



# **The Green Choice**

Epson Europe's Sustainability Report  
2019/2020

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# Epson Management Philosophy

Epson aspires to be an indispensable company, trusted throughout the world for our commitment to openness, customer satisfaction and sustainability. We respect individuality while promoting teamwork, and are committed to delivering unique value through innovative and creative solutions.

Epson is proud to have featured a selection of stunning images by photographer Ray Collins to illustrate our latest Green Choice Report.

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# Sustainability in unprecedented times

Few can remember such a time as this. Our societies and economies face serious challenges as we do what we must to remain sustainable. At Epson our people have shown great spirit and resolve in these difficult times. Confidence in our technology as a force for good has helped bring us together and provide continued support to our customers and the communities in which we live and work.

But while we address the impact of the pandemic, we must never lose sight of that other constant threat to our world and its future generations. Although it seems likely we will develop a vaccine, the environment that sustains us will continue to face long term crises. This is something no business that believes in sustainability can ignore and so we remain committed, among many other measures, to achieving the UN's Sustainable Development Goals.

For Epson sustainability is about constantly addressing and improving every aspect of our global footprint, from our manufacturing and distribution to use of resources and behaviours of our people. It is about being indispensable to our customers who similarly share our commitment to a better environment and to developing ever more sustainable technologies and responsible ways of working.

Working with our customers is my passion, understanding their needs and listening to what they say is so important as we continually work to improve what we offer. Listening is essential if we are to remain sustainable. Together at Epson we will push the boundaries of what can be achieved as we aim to exceed our customers' expectations by making products and sharing solutions that truly delight and serve a real social purpose.

At Epson we are unusual as a manufacturer, all our components are produced in Epson-owned factories. This means we can guarantee the quality and reliability of supply and take direct responsibility for the care and wellbeing of our employees. In true Japanese tradition, our people remain our most valuable resource and, along with investment in our technology, we will constantly aspire to be a positive force for society.

Together, as we face the challenges in this 'new normal', we must all work even harder to make the right choices and create a more sustainable future for our people and planet. As President of Epson in EMEAR I remain committed to protect the wellbeing of our people, customers and partners and all their families and to lead our company with purpose.

I am genuinely proud to present Epson Europe's latest Green Choice report.

**Kazuyoshi Yamamoto**  
President, Epson Europe

“Working with our customers is my passion, understanding their needs and listening to what they say is so important as we continually work to improve what we offer.”

Kazuyoshi Yamamoto, President Epson Europe, on photovoltaics rooftop of Epson Germany's office building



“Together, as we face the challenges in this ‘new normal’, we must all work even harder to make the right choices and create a more sustainable future for our people and planet.”



# ESG - Environmental Sustainability, Social Responsibility, Corporate Governance

For many the term 'ESG' brings to mind environmental issues such as climate change and limited resources, but the term means so much more. It covers social issues including a company's labour practices, talent management, equal pay, diversity, health and safety. It covers governance matters like codes of conduct and business ethics.

Companies around the world are increasingly reporting on their ESG performance and there is a strong desire to understand a company's long-term value creation plan and receive credible, standardized information to support long-term risk assessments.

Our investors, shareholders and customers are asking more questions and demanding more answers about ESG factors in our investment and procurement processes. They increasingly evaluate us based on ESG information.

There is a strong desire to understand our long-term value creation plan and receive credible, standardized information to support long-term risk assessments. Environment, Social Responsibility and Governance are fully interconnected and central to our good and sustainable business performance.

In this report we have outlined our progress we made so far during 2019 and 2020 and, of course, we need to do even better year on year.



# SDGs as a compass for our business and society

The agenda for the UN Sustainable Development Goals (SDGs) was launched in 2015 as a plan of action for our people, planet, and future prosperity that included a declaration of commitment to 17 goals and 169 targets for sustainable development.

Epson is fully committed to the SDGs. They are integrated into our mid and long-term plans; they are guiding us as a compass for our business and they are setting the direction for all our sustainability actions.

In November 2019 the EU announced the “European Green Deal” and that it intends to become the first climate-neutral continent by 2050. The Green Deal is the policy response of the European Commission to the current and future climate and environmental-related challenges.

How do we make the SDGs and the European Green Deal a success?

Key to the delivery of these objectives is the need to re-orient significant amounts of public and private capital into sustainable activities. But how do we bring the goals into our day-to-day life at Epson and how can we help our customers and partners achieve their sustainability aims?

I'd like to give you a few quick examples but you can read much more in this report:

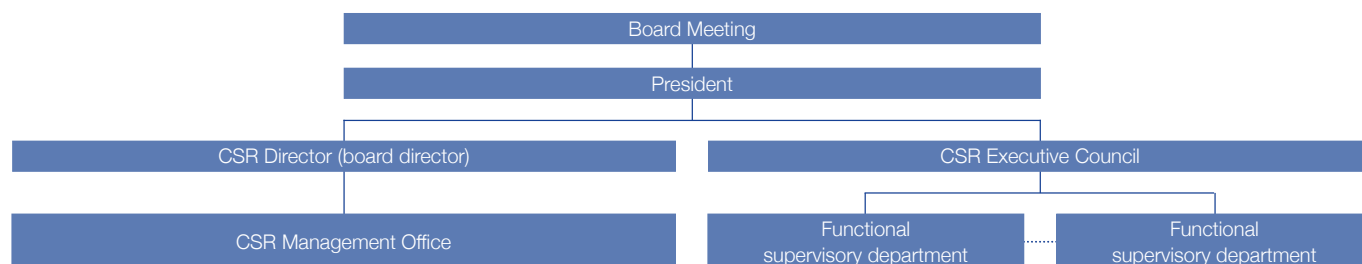
- **SDG 4 Quality Education:** We are helping to improve the learning environment and keeping students more engaged.
- **SDG 8 Good Job and Economic Growth:** We invest in our people and always create a win/win situation in business. No one will be left behind.
- **SDG 12 Responsible Consumption and Production:** We keep the material of our products in the value chain for as long as possible.
- **SDG 13 Climate Action:** We reduce our carbon footprint wherever possible (renewable energy, electric cars, etc.) and promote our energy efficient technologies. Science and innovation lead the way.

Both as business people and as individuals, we need to show that we are accountable and transparent. We are committed to ethical leadership and good governance through value-based strategies and positive actions for a sustainable business in a better world.

**Henning Ohlsson**  
Sustainability Director  
Epson EMEA



# Managing sustainability at a global level



Epson's CSR Management Office has a direct reporting line to the company President. The Director of the office is a member of Seiko Epson's Board of Directors.

The CSR Executive Council and CSR Management Committee are responsible for promoting Epson's CSR activities.

## Epson's European sustainability team

Here at Epson, sustainability is integrated into decisions at every level of the organisation. To achieve this, Epson's European President and the senior management board take an active role in driving sustainability policies and processes. They are assisted by dedicated sustainability managers in the UK, Germany, France, Italy, the Netherlands and Norway, who are responsible for ensuring that CSR, CSV and ESG obligations are met on all fronts, be it quality (ISO 9001), environmental (ISO 14001) or social. In addition, three sustainability managers based in the Netherlands look after the European regulations in the areas of waste, energy, chemical and product safety.



Sustainability team at the central warehouse in Bedburg, Germany





# Environmental sustainability – a global commitment

As a global organisation, Epson is committed to improving its environmental engagement in all geographies across the world. In 2018, the Science Based Targets initiative (SBTi) approved Epson’s global greenhouse gas (GHG) reduction targets. The initiative, which is a joint project between the CDP (formerly the Carbon Disclosure Project), United Nations Global Compact (UNGC), World Resources Institute (WRI), and World Wide Fund for Nature (WWF), is working to recognise companies whose GHG reduction targets are in line with keeping a global temperature rise this century to well below two degrees Celsius, a central aim of the Paris Agreement.

Epson has set FY2025 targets for reducing direct emissions associated with its business activities (scopes 1 and 2 emissions) and for reducing indirect emissions (scope 3 emissions). Epson’s approved targets (the baseline year being the financial year that ended 31 March 2018)<sup>1</sup> are to:

Since setting these goals, we have continued to make strides and increase our positive actions to meet the targets set in all countries and regions in which we operate. Globally in the financial year 2019, we demonstrated progress in some of our most important areas of development, based on our benchmark year of 2017:



Scope 1 and 2 **emissions reduced by 18%** (equivalent to 485,753 t – CO<sub>2</sub> emissions)



Scope 3 emissions **increased by 60.5%** as a percentage of business profit (equivalent to 5,780 t – CO<sub>2</sub> e/100 million yen)<sup>2</sup>



Reduce scope 1 and 2 GHG emissions by **19% by the 2025 fiscal year**



Reduce scope 3 (categories 1 and 11)\* GHG emissions from purchased goods and services and use of sold products per unit of value added by **44% by the 2025 fiscal year**



<sup>1</sup> The GHG Protocol (internationally recognised standards for accounting and reporting greenhouse gas emissions) defines three scopes for accounting for greenhouse gas emissions:

Scope 1: Direct emissions from sources that are owned or controlled by the organisation

Scope 2: Indirect emissions from the consumption of purchased sources of energy

Scope 3: Emissions from an organisation’s value chain

\* – Category 1: Purchased goods and services

\* – Category 11: Use of sold products

<sup>2</sup> This increase in emissions is due to a significant decrease in business profit



# Environmental sustainability – European action






In 2019, Epson Europe made further progress to reduce its local environmental impact. As Epson’s European footprint is mainly corporate, employee participation has been a key factor in making changes. Epson Europe takes its commitment to reduce greenhouse gas (GHG) emissions very seriously, for both Scope 1 and Scope 2 emissions, in line with Epson’s global Science Based Targets initiative.

