focused solutions designed for the people and environments where they are needed most.

To do this, we partner with organizations and individuals who are experts in their fields. We open up our technology ecosystem to responsible innovation and we collaborate on philanthropic programs to create positive impact, locally and globally. For example, our 2030Vision, in partnership with the UN system and

others, is a cross-sector collaboration that connects businesses, academia, NGOs, and governments with the technology and expertise they need to realize the Goals.

Our commitment to the Global Goals starts at the very top of our company with the CEO. Through Team Arm, everyone in the business can also engage actively in initiatives around the world.

We measure our contribution through a combination of target- and indicator-level analysis (see page 15)—constantly assessing the impact of our initiatives and partnerships, and reporting in a transparent way.

Our Strategic Drivers

To maximize sustainable positive impact, we focus our efforts on areas that balance global progress with local needs.

Demonstrating responsible business practices that protect people and the planet

Building Trust

Creating a culture based around purposeful technology

Enabling Our People

Improving Lives

Realizing the Global Goals

Creating collaborations that harness the power of technology to transform our world

Supporting education and making everyday life safer, healthier, and more efficient

Working for Maximum Impact

The 17 Global Goals of the 2030 Agenda for Sustainable Development are a roadmap for promoting prosperity and protecting the planet in the face of challenges like rapid urbanization, the loss of natural resources, climate change, and conflict.

Toward the 2030 Agenda

For the Global Goals to be achieved by 2030, there needs to be an urgent and more ambitious collective effort. Business and industry are essential to this, by unlocking the commercial opportunity related to the Goals and contributing to more equitable economic development.

Technology for Good

Technology is a crucial enabler of progress, but unleashing its potential to transform and improve lives requires partnership, collaboration, and fresh thinking on economic and business models. At Arm, we believe that the benefits of technology must extend far and wide to reach the millions of people globally whose communities have been historically underserved. This is why responsible technology is at the heart of Arm's approach to the Global Goals.
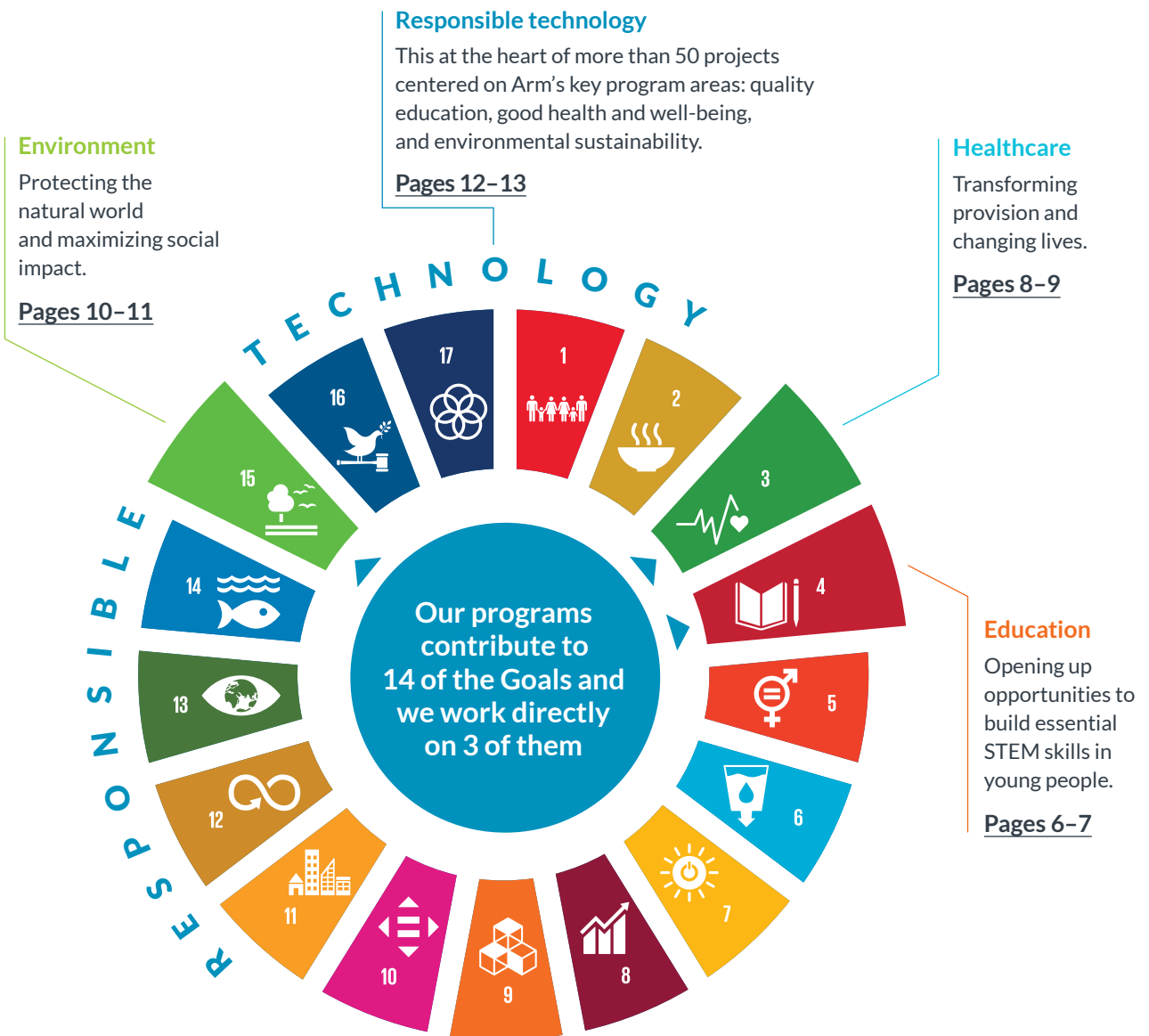
"By 2030, the Global Goals could generate revenue of $12 trillion every year, as well as 380 million jobs, across the energy, cities, food and agriculture, and health and well-being sectors."[2]

