

Capgemini Environmental Sustainability

2018/19 Report



Capgemini 

Welcome to the Capgemini Environmental Sustainability Report

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This report provides details of our environmental performance in 2018 and highlights the continued evolution of our Environmental Sustainability approach.

Scope:

Unless stated otherwise, the data in this report covers the Environmental Sustainability activities of the Capgemini Group for the calendar year 2018. This report complements the information published in the CSR section of our Registration Document 2018, our Annual Report 2018 and our Integrated Report 2018.

Feedback:

We welcome feedback on our approach to environmental sustainability and the content of this report. Please email sustainability.reporting.uk@capgemini.com

Find out more:

For more information about our program please visit:
www.capgemini.com/corporate-responsibility/



Executive Introduction ...	4
About Capgemini ...	5
Our Sustainability Strategy ...	6
We are Resourceful ...	7
We are Impactful ...	15
We are Accountable ...	19
Future Plans ...	22
Performance Scorecard ...	24
KPMG Assurance Statement ...	34

Serge Kampf Les Fontaines Campus (France) is ISO 14001 certified, has a Green Star award and is EU Ecolabel certified

Welcome to our 2018/19 Environmental Sustainability Report

Capgemini's Environmental Sustainability program is about building innovative solutions to important environmental issues, both within our business and importantly, for our clients.

In 2018 there was heightened public awareness and action on a number of crucial environmental issues, from plastic pollution in the ocean to biodiversity loss and climate action. Globally, a record-breaking 3,500 events were held in celebration of the UN's World Environment Day in 2018. The associated #BeatPlasticPollution campaign continues to be widely discussed on social media. Publication of the Intergovernmental Panel on Climate Change (IPCC)'s Special Report on Global Warming provided the most urgent warning to date of the need to accelerate the global response to climate change.

2018 was also a year of accelerated progress for Capgemini. Significantly, we were delighted to hit our 2020 carbon reduction target two years early, with a 21% reduction in carbon emissions per employee since 2015. This was driven by an extensive set of travel and energy initiatives across the Group, and marks a significant milestone for Capgemini, and a big step forward on our Environmental Sustainability journey.

While focusing on minimizing our own environmental impacts is an important starting point, we are aware we can have a far greater positive environmental impact through helping our clients to address their sustainability challenges. Our focus throughout 2018 has been on strengthening our client focussed sustainability program. We have identified over 30 capabilities which can deliver sustainability benefits for our clients and we are already implementing these for a number of clients. These will contribute towards the achievement of our new target: to help our clients save 10 million tonnes CO₂e by 2030. As part of launching this focus, over 1,500 team members were trained on sustainability topics this year, empowering them to start new conversations with their clients.

This report provides a snapshot of the initiatives in place across the Capgemini Group to embed Environmental Sustainability both within our business operations and through the work we do with clients.

Our progress to date is a result of the collective impact of our team of over 200,000 people worldwide, who are helping us become Architects of Positive Futures.

Rosemary Stark,
Chief Sales Officer

Group Executive Committee
Executive Sponsor for Environmental Sustainability



“Capgemini's Environmental Sustainability program is about building innovative solutions to important environmental issues, both within our business and importantly, for our clients.”

About Capgemini

A global leader in consulting, technology services and digital transformation, Capgemini is at the forefront of innovation to address the entire breadth of clients' opportunities in the evolving world of cloud, digital and platforms.

People Matter. Results Count.



We are a multicultural, global organization made up of over

210,000
Capgemini employees worldwide, from over **40 countries** and representing over **120 nationalities**

€13.2bn
revenue

12.1%
operating margin

€1.16bn
free cash flow

4.2/5
client satisfaction level

We serve **73%** of the 200 largest companies on The Forbes Global List

95% of our turnover comes from repeat clients

Our Core Values



Honesty



Boldness



Trust



Freedom



Fun



Modesty



Team spirit



Find out more:



Link to Environmental Sustainability [website homepage](#)



Link to Environmental Sustainability [policy documents](#)



Link to Environmental Sustainability [awards and recognitions](#)

Our Environmental Sustainability pillar is part of our wider Architects of Positive Futures program.



“ Our mission is to use our expertise to drive positive change for our own business, our clients and for society as a whole. We focus on programs which nurture diversity, promote digital inclusion and advance environmental sustainability. ”

Christine Hodgson
Chief CSR Officer
Chairman, Capgemini UK Plc
Group Executive Committee member



Our Environmental Sustainability Strategy and Highlights



“ Our Environmental Sustainability strategy is about reducing our own environmental impacts against ambitious targets and increasing the resilience of our business against the impacts of climate change. We are committed to expanding our reach beyond our own direct operations to help our clients address their sustainability challenges through delivering innovative and sustainable technology solutions. ”

Dr James Robey

Global Head of Environmental Sustainability

THREE PILLARS OF OUR PROGRAM

We are **RESOURCEFUL**

We drive efficiency and innovation across our business operations, focusing on our most material environmental impact areas – travel reduction, energy efficiency and waste management. Actions and initiatives are driven at a country level but unified by a set of ambitious global targets, with an overarching target validated by the Science Based Targets initiative (SBTi). This confirms that our goals are consistent with the global effort to keep average temperature increase below the 2°C threshold agreed at the COP21 climate conference in Paris.

We are **IMPACTFUL**

We recognize the greatest contribution we can make to addressing environmental challenges is through the services we deliver to our clients, leveraging our combined innovation and capabilities. Technology is one of the key levers available to address the mounting challenges posed by climate change. We have a new target to help our clients save 10 million tonnes of CO₂e by 2030.

We are **ACCOUNTABLE**

We monitor and report our environmental impacts transparently using a world-class carbon accounting system, to meet our ambitious Science-Based Targets. The roll-out of our ISO 14001 Environmental Management System, deployed by our Global Sustainability Center of Excellence, provides a consistent and efficient approach for managing our impacts. Our global Climate Change Risk Assessment process uses scientific research to identify the top climate hazards posed at a country level, and prioritize mitigation strategies where they are needed most.

2018 HIGHLIGHTS

- We achieved our 2020 target two years ahead of schedule, with a 21% reduction in carbon emissions per employee achieved since 2015
- We have reduced office energy use by 7% since 2015 despite increasing our total office floor space by 7% over the same period of time
- We made environmental sustainability the theme for three key focus weeks, reaching over 1,000 of our leaders and client facing teams
- We identified over 30 services that can help our clients reduce their environmental impacts
- We expanded our global ISO 14001 coverage adding three new countries (Australia, Italy and China) to our global ISO 14001 certificate
- We developed a new set of interactive dashboards, providing a more engaging and dynamic way to track our carbon impacts

We are Resourceful

OUR APPROACH

According to the Global Footprint Network it would take 1.7 Earths to replenish the natural resources we collectively use as a planet each year¹. A growing population, urbanization and increased rates of consumption are leading to unprecedented depletion of natural resources and damage to fragile ecosystems. Over the past decade, environmental concerns have climbed up the global agenda, with climate change and its related impacts featuring in the World Economic Forum's top five Global Risks every year since 2011.

The 'Resourceful' pillar of our program focuses on the continual reduction of our most material environmental impacts: energy use, travel emissions and waste.

We reduce the energy use in our offices and data centers through our holistic approach to energy management which focuses on increasing energy efficiency. We also identify opportunities to switch to renewable energy sources where possible. Our travel programs seek to reduce business travel emissions by promoting smart, safe

and sustainable travel, as well as identifying alternatives to travel. We are also embracing circular economy principles, seeking to not only to reduce and recycle but to design waste out of our operations.

A full breakdown of our environmental impacts and performance across these areas is available in the performance scorecard chapter of this report.

[1] Global Footprint Network - <https://www.footprintnetwork.org/>

IN THIS CHAPTER

- >> Cutting our carbon footprint
- >> Reducing our energy use
- >> Smarter with our travel
- >> Waste and Circular Economy

Cutting our Carbon Emissions

Meeting our science-based target

We are committed to cutting our carbon emissions, with a target which focuses on decoupling our development as a business from our total greenhouse gas emissions.

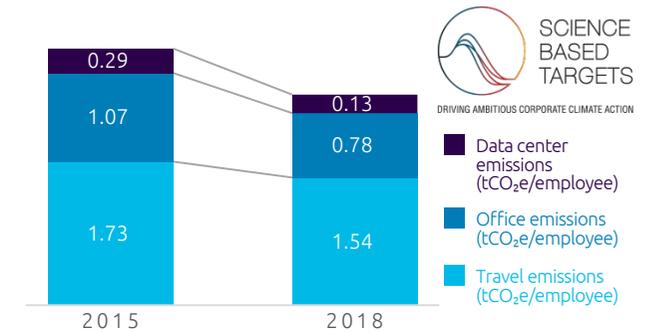
In 2017, we became one of the first companies in our sector to have our target validated by the Science Based Targets initiative (SBTi), confirming it is consistent with the global commitments agreed at the COP21 climate change conference in Paris:

To reduce our total carbon footprint per employee by 20% by 2020 and by 30% by 2030 (vs. 2015 baseline).

We were delighted this year to reach our 2020 target two years ahead of schedule, with a 21% reduction in greenhouse gas (GHG) emissions per employee achieved since 2015.

Since 2015, we have achieved a 9% reduction in absolute GHG emissions, whilst at the same time growing our global headcount by 15%² and our revenues by 11%³. This demonstrates that we are starting to decouple our business growth from our carbon emissions, a critical step businesses must take as we transition towards a low carbon economy.

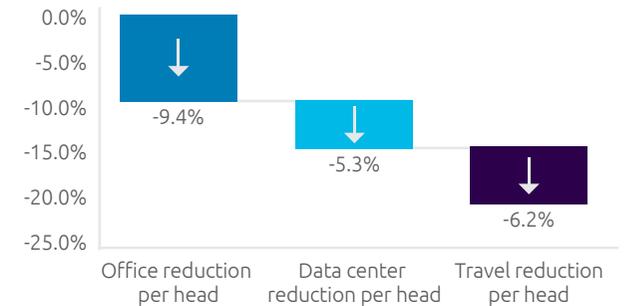
How have our carbon emissions per employee changed since 2015?