**In the past year, we have made positive strides including:**

<p>Adding e-cars and hybrid cars to the company car policy</p>	<p>No single-use plastics in Epson buildings</p>	<p>100% renewable energy use in all Epson-owned buildings</p>	<p>From 2021 onwards, we will strive to offset all CO<sub>2</sub> emissions coming from non-renewable energy in our non-Epson owned buildings</p>
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We will further support the transition to a low-carbon future by committing to additional reductions in business travel. The pandemic resulted in a significant reduction in travel which has enabled us to meet our 19% reduction target set for 2025. This experience has enabled us to review our 2025 target as the pandemic has shown that we can achieve even further reductions of up to 50% and operate just as efficiently without the need to return to pre-pandemic levels of business travel.



-  100% renewable electricity
-  Light sensors
-  Electric vehicle charging
-  100% LED lighting
-  Producing energy



**Epson France:**

- Signed a contract on 01 April 2020 with a new local renewable energy provider, Energies d'Ici
- Preventing water waste in the Levallois office thanks to a new dishwasher and individual ceramic mugs
- Across France, teams use glass replacements for bottles, slow cooking and containers as well as local, seasonal produce for all catering and events
- Employees are incentivised to use public transportation and appropriately sort trash



**Epson Spain:**

- Installed hydrometers with humidity and temperature sensors by zones to reduce electricity consumption
- Print double-sided by default on all printers
- Coffee capsules replaced by coffee dispensers in bulk to reduce packaging
- Equipment is repaired and put back into circulation to extend the life of products and reduce waste



**Epson Italy:**

- Ongoing reforestation CO<sub>2</sub> compensation programme for Epson calendars and dealer webpages
- Office vegetables purchased from "zero km" local producers
- Abolished all single use plastics and committed to renewable energy within the ForTex and Robustelli Epson Groups



**Epson Netherlands:**

- Increased recycling capacity with new waste bins
- Use almost exclusively recycled print paper
- SDG awareness raising posters in every meeting room and at reception



**Epson UK:**

- 0% of waste from our UK site goes to landfill
- Sensor taps in place now to save water waste
- 30 Green Gurus trained by new waste management organisation to monitor and educate the UK office regarding recycling and other environmental concerns



**Epson Germany:**

- 13 charging stations for hybrid and electric vehicles
- Integration of hybrid and electric vehicles into the company car policy; many colleagues with company cars switched to hybrids and electric cars
- Short domestic flights have been replaced with car or train travel



# Epson's European footprint – facts and figures

Our European facilities play an important role in reducing our environmental impact, as we strive to minimise our consumption and emissions. In our offices, employee engagement in energy, water and waste reduction makes an equally important contribution to our overall figures.

## Water in our offices

### 17.9% Increase in water consumption

Employee water consumption has increased due to more handwashing and sanitation as a result of the Covid-19 pandemic, which has impacted our European offices since early 2020. 9,207m<sup>3</sup> of water was used in 2019 across our European offices, 17.9% more than in 2018<sup>2</sup>.



### Did you know?

Globally, Epson works with Aqueduct, a project of the World Resources Institute (WRI), as a global standard to assess water related risk faced by our production sites. None of our sites are in a region where the overall water risk is extremely high based on the physical availability of water resources.

## Energy in our offices

### 11.3% Less gas consumed

200,355m<sup>3</sup> was consumed in Epson Europe's offices, a reduction of 11.3% since last year.



### 9.63% Decrease in overall electricity consumption compared to 2018

In 2018, Epson Europe introduced energy efficient LED technology in 100% of its EUL offices.

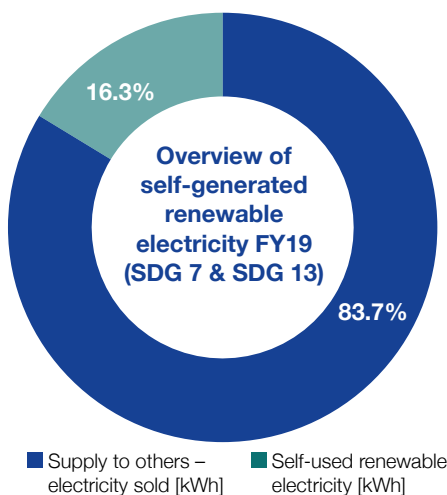


### 9.15% Decrease in electricity emissions per employee compared to 2018

Due to a warmer winter, Epson Europe required less heating for its offices.

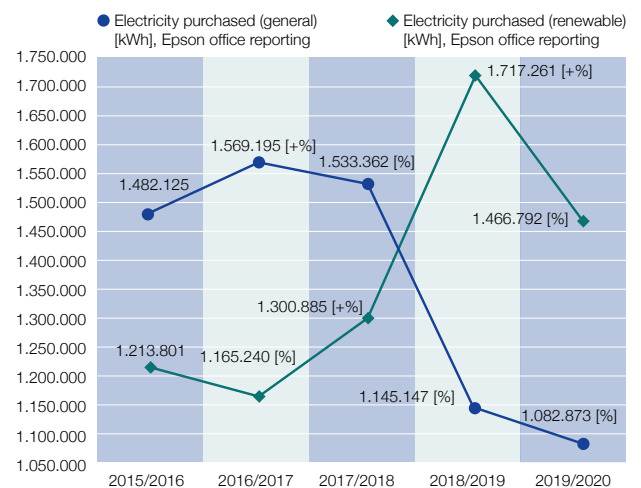


In 2019 almost 60% of all electricity was either self-generated or purchased renewable energy. An increase of 5% from 2018



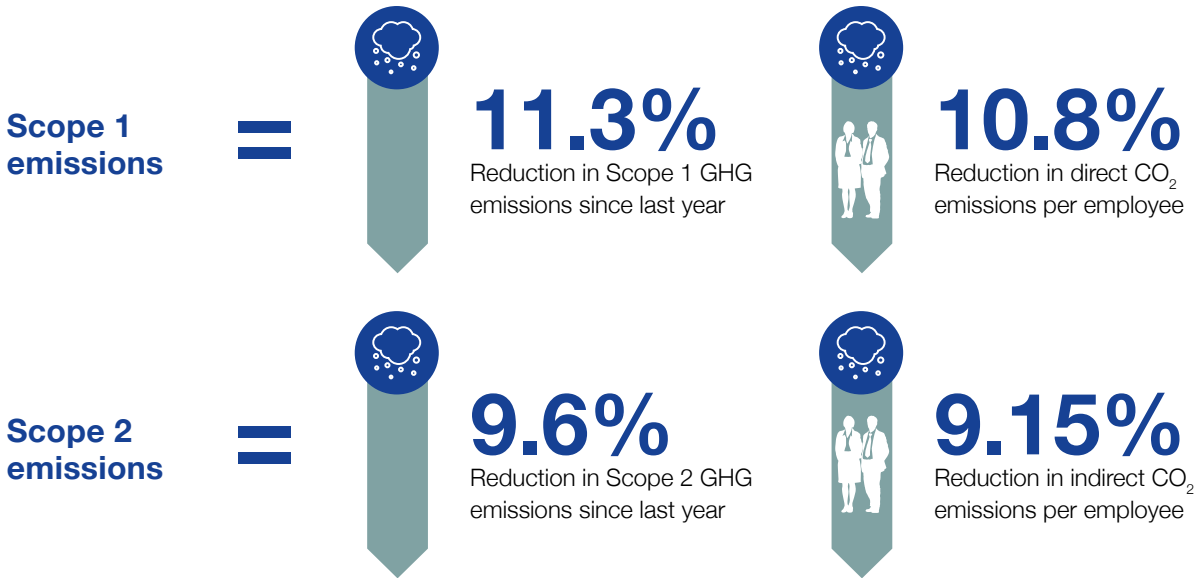
Our offices have been supplied by majority renewable energy for the past two financial years

Renewable energy vs. Grid mix FY15-19 (SDG 7 and SDG 13)



<sup>2</sup> This increase is attributed to increased sanitation and hand washing due to the Coronavirus pandemic.

## GHG Emissions in Epson offices<sup>1</sup>



Scope 1: Direct emissions from sources that are owned or controlled by the organisation  
 Scope 2: Indirect emissions from the consumption of purchased sources of energy

## Renewable energy footprint



<sup>1</sup> Epson Europe contributes to the reduction of the globally approved SBTs (Science Based Targets) target emissions (Scope 1 – Fuel combustion; Scope 2 – Purchased electricity and Scope 3 – Category 4 Upstream transport and distribution). However, as a European sales organisation we are also trying to reduce all Scope 1, 2 and 3 emissions. Therefore, in the context of this report, the utilisation of the terms Scope 1, 2 and 3 emissions is not necessarily linked to the global Seiko Epson approved targets.

## Our supply chain in Europe: warehouses and transportation



### GHG emissions (scope 1 & 2 combined) have fallen by 8.56% compared to last year

Despite increasing the footprint of our warehouses, thanks to our new energy efficient premises, our GHG emissions (scope 1 & 2 combined) have fallen by 8.56% compared to 2018.



### 31.35% Increase in water consumption since last year

Epson Europe expanded its workforce in the past year to meet increasing business demands, leading to an increase in water consumption in our warehouses. We also use our water to tend to the natural environment surrounding our warehouses in Germany.



### 9.56% Increase in purchased electricity consumption since last year

As well as an expanded employee base, we have increased our automation capabilities in our warehouses.



### 27.4% Decrease in consumption of gas

Totalling 61,068 m<sup>3</sup> consumed.

### Inbound and outbound emissions

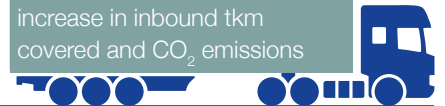
Epson Europe chooses carriers with clear environmental programmes and CO<sub>2</sub> emissions target reductions.