[2] Source: Business and Sustainable Development Commission

Our Contribution at a Glance

Arm's contribution to the 2030 Sustainable Development Agenda is driven and enabled by technology. Our core business, commercial partnerships, and responsible technology support industry growth and innovation while contributing to all 17 of the Global Goals.

- We have assessed all 17 Global Goals, 169 targets, and 232 performance indicators to determine where and how to maximize our impact.

- We consider we have the greatest impact on three of the Goals. Our programs in education, healthcare, and environment actively contribute to 14 of the Global Goals.

- See also page 14: impact programs mapped to SDG targets and indicators.

Responsible technology

This at the heart of more than 50 projects centered on Arm's key program areas: quality education, good health and well-being, and environmental sustainability.

Pages 12–13

Environment

Protecting the natural world and maximizing social impact.

Pages 10–11

Healthcare

Transforming provision and changing lives.

Pages 8–9

Education

Opening up opportunities to build essential STEM skills in young people.

Pages 6–7

Our programs contribute to 14 of the Goals and we work directly on 3 of them

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The 17 Global Goals to Transform Our World

GOAL 1: No Poverty	**GOAL 7:** Affordable and Clean Energy	**GOAL 13:** Climate Action
GOAL 2: Zero Hunger	**GOAL 8:** Decent Work and Economic Growth	**GOAL 14:** Life Below Water
GOAL 3: Good Health and Well-being	**GOAL 9:** Industry, Innovation and Infrastructure	**GOAL 15:** Life on Land
GOAL 4: Quality Education	**GOAL 10:** Reduced Inequalities	**GOAL 16:** Peace, Justice and Strong Institutions
GOAL 5: Gender Equality	**GOAL 11:** Sustainable Cities and Communities	**GOAL 17:** Partnerships for the Goals
GOAL 6: Clean Water and Sanitation	**GOAL 12:** Responsible Consumption and Production	

Inspiring Minds

Arm Education comprises the Arm University Program, Arm Education Media, and the Arm School Program. Each program works with academic, education, and industry partners to support technology innovation and talent development through computing and science, technology, engineering, and maths (STEM). By drawing on Arm's technological expertise, innovation, and partner ecosystem, Arm Education is able to offer resources that accelerate learning through market-leading education materials and technologies.

Open doors to learning

Higher and Professional Education

Established in 2013, The Arm University Program (AUP)[3] provides free Education Kits to faculties at universities worldwide to help them teach engineering concepts, using Arm- and partner-based technologies as a vehicle. The kits contain learning outcome-driven teaching materials for use within a typical ten- to 14-week university/college course. The pedagogy is experiential as fundamental concepts are cemented with hands-on lab experiments using modern hardware platforms and professional software development tools.

AUP Education Kits have been adopted by over 2,000 universities worldwide, with over 6,500 courses established globally to date.

Set up in October 2016 after the success of the University Program, Arm Education Media[4] enables learning through books and rich multimedia online courses, allowing students, hobbyists, and engineers to become work-ready.

Schools

Established in 2018, the Arm School Program (ASP)[5] works with key partners to close the STEM skills gap through a real understanding of the challenges facing teachers and learners in STEM and computing at K-12. In collaboration with schools, education organizations, and partners such as Micro:bit Educational Foundation and educational research departments, the ASP team is developing and supporting initiatives that will enable Arm and our partners to make a real difference in the schools education sector.

We are developing teaching and learning resources that support teachers in delivering the requirements of the computer science curriculum in the classroom. Applying a project-based learning pedagogy, our materials encourage learners to develop STEM skills including problem-solving, communication and team-working.

We also provide support for national initiatives that address structural issues in STEM education, including

the U.K. Government's National Centre for Computing Education, delivered by a consortium of the Raspberry Pi Foundation, the British Computer Society, and STEM Learning.

Our aim is to empower all learners with equal opportunities to develop their interest and skills in STEM.

Global Goals Supported

4 QUALITY EDUCATION   **8** DECENT WORK AND ECONOMIC GROWTH   **10** REDUCED INEQUALITIES

SDG Indicators

4.4.1 Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill

5.5.1 Proportion of seats held by women in (a) national parliaments and (b) local governments

8.6.1 Proportion of youth (aged 15–24 years) not in education, employment or training

[3] www.arm.com/resources/education/education-kits
[4] www.arm.com/resources/education/online-courses
[5] www.arm.com/resources/education/schools

do your :bit

Inspiring Schoolkids to Develop Skills, Problem-Solve and Have Fun With STEM

Using the BBC micro:bit pocket computer as a starting point, the do your :bit Global Challenge aims to inspire young people to solve real-world problems and help develop 21st-century digital skills.

The gender gap is a major factor in the global shortage of STEM skills. In the U.K., for instance, just 35 percent of 16-year-old girls choose STEM subjects compared to 94 percent of boys. While the problem is complex with many factors involved, evidence suggests that the source of the gender gap lies in the school years.