“ Achieving a 21% reduction in emissions per employee marks a significant milestone for our Group, and a big step forward on our Architects of Positive Futures journey. ”

Rosemary Stark,
Chief Sales Officer
Group Executive Committee
Executive Sponsor for Environmental Sustainability

What are the components of a 21% reduction since 2015?



[2] average headcount across each calendar year
[3] revenues calculated year-on-year at constant currency

Building a More Sustainable Future

Our 21% reduction in carbon emissions per employee since 2015 has been driven by combined action from many of our teams including facilities, procurement, Group IT, sustainability leads and individual employees, all seeking to embed sustainable behaviors and actions into the way we operate. A range of example initiatives are given below:



Business Travel Initiatives

Invested Microsoft™ Surface Hubs and Office365 to enable virtual collaboration

Equipped meeting rooms with the technology to hold a video conference through Skype

Installed electric vehicle charging points across multiple locations

Introduced electric pool cars available to use in key offices in France and the Netherlands

Incentivised the use of public transport through free weekend rail travel in the Netherlands and ticket printing facilities in the UK

Introduced Cycle to Work and car sharing schemes to enable a more sustainable commute

Developed a communication campaign to encourage people to replace 1 in 5 business trips with a virtual meeting



Energy Efficient Data Centers

Installed LED lighting and smart building controls to reduce the energy consumption of data centers

Introduced fresh air cooling systems to reduce air conditioning demand

Closely monitored the Power Usage Effectiveness (PUE) of all of our data centers



Renewable Energy

Invested in solar power generation, with panels installed across several of our large offices generating over 5GWh

Purchased our electricity from renewable energy sources across several key geographies



Creating Sustainable Workplaces

Introduced fresh air cooling systems to reduce air conditioning demand

Installed LED lighting with motion sensors

Purchased energy efficient office equipment such as hand dryers and hot water taps

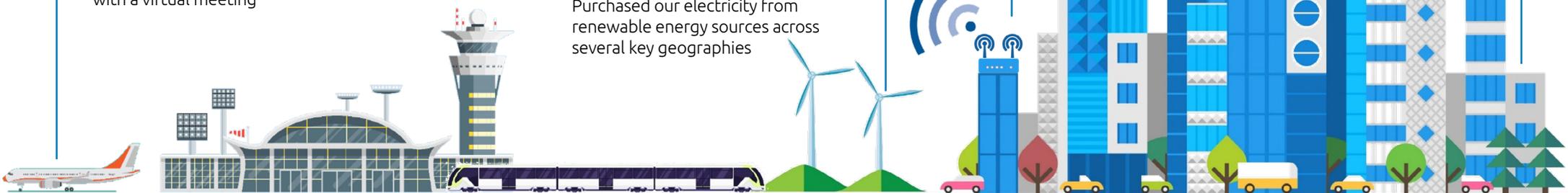
Introduced rainwater harvesting and borewells to provide a sustainable water supply

Built onsite sewage treatment plants to recycle waste water

Enhanced building management systems to maximise heating and cooling efficiencies

Installed energy efficient district heating and cooling systems

Consolidated the number of offices we occupy to increase utilisation and energy efficiency



Reducing our Energy Use

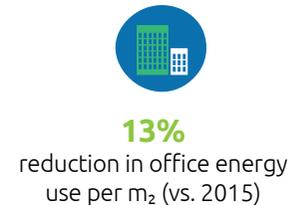
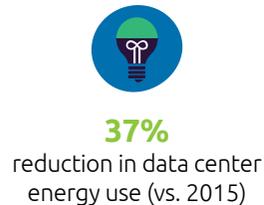
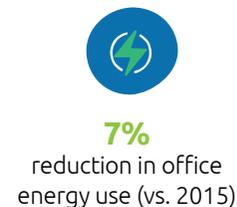
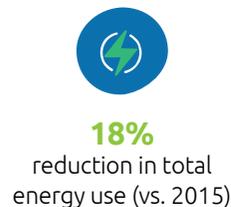
We consider energy efficiency in all aspects of our office and data center operations, from the smart management of lighting, heating, and cooling systems, to creating more agile, collaborative, and innovative workplaces which reduce the amount of office space we occupy. Employee action drives further progress in many countries, for example through creative switch-off campaigns and office energy champions to inspire sustainable behavior change.

Across the Group, we have reduced total energy use by 18% since 2015, driven by a 7% reduction in office energy use and a 37% reduction in data center energy use.

Investing in renewable energy

As well as controlling and reducing our energy use, we look for opportunities to switch to cleaner, renewable energy sources. We continue to invest in renewable energy, with large solar PV arrays installed across five offices in India (as well as a small solar array in the UK). In addition, several Capgemini entities including India, Brazil, Portugal, Switzerland, the Netherlands, Sweden, the UK, Norway, Belgium, Germany and Finland continue to purchase a significant amount of electricity from renewable energy sources, with 24% of our total global electricity supply coming from renewable energy sources in 2018.

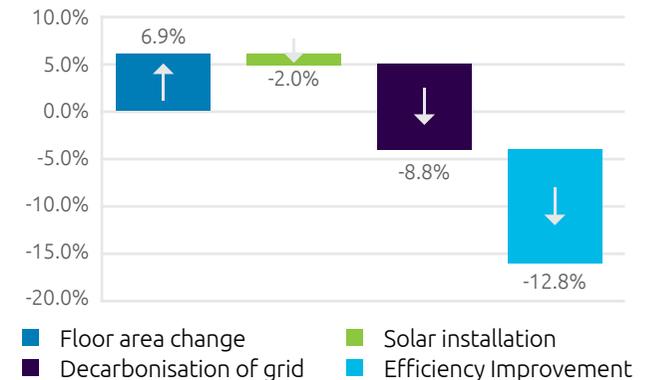
In 2018, we generated **5.1 GWh** of solar electricity, enough to power **4,600 Indian homes** for a year.



How have we reduced office energy emissions?

Overall the carbon emissions associated with our office energy use has reduced by 17% since 2015, despite expanding our office space by 7% since 2015. This has been achieved by the installation of solar panels (2% emission reduction) and improvements to the energy efficiency of our space (resulting in a 13% reduction). In addition, we have benefitted from the overall decarbonisation of electricity grids in the countries we operate (driving a 9% reduction).

What has driven our 17% reduction in office energy emissions since 2015?



Key energy efficiency measures



1. Monitoring and assessment

- Installed smart meters
- Conducted energy audits
- Set facility level energy targets



2. Building controls

- Installed building management systems
- Fitted passive infrared sensors
- Set efficient timer & thermostat settings



3. Energy efficient technology

- Fitted LED & motion sensor lighting
- Installed efficient heating and ventilation systems, including use of fresh air cooling
- Switched to more efficient uninterruptible power supply systems



4. Space utilisation

- Reduced under-utilised space
- Improved the layout of workspaces
- Moved to sustainability-certified buildings (with standards such as LEED, BREEAM or IGCB)

Office Energy in Focus

Increasing energy efficiency in India

India is home to over 100,000 Capgemini team members, with most people working on site from over 40 facilities. Our Indian offices account for over 56% of the Group's office energy consumption and 78% of office energy emissions making it a priority focus and consequently we have taken significant steps to improve the energy efficiency and sustainability credentials of our offices.

We have carried out significant improvements to our ventilation and air conditioning infrastructure helping to improve the energy efficiency per square meter of our Indian offices by 7% in 2018 and by 14% since 2015. One example from 2018 was the addition of three kilometres of chilled water piping and the replacement of over 70 air handling units in our Mumbai campus, expected to deliver a 1.6 million kWh saving per annum.

We have also invested in digital platforms to provide real-time monitoring of our energy system and solar plant performance. These systems help us to better manage our



Image: Solar Panels on the roof of the car park at our Hyderabad campus

energy generation and consumption through providing real-time data that we utilize to make decisions and see the impact immediately.

Eight buildings in India have achieved LEED Platinum (Leadership in Energy and Environmental Design) or IGCB Platinum (Indian Green Building Council) certification, a recognition of the sustained focus on improving the operational efficiency and reducing our use of natural resources across these sites.

Investing in renewable energy in India

We continued to develop our renewable energy capacity across our Hyderabad, Chennai and Pune campuses and have commissioned additional solar installations at our Bangalore and Mumbai campuses. In total, we have deployed over 5 MW of solar power within our facilities which generated 5.1 GWh of electricity in 2018, and should generate 7.5 GWh per year once fully operational.



Taking inspiration from the natural environment, India's Corporate Real Estate Services team also created and installed the first ever solar tree (pictured left) at our Airoli campus in Mumbai. The unique tree-like structure has a functional power generator that mimics a tree trunk with solar panels acting as leaves.

In total, over 1500 solar panels have been installed at our Airoli campus, which generate 675,000 kWh of electricity annually, helping to avoid 580 tonnes of CO₂e.

We also look for opportunities to purchase renewable energy where possible. In 2018, we signed new power purchase agreements in Bangalore to supply 10 million kWh of renewable electricity from offsite solar and wind power plants.

Case study: GreenTech, France

We opened one of our most sustainable offices to date this year in Lille, France. 80% of the construction is made from wood and over half of the site is covered by glass maximizing the amount of natural light. The roof houses a solar array which produces more energy than the office itself consumes, leading to the site receiving BEPOS (Positive Energy) certification. In addition, the office is built around a large central garden providing a connection to the natural environment.

Click on the video (below) to find out more.



Smarter with our Travel

Our approach to smart and sustainable travel

As a people-centred business with a global client base, business travel is our most significant impact accounting for more than half of Capgemini's carbon emissions. Reducing our carbon footprint requires minimizing our business travel emissions, but without compromising on the value we gain from spending time face-to-face with our clients.

We focus on helping team members make smart and sustainable choices when it comes to travel, with a travel strategy that has three main elements:

1. Promoting virtual collaboration and technology-enabled meetings as an alternative to travel

For example, we have rolled out Microsoft Surface Hubs across key offices to enable our people to connect and collaborate without the need to travel.

2. Encouraging modal shift to lower carbon travel options such as rail, public transport or cycling

For example, in France we have added alerts to online travel booking tools encouraging people to book key domestic routes by rail instead of air.

3. Changing culture and behaviors around travel to give people freedom, flexibility and accountability for their travel choices

For example, in Germany we invited car drivers to come up with their own ideas on how they could reduce fuel emissions or in the Netherlands where fuel efficient driving is financially rewarded.