**30.87%**  
increase in outbound tkm covered.

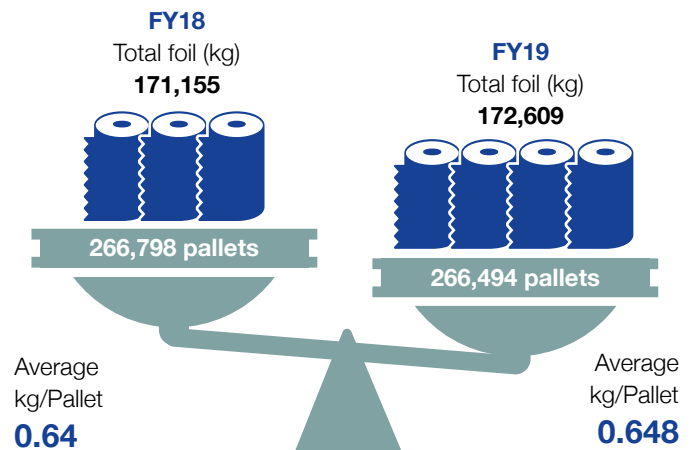
**13.78%**  
increase in CO<sub>2</sub> emissions



**14.15%**  
increase in inbound tkm covered and CO<sub>2</sub> emissions



As Epson Europe expanded its business across Central and Eastern Europe in the past year, new business travel has been essential. Further, palletisation has changed this year for safety reasons due to larger product dimensions and packing rules, leading to lower pallet utilisation. Epson Europe and its transportation vendors are constantly implementing changes to become more efficient and sustainable.



New efficient packing machinery

As sales increased over the past year, Epson Europe have slightly increased the use of plastic foils by 1%. A new product mix has required different and more fragile packing means. In FY20, we have introduced a new packing machine to address this, which efficiently wraps non-tiltable boxes, and has saved us 40% in wrapping foil.

## Recycling

To conserve valuable environmental resources and reduce waste, Epson aims to collect and recycle as many products and supplies as possible. In 2019, we recycled<sup>1</sup>:



**19,630,000+ kg of WEEE**

(Waste Electrical and Electronic Equipment)



**9,400+ kg of batteries**



**2,847,000 kg of paper**



**414,500 kg of wood**



**800,000+ kg of plastic**

### Cartridge collection & recycling programme

To conserve valuable environmental resources and reduce waste, we aim to collect and recycle as many products and consumables as possible. That's what Epson's cartridge collection & recycling programme stands for. There are different collection systems, tailored to various Epson printers, from consumer and business inkjet printers, to large-format printers, POS printers and label printers. We offer two different programs namely postal returns (for single returns) and box collection (for bulk returns).

The free of charge service is easily accessed via our website, where envelopes, recycling boxes as well as collection can be requested.

The collected consumables, such as ink cartridges, toners, and waste ink containers, are sorted and professionally recycled by our certified collection and recycling service providers Cycleon, in cooperation with Close the Loop, which are certified with EN 50625-1: 2014, ISO 9001: 2015, ISO 14001: 2015. The valuable raw materials contained in the products (e.g. various plastics, metals) are sorted, recycled if necessary, and then fed back into the resource cycle. On average, 95% of the collected material can be recycled and the remaining 5% are non-recyclable materials that are used to generate energy.

### Social responsible manufacturing

Epson joined the Responsible Business Alliance (RBA)<sup>2</sup> in April 2019 and is fully committed to collaborating with the RBA to improve working and environmental conditions through leading standards and practices. The Epson Supplier Code of Conduct, which is stipulated in detail within the Epson Group Procurement Guidelines, prescribes requirements in the areas of labour, health and safety, environmental conservation, management and ethics, as well as seven additional requirements that Epson defines as important measures, including export control and ensuring security in the supply chain. In 2018, we briefed key suppliers about the Epson Supplier Code of Conduct (based on RBA) and asked them to observe it, implementing a supplier self-assessment questionnaire and conflict minerals surveys. On-site verification of key suppliers took place, with corrective action implemented as needed<sup>3</sup>.

### Environmental risk management

We have Group-wide standards for pollution control, ensuring that all members are aware of and understand the ideas and laws of environmental risk management. We use ISO 14001, which specifies the requirements for an environmental management system, to identify and assess the risk of failing to meet standards, experiencing environmental complaints, or related incidents in order to mitigate such risks.

<sup>1</sup> Sum of amount actually collected and expected to be collected

<sup>2</sup> [https://global.epson.com/newsroom/2019/news\\_20190425.html](https://global.epson.com/newsroom/2019/news_20190425.html)

<sup>3</sup> [https://global.epson.com/SR/report/2018/pdf/epson\\_sr2018\\_all\\_e.pdf](https://global.epson.com/SR/report/2018/pdf/epson_sr2018_all_e.pdf)

# Corporate certifications



## Epson achieves EcoVadis Platinum status

EcoVadis Platinum status is an important and significant milestone for Epson. Sustainability is at the heart of everything we do at Epson and this award is just as valuable to our business, our partners and customers, as is our financial success.

For three successive years, our Gold EcoVadis rating has allowed our customers to purchase with confidence from Epson, secure in the knowledge that not only is our heat free technology assisting them towards their own sustainability goals, but that we adhere to the very highest labour, human rights and social standards.

Our Platinum EcoVadis rating now places us in the top one per cent in CSR for companies in our industry globally. We wholly recognise that there is always more to be done, but this is an achievement which reflects the great strides we have made in the last year to achieve the highest possible international CSR standards. We will continue to examine every aspect of our business and to deliver even further improvements in our sustainability performance.

## Epson commits to the United Nations Global Compact

Epson has reiterated its commitment to the United Nations Global Compact by signing the Statement from Business Leaders for Renewed Global Cooperation. Epson takes an uncompromising approach to socially responsible corporate conduct in areas such as compliance, human rights, environmental action, workforce diversity, and supply chain management.

## Epson selected as a constituent of the FTSE4Good Index for the 16th consecutive year

Epson has been included in the FTSE4Good Index Series for the 16th consecutive year. The FTSE4Good Index Series measures the performance of companies demonstrating strong environmental, social and governance (ESG) practices. Selection for this index indicates that Epson has been independently appraised for its efforts towards the environment and in solving issues in society and has been recognized as a sustainable company.

## Epson on Leaderboard for Carbon Disclosure

Epson has been identified as a global leader for engaging with its suppliers on climate change, being awarded a position on the Supplier Engagement Leaderboard by the Carbon Disclosure Project. Epson has been recognized for its actions and strategies to reduce emissions and manage climate risks in its supply chain. Over 4,800 companies in total were assessed by CDP and given a Supplier Engagement Rating, based on answers to selected questions about governance, targets, scope 3 emissions, and value chain engagement of their response to the CDP 2019 climate change questionnaire and their overall CDP climate change score. Epson is now among the top 3% of organisations assessed by CDP.



### Epson projectors are TCO Certified

Epson's projectors are TCO Certified. Epson's projector manufacturing plant in the Philippines was audited and successfully certified for compliance with strict social and ecological criteria as part of TCO Certified. TCO Certified is a world-leading global sustainability certification for electronics, founded over 25 years ago. Criteria include socially responsible manufacturing, environmental impact, user health and safety, and ergonomic design.

### RBA Code of Conduct

Epson will comply with the RBA Code of Conduct in its own operations, progressively implementing the RBA approach internally as well as to its first tier suppliers. Epson Precision Malaysia Sdn. Bhd. (EPMY) obtained a "Platinum" status for the RBA Validated Assessment Program (VAP) audit in 2019. The RBA (VAP) is the leading standard for onsite compliance verification and effective, shareable audits. Other Epson factories are currently undergoing audit processes and the results will be available in 2021.

### Sustainability Awards

On a more local level, Epson Germany has been nominated for the German Sustainability Award (Deutscher Nachhaltigkeitspreis) for the climate category. The award encourages the acceptance of social and ecological responsibility and to identify role models in this area, and awards prizes to companies for which sustainability is part of their business model. Epson France has recently been awarded a Product Game Changer award for Epson's cartridge-free EcoTank printers as part of the 3rd Grand Prix for Brand Social

Responsibility® (RSM). The purpose of this award is to reward brands that have integrated CSR into their marketing model, and who are committed to societal utility and creating a better world.

### CSR Europe

CSR Europe is the leading European business network for Corporate Sustainability and Responsibility. With the corporate members, National Partner Organizations (NPOs), and Associated Partners they unite, inspire and support over 10,000 enterprises at local, European and global level and support businesses and industry sectors in their transformation and collaboration towards practical solutions and sustainable growth.

Following the SDGs, CSR Europe aims to co-build an overarching strategy for a Sustainable Europe 2030 with European leaders and stakeholders. Epson joined CSR Europe in a full corporate membership in September 2017, and in 2019 Henning Ohlsson, Sustainability Director of Epson Europe and Managing Director of Epson Germany, Austria and Switzerland, was elected onto the board of Directors of CSR Europe.

### The EU Eco-Management and Audit Scheme (EMAS)

Is a premium management instrument developed by the European Commission for companies and other organisations to evaluate, report, and improve their environmental performance. EMAS is open to every type of organisation eager to improve its environmental performance. It spans all economic and service sectors and is applicable worldwide.