With its focus on visible issues such as health and the environment, the do your :bit Global Challenge is designed to excite the enthusiasm of girls as much as boys. Research shows that when girls can see a problem in context, they're just as motivated as boys to solve it.

Connecting Person to Person

Six shortlisted young winners—one from each continent—converged on London in January 2019 for the do your :bit Challenge Day. When Arm technology experts joined in to help the kids create their brilliant solutions, the creative buzz was evident on both sides.

The Arm School Program supported the Challenge with classroom resources to help schools engage with the competition.

Global Goals Supported

| 4 QUALITY EDUCATION | 5 GENDER EQUALITY | 8 DECENT WORK AND ECONOMIC GROWTH | 10 REDUCED INEQUALITIES |

SDG Indicator

4.4.1 Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill

Arm and the BBC are co-founders of the Micro:Bit Educational Foundation. The do your :bit Global Challenge was co-created with the World's Largest Lesson in collaboration with the British Council.

Impact

U.K.

1m

BBC micro:bits donated to year 7 children; 70% more girls said they would choose computing as a school subject after using the micro:bit.

Western Balkans

100%

of teachers thought the micro:bit was a useful teaching tool.

Denmark

95%

of teachers felt that students found it easier to code after working with BBC micro:bits.

The Winning Idea

The overall winner of the 2018 do your :bit Global Challenge was 10-year-old Zayd, from Syria. His invention is a large remote-controlled cardboard robot designed to help children with asthma. Dr. Robot is equipped with multiple micro:bits and various sensors as well as an alarm to notify parents in an emergency.

> "I knew that many people in the Eastern Province of Saudi Arabia, where I live, suffer from asthma, so I thought 'why don't I help?' I made Dr. Robot to be a friend to asthma patients and help them take their medicine on time."

Accelerating Innovation to Improve Lives

Growing populations, chronic conditions, and rising costs mean that many countries are struggling to deliver their public health commitments. Arm-powered technology helps unlock solutions that address a lack of access to affordable healthcare services, inadequate infrastructure, and obstacles to information sharing.

Simprints
Solving the Identity Crisis

More than 1 billion people have no formal proof of identity, preventing access to essential services such as healthcare, education, and finance. In healthcare, this lack of identity can mean the difference between life and death. Simprints is a not-for-profit tech company that's building low-cost biometric identification systems to enable citizen identification in developing countries.

When the Simprints team tried to select a fingerprint scanner for their solution, they found that most biometric systems on the market today have neither sensing hardware nor matching software that can cope with the scarring and wear often seen on people's hands in the developing world. Simprints went on to develop its own robust, ergonomic, and mobile fingerprint scanner—powered by an Arm Cortex-M processor.

As a typical example of Arm's role as an enabler, we have supported the Simprints team with skills and volunteers,

helped design the initial prototype, and provided match funding.

One of the aspects we celebrate in Simprints' approach is the commitment to human-centered technology designed for the needs and circumstances of the people who will be using it in some of the poorest countries in the world.

Global Goals Supported

3 GOOD HEALTH AND WELL-BEING

8 DECENT WORK AND ECONOMIC GROWTH

10 REDUCED INEQUALITIES

SDG Indicators

3.b.1 Proportion of the target population covered by all vaccines included in their national programme

16.9.1 Proportion of children under 5 years of age whose births have been registered with a civil authority, by age

Impact

Almost

1m

beneficiaries have been enrolled by Simprints as of 2017.

> "Without Arm's support, it's highly doubtful we would have got to where we have—creating a technology that, if used correctly with the right privacy and safeguard mechanisms in place, can create a world where these invisible people are recognized and can receive the support they need."
>
> **Christine Kim**
> Head of Strategic Partnerships, Simprints

> "I thought it would be difficult but it is small and convenient... It gives more legitimacy to our work— the beneficiary says, 'you know so much'!"
>
> **Nasreen**
> BRAC Community Health Worker, Bangladesh

WASH
Digital Innovations for Water, Sanitation, and Hygiene

The lack of access to water, sanitation, and hygiene (WASH) in urban areas affects 1 billion people worldwide. In September 2018, UNICEF, Arm, and the Bill & Melinda Gates Foundation (BMGF) launched a global call for digital innovations with the aim of improving access to safe, clean, affordable water by investing in and mentoring the competition winners. With over 540 applications, this was one of the most popular Gates Grand Challenge Explorations ever.

Global Goals Supported

3 GOOD HEALTH AND WELL-BEING

6 CLEAN WATER AND SANITATION

SDG Indicators

3.9.2 Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene

6.1.1 Proportion of population using safely managed drinking water services

6.2.1 Proportion of population using (a) safely managed sanitation services and (b) a hand-washing facility with soap and water

Impact

547
submissions to the WASH Challenge from 47 countries.

15
finalists shortlisted to receive $100,000 seed funding.

8
teams selected to attend an innovation accelerator bootcamp.

8
Arm employees took part as mentors.

Driving WASH Innovation

Eight teams were selected to attend a five-day bootcamp to help them develop their innovations further. Among these were the **Safi Sana team from Ghana**, with a proposal to extract economic and social value from waste, and the **Urban WASH team from Nepal**, with a solution to optimize the conversion of waste to resources, so reducing pollution and disease.

Honing the Solutions at Bootcamp

The bootcamp was a high-energy, hands-on event, enabling the teams to dive deep into everything from leveraging technology to business models. After honing their solutions with the help of Arm mentors and experts, the teams pitched to an audience of industry experts and investors, followed by sessions with UNICEF, Arm, and the BMGF to help them move their proposals forward.