11%
reduction
in travel
emissions
per head
since 2015



7%
reduction in
air travel
emissions
per head
since 2015



22%
reduction in
car travel
emissions
per head
since 2015

Case Study: Poland Sustainability Week

Capgemini Poland hosted a sustainability week in 2018, with a focus on encouraging people to make smart and sustainable travel choices. During this week, an eco-commute photo contest was held to raise awareness of sustainable ways to travel to work, and we installed a blender bike at our Krakow office, with people cycling to blend fruit smoothies. In addition, Capgemini Poland's cycle club rode from our Krakow to Katowice office, covering over 227 km and encouraging people to feel confident tackling the roads by bike.



Images: Capgemini employees enjoying the blender bike (left) and cycling club setting out on their 227 km cycle (right)

Case Study: Netherlands Mobility Plan

For Capgemini Netherlands, a comprehensive mobility program continues to drive reductions in business travel emissions, with an overall reduction in travel emissions of 19% since 2015. The program focuses on making sustainable choices attractive and beneficial for employees, with key elements including:

- A flexible mobility budget to give employees more freedom and control over their travel decisions;
- A lease arrangement which incentivizes employees to choose fuel efficient, lower emissions lease cars and a telematics system which tracks and rewards fuel efficient driving;
- Free public transport travel for employees with a lease car. All other employees can benefit from the NS Business rail card arrangements (easy access, lower prices);
- A range of financial incentives offered both for purchase and business use of bicycles; and
- Provision of eBikes and eCars for all employees for shared use at the Utrecht and Amsterdam offices.



Business Travel in Focus

Promoting virtual ways of working

At Capgemini we are committed to creating a fully digital workplace, in which people have the tools and support they need to be able to collaborate and deliver without even stepping into an office. This means ensuring our physical workspaces are set up to maximise digital collaboration, as well as providing employees with access to the technology they need to connect seamlessly with colleagues and clients from any location, and any device.

Throughout 2018, we continued to invest in technologies to enhance collaboration; this includes deployment of Office365 across the whole Group and the installation of Microsoft Surface Hubs, which enable users to collaborate on documents and digital whiteboards across multiple locations in real-time. We have seen a continued increase in virtual collaboration, with 11.7 million hours of Skype for Business calls held in 2018 (a 28% increase from 2017).



11.7 million hours

of Skype for Business calls held in 2018
(a 28% increase vs. 2017).



Case Study: Using digital platforms to enable carpooling

The Corporate Real Estate Services team in France implemented a 100% digital carpooling solution called Ecocapcar in 2018. Using a dedicated app with a virtual key, employees can book an electric pool car, calculate the distance to their destination and identify a suitable vehicle based on charge capacity. Ecocapcar provides a valued opportunity for employees to experience driving an electric vehicle for themselves, whilst also reducing the carbon impacts of business trips.



In India, Capgemini has partnered with 'sRide', India's largest carpooling app which connects car owners with commuting employees to reduce the pressure on the roads. Carpooling through the sRide mobile app has been rolled out across 12 Indian cities with an exceptional uptake. Capgemini has the highest number of registered sRide users amongst IT companies with approximately 50% of our India colleagues becoming active users. 5.3 million car pool kilometers were logged on the app in 2018, helping to save over 1,000 tCO₂e from commuting, as well as reducing congestion and air pollution.



18,975

Capgemini India employees
signed-up to use the sRide
carpooling app in 2018



5.3 million km

Of carpooling completed
by our people in 2018



1,027 tCO₂e

Avoided through the
use of carpooling in 2018

Case study: Virtual Collaboration Hubs, UK

In a survey conducted in the UK, 89% of our respondents agreed that increased use of virtual collaboration tools would reduce the need to travel. As a result, a working group was established in 2018 with representatives from Sustainability, IT and Facilities to advance our virtual collaboration journey.

This group has established a proof of concept for 'Virtual Collaboration Hubs' - dedicated spaces within our offices where people can collaborate on documents and digital whiteboards across multiple locations in real-time whilst on a video call. A key finding from the pilot was that people need the opportunity to experiment and learn the technology for themselves before they fully embrace the benefits.

This proof of concept has proved popular with a number of strategic accounts and will be scaled up throughout 2019. Not only will this support our continued travel emissions reduction, it will also help improve wellbeing, reduce travel costs and showcase sustainable innovation.

Waste and Circular Economy

Managing our waste effectively is important in terms of minimizing our use of finite natural resources, as well as being a tangible, impactful way of demonstrating our environmental commitments to our people. We have reduced the total amount of waste we generate by 17% since 2015, a positive outcome given our workforce increased by 15% over the same period. In addition, we increased recycling rates, with a 30% reduction in waste sent to landfill.

Our focus remains on both minimizing the waste we generate and increasing recycling and reuse. We also embrace circular economy thinking, looking for opportunities to maintain products and materials in a cyclical use phase wherever possible. This includes localized initiatives such as swapping disposable cups with reusable ones or choosing furniture and carpets which are built for long-term durability (and can eventually be recycled in a closed loop back into the same product). Where possible, we partner with charities and universities to reuse stationery, furniture and technical equipment.

When it comes to the disposal of IT assets, we work with regional specialists to ensure our IT equipment is reconditioned and reused wherever it can be, or otherwise disposed of sustainably and securely. For example, in France our partnership with Nodixia means employees are able to recondition both personal and company-issued electronic devices. Nodixia processed 8,100 electronic items in 2018, with 75% of the devices reconditioned for reuse and 25% broken down into components and recycled. This initiative also has social benefits, with Nodixia employing people with disabilities and reinvesting part of their profits in social development projects.

An important area of focus throughout 2018 has been on working with our facilities and procurement teams to phase out the use of single-use plastics from our

operations. Our aim is to eliminate single-use plastics from our offices operations by 2020. Significant progress has been made on removing and replacing key plastic items including plastic cups, bottles, straws, stirrers, plates and cutlery from our offices.



17%
reduction in total
waste generated
(vs. 2015).



28%
reduction in waste
per employee
(vs. 2015)



30%
reduction in
waste sent to
landfill (vs. 2015)

Case Study: Les Fontaines Food Waste

Our Serge Kampf Les Fontaines University in France is a state-of-the-art sustainable facility which has achieved the [IAAC](#) Green Star award, is EU Ecolabel certified and has achieved ISO 14001 certification.

At the campus, we serve approximately 150,000 meals a year leading to around 60 tonnes of food waste. In addition to reducing the amount of food waste we generate, we have taken steps to close the loop on our food waste stream through installing a food waste dehydrator that transforms every 100 kg of waste into 10 kg of fertilizer. We use this fertilizer in our 52 hectare park and woodland, with our food waste becoming an important input to the life cycle.

Case Study: Community Waste Projects in Bangalore

Waste management poses a significant problem across India, with urbanisation and a growing population putting huge pressure on waste infrastructure. Consequently, large amounts of waste are sent to landfill, giving rise to groups of waste pickers making a living by collecting and selling waste.

To help address the environmental and social challenges this poses, Capgemini's Bangalore office initiated a decentralised waste management approach in partnership with the Municipal Corporation and NGO partner Saahas. We provided the infrastructure, technical equipment and funding required to ensure the safe and proper segregation and treatment of waste, whilst working with Saahas to provide employment opportunities for the local community.

The center now processes 2.5 tonnes of waste per day, with waste segregated into wet waste which is shredded and composted and dry waste which is sorted and sent for recycling. The project has engaged the local community, with over 240 students from six local schools invited to visit the project and learn about waste handling. Capgemini team members have also been involved as volunteers from the inception of this project, supporting awareness raising, education and other program activities.



A group of students visiting the Kasa Rasa waste management center

We are Impactful

OUR APPROACH

We firmly believe that technology is one of the key levers we have to meet the mounting challenges posed by climate change. The fourth industrial revolution, driven by technologies such as artificial intelligence, machine learning and the Internet of Things, is set to transform how humanity manages its environmental impacts.

It is estimated that the ICT sector has the potential to cut 9.7 times⁴ more greenhouse gas emissions than it produces. IT solutions have the potential to make a significant positive contribution to increasing efficiency and delivering a more sustainable future for our environment.

As a global leader in consulting, technology services and digital transformation, we are strongly placed to help transform the way our industry thinks about sustainability and ensure that the maximum positive impacts are achieved for our planet through technology.

We have set a new target to help our clients save 10 million tonnes of CO₂e by 2030 by leveraging the combined innovation and capabilities of the Group. Working with our clients to deliver sustainable services is a real opportunity for Capgemini to demonstrate leadership in the industry and support the transition to a low carbon economy.

[4] Global e-Sustainability Initiative - <http://smarter2030.gesi.org/>



IN THIS CHAPTER

- >> Supporting clients' sustainability challenges
- >> Energy and Utilities in focus
- >> Engaging our networks to maximise our impact

Supporting Clients' Sustainability Challenges

Advancing our Client Sustainability Program

The combined direct carbon emissions of our top 20 global clients is approximately 250 million tCO₂e⁵ per year. This equates to over 500 times Capgemini's global annual carbon emissions. We recognize that whilst continuing to reduce our own operational impacts is essential, we can play a far greater role in addressing climate change if we collaborate with our clients on this topic. This is why we launched a new global ambition to help our clients save 10 million tonnes of CO₂e by 2030.

Our new commitment will require a step change in our business, rethinking the way in which we view and use technology and embedding sustainability benefits into our portfolio of services. The focus during 2018 has been on identifying service areas and specific capabilities that can and are delivering tangible sustainability benefits to our clients. We have identified over 30 capabilities from within our portfolio that can help clients reduce their carbon emissions. Here are some of examples of the ways our services are already helping clients reduce their environmental impacts:



Developing sustainable technology. For example, using artificial intelligence to analyze and optimize energy consumption in a water utility company.



Creating sustainable business models. For example, centralizing a retail company's stock procurement model to reduce the emissions from transporting goods and waste from uncoordinated purchasing plans.

[5] Client carbon emissions taken from the 2017 CDP disclosure and includes direct (scope 1 and 2) emissions only



Leveraging data and insights to drive sustainable performance. For example, visualizing a manufacturer's energy consumption and carbon emission data to enable identification of opportunities to reduce impacts.