Rob Clark, Senior Vice President, Epson Europe, taken outside Epson's UK and European head office

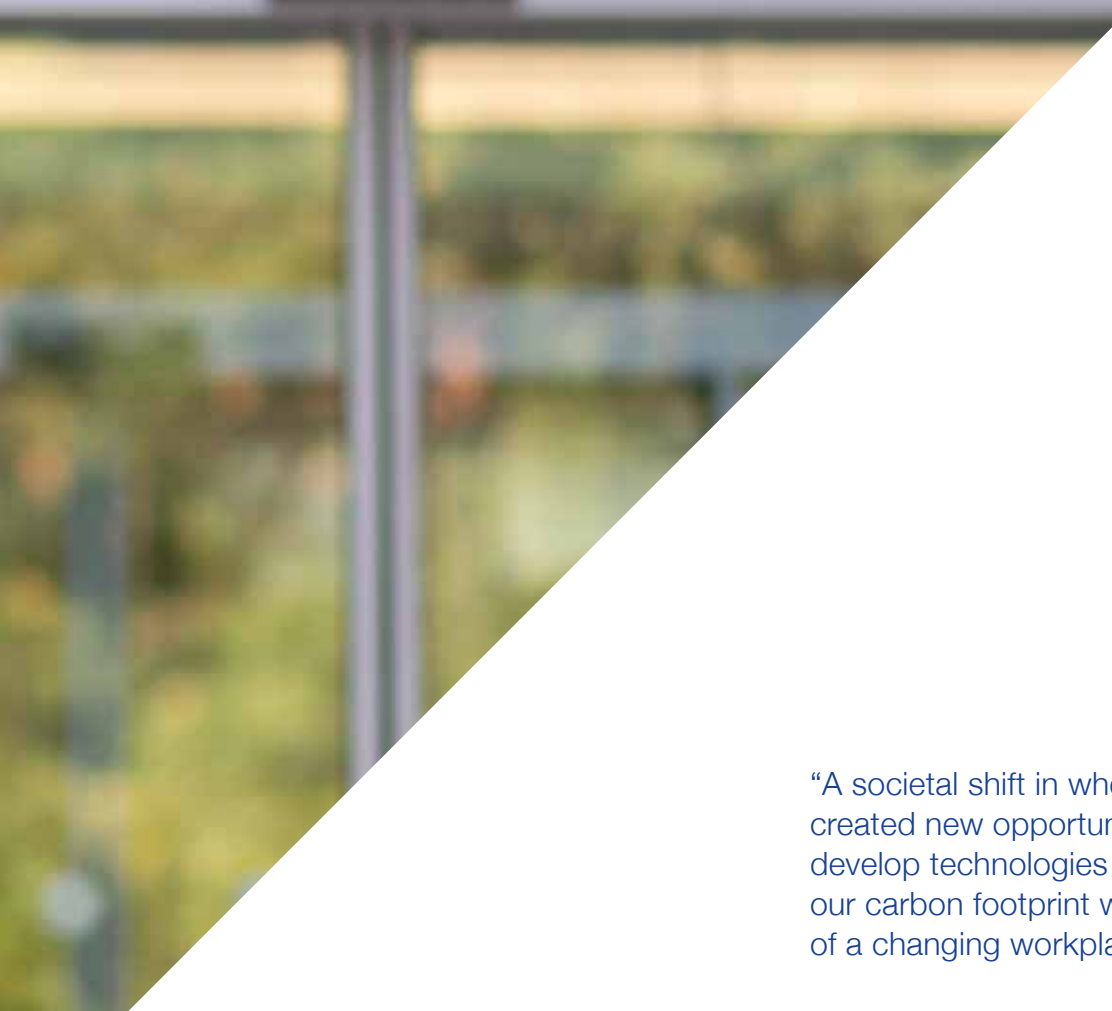
## Epson technologies in a 'new normal'

There is no doubt that the pandemic has challenged us to examine the sustainability of all our technologies. This is not a bad thing. A societal shift in where and how we work has created new opportunities for Epson to develop technologies that help further reduce our carbon footprint while answering the needs of a changing workplace and society.

Few businesses have been unaffected by COVID-19 and Epson is no exception. While sales for our highly efficient, cartridge-free EcoTank home inkjet printers have surged, other areas such as the high lumens projection market for live outdoor events this year have inevitably been affected.

At the same time new uses for our technology have emerged. Our Moverio smart glasses are solving the challenge of conducting business in a more remote world. The German automotive industry is using Epson smart glasses to sell its cars remotely in real-time to consumers, and companies across Europe use them for remote technical assistance, significantly reducing the need for long distance travel and physical contact.

During the lockdown we have seen significant demand for our inkjet colour label printers, especially for take-away food providers and suppliers of sanitizers. Printing labels on-demand and on-site is a far more sustainable model as it allows businesses greater flexibility while significantly reducing label waste and carbon-heavy delivery costs.



“A societal shift in where and how we work has created new opportunities for Epson to develop technologies that help further reduce our carbon footprint while answering the needs of a changing workplace and society.”

As we look forward, Epson inkjet technology with less energy, waste and significantly reduced carbon footprint, continues to replace laser as the technology of choice for printing in the home and office. This year Epson has led the business print market switch to a more sustainable technology, showing how by choosing inkjet printing significant carbon reductions can be achieved without any compromise on quality, reliability or output.

Other areas of our business such as robotics are also emerging as sustainable choices. As economies across Europe look to recover, the increased use of localised automation is resulting in less dependency on carbon-heavy offshore production. Robots are meeting the requirement for safe, socially distanced production, while at the same time reducing the need for people to undertake often tedious and monotonous factory work.

Visual communications, the use of projectors in video conferencing and for education, is also an area that continues to grow. As the workplace re-organises itself into more remote hubs, the need for effective visual communications is accelerating. Our ultra-short-throw projectors are improving accessibility in the classroom while our visualisers have supported new remote teaching methods.

Epson is well placed for all these new challenges. Sustainability is in our DNA. Our Japanese roots are grounded in a strong tradition of making exceptional products from finite resources. Developed in the true spirit of *Sho Sho Sei*, meaning precise, compact and efficient; Epson aspires to produce technologies that delight our customers, reduce carbon footprint, and answer the societal needs of our times.

**Rob Clark**

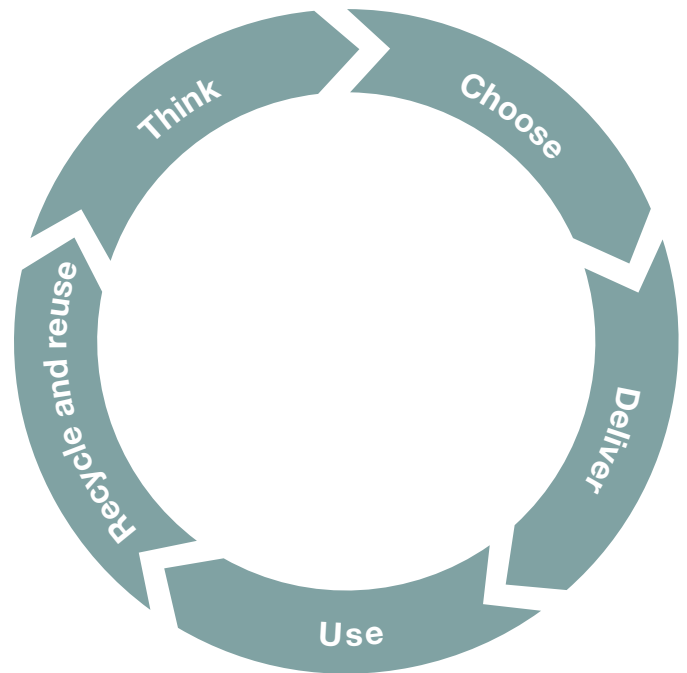
Senior Vice President, Epson Europe

# Technology vision: bringing the full product lifecycle into workplace innovation

We consider the full product lifecycle in our design and development. To make a greater contribution, we seek to drive work process innovations by minimising the environmental impacts incurred by our customers when using Epson products and by raising operational efficiency and productivity. Achieving this means taking on new challenges to offer value that existing technologies cannot provide.

Epson's inkjet printers are simple, non-contact systems that deposit ink droplets on media without heating the ink, so they are durable, require fewer replacement parts, and less packaging. The fact that they use Heat-Free technology also means that they consume little energy. These characteristics translate into a lower environmental impact and a lower total cost of ownership (TCO).

Epson worked with TÜV Rheinland to independently validate and calculate actual saving in energy costs and carbon emissions from businesses choosing inkjet in preference to laser technology.



# The circular paper ecosystem

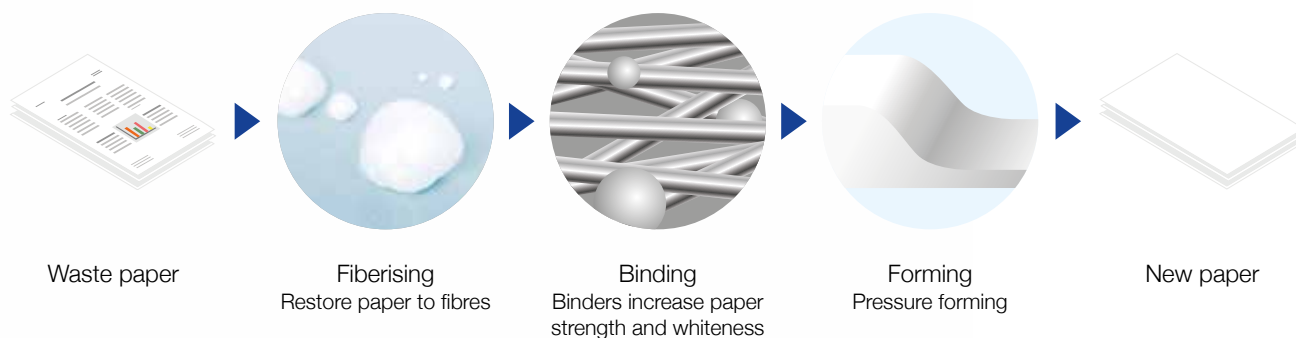
At Epson, our long-term environmental vision is to achieve sustainability in a circular economy, and we want to help our customers fulfill their recycling responsibilities. “Paper to paper” recycling, when fresh sheets of copy paper are produced from used paper generated on-site, is an effective way to contribute to an office eco-system. To this end, Epson has developed PaperLab, the first ever in-office paper recycling machine.

PaperLab is powered by Dry Fiber Technology, a combination of three processes that turn used paper into new paper: defibration, binding and forming. The processes remove inks and toners, reducing the printed sheets to their basic paper

fibres and saving the trouble of shredding documents. Capable of producing 5,760 sheets of recycled paper in an 8-hour workday, the machine also allows the user to adjust the thickness and size of the paper required. The intention is to keep paper at its highest value state for the longest possible time.