Together with our partners we are now developing ways to help the teams scale their solutions, including exploring accelerator potential with other funding agencies and skills-based volunteering opportunities for Arm employees in order to provide the teams with continuing support.

Ideas on tap for water

"I was very excited to see technology used so clearly for good, and I particularly enjoyed working with the teams to work out their technology needs and help crystallize their plans."

Jan-Peter Larsson
Systems Architecture Engineer, Arm

Our partners: UNICEF, Bill & Melinda Gates Foundation, The African Academy of Sciences, Sida.

Bootcamp facilitators: World Food Programme Innovation Accelerator.

Safeguarding the Natural World

The Global Goals identify fundamental planetary challenges, from climate breakdown to habitat loss and species extinction. We must go further than simply limiting the adverse impacts of human activity. There's an urgent and critical need to safeguard and conserve the natural resources, ecosystems, and biodiversity we all depend upon.

Embedding Environmental Improvement at Arm

In 2010, we developed meaningful carbon reduction targets and started disclosing our emission data through CDP's climate change program.

We set out to achieve a 30 percent reduction in tonnes of CO_2 emissions per employee by 2020 and a 15 percent reduction in energy used per person by 2020, measured in megawatt hours (MWh), against the 2010 baseline. As of March 31, 2019, we have achieved both targets and are now setting new and ambitious goals.

Our focus on promoting sustainable workspaces has contributed to this. We continue to apply our sustainable design principles globally and aspire to have our offices certified to LEED Gold standard or higher. For further details of our environmental efforts, see page 18.

WILDLABS
Technology Protecting the Natural World

Arm teamed up with Google.org in 2015 to provide seed funding for WILDLABS— the first global, open online community dedicated to conservation technology. Since then WILDLABS has evolved into a thriving platform, connecting conservation practitioners with technology companies, universities, investors, and innovators who share information and use technology to protect species and habitats. Arm funds the platform and also provides support through technology expertise and employee volunteering.

Global Goals Supported

SDG Indicators

7.2.1 Renewable energy share in the total final energy consumption

12.5.1 National recycling rate, tons of material recycled

12.6.1 Number of companies publishing sustainability reports

"In addition to great forums and resource pages, WILDLABS runs virtual meetups to share ideas on a wide range of topics at the intersection of conservation and technology. It was through WILDLABS that we connected with Dr. Melanie Clapham at the University of Victoria, who was looking for automated identification technology for bears to augment her field research. Together we formed the BearID Project, evolving what started as a toy project to explore deep learning into a powerful conservation tool."

Ed Miller
Director and Software Developer for the BearID Project; Senior Technical Marketing Manager, Strategic Alliances, Arm

Impact
WILDLABS has:

3,235
active members.

760
active conversations have elicited 2,990 replies from 467 members.

100,650
visitors from 100+ countries have viewed 403,584 pages.

This dialogue enabled members to share best practice to increase the efficiency and effectiveness of technology deployment to address conservation challenges.

WILDLABS in the Wild

WILDLABS is supporting Ol Pejeta Conservancy in Kenya to establish a Conservation Technology Lab (CTL), which has the aim of testing and developing innovative tech solutions to improve wildlife conservation in East Africa and beyond.

The CTL will tap into the latest advances in data science and the Internet of Things, including the real-time monitoring of animals. It's not just about wildlife. Another focus is community welfare—a vital part of sharing the mutual benefits of conservation and building relationships with local people.

Start-up funding and additional technical assistance for the CTL have been provided by Arm, The Royal Foundation, and Fauna & Flora International.

Global Goals Supported

SDG Indicators

15.5.1 Red List Index

15.7.1 Proportion of traded wildlife that was poached or illicitly trafficked

12.a.1 Amount of support to developing countries on research and development for sustainable consumption and production and environmentally sound technologies

BearID Project

Arm employee Ed Miller is passionate about the environment, wildlife, and photography. In April 2017, he joined the WILDLABS community, and within hours he had made connections that sowed the seed of the BearID project in British Columbia. With more than 25 years' experience developing hardware, software, and systems for multimedia products, Ed brings substantial expertise to the program.

Using human face recognition techniques, the project is developing a software tool that can identify individual brown bears from images of their faces. Applying this technology to camera trap imagery would provide scientists with a new technique for the non-invasive monitoring of wild populations of brown bears and enable conservationists to ask a wider variety of applied research questions.

This is important as scientists are under increasing pressure to draw larger conclusions from their research, but with fewer resources available. It's an initiative that provides the foundation for the development of face recognition for other threatened wildlife, which holds promise for conservation efforts worldwide.

Global Goals Supported

SDG Indicators

15.5.1 Red List Index

15.7.1 Proportion of traded wildlife that was poached or illicitly trafficked

Wild for nature

Growing Positive Impact and Building Trust

In the race to realize and widely disseminate the benefits of a digitally connected world, technology companies have a social responsibility that extends beyond just delivering products. What's more, the Global Goals can only be truly advanced if digital innovation improves lives in historically underserved communities across the world.

Global IoT

Security in the Data-Driven World

In Arm's first Security Manifesto, launched in October 2017, we underlined the imperative of what we called a digital Social Contract: the need to protect users' cybersafety, no matter what. With threats to the data-driven world increasing, we outlined detailed technical directions to confront the risk, including our Platform Security Architecture (PSA) principles.