Providing managed services that increase efficiency. For example, our energy savings as a service product has helped cut a utility company's energy consumption by 20% per annum.



Optimizing assets to reduce emissions and consumption. For example, installing transport management systems helps optimizing client's fleets and logistics, reducing fuel consumption, costs and carbon emissions.



Providing platforms that enable sustainable technologies. For example, helping energy utilities implement smart meters and smart grids enables better management of supply and demand, and integration of renewable energy.

Measuring our client impact

In order to identify carbon savings and measure the collective impact of our clients' services we have developed a number of measurement tools:



Service Carbon Impact Calculator

Our carbon calculator enables us to understand the carbon savings our services provide our clients. This calculator can be used to provide carbon savings to supplement our business case and differentiate us in the market, as well as drive informed Carbon Conversations with clients.



Energy Consumption Model

The Energy Consumption Model is a highly detailed model for understanding the true lifecycle cost of IT estate transformation from an energy and carbon perspective. It takes into account the energy consumption of IT hardware, from servers and networks through to end user devices and embodied carbon during device manufacture to understand the net environmental impact of IT estate rationalization, refreshment and transformation.



“ 2018 has been about laying solid foundations for our client sustainability program. Through a range of formal training programs, webinars and business challenges, we are empowering team members to start conversations with their clients on the topic of sustainability. We've also identified over 30 capabilities we offer which help clients to cut carbon, and have developed strong mechanisms to track this carbon reduction. ”

Matthew Bradley,
Group Environmental Lead (Client Sustainability Program)

Energy & Utilities in Focus

Energy and Utilities is a key sector for Capgemini, representing 11% of our 2018 revenues. The sector also presents a significant opportunity from a sustainability perspective. Global energy-related carbon emissions reached a historic high of 32.5 gigatons of CO₂ in 2018⁶, yet at the same time research suggests that smart grids, analytics solutions and advanced energy management systems can abate 1.8Gt CO₂e, generating \$0.8 trillion in new revenue opportunities⁷.

Energy and Utility companies are facing disruption at unprecedented levels, driven by rapid advancements in digital technology. Edge computing helps utilities to capture and analyze data wherever it's generated – by customers on mobile devices, by sensors in electric vehicles, by machine-to-machine connections in smart buildings. Using this data to drive operational efficiency not only delivers significant financial savings, but also clear environmental benefits for the planet.

Capgemini helps Energy and Utility companies navigate and master these market shifts and technology-triggered trends. Our energy experts work with clients to create a vision and chart a path to digital transformation, equipping them to start projects today that lead to long-term strategic advantage in the market and tangible benefits for our natural environment.

“ Smart grids, analytics solutions and advanced energy management systems can abate **1.8Gt CO₂e** and generate **\$0.8 trillion in new revenue opportunities** ”

(GeSI, Smarter 2030)

Using big data and predictive analytics to identify, prioritize and remedy water leaks

The Challenge

It is expected that two-thirds of the world's population will live in water-stressed countries by 2025^[8]. Water scarcity, extreme weather events and a growing global population are placing huge pressures on water companies to meet the demand for clean water. Reducing the number of leaks across a water network is critical for meeting consumer demand and driving down operational costs. The challenge and opportunity for water companies lies in integrating and analyzing multiple data sources to provide business-driven analytics to identify, prioritize and remedy leaks across their water network to preserve this critical natural resource.

The Solution

Capgemini's big data analytics platform allows clients to bring multiple data sources together from across their operations to identify leaks with greater speed and accuracy. Our analytics solution uses a utility company's existing network data such as pressure and flow to detect and locate leaks faster. We have a highly intuitive user interface which helps operational teams to find and fix leaks faster and reduce the wastage of clean water.

The Result

We implemented a pilot solution for a large UK water company, enabling them to detect nearly 85% of leaks across their network more than 20 days earlier than the current industry average, with 72% confidence level. The solution is having a significant impact on reducing energy use and carbon emissions too, with every 100 megalitres of water saved resulting in a carbon saving of 105 tCO₂e, helping towards our target to help clients save 10 million tonnes of tCO₂e.

[6] Capgemini, 2018 WEMO Report - www.capgemini.com/research/world-energy-markets-observatory-2018/

[7] GeSI, Smarter 2030 - <http://smarter2030.gesi.org/>

[8] http://www.un.org/waterforlifedecade/water_and_sustainable_development.shtml

Engaging our Networks to Maximize our Impact

Empowering our people to take action

We have accelerated our approach to employee engagement throughout 2018, focusing especially on engaging senior leaders and future leaders. Working with the Capgemini University team at Les Fontaines, we made environmental sustainability the theme for three key event weeks, reaching over 1,000 of our senior leaders and client facing teams in 2018. At a country level, we delivered quarterly sustainability webinars in North America with over 1,300 learning hours completed by participants and in the UK we held briefings on our sustainability aspirations with over 500 of our consultants.

In 2018, we integrated sustainability themes into the curriculum of our formal Talent development programs, setting real sustainability business challenges for teams to solve. We also developed a global sustainability e-learning course and launched a new internal website to ensure people have access to the information, knowledge and resources they need to engage with their clients on the topic of sustainability. These topics are clearly capturing people's interest, with 5,000 people signing up this year

“ I strongly believe that in order to live within the finite limits of our planet, we need to find ways towards a more sustainable economy and society. As a Sustainability Ambassador, I aim to foster sustainable thinking within Capgemini, identifying and implementing ways in which we can have a positive impact on society particularly with the work that we do with our clients. ”

Sini Haara, Consultant
Capgemini Sustainability Ambassador

to receive our Environmental Sustainability Newsletter to keep updated on the latest news.

This year also saw the launch of a new Sustainability Ambassadors Network consisting of technology specialists who have a passion for sustainability. The network helps to identify opportunities to engage with our clients on sustainability topics and leverage the positive impacts of our technology services.

Sustainability was also a core component of our AI4Change Hackathon, the largest global hackathon Capgemini has ever run. During our Global Innovators Month, this virtual problem-solving innovation challenge saw over 550 hackers from across 20 countries participating to tackle a wide variety of sustainability and business challenges through the application of Artificial Intelligence.

The team awarded the sustainability innovation prize were India-based team, RPA Rovers, who developed a solution to reduce travel-related carbon emissions using Artificial Intelligence. Their app analyzes multiple travelers' calendars and travel schedules to provide a suggestion on the most carbon efficient time and location to meet.

Engaging our wider network

Taking a digital deep dive on World Water Day

On World Water Day in 2018, we hosted a unique event at our London Accelerated Solutions Environment with one of our UK charity partners, Business in the Community ([BITC](#)) and a number of key clients from the water industry.

The “Digital Deep Dive” event brought together 37 experts from across the water industry to explore how technology can be applied to create a more sustainable future. Participants attended tradeshows designed to inspire thinking around the sustainability benefits of emerging technology. Topics ranged from optimizing energy use through smart data analytics, to using big data and artificial intelligence to map the sustainability risks of water companies.

The aim of the day was to inform recommendations for government and business, and to develop a framework for action, which was presented during Responsible Business Week. You can read more about the event and the ideas developed in this [interactive webpage](#).



Click on the image above to watch the event video and hear directly from some of the event participants

We are Accountable

OUR APPROACH

In a digital and socially-connected world, organizations can build or break trust more rapidly than ever before. Trust in institutions has been at a historically low level over the last decade, but there are positive signs that trust in business is now starting to grow⁹.

Capgemini recognizes that building and maintaining the trust of stakeholders is fundamental to achieving long term sustainable growth. Our focus on being accountable is about taking responsibility for managing and monitoring our environmental impacts and ensuring we communicate our environmental performance in a transparent and accessible way.

Central to the program is our ISO 14001 certified global Environmental Management System. This provides a rigorous, consistent and efficient approach for managing our environmental impacts, responding to legislative requirements and driving our environmental performance.

In addition, we have a comprehensive carbon accounting system through which we accurately measure, monitor and report our environmental impacts across our global operations. The data and insights generated from this system pinpoint improvement areas and drive action at a global, country and business unit level.

Our commitment to transparency and accountability is further demonstrated in the performance scorecard section of this report, where we provide a detailed breakdown of our environmental impacts and share further insights on the drivers of performance.

[9] The 2019 [Edelman Trust Barometer](#) found that that trust in business, and the technology sector in particular, grew significantly in 2018. In addition, it was found that people hold more trust in their employer than any other institution.

IN THIS CHAPTER

- >> Environmental Management
- >> Taking action on climate change

Environmental Management at Capgemini

Expanding our global Environmental Management System

Capgemini Group has a global [ISO 14001](#) certificate for its Environmental Management System (EMS), the culmination of several years' effort developing a global approach to environmental management. During 2018, Capgemini operations in Italy, Australia and China achieved ISO 14001 certification for the first time, joining our global certificate.

The global ISO 14001 certificate now covers 13 countries, 211 facilities and operations associated with 170,157 people. A further four countries have retained individual ISO 14001 certificates covering all or part of their operations, meaning that across the Group 87% of our operations by headcount are now ISO 14001 certified. We are committed to increasing this coverage further, with a target to ensure all Capgemini entities with a headcount of over 1,000 people are ISO 14001 certified by the end of 2020. This ambition will mean bringing more than 15 new Capgemini entities into scope, as well as transitioning all local systems onto the global platform.

Benefits of an Environmental Management System



“ Our Environmental Management System is about more than ensuring legal compliance. It provides a framework for action, transforming the environmental impact of our business. We continue to expand our EMS into new countries with Australia, Italy and China joining our program in 2018. This process is stimulating solid action and delivering significant benefits at a country level. ”



Annelies Hermens
Group Environment Lead

Governance

Our approach to environmental management is underpinned by strong governance and collective responsibility:

THE GROUP CSR BOARD provides executive level governance for the Architects of Positive Futures program, with responsibility for reviewing, debating and approving responsible and sustainable policies and practices for the Group. The Board is chaired by the Group Head of CSR and is comprised of 12 executives from across the Group as well as the leads for each of the Group CSR pillars.

THE GROUP ENVIRONMENTAL MANAGEMENT COMMITTEE provides operational governance on environmental policies and practices for the Capgemini Group. The Committee is made up of executives from our largest geographies and provides expert guidance in setting the direction, establishing targets and integrating sustainability into the operations of the business.