PaperLab can recycle waste paper in the office using a dry process<sup>1</sup>, thereby creating an office ‘eco-system’ that reduces CO<sub>2</sub> emissions, increases savings on collection, disposal and logistics, ensures secure disposal of confidential documents and saves water, which is used in huge volumes in traditional recycling processes.

**PaperLab contributes** to SDGs 6, 8, 9, 12 and 15.



Epson PaperLab A-8000

**Innovative dry process – making it possible to produce new paper from old paper in a small, localised cycle.**



See PaperLab in action

<sup>1</sup> A small amount of water is used to maintain a certain level of humidity inside the system which takes used documents and turns them into clean, white, blank sheets, in just 3 minutes.

# Our products and solutions – sustainable by design

Epson defines an environmentally-conscious product as one for which environmental impacts are considered at every phase of the lifecycle, from design and manufacturing to transport, usage and recycling.

Epson sets size and weight targets for products, since reducing these helps to significantly mitigate environmental impacts, not only because fewer materials are consumed but also because products can be transported and warehoused more efficiently. Epson makes every effort to design exacting products that minimise use of consumables and packaging at the customer's end.

However, we also go further than what is asked of us. Our engineers hold the expertise to innovate with the environment in mind.

## Reducing consumables

Epson is consciously transitioning away from a business model that is reliant on consumables, and will be accelerating the promotion of high-capacity ink products as an economic, efficient and more environmentally friendly alternative to laser printers.

## Greater output, reduced consumables

Our Business Inkjet Multiple Function Printers (MFPs) with replaceable ink bags, reduce the number of consumables and packaging required. This is the amount of cartridges and packaging required to print 2,100 pages (1,500 mono, 600 colour) per month over 5 years with a laser printer<sup>1</sup>. Just 9 Epson ink packs produce the equivalent output as 44 toner cartridges used in a laser printer.

**9**  
ink pack



**Business Inkjet**



## Focusing on solutions

By refocusing our efforts on solutions, we will both drive sustainable growth and boost relationships with our partners, allowing us to better serve our customers. Developing this offering across our four core innovation areas (inkjet, wearables, visuals and robotics) is vital to our goal of becoming a solution partner than just a technology vendor.

## Minimising the impact of packaging

Beyond our own operations, we are continually evolving the sustainability of our packaging materials. We have several ongoing material improvement projects resulting in CO<sub>2</sub> emission savings and replacing of plastics.

The operation during this year has extended its use of quick-well packaging therefore limiting the use of recycled Fillpak paper as a filling material in parcel deliveries, introduced 100% ecological paper usage, and in addition we are adding a 2nd hooder wrapping into the operation which will reduced film consumption usage further in the coming years, on top of the 24% reduction we have seen from 2014 to 2019.

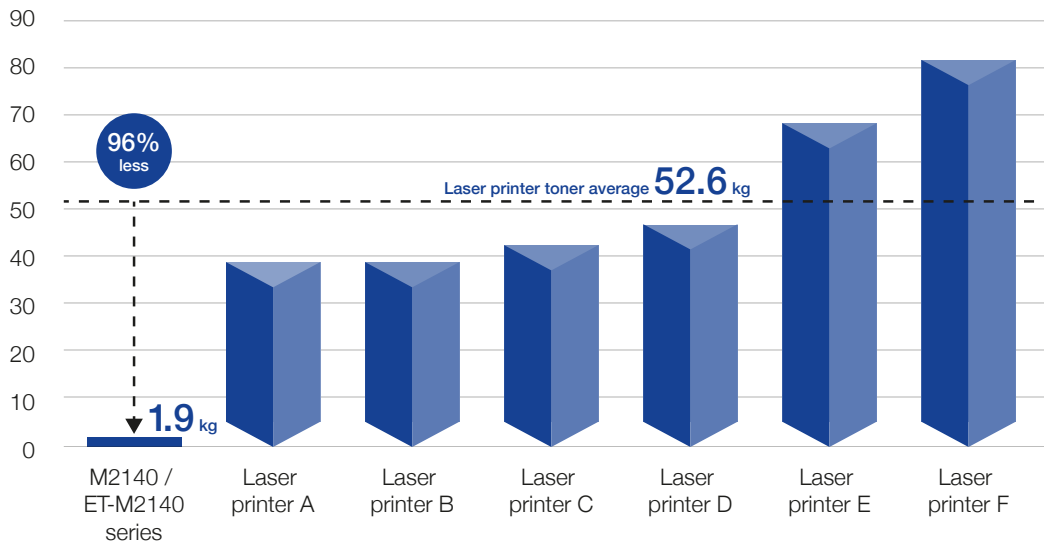


**44**  
toner  
cartridges

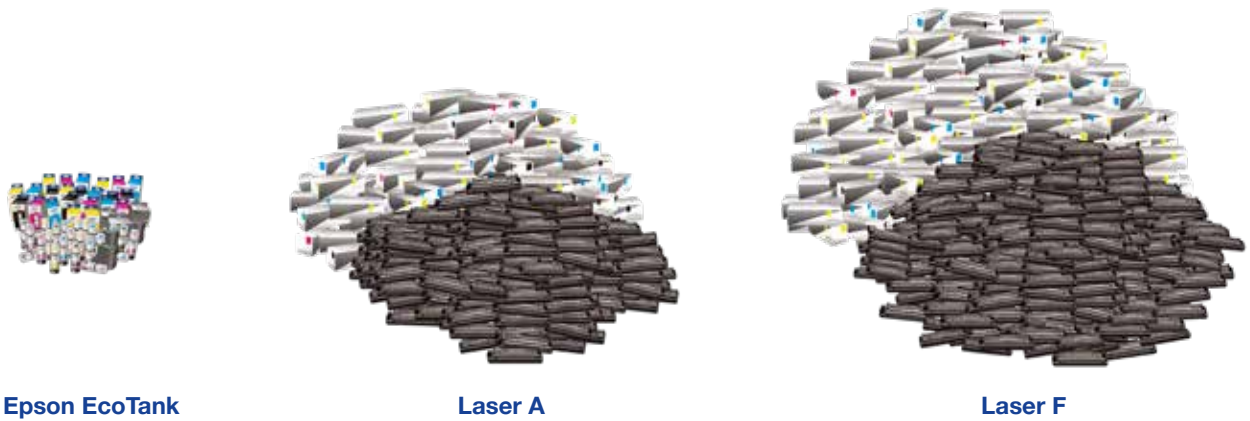
**Laser**



Epson high-capacity ink tank printers also reduce consumables and packaging. The CO<sub>2</sub> emissions from ink tank consumables are only about 1/5th of those of a conventional cartridge model<sup>2</sup>.



EcoTank monochrome series ink bottles contain enough ink to print up to 6,000 pages. Thanks to the high yield of the ink bottles, the total resources of EcoTank's used consumables is 96%<sup>3</sup> less than laser printer consumables. EcoTank consumables also reduce the environmental impact of transportation and delivery.



Epson EcoTank

Laser A

Laser F

EcoTank sales have potentially saved up to 1.1 million tonnes of plastic-based consumables<sup>4</sup>

The sale of 50 million EcoTank printers worldwide, since launch in 2010, have potentially displaced lasers. Looking at the plastic based consumables which laser toner cartridges represent, we have potentially saved up to 1.1 million tonnes of plastic-based consumables.

<sup>1</sup> HP Colour LaserJet Pro M477dw based on manufacturer's published ink yield data.  
<sup>2</sup> Compares CO<sub>2</sub> emissions from raw materials and parts manufacturing for consumables to print 300 pages (A4, color) per month/18,000 pages in 5 years with models EW-M770T and PX-M650F. CO<sub>2</sub> emissions calculated based on Epson's evaluation conditions and will vary depending on customer printer use. Results based on calculation method used in Japan. Evaluated: Cartridge model: ink cartridges, packaging. High-capacity ink tank model: ink bottles, packaging  
<sup>3</sup> Storage space comparison based on Epson calculations of storage space requirements for packaged consumables sufficient to print 6,000 pages on 12 SFP and MFP (3-in-1) printers selected from among the top-selling 50% of A4 monochrome laser printers (below-20ppm class) listed in IDC Worldwide Quarterly Hardcopy Peripherals Tracker 2019Q2 data FY17 results. Average toner package unit volumes and yields for each model were calculated by Epson using toner package dimensions and yields published by the manufacturer for each model (as of August 2019). Actual size and number of toner cartridges required varies by laser printer model. EcoTank consumables quoted yields are simulated figures calculated by Epson based on ISO/IEC24711 methodology using ISO/IEC19752 test pat  
<sup>4</sup> Based on Epson calculations, in printing 100,000 pages EcoTank Mono requires the disposal of 85% less plastic-based consumable material on average than competing mono laser A4 devices 1-20ppm.

# Inkjet innovation

Our vision and aim is to further refine our Micro Piezo technology and expand into high-productivity segments, improve environmental performance and create a sustainable printing ecosystem.

<b>Vision</b>	Refine Micro Piezo technology, and expand into high-productivity segments, improve environmental performance and create a sustainable printing ecosystem.
<b>Value creation</b>	 <b>Smart technologies</b> – Reduce costs, time, and trouble in printing, and create new possibilities for digital printing.
	 <b>Environment</b> – Mitigate environmental impacts and risks caused by the use of resources, electricity, and chemicals in traditional printing.
	 <b>Performance</b> – Contribute to higher customer productivity with high-speed, high-quality prints on a range of media of various sizes.

## Printers

Epson’s inkjet systems and printers are designed to reduce environmental impact, resource and energy consumption as well as increase production thanks to our proprietary Micro Piezo technology.

## Inkjet technology for textiles

In textile printing, the inkjet process saves resources and is more environmentally conscious than analogue processes because there are no films, screens, or plates to produce, wash, or store. Since the digital textile printing process is also shorter, it uses less energy and water than a traditional analogue process and wastes far less ink.