A year on, we have reiterated the sector's shared responsibilities in our second Security Manifesto[6]. We have also built on the PSA—with a focus on providing a portfolio of IP, software, and tools that enables our partners to design securely from the ground up for a wide range of embedded devices.

Many Arm partners now work with PSA, and it has gained industry recognition quickly (42 percent awareness in the Arm security survey). Arm makes no revenue from PSA, but we continue to invest in developing it because of its importance. It is open source and open to universal comment and amendments as time goes on.

Another significant new move on IoT security is our partnership with Cybereason. Its AI threat-hunting machine technology offers a major upgrade on what has been available previously. This means that, for example, threats to personal data can be identified and isolated, and that firmware updates can be automatically uploaded, configured and deployed up to 100 times faster than any other solution – helping to safeguard all future Arm-based IoT devices tied into the Arm Pelion IoT Platform.

We must continue to build a global secure-by-design compute platform guided by PSA's principles, harnessing advanced security technologies to provide round-the-clock device security policing. All technology companies share responsibility to uphold the trust placed in us by the users of what we're creating.

Global Goals Supported

11 SUSTAINABLE CITIES AND COMMUNITIES   16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Key Principles of Our Security Manifesto

- We must inspire trust as we scale the connected world

- No company is exempt from the Social Contract with users

- Security is a collective industry responsibility and is both an opportunity and a challenge

- Advanced security intelligence should be distributed throughout the IoT

- We must build security systems that deal with potential human error

[6] https://pages.arm.com/iot-security-manifesto.html

2030Vision

Delivering the United Nations' Global Goals by 2030 requires extensive collaboration across the private sector, governments and civil society. It requires significant investment and innovation as well as fresh thinking about economic paradigms and business models.

At Arm, we believe business can and should be making the relevant investments to unlock these opportunities, and in doing so advance the Global Goals. Technology will be a critical enabler to realize this sustainable future. This is why Arm founded 2030Vision[7], to unite the technology sector to work together to harness their resources, innovative ideas and considerable skills to turn the vision of the 2030 agenda into a reality. Given the ambition, complexity and urgency of the Global Goals, we realized that it would require an unprecedented level of collaboration, scale and impact to engage more with these challenges in order to deliver the world we want by 2030. Getting this right, making sure we understand the issues technology is trying to solve, is necessary for us all. This is our commercial future and the future for our planet and everyone who lives here.

Biomarkers
Improving Health Outcomes for Women and Children

In partnership with UNICEF, we have continued to invest in and explore how frontier technologies can become profitable while improving health outcomes for women and children.

We invested in a pilot initiative with UNICEF Malawi to explore the potential use of wearable biomarkers for children. This technology can provide vital information about their mental and physiological development and overall well-being, so parents, caregivers, and community health workers can be best informed. Three villages were chosen to host the pilot, to test different contexts and scenarios as they relate to urbanization, connectivity, health facility access, and other social indicators.

In the first phase of the pilot, four companies whose devices include wrist, chest, and head bands and tablets, with another company working with deep learning and health, were selected. Most devices were for collecting various biomarkers: temperature to identify fever, facial expressions to evaluate stress levels, and EEG and EKG signals to evaluate headaches, heartaches, and other proxies for infectious diseases. Another company's device was a drone designed to collect data from wearables.

The tests and activities were well received by the communities. During the next testing phase, we will collaborate with UNICEF Malawi and the tech companies to work through usability gaps, add-on requests, and other limitations and simulate routines of daily usage of the wearables, to ensure reliability, data quality, and continued positive behavioral reactions.

Global Goals Supported

SDG Indicator

3.8.1 Coverage of essential health services

Improving health outcomes

Mapping Our Impact

How We Measure Our Contribution

The 17 SDGs, supported by 169 targets and 232 indicators, were initially created for governments to measure and report on progress. However, there is now general consensus that to achieve the Goals by 2030, it is incumbent on business, communities and individuals to play an active role in supporting government policies and actions.

Arm measures its own contribution through a combination of target- and indicator-level analysis. Our indicator-level focus has been key to identifying where we can—and cannot—generate meaningful positive impact.

Achieving the Global Goals is only possible through collaboration, as highlighted by Goal 17—Partnerships for the Goals. Our commitment to the SDG targets and indicators has also helped

Our Project Matrix

This matrix maps initiatives according to our focus areas as well as the relevant Global Goals and indicators. It lists projects described in this publication plus those contained in our previous Impact Report.

Key

► Projects in bold are those described in this report. Others are those included in last year's Global Goals Impact Report.

	1 NO POVERTY	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	5 GENDER EQUALITY	6 CLEAN WATER AND SANITATION
Education						
► **STEM Education / Schools and University Programs**				●		
► **do your :bit**				●	●	
2020 Stem				●		
Code Club				●	●	
Healthcare						
► **Simprints: Biometrics**			●			
► **WASH**			●			●
Talking Book	●	●	●	●	●	●
Respiro			●			
Environment						
► **Environmental Improvement at Arm**						
► **Ol Pejeta / WILDLABS**						
► **BearID**						
Responsible Technology						
► **2030Vision**	●	●	●	●	●	●
► **Security and AI**						
► **Biomarkers**			●			
► **Gaming lab**				●	●	
Autonomous Vehicles			●			
U-report	●		●			

us to select partners and projects with measurable outcomes relevant to achieving these metrics—and ultimately the Goals.