THE GLOBAL ENVIRONMENTAL SUSTAINABILITY NETWORK consists of country-level Sustainability Managers and Sustainability specialists from across Capgemini. This Group is responsible for the delivery of sustainability initiatives and for driving progress against Country targets (with the support of Country Boards where applicable). The network meets virtually every six weeks to provide performance updates and share best practice.

THE OFFICE OF THE CEO, THE GROUP EXECUTIVE COMMITTEE, THE GROUP EXECUTIVE BOARD AND THE BOARD OF DIRECTORS are all consulted and involved in key decisions relating to our Architects of Positive Futures program. Ultimate executive responsibility for material decisions relating to the program sits with the Office of the CEO, Paul Hermelin.

The decision was taken by the Board of Directors in March 2018 to introduce new performance conditions linked to our carbon reduction target (to reduce carbon emissions per employee by 20% by 2020). Performance against this target now affects the remuneration of Corporate executive officers (Chairman, CEO, COOs), the General Management Team and over 1,000 executives across the Group.

Taking Action on Climate Change

Carbon Accounting Approach

Our climate change strategy is underpinned by a comprehensive data set on our carbon impacts, with around 10 million data points collected and analyzed each year. We use this data set to enable a granular view of our greenhouse gas emissions and to help us pinpoint opportunities to reduce emissions. For Capgemini, having a single global system managed by one team helps ensure our data is relevant, comprehensive, consistent, and complete, with a measurement approach that is aligned with the Greenhouse Gas Protocol Corporate Standard.

We are committed to continuously improving the quality of our data collection and analysis and using these insights to inform our strategic decisions. This includes, for example, gradually increasing the coverage of our reporting to encapsulate 99% of our operations (with the remaining 1% estimated), as well as adding new emission sources to our inventory. In 2018, we added data for Capgemini Portugal to our reporting system and enhanced the way our travel data is gathered in various countries,

incorporating new data sources that had not previously been available and reviewing the way we analyze and extrapolate data.

Ensuring our data can easily be accessed, understood and visualized by those that need it has also been an important area of focus throughout 2018. Through the creation of a new set of interactive, visual dashboards, we have provided global leads and sustainability teams across Capgemini with a more engaging and dynamic way to track their impacts.

Climate Change Risk Assessment

Climate change and its related impacts have featured in the World Economic Forum's top five Global Risks every year since 2011, highlighting the importance of this topic. To help us manage these risks, we have developed a Climate Change Risk Assessment (CCRA) which uses scientific research to identify the top climate hazards facing Capgemini. We assess the exposure of our people, assets, offices and national infrastructure to these hazards and then model the likely financial and operational impacts on our business. We use the output of this strategy to prioritize developing mitigation strategies and action plans where they are needed most.

Our CCRA approach follows five key steps



Research

Using scientific research (including climate-related scenarios) to identify the relevant climatic hazards; this helps us understand the risk exposure of assets in each country, as well as at a company level.



Assess Impact

Assessing at an asset level the direct and indirect impacts of these hazards on Capgemini operations; this gives us an ability to prioritize mitigation steps based on our best understanding of these impacts.



Assess control measures

Evaluating the existing control measures with key stakeholders from across the business helps to assess their suitability and identify opportunities for improvement and adaptation.



Review

Findings are reviewed by the relevant country Board, who are responsible for deciding what steps are needed to control or mitigate climate-related risks and capitalize on opportunities.



Improvement

Where necessary, an improvement action plan is developed and the progress against it is monitored. The findings also feed into a global review and help to inform our business continuity planning and global risk management processes.

“ Data is fundamental to driving sustained action on climate change. We focus on deploying a rich global data set on Capgemini's own carbon impacts to generate insights and drive meaningful action. ”

Aphra Morrison
Sustainability Reporting Manager





Future Plans

Where are we going next?

Since the beginning of our Environmental Sustainability journey, we have approached this topic with a sense of urgency, driven by a recognition that failure to respond to the environmental challenges we face now will significantly impact generations to come.

This year, the IPCC Special Report on Global Warming has provided the strongest warning to date of the need for urgent action to limit global warming to 1.5 degrees celsius and avoid the irreversible and potentially devastating impacts of climate change. Now more than ever, businesses need to commit to bold sustainability targets, which go past doing incrementally less bad and instead aim for doing exponentially more good for our environment.

This section of the report explains the steps we will take in 2019 and beyond to ensure the continual improvement of our sustainability program.





Where are we going next?

Helping our clients reduce their carbon emissions

We know that technology is one of the key levers available to address the mounting challenges posed by climate change. Technologies possess the capability, if applied correctly, to play an instrumental part in the rapid decarbonisation of the global economy. For this reason, our focus in 2019 will be on accelerating the sustainability benefits of our client engagements and advancing our technology capabilities and expertise to enable clients to address sustainability challenges.

We will focus our efforts on working with our portfolio leaders to embed sustainability benefits into our portfolio of service offerings, with a focus on defining and enhancing sustainable outcomes for our clients. At a broader level, we will continue to explore sustainability challenges faced at a sector level and the opportunities to introduce and leverage IT solutions to support them. We will be working with our sector experts in our key geographies to ensure clients' sustainability challenges

and aspirations become central to our delivery approach at a sector level.

To achieve this, we will need to mobilize our account managers, engagement managers, architects and sales teams across the Group, equipping them with the tools, resources, and learning and development opportunities they need to engage their clients in carbon conversations. We are committed to demystifying sustainability, helping our people, clients and suppliers to understand the sustainability impacts of the decisions they make, alongside how IT can be leveraged to maximize a positive sustainability benefit.

Reducing our own carbon footprint

With the delivery of our headline 2020 carbon reduction target two years ahead of schedule, we know that carbon savings will become increasingly challenging to deliver, which is why we must innovate in order to drive further reductions and efficiency savings within our own operations. In 2019, we will focus on a number of key

strategic initiatives in order to continue to drive progress in reducing our own impacts. In particular, we will take further action to focus on business travel emissions with continued investment in virtual collaboration technology alongside behavior change campaigns to increase the effectiveness of virtual working.

Additionally, we will look to increase the use of renewable energy across our operations. This will mean continuing to increase renewable energy generation, particularly in our India campuses where we have the space and scale to make a meaningful investment. We will also seek to increase the share of renewable energy purchasing for the sites where we control the energy contracts, as well as exerting our influence on our landlords to do the same.

Finally, we will continue to advance our focus on waste, particularly targeting the reduction of single-use plastics within our own operations, as well as encouraging behavior change to reduce the amount of waste brought into our offices.

If the latest IPCC report teaches us anything, it is that doing 'incrementally less bad to the environment' is no longer enough. In order to address climate change, we need to set our aspirations on doing 'exponentially more good' for the climate. We need to raise the level of aspiration across businesses to curb climate change and create a more sustainable future together.



“ Now more than ever, businesses need to commit to bold sustainability targets, which go past doing incrementally less bad and instead aim for doing exponentially more good for our environment. ”

Dr. James Robey
Vice President,
Global Head of Environmental Sustainability

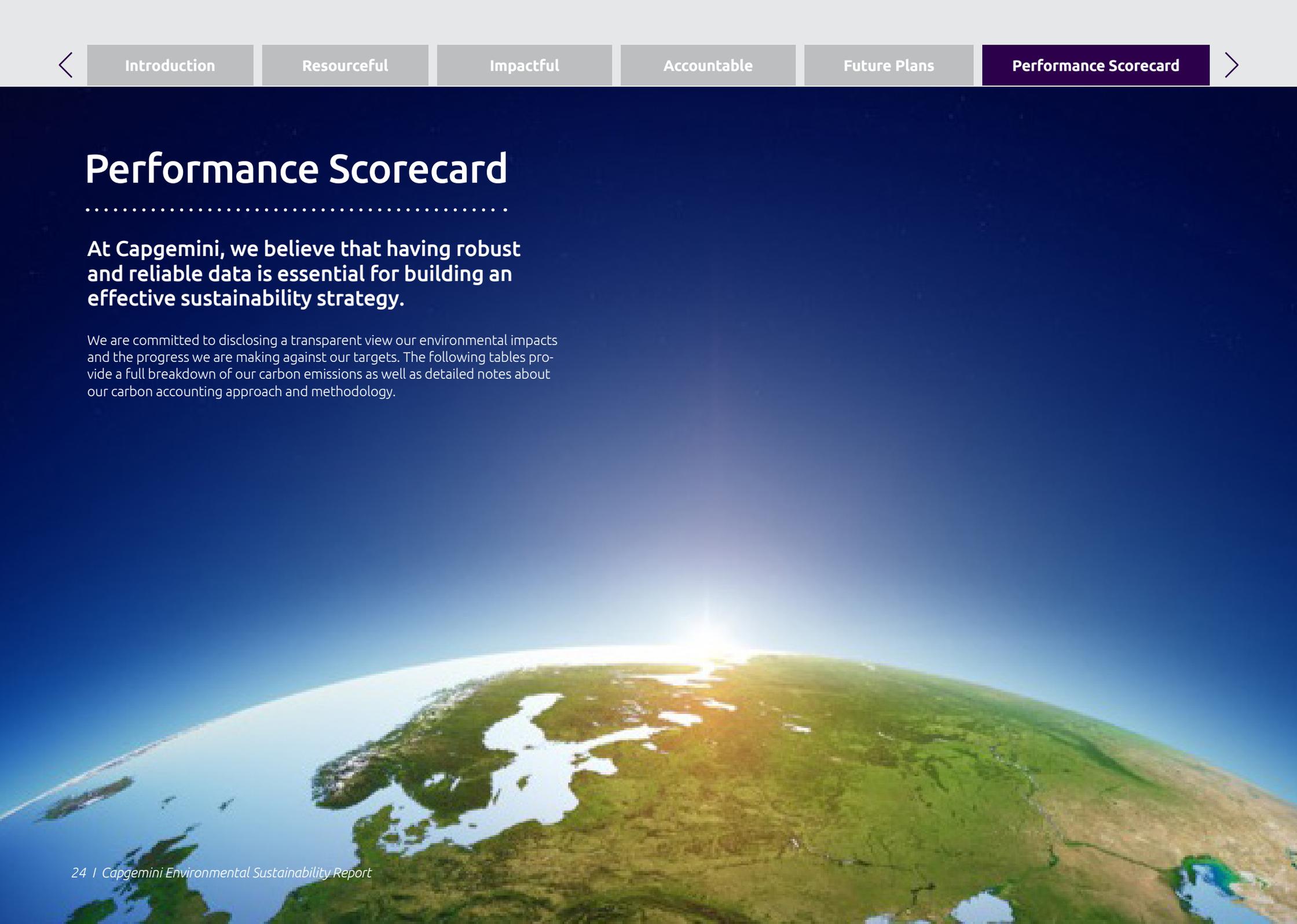


Performance Scorecard

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At Capgemini, we believe that having robust and reliable data is essential for building an effective sustainability strategy.