**Epson Inkjet for textiles** contribute to SDGs 6, 7, 8, 9, 11, 12 and 15.



EcoTank ET-4750



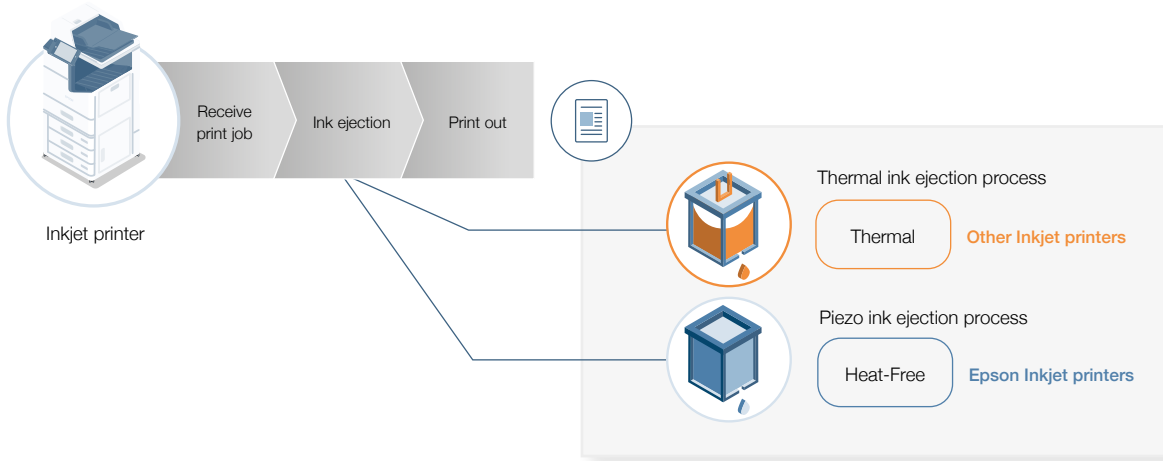
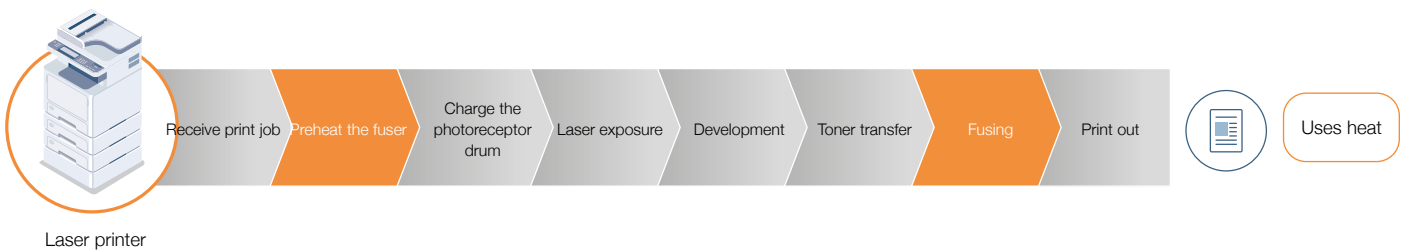
**Heat-Free technology**

Epson’s proprietary Micro Piezo inkjet technology underpins all Epson inkjet printers, whether for the home or business, and is what separates us from other manufacturers. The laser printing process is complicated, comprising preheat, charging, exposure, development, transfer, and fusing steps. Fine toner powder is transferred to a sheet of paper through contact and fused with heat and pressure. In contrast, Epson’s piezo inkjet printers are simple, non-contact systems. They deposit ink droplets on media without heating the ink, so they are durable, require only infrequent parts replacement, and generate little waste. Even if paper does jam, it can be removed easily and safely because there are no hot parts. The fact that they do not use heat also means that they use less power.

- Less power consumption saves energy and money
- Fewer replacement parts, lower environmental impact
- Less intervention increases productivity
- Consistent high-speed printing

High-speed linehead inkjet multifunction office printers are strategic products that will change laser-dominated office printing landscape. The WF-C20590 high-speed linehead inkjet multifunction printer is equipped with PrecisionCore lineheads that deliver print speeds up to 100 ppm, which is about double the 50-page output of a typical office laser printer. Power consumption is 71%<sup>1</sup> less than that of a typical laser printer.

**Epson Inkjet contributes** to SDGs 6, 7, 8, 9, 11, 12 and 15.



Watch the Heat-Free technology case study

<sup>1</sup> Epson WorkForce Enterprise WF-C20600 D4TW uses 71% less energy on average than competing colour laser A3 MFPs 45-69ppm. Methodology verified by TÜV Rheinland, based on 'Typical Energy Consumption', defined under and/or simulated with reference to the Energy Star test procedure and presented in kWh per year. Models identified using IDC HCP tracker data from Q4 2015 to Q3 2019.

# Creating real customer value

By switching to Epson Inkjet Heat-Free technology, our customers are saving on energy, reducing their carbon footprint and reducing printing costs.

## French rental company saves over €33,000

Kiloutou is the 3rd largest European rental company and a major player in the rental of equipment in France. The Kiloutou group provides a wide range of materials and services including personnel elevation equipment, earthmoving and construction, structural and finishing work, commercial vehicles and support for events. In 2019 Kiloutou replaced its fleet of laser printers with Epson inkjet technology.

The company switched from using 484 A4 laser multifunction printers and 15 A3 laser multifunction printers to the equivalent number of Epson inkjet printers. This switch has resulted in savings of €15,540 (= 157,397 kWh) and a reduction in carbon emissions of 11,647 kg of CO<sub>2</sub>.

Kiloutou also experienced additional benefits including less waiting time on head office copiers. In 2020, Kiloutou replaced a further 923 monochrome A4 laser printers with the equivalent number of Epson inkjet monochrome A4 printers.

Kiloutou's decision to switch to Epson inkjet technology will deliver total savings of €33,317 (=333,166 kWh) and a CO<sub>2</sub> reduction of 24,654 kg.

Savings calculated over a 5 year period

**484** Inkjet printers installed

**€33,000** saved

**11,647** saved in CO<sub>2</sub> emissions

**157,397** kWh saved

## Switching to Epson saves IB Südwest 63 tonnes in CO<sub>2</sub> emissions

Internationaler Bund e. V. (IB) is one of the largest German non-profit service providers in youth, social and educational work in Europe. IB Südwest is a subsidiary and operates in 170 communes in Southwest Germany. 2,400 employees are committed to supporting people develop their own lives and build an open-minded, democratic society. Sustainability plays an important role for IB Südwest's employees to ensure a prosperous and healthy environment for future generations. By switching to 154 Epson WorkForce business Inkjet printers, the company is now saving 128,848 kWh in energy and 63,007 tonnes of CO<sub>2</sub> emissions in comparison to its previous laser printers. The project was realised by HAIN.<sup>1</sup>

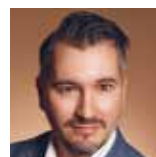
"We are especially happy to reduce CO<sub>2</sub> and particulate matter emissions and last but not least lowering the handling costs for our printers."



**Mr Martin Treu**

Head of IT IB Südwest GmbH

"We are delighted to be able to provide a print solution that supports IB Südwest in their commitment to be sustainable and forward thinking"



**Mr Maurizio Pittello**

Managing Director of HAIN GmbH

**154** Inkjet printers installed

**128,848** kWh energy saved

**63,007** tonnes CO<sub>2</sub> saved

<sup>1</sup> Calculation over a five-year use period (one hour use phase per day based on the customer's average user behaviour) based on the manufacturer's stated energy consumption in operating mode of the laser printers used before compared to the energy consumption in operating mode of the Epson WorkForce business inkjet printers. CO<sub>2</sub> emission factor based on the average German power mix

## EG Group saves 50 tonnes in CO<sub>2</sub> emissions with Epson

EG Group operates an extensive network of petrol forecourt retail convenience stores across the UK and nine other international markets. Thanks to the installation of Epson inkjet printers (WorkForce WF-M5799DWF), which replaced its previous fleet of laser printers, EG is now saving<sup>1</sup>: 49,355 kg in CO<sub>2</sub> emissions (not including the additional carbon footprint associated with increased consumables), 179,400 kWh in energy, 16,600 consumables, and 15% in printing costs.

“As a growing international, customer-centric retailer, our priority when considering any operational change is to ensure we retain our high standards of efficiency and customer experience. Epson’s technology aligned closely with our global commitment to build a sustainable business model, and it challenged any misconception that eco-savings would be a compromise on cost or productivity.”

### Javid Patel

Head of Purchasing for EG Group

**49,355** kg CO<sub>2</sub> emissions saved

**179,400** kWh energy saved

**16,600** consumables

**15%** saving in printing costs.

## acon avm opts for sustainability with Epson inkjet technology

acon avm is a large, full-service consultancy and accountancy firm based in the Netherlands with over 1,000 employees in 40 offices. The company prides itself in delivering high-quality services for SMEs and is firmly committed to social involvement and sustainable entrepreneurship.

acon avm’s existing printer fleet was based on laser technology and was due for replacement. The company not only wanted to halve the number of printers, but also set ambitious targets for sustainability, operational costs and productivity.

## Eldor chooses Epson inkJet technology

Eldor Corporation is an Italian based world leader in the research, development and production of ignition coils, engine and vehicle control systems and electric-hybrid systems. As a result of its expanding business and need for re-organisation, Eldor replaced its existing laser printers with a new fleet of Epson business inkjet printers. To date it has installed 91 Epson Workforce inkjet printers for its offices which, when compared with laser technology, now guarantees energy savings of 23,047 kWh and a CO<sub>2</sub> reduction of 7,490 kg<sup>1</sup>.

“For us it was essential to work with a company with a special focus on the environment and people. We attach great importance to the quality of the workplace and Epson’s inkjet technology has allowed us to reduce the environmental impact compared to laser printers, as well as significantly reduce the volume of produced waste.”