While the credibility of any company's claims to be delivering the SDGs lies in the ability to demonstrate quantifiable contribution to the relevant indicators, we acknowledge that in some cases this is not possible. For example, there are many educational projects and partners we are working with around the world. All are quality initiatives with tangible outcomes—but not all can demonstrate meaningful delivery of the Goals,
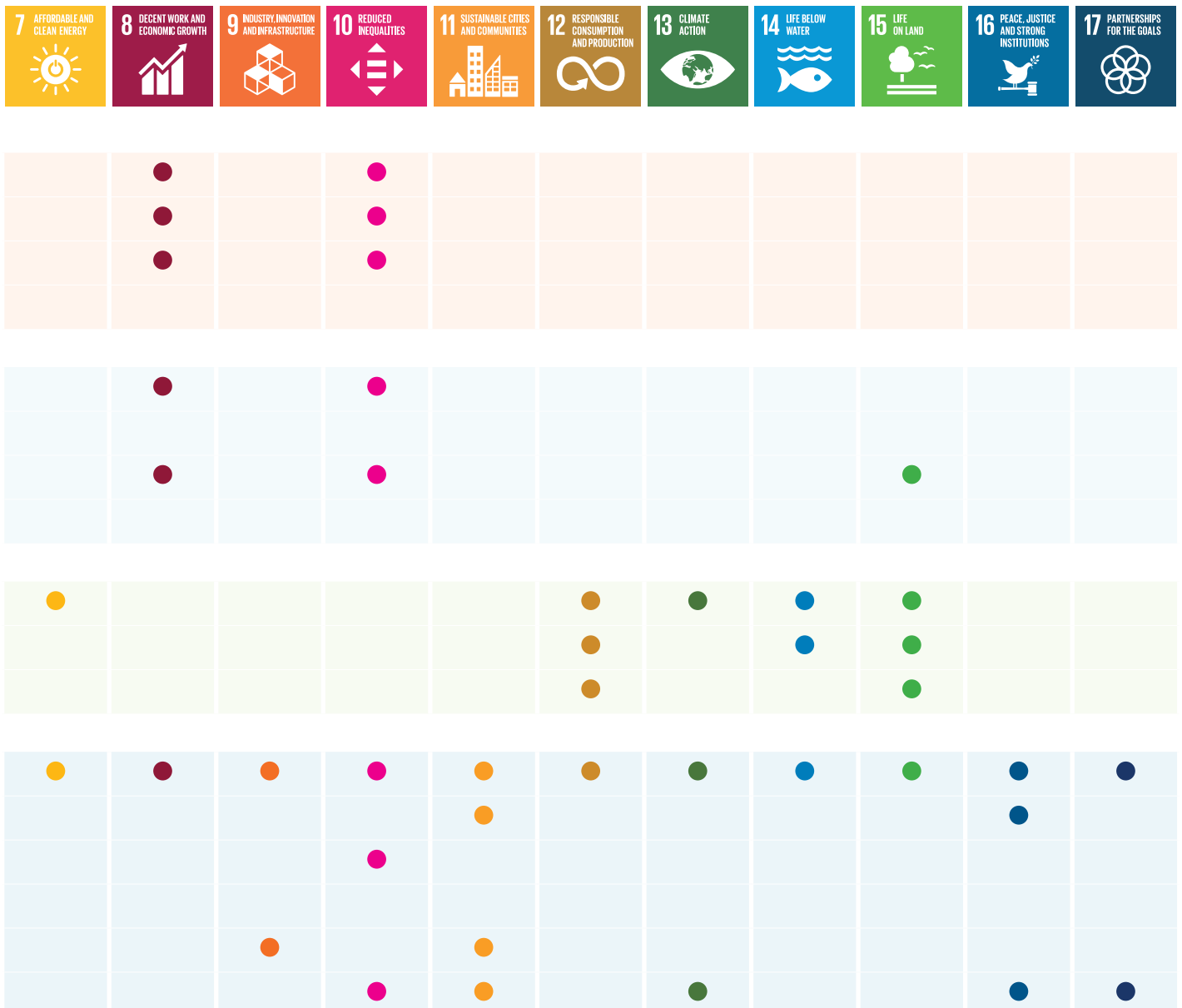
as defined by the UN and agreed and endorsed by all its member countries.

Such projects are seeking to address issues of inequality or disadvantage in the context of localized factors and needs —and have quality outcomes relating to these, even if they cannot be strictly connected to SDG indicators. As a result, not all of our programs have impacts that can be linked to the indicators.

Arm reports its impact for all the programs we support while seeking to be clear about how each program relates to delivering the UN SDGs.

Tracking Progress

Mapping our programs to targets and indicators of the Global Goals helps us measure impact at a high level. We also review individual projects on a quarterly basis against agreed objectives that are specific to the initiative. An essential part of this process is assessing the effectiveness of partnerships. These inputs form part of both our short-term and medium-term planning.

7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	10 REDUCED INEQUALITIES	11 SUSTAINABLE CITIES AND COMMUNITIES	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	13 CLIMATE ACTION	14 LIFE BELOW WATER	15 LIFE ON LAND	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS

Team Arm: Our People's Global Reach

Arm's initiatives to support strong communities are amplified through our employee engagement program, Team Arm. Here we feature a small sample of Team Arm projects and individuals who have taken on the role of Champions. They work with their colleagues to raise funds, volunteer time, and offer skills to benefit local communities and wider society.