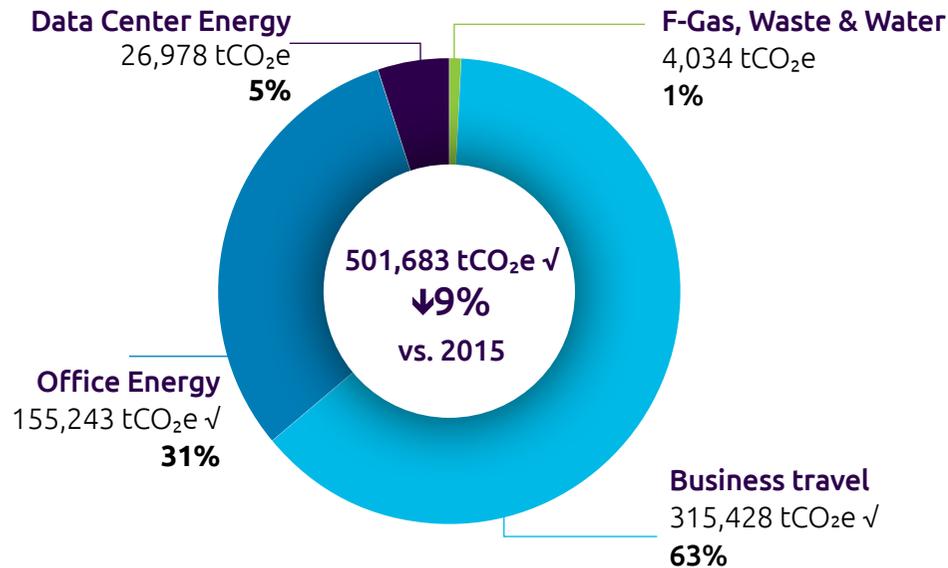
We are committed to disclosing a transparent view our environmental impacts and the progress we are making against our targets. The following tables provide a full breakdown of our carbon emissions as well as detailed notes about our carbon accounting approach and methodology.





Our Carbon Emissions At a Glance

Our environmental impacts are measured across 99% of our operations (by headcount) with the remaining 1% extrapolated. The infographics below provide a breakdown of our carbon emissions in 2018.



Capgemini Group carbon footprint in 2018 (in tonnes of CO₂e) which is showing a 9% reduction in absolute carbon emissions against our 2015 baseline. ✓ mark indicates data points which have been reviewed by KPMG to a reasonable level of assurance.

Five geographies account for over 80% of our carbon footprint

- 
INDIA
 220,192 tCO₂e
 44% of total Group emissions
 2.1 tCO₂e per employee
 ↓26% in tCO₂e per employee vs 2015
- 
NORTH AMERICA
 85,633 tCO₂e
 17% of total Group emissions
 4.9 tCO₂e per employee
 ↓19% in tCO₂e per employee vs 2015
- 
FRANCE
 39,601 tCO₂e
 8% of total Group emissions
 1.64 tCO₂e per employee
 ↑2% in tCO₂e per employee vs 2015
- 
UNITED KINGDOM
 32,741 tCO₂e
 7% of total Group emissions
 4.1 tCO₂e per employee
 ↓35% in tCO₂e per employee vs 2015
- 
NETHERLANDS
 31,094 tCO₂e
 6% of total Group emissions
 5.0 tCO₂e per employee
 ↓10% in tCO₂e per employee vs 2015

TABLE 1: CARBON EMISSIONS BY SCOPE

Metric		Unit	2015 Total	2017 Total	2018 Total	Change vs 2015	Comments
Target: To reduce our carbon footprint per employee by 20% by 2020 and 30% by 2030		T CO ₂ e per employee	3.09	2.61	2.45√	-20.9%	
Scope 1	Office Energy (natural gas, diesel, LPG)	T CO ₂ e	5,730	5,179	5,112	-10.8%	The reduction in Scope 1 energy emissions has largely been driven by reductions in diesel use in India and reductions in natural gas use in Netherlands, UK and France. Fluorinated gas (F-gas) from our air conditioning systems does tend to fluctuate year-on-year in part due to the irregularity of maintenance cycles and the challenge of getting high quality data from leased sites. The increase in 2018 is largely due to F-gas increase in India, with a leakage incident at our Pune campus partly responsible.
	Data Center Energy (natural gas and diesel)	T CO ₂ e	239	169	92	-61.5%	
	F gas	T CO ₂ e	1,487	983	2,139	43.9%	
	TOTAL Scope 1	T CO₂e	7,455	6,330	7,343	-1.5%	
Scope 2 (Location-Based)	Office Energy (electricity, heating, cooling)	T CO ₂ e	151,847	139,083	129,368	-14.8%	The reduction in office electricity usage can largely be attributed to improvements in energy efficiency and space utilisation across our larger regions, particularly India, the Netherlands, the US and the UK. The reductions in data center emissions reflects rationalisation of our data center portfolio, with reductions in the UK, Netherlands and North America. An increase in our solar capacity in India and decarbonisation of the electricity grid have also been key drivers (see p10 for details).
	Data Center Energy (electricity)	T CO ₂ e	48,435	35,721	25,275	-47.8%	
	TOTAL Scope 2	T CO₂e	200,282	174,804	154,643	-22.8%	
Scope 3	Business Travel	T CO ₂ e	307,906	297,337	315,428√	2.4%	The increase in our business travel emissions reflects a growing headcount which has resulted in significant increase in air emissions in particular (more detail on page 30). The reductions in Scope 3 Electricity Transmission & Distribution Losses (T&D Losses), reflects a reduction of our electricity usage overall as well the decarbonisation of the electricity grid. Whilst our waste emissions have remained stable since 2015, a change in emission factors in 2016 masks the significant progress we have made in reducing waste generation. Our water usage has increased since 2017, partly due to a growing headcount in India, as well as an increase in water use in France.
	Office Energy (T&D losses)	T CO ₂ e	28,968	31,055	20,762	-28.3%	
	Data Center Energy (T&D losses)	T CO ₂ e	3,621	2,691	1,611	-55.5%	
	Water	T CO ₂ e	1,662	1,392	1,496	-10.0%	
	Waste	T CO ₂ e	403	572	400	-0.9%	
	TOTAL Scope 3	T CO₂e	342,561	333,047	339,697	-0.8%	
TOTAL	TOTAL EMISSIONS	T CO₂e	550,298	514,182	501,683√	-8.8%	
Scope 2 (Market-Based)	Total Market-Based Emissions (electricity and district heating emissions)	T CO₂e	163,072	139,181	128,802	-21.0%	

- Data identified in these tables by a √ mark has been reviewed by KPMG with a reasonable level of assurance. The data included differs from that reported in our Annual Financial Report and our Integrated Report due to replacement of some Q4 2018 estimates with actual data, as well as a number of data corrections applied to all years.
- Where data is not available, appropriate estimation methods are deployed. For approximately 12% of emissions data, we do not receive actual usage data relating to miles but we do receive relevant cost data, enabling us to estimate the energy usage or the travel mileage using the cost data. For approximately 4% of emissions data we use other estimation methods – this includes, for example, data which has been extrapolated where a data set is known to be incomplete (for example, we know that a certain proportion of employees do not book through the travel agents) or it includes estimating energy usage of one facility based on

- energy usage per floor area of a similar facility,
- With the exception of electricity emissions, all emission sources have been calculated using the emission factors recommended by DEFRA: <https://www.gov.uk/measuring-and-reporting-environmentalimpacts-guidance-for-businesses>
- Electricity emissions have been calculated in the main body of the table above in line with the GHG Protocol's "location-based" approach. Regional electricity emission factors for UK (DEFRA 2018) and the US (eGrid). For all other countries, emission factors from International Energy Agency (IEA) have been applied to calculate Scope 2 location-based approach.
- The "Market-based emissions" given in the final row are a recalculation of Scope 2 emissions using the GHG Protocol's market-based approach. Where possible, market-based emissions have been calculated using supplier-specific emission

- factors. Where these are not available we have used a residual fuel mix factor, sourced for from RE-DISS for countries in Europe and from green-e.org for US and Canada. For a few smaller entities, we have assumed an emission factor of 0 for electricity purchased on renewable energy tariffs. In locations where neither supplier-based nor residual fuel mix factors are available we have used a location-based emission factor.
- "T&D losses" refers to electricity transmission and distribution grid losses i.e. the energy loss that occurs in transmitting the electricity from the generation source to our facilities.
- As recommended by the GHG Protocol, F-gas not covered by the Kyoto Protocol (such as CFCs) are not reported as Scope 1 emissions and are therefore not included above. These F-gas emissions are, however, captured with a value of 1,397 t CO₂e for 2018

TABLE 2: CARBON EMISSIONS BY SCOPE BY REGION (2018)