### Luca Forte

Board member and Corporate Supply Chain Director of Eldor Corporation

**91** Epson printers installed

**23,047** kWh saved

**7,490** kg<sup>1</sup> CO<sub>2</sub> reduction

Following the switch from 125 laser printers to 68 Epson business inkjet printers, acon avm calculates it can achieve energy savings of 308,155 kWh<sup>1</sup> over a period of 5 years, or a saving of more than 98% compared with equivalent laser printers. This corresponds to a reduction of over 146,374 kg CO<sub>2</sub><sup>2</sup>.

“In terms of sustainability, we were quickly convinced of the benefits of Epson. The added value of Epson’s Heat-Free technology is very clear to us. Such large energy savings and CO<sub>2</sub> reductions simply cannot be ignored.”



**Anita van Gelder**

ICT & Facilities Director at acon avm

**125** Laser printers replaced

**308,155** kWh in energy

**146,374** kg CO<sub>2</sub> saved

<sup>1</sup> BLI – Buyers Lab data. Calculation based on the manufacturer’s stated energy consumption in operating mode and standby, comparing the new Epson printers as purchased by acon avm with the company’s current printer fleet.

<sup>2</sup> Based on CO<sub>2</sub> conversion factor of 0.475 (electricity from unknown source) available at: [www.co2emissiefactoren.nl](http://www.co2emissiefactoren.nl)

## Diabetes clinic reduces energy consumption peak

The Diabetes Clinic Bad Mergentheim, Germany, is a specialist hospital offering in-patient treatments for diabetes. The facility includes the Diabetes Academy, the research institute FIDAM and an independent, private diabetes practice. The institute relies on Epson printing and projection technology to equip its numerous offices and training rooms.

“Before we switched to Epson inkjet printers, every day at 11am our energy consumption peaked – something we couldn’t explain for a long time. Today we know that this was the time that doctors started to print patient data and the peak was simply due to the warm-up phase of our laser printers. After installing Epson inkjet printers, this problem disappeared.”

### Daniel Schießmann

Head of IT at Diabetes-Klinik Bad Mergentheim

## Textile printing with certified, sustainable inks

BingBingBing is a Paris-based communications agency that designs and manufactures promotional products, such as t-shirts and canvas bags for well-known brands and marketing agencies. In order to meet the fast-paced demands of their clients and frequent requests for 24-hour turnaround, items are printed in-house.

“Our aim is to develop sustainable, organic products as part of a global initiative, and Epson is helping us to make that happen. Our Epson large format printers enable us to work with OEKO-TEX certified inks with natural pigments. The ability to print onto organic textiles without sacrificing the quality of our products is essential to us and our clients who care passionately about sustainability.”

### Nicolas Gille

Director at BingBingBing Strategie



Watch the BingBingBing Strategie case study

## Energy efficient office space hubs for entrepreneurs

SkaleHub Offices provides all-inclusive, quality office spaces for entrepreneurs looking to grow their businesses. The co-working spaces can be found in five locations across Amsterdam and offer fully equipped office space including high-speed internet and printers.

“Our aim is to create energy efficient office environments. Epson has really helped us to reduce our energy consumption. We’ve avoided a situation where our entrepreneurs use multiple printers, and instead we have just one, high-quality printer that’s extremely energy efficient.”

### Thom van Wijk

CEO and Founder of SkaleHub Offices



Watch the SkaleHub Offices case study

## Setting an example to students on sustainability

Alkwin Kollege in the Netherlands prides itself on a safe and challenging learning environment. Varied teaching methods, citizenship education and personal development play an important role and broad talent development is encouraged, including science, cultural activities and sports.

“The printers are really energy efficient, which is great for the environment. As a school we have to set an example when it comes to sustainability. When it comes to bringing this to life and demonstrating this to our students, our Epson printers are a key part of that message.”

### Ron van der Sluis

Digitalisation and Education Innovator at Alkwin Kollege



## Contributing to the UN's Smart Sustainable City programme

This year, we reinforced our commitment to transforming the UN's SDGs into action and results, through our partnership with Ålesund Futurlab – U4SSC (United for Smart Sustainable Cities). The U4SSC implementation programme is part of a wider UN programme that aims to utilise technology to deliver smarter solutions for cities and communities across the world.

Based in the Norwegian seaport of Ålesund, U4SSC is made up of a partner network from academia, public sector, industry and commerce, and in 2020, the programme is working actively to create a solid framework for local development, using the best available technology.

Epson has been working closely with the Offshore Simulator Centre (OSC) at Campus Ålesund, which uses our technology to support the Norwegian Maritime Competence Centre (NMK). There, Epson laser projectors play a key role in the development of smarter solutions including the creation of virtual meeting spaces, development of control rooms for autonomous vessels to monitor ship traffic in real time and to shape the future of the global maritime industry.

The Epson expertise and visualisation technology used in NMK's shipping simulator is now being applied to other emergency planning including scenarios for the fire and rescue services to reduce response times without the need for new road construction. This visualisation tool has also become the official tool for the UN to simulate city development for all cities in the world.

Epson display solutions in Offshore Simulator Centre at Campus Ålesund



# Visual innovation

## Vision

Refine original microdisplay and projection technologies and create outstanding visual experiences and a natural visual communications environment for every aspect of business and lifestyles.

## Value creation



**Smart technologies** – Enrich communication through the ubiquitous rendering of images.



**Environment** – Use realistic augmented reality (AR) technology to reduce environmental impact associated with the movement of people and things.



**Performance** – Use high-quality images to enrich lives and enhance customer productivity



EB-1485Fi Ultra-short throw display solution

### Display solutions

We launched the EV-100 and EV-105, accent lighting projectors with a long-lasting laser light source, helping to reduce the energy footprint. Our large-scale laser projectors integrate a long-lasting laser-light source, which lasts up to 20,000 hours.

Our interactive projectors such as the EB-1485Fi support easy remote collaboration and lower the need for travel, helping to reduce the environmental footprint. Power consumption can be lowered by as much as 29% using ECO mode. Many of our business projectors are TCO certified.



Moverio Smart glasses

### Moverio

Epson's Moverio smart glasses are compact and lightweight with unique silicon-based Si-OLED (organic light emitting diode) digital display technology. They deliver 3D content with a long battery life, and can visually detect items using a high-resolution, five megapixel stereo camera. The glasses are being used across Europe in a range of commercial applications including healthcare, dentistry, remote maintenance, drone-piloting, as well as for many visitor and cultural attractions.

# A technology come of age in extraordinary times

Epson's Moverio augmented reality smart glasses is a communication technology come of age in these changed times. Its use now in remote assistance is widespread where the glasses are delivering increased productivity, lower costs, improved customer service and – importantly – a much reduced carbon footprint.

There are many excellent examples of remote assistance including pharmaceuticals (Marchesini), rubber manufacturing (Saargummi), railway manufacturing (Siemens), food & drink (SIG) and packaging (Comexi). The glasses achieve faster

response times to problem solving; higher productivity through reduced machine downtime; higher first-time fix rates and significantly reduced long-distance travel meaning much lower carbon emissions.

The German automotive industry is also using Epson's smart glasses to sell its cars remotely to consumers. Audi began using Moverio in 2019 and now potential purchasers can view cars from the comfort of their homes in real time, ask questions and view vehicles before making a commitment to visit the showroom.

**Epson visual solutions** contribute to SDGs 4, 7, 8, 9 and 12.



Watch the Marchesini case study



Watch the Saargummi case study



Watch the Siemens case study



Watch the SIG case study



Watch the Comexi case study

SIG Linnich using Moverio smart glasses



# Robotics innovation

## Vision

Combine our core technologies with sensing and smart technologies in manufacturing, expand applications, and create a future in which robots support people in a wide variety of situations and lifestyles.

## Value creation



**Smart technologies** – By providing solutions with robots that see, sense, think, and work, and by enabling anyone to easily use our robots, we will free people from performing work they don't want to do and work that employers don't want them to do, thus allowing them to shift into higher added value jobs that are more creative.



**Environment** – Mitigate environmental impacts with compact, slim, lightweight robots that are energy-efficient.



**Performance** – Using original robotics and sensing technologies, we will achieve robots that move accurately, at high speed, and with low vibration, thereby providing solutions that exceed customer expectations and increase their productivity

## Robots

Epson's industrial robots have led the industry for over 30 years thanks to their innovation and reliability, and Epson has maintained the top share of the global market for SCARA robots for nine consecutive years<sup>1</sup>.

Our T-Series robots have a built-in controller and battery-free motors. The SCARA T3 is 30% more energy-efficient than conventional SCARA robots<sup>2</sup>. Because they do not use batteries, you do not have to replace them every year-and-a-half as you would a traditional SCARA robot. Thanks to its built-in controller, there will be less waste produced from disposing of multiple parts, and it also runs on 100V, so it can be used in facilities where a large power supply is not available.

**Epson Robotic solutions contribute** to SDGs 7, 8 and 9.



T3-4015 robot

<sup>1</sup> Market share based on revenue and unit sales of industrial SCARA robots, 2011-2019 (Source: Fuji Keizai "2012 – 2020 Reality and Future Outlook of Worldwide Robot Market")

<sup>2</sup> Compared with an Epson LS3 SCARA robot.





# Inspiring tomorrow's sustainable fashion

Awareness of sustainability within the fashion industry has seen considerable growth, with consumers increasingly demanding sustainable manufacturing practices. Digital textile printing provides significant reductions in water and electricity consumption in comparison to traditional methods of printing fabrics. It also offers designers the flexibility to customise designs and produce exact quantities on-site and on-demand, with very little waste.

Our German team has a long-standing partnership with the Faculty of Textile and Clothing Technology at Niederrhein University of Applied Sciences in Mönchengladbach- offering Bachelor degree students the opportunity to work on real-life assignments. This year's students – divided into interdisciplinary teams, were tasked with designing a women's Autumn/Winter fashion collection using sustainable fabrics such as recycled PET. The fashion collection was created with the theme 'Identity of nature' using inspiration by the ocean and the woods.