1

U.S. **Team Arm has a tradition of volunteering at The Tech Interactive, a science and technology center in San Jose, California.**

Arm employees support the annual Tech Challenge, which invites teams to engineer solutions to real-world problems, and assist the center with exhibits for the Girls@ TheTech program, designed to inspire more girls to study STEM. Arm also sponsors an annual visit to the center, enabling around 100 5th grade students to enjoy a day of science and exploration.

"The children are so excited for this opportunity that Arm has provided."

Mrs. Hingraji
5th Grade Teacher, Pearl Zanker Elementary School
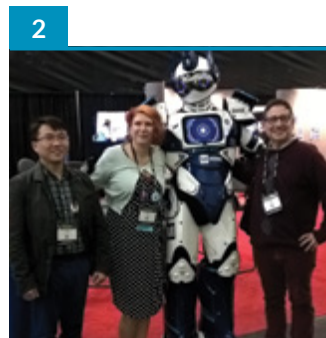
2

U.S. **Arm has formed a deep relationship with FIRST—an organization with a mission to inspire young people's participation in science and technology.**

Boston-based staff engineer Rick Mankin and a number of colleagues have helped set up the company's global sponsorship of FIRST Tech Challenge's Control Hub Award.

"When I attended the FIRST Championship, I was touched by how Arm technology is reaching so many people across the globe. Our processors were part of almost every robot yet our name was not very visible. We hope Arm's support for the Control Hub tech challenge will build more awareness among the young teams and their mentors."

Rick Mankin
Arm Staff Engineer

3

U.K. **Arm is a driving force behind Sheffield Business Together, a consortium of city employers set up to maximize the positive impact of employee-led volunteering.**

Arm employees co-founded the consortium, and Peter Rowe, one of our senior managers, chairs the steering committee. Arm also led the group's support for Snowdrop—a charity for survivors of modern slavery. Local businesses helped them move location and upgrade accommodation, providing £30,000 in corporate donations, 350 hours of volunteering time and £1,000 in employee donations.

"It was amazing to see businesses pulling together and there have been so many positive comments about the all-round benefits. It astounded me how generous people and businesses are when needed."

Chris Taylor-Cook
Arm Sheffield
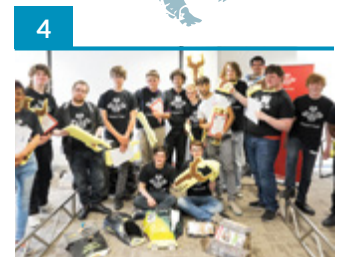
4

U.K. **Team Arm's partnership with the Prince's Trust has seen employees volunteer more than 950 hours for the Get Started with Technology program for young people.**

Arm donated over £500,000, and 215 employees gave their time to host workplace insight days, help run the programs, and be long-term mentors.

"The memory that really stuck with me is the contrast between the shy, reserved young people full of self-doubt at the beginning of the week and their only-a-few-days-older selves, confidently presenting their work and plans for the future. The impact of even a few days of interesting and motivational activities is truly astonishing."

Lukas Krasula
Senior Image Quality Engineer

5,985

established employees.

30,000

hours of company time contributed to volunteering between April 2016 and the present day.

70%

of Team Arm projects focus on education.

5

Sweden **Thanks to Arm employees at our Lund office, grade 4 girls studying STEM have the chance to hone their coding with the help of experts.**

Team Arm volunteers joined with Malmö University to invite 50 grade 4 girls to work on their skills next to female tech students and Arm technologists. Since the first event, held to mark Ada Lovelace Day, engineering and technology sessions have been added to the event, and more Arm employees are getting involved.

"It was great to see how enthusiastic and proud the kids were—and we received good feedback from the teachers that the kids had continued working with the micro:bits at school."

Anders Fyhn
Staff Engineer

6

Hungary **Arm volunteering is creating an educational ecosystem around the micro:bit that engages students in a fun and creative way.**

Team Arm volunteers teach the students and hold workshops for teachers. In collaboration with a university, the company lends free micro:bit kits to schools.

"So far we've educated more than 100 teachers and reached out to 160 schools and 15,000 students aged 10 to 18. The Facebook group we set up for teachers has 500 active members. We've now created a webpage hub for all micro:bit activity in Hungary and started a robot competition for children. It's great that more and more Arm colleagues are getting involved every year."

Tamas Fulop
Senior Applications Engineering Manager

7

Israel **Working with the Amichai Association, Arm employees at our Ra'anana office are helping kids with special needs to have fun and enjoy their day.**

Twice a year, a group of Team Arm volunteers help out at sessions where the children take part in activities and games they really enjoy.

"It's wonderful to see how much happiness the kids get from taking part. Day-to-day things that we take for granted are really special for them, and the experience gives us a new understanding on life. It also helps us connect with Arm's mission, by connecting with the community and believing in the Global Goal—taking part makes us feel we are part of an amazing company!"

Limor Jhan
Office Manager

8

India **Food drives organized by Team Arm are a vital part of supporting disadvantaged children and families living in slums in Noida, Uttar Pradesh.**

Each food drives aims to provide families with a month's supply of provisions. The Arm volunteers also ran a campaign for food and raw material donations in the office.

"The most fulfilling part was meeting the little children. As we handed over the food packets, we spoke to them about washing hands and brushing teeth. Some of them seemed clearly malnourished. We came back with the satisfaction of knowing their lives had been made slightly easier for the time being. We plan to continue regular food drives and also organize a basic health camp to improve conditions for people in these slums as much as we can."