Metric		Unit	India	North America	France	UK	Netherlands	Other Europe	Latin America	Other Regions	Estimated Countries
Target: To reduce our carbon footprint per employee by 20% by 2020 and 30% by 2030		T CO ₂ e per employee	2.12	4.85	1.64	4.10	5.05	2.23	0.99	2.42	2.29
Scope 1	Office Energy (natural gas, diesel, LPG)	T CO ₂ e	2,824	37	736	490	154	812	10	0	49
	Data Center Energy (natural gas, diesel)	T CO ₂ e	0	0	34	17	8	33	0	0	0
	F gas	T CO ₂ e	1,816	0	0	69	0	61	173	0	21
	TOTAL Scope 1	T CO₂e	4,640	37	769	576	163	905	183	0	70
Scope 2	Office Energy (electricity, heating, cooling)	T CO ₂ e	100,143	5,235	2,154	2,493	1,629	11,116	1,256	4,090	1,252
	Data Center Energy (electricity)	T CO ₂ e	0	8,079	1,726	6,343	5,952	2,860	153	162	0
	TOTAL Scope 2	T CO₂e	100,143	13,314	3,880	8,836	7,581	13,976	1,408	4,253	1,252
Scope 3	Business Travel	T CO ₂ e	95,482	71,307	34,577	22,524	23,015	49,907	6,133	9,432	3,052
	Office Energy (T&D losses)	T CO ₂ e	18,737	311	126	212	65	601	166	342	201
	Data Center Energy (T&D losses)	T CO ₂ e	0	559	115	541	239	124	25	9	0
	Water	T CO ₂ e	1,074	40	70	49	14	182	26	28	14
	Waste	T CO ₂ e	115	64	64	5	18	100	9	19	4
	TOTAL Scope 3	T CO₂e	115,408	72,282	34,951	23,330	23,351	50,914	6,359	9,831	3,271
	TOTAL EMISSIONS	T CO₂e	220,192	85,633	39,601	32,741	31,094	65,795	7,950	14,083	4,593
Scope 2 (Market-Based)	Total Market-Based Emissions (electricity and district heating emissions)	Market-Based Emissions	92,270	15,602	1,214	1,272	170	11,958	813	4,253	1,252

Notes

- For this table, and the Region tables that follow, we display data for Capgemini entities with the highest emissions (India, North America, France, UK and The Netherlands), as ordered by size of total emissions. For the other 22 countries where we measure emissions these are summarised in the Other Europe, Latin America and Other Regions columns. For just under 1% of our operations by headcount, we do not collect environmental data as part of the Group program. For these entities we include an estimate for emissions in the column "Estimated Countries". Estimated Countries include Austria, Chile, Colombia, Hong Kong, Hungary, Japan, Malaysia, Russia, Singapore, Slovakia, Taiwan, and United Arab Emirates.
- Due to the lack of reliable data from the energy supplier, 61% of the office energy data for France for Q1- Q3 2018 has been estimated based on 2018 actual data. This estimated data accounts for approximately 4% of total Group energy use, 6% of total office energy use and less than 0.5% of total GHG emissions

TABLE 3: ENERGY USE

	Metric	Unit	2015 Total	2017 Total	2018 Total	Change vs 2015	Comment
Key Metric	Office Energy Use	MWh	292,592	277,223	272,540 √	-6.9%	
Office	Natural Gas	MWh	15,565	13,297	11,902	-23.5%	Office energy has reduced across the Group, with improvements in energy efficiency and space utilisation key to this (as highlighted throughout the report). The reduction in natural gas has largely been in the UK, France and the Netherlands. The increase in diesel usage has been driven by Capgemini India, and is down to both an increase in power outages in 2018, as well as several new facilities opening.
	Diesel & LPG	MWh	10,437	10,002	11,028	5.7%	
	Renewable Electricity	MWh	42,111	39,866	41,377	-1.7%	
	Other Electricity	MWh	216,650	207,219	201,022	-7.2%	
	District Heating	MWh	6,151	5,104	5,727	-6.9%	
	Office Cooling	MWh	1,677	1,733	1,484	-11.5%	
	% Electricity from Renewables	%	16.3%	16.1%	17.1%	0.8%	
	Energy use per floor area	kWh/ m ²	168.9	157.0	147.2	-12.8%	
Key Metric	Data Center Power Usage Effectiveness	Average PUE	1.76	1.78	1.80	6.0%	
Data Center	Natural Gas	MWh	355	32	34	-90.5%	The rationalization of our data center portfolio has led to significant reductions in data center energy usage across the Group. At the same time our average PUE has increased, which partly reflects the fact that before closure or migration of a data center the PUE tends to increase – the energy overheads such as cooling remain, whilst the amount of computing power delivered to clients reduces.
	Diesel	MWh	639	591	310	-51.4%	
	Renewable Electricity	MWh	72,979	49,406	40,496	-44.5%	
	Other Electricity	MWh	90,687	81,787	63,467	-30.0%	
	Total Data Center Energy Use	MWh	164,660	131,816	104,307	-36.7%	
	% Electricity from Renewables	%	44.6%	37.7%	39.0%	-5.6%	
TOTAL ENERGY	Total Energy Use	MWh	457,252	409,039	376,847 √	-17.6%	
	% of Total Electricity from Renewables	%	27.2%	23.6%	23.6%	-3.6%	

1. "Renewable Electricity" includes all renewable electricity purchased on renewable energy tariffs or through renewable energy certificates as well as a small amount of electricity generated on-site in India and the UK using solar photovoltaic panels. "Other electricity" includes purchased electricity generated from mixed tariffs which are largely made up of fossil fuel and nuclear sources.
2. Given the nature of our business, many of Capgemini's offices have large server rooms. These are not considered to be data centers but their presence should be taken into consideration when comparing the energy usage and energy efficiency of our offices against those in other sectors.
3. Data Center Power Usage Effectiveness (PUE) is a standard industry measure of how energy efficient a data center is. It compares the amount of non-computing overhead energy (used for things like cooling and power distribution) to the amount of energy used to power IT equipment. A PUE of 2.0 means that for every watt of IT power, an additional watt is consumed to cool and distribute power, whereas a PUE of closer to 1.0 means nearly all the energy is used for computing. To track the energy efficiency of our data centers, we use a simple average of the PUE across multiple data centers.

TABLE 4: ENERGY USE BY REGION (2018)

	Metric	Unit	India	North America	France	UK	Netherlands	Other Europe	Latin America	Other Regions	Estimated Countries
Key Metric	Total Office Energy Use	MWh	152,887	14,714	41,367	11,539	4,355	33,346	5,431	6,263	2,637
Offices	Total Office Energy Emissions	T CO ₂ e	121,705	5,584	3,016	3,195	1,848	12,529	1,432	4,432	1,502
	% Office Electricity from Renewables	%	11.1%	0.0%	11.2%	93.0%	91.2%	13.8%	33.5%	0.0%	10.6%
Key Metric	Data Center PUE	Average PUE	N/A	1.73	2.01	1.68	1.86	1.69	1.90	N/A	N/A
Data Centers	Total Data Center Energy Use	MWh	0	24,750	32,934	22,481	12,798	9,817	1,268	258	0
	Data Center Energy Emissions	T CO ₂ e	0	8,638	1,875	6,901	6,200	3,017	177	171	0
	% of Data Center Electricity from Renewables	%	N/A	0.0%	0.0%	87.2%	100.0%	63.1%	100.0%	N/A	N/A
TOTAL ENERGY	Total Energy Use	MWh	152,887	39,464	74,302	34,021	17,153	43,163	6,700	6,521	2,637
	Total Energy Emissions	T CO₂e	121,705	14,221	4,890	10,096	8,047	15,546	1,610	4,604	1,502
	% of Total Electricity from Renewables	%	11.1%	0.0%	5.9%	88.9%	98.1%	24.5%	40.9%	0.0%	10.6%

Notes

1. France: Due to the lack of reliable data from the energy supplier, 61% of the office energy data for France for Q1- Q3 2018 has been estimated based on 2018 actual data received for other sites. This estimated data accounts for approximately 4% of total Group energy use, 6% of total office energy use and less than 0.5% of total GHG emissions
2. For all regions, office energy emissions and data center energy emissions have been calculated using the GHG Protocol location-based approach.
3. N/A (Not Applicable) is used to indicate regions where we do not have a data center.

TABLE 5: BUSINESS TRAVEL

	Metric	Unit	2015 Total	2017 Total	2018 Total	Change vs 2015	Comment
Key Metric	Total Business Travel Emissions	T CO₂e	307,906	297,337	315,428 ✓	2.4%	
Travel by Type	Air Emissions	T CO ₂ e	190,406	178,363	203,845	7.1%	A key driver of the increase in travel emissions is the growth in our headcount, which is up by 15% since 2015. Total air mileage has in fact been relatively flat since 2015; the increase in air emissions reflects both changes to the emission factors since 2015 and a significant increase in the amount of short haul flights, which have a higher emissions value per mile travelled. The reduction in car emissions reflects both lower car mileage and a shift to more efficient vehicles.
	Car Emissions	T CO ₂ e	66,443	63,046	59,644	-10.2%	
	Hotel Emissions	T CO ₂ e	37,594	40,958	36,316	-3.4%	
	Rail Emissions	T CO ₂ e	5,918	6,942	6,546	10.6%	
	Taxi Emissions	T CO ₂ e	6,432	6,661	7,460	16.0%	
	Other Modes of Transport	T CO ₂ e	1,114	1,367	1,617	45.2%	
Travel per Employee	Total Business Travel Emissions per Employee	T CO₂e/ employee	1.73	1.51	1.54	-11.2%	
Travel by Source per Employee	Air Emissions	T CO ₂ e/ employee	1.07	0.91	0.99	-7.2%	On a per employee basis, our business travel emissions are showing a significant reduction, with strong progress in India, North America and the Netherlands in reducing travel emissions per head.
	Car Emissions	T CO ₂ e/ employee	0.37	0.32	0.29	-22.1%	
	Hotel Emissions	T CO ₂ e/ employee	0.21	0.21	0.18	-16.2%	
	Rail Emissions	T CO ₂ e/ employee	0.03	0.04	0.03	-4.1%	
	Taxi Emissions	T CO ₂ e/ employee	0.04	0.03	0.04	0.6%	
	Other Modes of Transport	T CO ₂ e/ employee	0.01	0.01	0.01	26.0%	

1. Hotel emissions are calculated based on emission factors specific to the country in which the traveler is staying. For some countries, emission factors were not available from DEFRA and therefore have been sourced directly from <https://www.hotelfootprints.org> (DEFRA emission factors are derived from the same data set). Hotel emissions have been recalculated for 2015 for India, as it was discovered was incomplete, and therefore an estimation has now been applied based on more reliable data for 2017.
2. "Other Modes of transport" includes bus travel, tram travel, rickshaw and motorbike.
3. Where mileage data is not available, emissions have been estimated by taking the cost data within that country and applying the average cost per mile ratio from other data within that country or region.

TABLE 6: BUSINESS TRAVEL BY REGION (2018)

	Metric	Unit	India	North America	France	UK	Netherlands	Other Europe	Latin America	Other Regions	Estimated Countries
Key Metric	Business Travel Emissions	T CO₂e	95,482	71,307	34,577	22,524	23,015	49,907	6,133	9,432	3,052
Travel by Type	Air Emissions	T CO ₂ e	70,443	58,264	20,017	12,241	5,097	23,352	5,251	7,209	1,972
	Car Emissions	T CO ₂ e	10,203	3,121	9,853	3,414	15,630	16,689	152	6	577
	Hotel Emissions	T CO ₂ e	11,868	8,554	1,994	5,250	1,083	5,788	457	970	351
	Rail Emissions	T CO ₂ e	183	85	2,268	1,230	774	1,937	0	6	63
	Taxi Emissions	T CO ₂ e	2,749	1,268	445	279	52	1,083	273	1,239	72
	Other Modes of Transport	T CO ₂ e	37	16	0	109	379	1,059	0	2	16

1. In the Netherlands, Belgium, Luxembourg and Germany, emissions associated with car travel likely to be over-estimated as they include emissions related to car travel to work, which is difficult to reliably separate from business mileage.
2. India: The data reported for 3-wheeler travel in India has been uploaded under "Motorbike" as DEFRA does not provide a separate emission factor for a 3-wheeler.
3. India: Guest house data for India was reported for all employee stays in guest houses for the first time in 2017. Since corresponding data for 2015 and 2016 was not available, emissions for previous years have been estimated based on 2017 data. As no emission factors for guest houses are currently available, the emissions stated above assume that the emissions from one guest house room night is equivalent to 0.13 of the emissions from one hotel night in India (this ratio has been calculated by reviewing guest house energy data in comparison to a typical hotel).

TABLE 7: WASTE & WATER USE

	Metric	Unit	2015 Total	2017 Total	2018 Total	Change vs 2015	Comment
Waste by Disposal Method	Waste to Landfill	Tonnes	3,756	2,979	2,628	-30.0%	Significant reductions in the amount of waste generated have been achieved across the Group, with strong progress in India, France, UK, Netherlands, Spain and Brazil.
	Waste Recycled	Tonnes	1,332	1,388	1,137	-14.7%	
	Waste to Energy	Tonnes	115	112	105	-8.8%	
	Waste to Anaerobic Digestion	Tonnes	N/A	167	430	100.0%	
Total Waste	Total Waste	Tonnes	5,203	4,645	4,300	-17.4%	The amount of waste diverted from landfill has significantly increased since 2015. Actual diversion rates are likely to be higher than reported here – in some regions we face a challenge in obtaining reliable information on how our waste is treated, particularly for shared buildings. Where accurate information is not provided, we make a conservative assumption that waste is sent to landfill.
	Total Waste Per Employee	kg per employee	29.24	23.57	20.96	-28.3%	
	% of Waste Diverted from Landfill	T CO ₂ e	27.8%	35.9%	38.9%	11.1%	
	Total Waste Emissions	T CO ₂ e	403	572	400	-0.9%	
Water Use	Total Water Use	Cubic meters	1,578,894	1,323,210	1,421,910	-9.9%	The reduction in water usage since 2015 has been driven by significant reductions across India, UK and Benelux, though we have seen an increase in 2018, most likely due to a growing headcount in India. Capgemini India is by far the largest user of water across the Group and has a strong focus on water efficiency; in 2018 we invested in an on-site sewage treatment facility in Pune and a borewell in Bangalore.
	Total Water Per Employee	Cubic meters per employee	8.87	6.71	6.93	-21.9%	
	Total Water Emissions	T CO ₂ e	1,662	1,392	1,496	-10.0%	

1. The availability of accurate waste and water data varies considerably across the Group, depending on the type of site, the type of lease and local waste arrangements. Where actual data is not available, it has been estimated using relevant estimation methods with landfill assumed where the disposal method is not provided. We conducted a review of estimation approaches for waste and water in 2018, which has resulted in increased scope of reporting and data corrections for all years.
2. We began collecting data on waste disposed by anaerobic digestion in 2016, hence it is marked as N/A for 2015
3. The waste emissions factor for landfilled waste nearly doubled in 2016 compared to 2015, which is part of the reason why our waste emissions have remained flat even though our landfilled waste and our total waste generation has reduced significantly.
4. As recommended by DEFRA we calculate both the emissions associated with water supply and the emissions associated with water treatment. As the volume of water being sent for treatment is not currently metered, we have made an assumption that it is the same as the volume of water supplied.

TABLE 8: WASTE & WATER USE BY REGION (2018)

	Metric	Unit	India	North America	France	UK	Netherlands	Other Europe	Latin America	Other Regions	Estimated Countries
Waste by Disposal Method	Waste to Landfill	Tonnes	370	640	591	11	156	551	89	194	25
	Waste Recycled	Tonnes	212	24	245	142	122	358	20	2	11
	Waste to Energy	Tonnes	0	0	0	27	0	78	0	0	1
	Waste to Anaerobic Digestion	Tonnes	408	0	0	0	0	18	0	0	4
Total Waste	Total Waste	Tonnes	990	663	836	181	278	1,005	109	196	41
	Total Waste Emissions	T CO ₂ e	115	64	64	5	18	100	9	19	4
	% of Waste Diverted from landfill	%	62.6%	3.6%	29.3%	93.6%	43.9%	45.2%	18.3%	1.1%	39.0%
Water Use	Total Water Use	Cubic meters	1,020,564	38,320	66,220	46,264	13,042	172,670	24,305	26,875	13,650
	Total Water Emissions	T CO ₂ e	1074	40	70	49	14	182	26	28	14

KPMG Assurance Statement

Capgemini S.E.

Registered office: 11, rue de Tilsitt, 75017 Paris

Report by the Statutory Auditor on a selection of environmental indicators published in

Capgemini Environmental Sustainability 2018/2019 Report

For the year ended 31 December 2018

To the shareholders,

As requested and in our capacity as the Statutory Auditor of your company (hereinafter the "Entity"), we hereby report to you on a selection of consolidated environmental information for the year ended December 31, 2018, identified by the symbol √ (hereinafter named "CSR Information"), and disclosed in the Environmental Sustainability 2018/2019 Report of the Entity (hereinafter the "Environmental report").

Responsibility of the Entity

The Corporate Social Responsibility & Sustainability division is responsible for preparing the CSR Information in accordance with the guidelines used by the Entity (hereinafter the "Guidelines"), summarised in the methodological notes presented in the Environmental report and available on request at the Entity's headquarters.

Independence and quality control

Our independence is defined by the provisions of Article L.822-11-3 of the French Commercial Code and the French Code of Ethics for statutory auditors (Code de déontologie). Moreover, we have implemented a quality control system that includes documented policies and procedures to ensure compliance with applicable ethical rules, professional standards, laws and regulations.

Responsibility of the Statutory Auditor

On the basis of our work, it is our responsibility to express, at the request of the Entity, reasonable assurance that the CSR information selected by the Entity and identified by the symbol √ in the Environmental report is fairly presented, in all material respects, in accordance with the Guidelines. The conclusions given below relate solely to the CSR Information and not to the Entity's Environmental report as a whole.

We performed our work in accordance with ISAE 3000 and in compliance with the professional guidelines applicable in France.

Means and resources

Our work drew on the skills of five individuals. To assist us in conducting our work, we called on our firm's sustainable development and corporate social responsibility specialists.

Reasonable assurance on a selection of non-financial information

Nature and scope of our work

We conducted interviews with the persons responsible for preparing the CSR Information in the departments in charge of collecting the information and, where appropriate, responsible for internal control and risk management procedures, in order to:

- assess the suitability of the Guidelines in terms of their relevance, completeness, reliability, neutrality and understandability, and taking into account industry best practices where appropriate;

^[1] Office direct energy consumption, Total direct energy consumption, Greenhouse gas emissions related to business travel, Total Greenhouse gas emissions, Total Greenhouse gas emissions per employee.

^[2] ISAE 3000 – Assurance engagements other than audits or reviews of historical financial information.

- verify the implementation of data-collection, compilation, processing and control process to reach completeness and consistency of the CSR Information and obtain an understanding of the internal control and risk management procedures used to prepare the CSR Information.

We determined the nature and scope of our tests and procedures based on the nature and importance of the CSR Information with respect to the characteristics of the Entity, the human resources and environmental challenges of its activities, its sustainability strategy and industry best practices.

At the Entity level, we performed analytical procedures on the CSR information and verified, using sampling techniques, the calculation and the consolidation of the data.

At the level of a representative sample of entities selected by us on the basis of their activity, their contribution to the consolidated indicators, their location and a risk analysis, we conducted interviews to verify that procedures are properly applied and to identify potential undisclosed data, and we performed tests of details, using sampling techniques, in order to verify the calculations and reconcile the data with the supporting documents. The selected sample represents between 65% and 78% of the CSR information.

We consider that this work enables us to express a conclusion of reasonable assurance for the information selected by the Entity and identified by the symbol √.

Due to the use of sampling techniques and other limitations inherent to information and internal control systems, the risk of not detecting a material misstatement in the CSR information cannot be totally eliminated.

Conclusion

In our opinion, the CSR information selected by the Entity and identified by the symbol √ in the Environmental report is fairly presented, in all material respects, in compliance with the Guidelines.

Paris-La Défense, June 3rd 2019

KPMG S.A.



Philippe Arnand
Partner
Sustainability Services



Frédéric Quélin
Partner

^[3] Capgemini India, Capgemini France, Capgemini China, Capgemini North America.



About Capgemini

A global leader in consulting, technology services and digital transformation, Capgemini is at the forefront of innovation to address the entire breadth of clients' opportunities in the evolving world of cloud, digital and platforms. Building on its strong 50-year heritage and deep industry-specific expertise, Capgemini enables organizations to realize their business ambitions through an array of services from strategy to operations. Capgemini is driven by the conviction that the business value of technology comes from and through people. It is a multicultural company of over 200,000 team members in more than 40 countries. The Group reported 2018 global revenues of EUR 13.2 billion.

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