Aarushi Girdhar
Memory Design Engineer

Sustainability at Arm

At Arm, sustainability is embedded into our practices. Our Code of Conduct provides the foundation of our ethics and compliance program, ensuring we manage our business with integrity and accountability. This includes our approach to issues such as the environment, human rights, whistleblowing, and anti-bribery and corruption. A well-defined governance structure—starting with the Arm Board, then the Executive Committee, including an Executive Committee sub-committee on sustainability composed almost entirely of C-suite executives—reflects the importance of top-level engagement in driving our sustainability strategy.

The following section provides some of our key data highlights for financial year 2018 (year ending March 31, 2019). Our full Data Report can be found at www.arm.com.

Key Economic Data

Arm is headquartered in Cambridge, U.K. and has 50 offices in 23 countries, with major R&D centers in the U.K., U.S., China, Israel, France, Norway, and Sweden. We continue to show strong, sustainable growth year on year.

£1,395m
Revenue

33%
Market share*

90%
Market share for Arm-based application processors in mobile devices

22.9bn
Arm-based chips shipped

1,694
Cumulative licenses signed

Our People

Our culture is based on empowering everyone at Arm to release their creative potential and build business value in the process, following our Core Beliefs:

We, not I

Passion for progress

Be your brilliant self

We aim to be the best company to work for in our target markets, with a culture rich in innovation and collaboration.

Our People Group supports our corporate strategic objectives. It does this by ensuring that our policies, systems, and processes are efficient, impactful, and meritocratic, enabling a high-performing

and highly engaged organization. Arm strives for equal opportunities and does not tolerate any harassment of, or discrimination against, our people.

Equal opportunity policies and related legal obligations are monitored and managed by the People Group and Legal Department.

5,985
Employees worldwide

89
Nationalities employed by Arm globally

1,180
Female established employees (20%)

25%
Female Executive Committee members (three)

* Note that market share is lower than previously shown as market definition has been expanded.

Our Environmental Efforts

Arm does not currently have any material impacts or risks relating to water, materials, biodiversity, products and services, compliance, or transport. However, we recognize that all human activities, including Arm's day-to-day activities, have an impact on the environment. We are committed to a program of continuous environmental improvement to conserve natural resources and minimize adverse impact from our operations.

Arm is a founding signatory to the Step Up Declaration, an alliance formed in 2018 dedicated to harnessing the power of the fourth industrial revolution to rapidly reduce greenhouse gas emissions across all economic sectors. We remain committed to the alliance and are currently exploring responsible offsetting mechanisms for the tech sector at scale.

We joined the United Nations Global Compact Pathways to Low Carbon Development platform in 2019. The platform has a focus on corporate engagement with governments around climate policy and increased corporate ambition for science-based targets.

As at March 31, 2019, we have achieved our 2020 carbon and energy consumption targets set in 2011 using a 2010 baseline. We recognize the need for ambitious goals in order to avert the climate crisis and have explored science-based targets. Details of our environmental targets will be confirmed once this process is complete. We also acknowledge the need to work internally and with suppliers and service providers to achieve significant reductions in both intensity (based on full-time employees) and absolute reductions.

Alongside this, we will continue to understand and quantify the positive impact that our technology has in avoiding emissions and energy consumption in its end use. In particular, this can be demonstrated through the use of Arm server infrastructure technology, which is already demonstrating significant energy savings for users.

Energy Data

Energy consumption, electricity only (MWh)

FY 2018	36,677
FY 2017	35,349
FY 2016	31,873

Energy intensity ratio by headcount, electricity only (MWh)

FY 2018	5.04
FY 2017	5.40
FY 2016	6.15

Sterling revenue normalized (£m)

FY 2018	1,395
FY 2017	1,368
FY 2016	1,297

Carbon by economic output (tCO$_2$e/£m)

FY 2018	25.57
FY 2017	24.60
FY 2016	23.90

Emissions by Scope (tCO$_2$e)

FY 2016

439
14,864
15,692

FY 2017

269
20,391
13,061

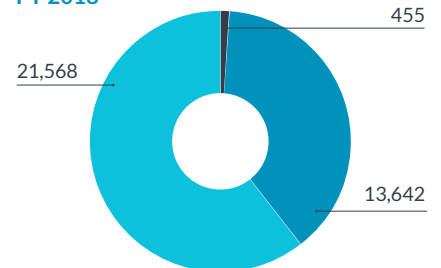**FY 2018**

455
21,568
13,642
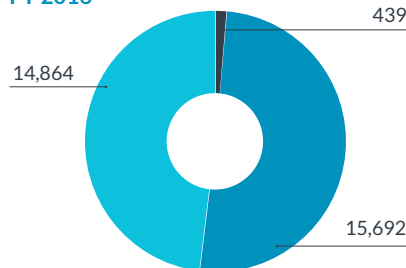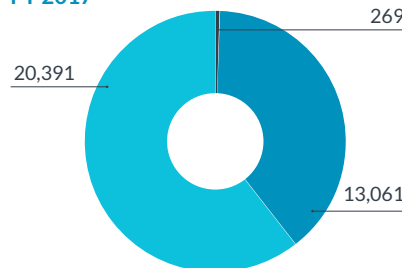
Emissions by Scope (tCO$_2$e)

- Scope 1 (direct emissions)
- Scope 2 (indirect emissions from purchased electricity)
- Scope 3 (indirect emissions, including air travel)

arm

Arm technology is at the heart of a computing and connectivity revolution that is transforming the way people live and businesses operate.