"The students really appreciated the opportunity to work with the latest technologies and gain real industry experience in production techniques that will help with their future development and studies" commented Prof. Dr.-Ing. Kerstin Zöll, professor for Clothing Manufacturing Technology, Niederrhein University of Applied Sciences.

All the fabric patterns designed by the students for their collection were printed in the Epson Industrial Solution Centre in our German office in Meerbusch with the digital dye-sublimation printers SureColor SC-F6300, SureColor SC-F9300 and SureColor SC-F9400H from Epson. The final outfits were presented by the students to an audience of about 500 people, including their professors, Epson staff and fellow students.

"Working with the university students is a real inspiration, helping them discover the sustainable benefits of inkjet printing and giving them the opportunity to explore their creativity and bring it to life using sustainable materials and Epson's energy and resource-efficient direct and dye-sublimation printers."



**Daniela Scheidung**  
Product Manager  
Commercial & Industrial Printing

Sustainable digital textile printing





Michelle in the Solutions Suite at Epson's UK and European head office

## People are our culture

No year has demonstrated the value of our people like 2020. The pandemic has transformed the way we work together as a company. It has tried and tested our business and, like many other organisations, encouraged us into new ways of operating. I reflect with pride on the adaptability, resilience and determination shown by every Epson employee throughout this year. It is this positive attitude that has enabled our people to navigate through the last few months, maintaining a focus on our customers and remaining strong as a community. It is our employees that make Epson the customer-centric company that we are today.

Across the globe we operate as a diverse group of people, who all work together to deliver innovative and sustainable solutions that meet our customers' needs. At Epson we encourage individuality and value the different perspectives, skills, experiences and ideas that all our people bring. Belief in our vision brings to life the products and services we offer to our customers. And throughout this time, it has been their commitment to delivering customer satisfaction whilst caring for and supporting the wider community that has sustained us through these challenging times.

Keeping all our employees connected to Epson, their colleagues and their local communities has been critical. We have managed this through establishing online employee communities, delivering regular virtual training on a variety of diverse topics, and making the best use of communication technologies. In fact, Epson Europe employees have spent a total of over 19,300 hours on training in the past year, and despite the challenges, employees across Europe have spent significant time contributing to and supporting their local communities – from tree planting to charity fundraising.

Epson knows that now, more than ever, our commitment to providing continuous and diverse training and development opportunities is essential for us to continue to develop our diverse global talent that will help drive Epson to new heights in the future.



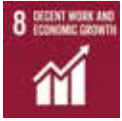
“I am proud to work for such a responsible and principled company and, more than ever, I am honoured and privileged to work with exceptional colleagues during these challenging and unprecedented times.”

Our employees tell us that Epson has a special culture, where we give our employees the time and opportunity to get things right and do a great job in a safe, healthy and fair working environment, where a focus on success and pride is as integral as team work and recognising individual contributions.

Our employees are fundamental to making the Epson culture and we go out of our way to recognise and reward the behaviours that contribute to making Epson a great place to work. Employees who exhibit our company values and core behaviours are celebrated as Epson Champions. Last year our employees named as Epson Champions enjoyed a magnificent trip to Japan which included time at the Epson head office, visits to our factories and the opportunity to enjoy unforgettable time sightseeing and experiencing the best of Japanese culture, including Tai Chi and karaoke.

I am proud to work for such a responsible and principled company and, more than ever, I am honoured and privileged to work with exceptional colleagues during these challenging and unprecedented times.

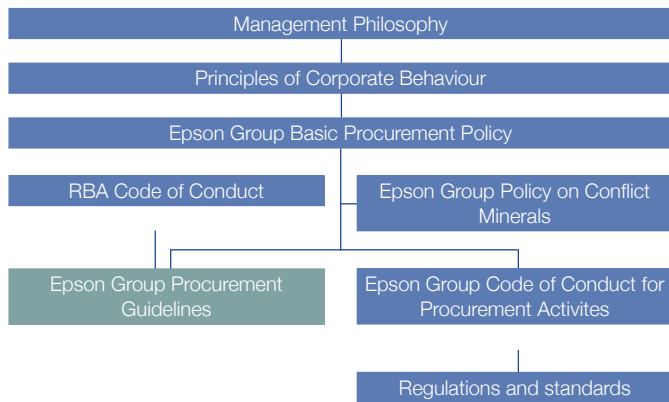
**Michelle Taylor**  
EMEA HR Director



# Our commitment to people

At Epson Europe, our employees are the cornerstone of our success. We employ over 76,000 people worldwide and without them, we wouldn't be where we are today. We are committed to delivering the best working conditions for everyone.

## CSR Procurement Policies



- Compliance requirements applying to suppliers
- Internal standards

## Our People commitment

Epson joined the Responsible Business Alliance in 2019 and is committed to its Code of Conduct, outlining a clear set of social, environmental and ethical industry standards. The standards set out in the Code of Conduct reference international norms and standards including the Universal Declaration of Human Rights, ILO International Labour Standards, OECD Guidelines for Multinational Enterprises, ISO and SA standards, and many more. The code covers five key sections, including: standards for Labour, Health and Safety, the Environment, Business Ethics and the elements of an acceptable system to manage conformity to the code itself.



**Contracts:** every employee has a contract with regulated working hours and overtime opportunities

**Recruitment:** hiring people over 18 (ILO standard is 16), fairly and with transparency

**Remuneration:** paying above average wages

**Termination:** never terminating employees based on unfair or unethical reasons

**Partnerships:** requiring our suppliers to follow the Supplier Code of Conduct and treat their employees with similar dignity and respect

**Health & Safety:** ensuring employees have safety, health and fire or disaster prevention training through our Safety & Health programme

**Emergency measures:** having proper measures in place to effectively tackle any crisis situation to ensure the safety of our employees

**Freedom:** respecting freedom of association to join a trade

union

**Work Councils:** having work councils in each country and a European Works Council within the company

**Reporting:** providing services for employees to report abuses of any kind

**In our factories**

Epson wholly owns and manages all factories that produce its products and technologies, and is committed to delivering the best working conditions for all employees regardless of where they work.

Epson Precision Malaysia Sdn. Bhd. (EPMY) obtained a “Platinum” status for the RBA Validated Assessment Program (VAP) audit in 2019. The RBA (VAP) is the leading standard for onsite compliance verification and effective, shareable audits. Other Epson’s factories are currently undergoing audit processes and the results will be available in 2021.

Epson employees participate in global ACT for SDGs week





# Diversity at Epson

Equality, diversity and inclusion are integral parts of Epson's DNA. Epson's Management Philosophy and nine Principles of Corporate Behaviour are the foundations of our company; they represent our vision, core belief system and the values we strive to uphold every day. Two of our nine Principles of Corporate Behaviour talk about the value of diversity, having a fair work environment and respecting human rights. Principle 3 highlights the value of fostering diverse values and teamwork, and Principle 4 emphasises that Epson Europe must uphold a safe, health and fair work environment where human rights are respected.

As a company which represents a diverse mix of people, we encourage individuality and value the different perspectives, skills, experiences and ideas that come with a diverse mix of people. Our employee strategy, policies and procedures support us in ensuring that we maximise this diversity by having an inclusive environment for all – an environment where everyone is encouraged to share their ideas and make their voices heard, working together cooperatively and harmoniously.

Company-wide, Epson has set a target of achieving 5% (40 people) of management positions and 7% (350 people) of leadership roles (equivalent to assistant manager) represented by female employees by FY2022<sup>1</sup>. Epson also has a long-standing commitment to promoting women and girls in STEAM (science, technology, engineering, arts and mathematics).

## In Europe, our people manager positions are:



We are proud to state that globally we employ a high number of people with disabilities and are committed to ensuring that no assumptions are made about ability based on an individual's disability whether visible or non-visible. Across Europe we have been working with organisations like Sant Martí in Spain and the Werkstatt für angepasste Arbeit (WfaA) in Germany to proactively identify people with a physical or mental disability to work at Epson.

## Our diversity and inclusion initiatives include:

- Robust and unbiased recruitment and selection processes
- Participation in the 30% Club Women's Mentoring programme in the UK in 2019 and internationally in 2020
- Diversity, Equality and Inclusion training and Unconscious Bias training in 2020
- Refresher training and awareness courses regarding our principles of corporate behaviour
- An employee ideas and suggestion scheme for all employee voices to be heard and considered
- A selection of Employee Resource Groups to support female, menopause, men's mental health and retirement planning and retirement focused employees
- Flexible working and core hours available

<sup>1</sup> [https://global.epson.com/SR/report/2018/pdf/epson\\_sr2018\\_all\\_e.pdf](https://global.epson.com/SR/report/2018/pdf/epson_sr2018_all_e.pdf)



# Commitment to employee wellbeing

Epson is committed to supporting the wellbeing of our employees by providing resources, information and opportunities to help employees maintain their physical, mental and financial wellbeing and develop productive relationships with colleagues and the local community. In the past year, we have increased our efforts to ensure that Epson employees are actively supported in achieving and maintaining good health and wellbeing both in and out of the workplace, and that Epson supports local communities and societies to achieve sustainability and prosperity.

## Key activities undertaken in FY19 were:

- Employee assistance programmes
- Seminars and webinars on mental and financial health
- Partnerships with local gym and fitness centres to promote physical health
- Mental Health First Aiders are identified, trained and available to support employees

## Supporting employees during Covid-19

The safety and wellbeing of our employees is Epson Europe's top priority. Almost all of our employees worked from home during the Covid-19 crisis, and many continue to do so. Having a remote workforce poses its own challenges, so keeping our employees connected to the company and their colleagues is a key focus. Establishing online employee communities, increasing our training offering and ensuring effective use of technology has allowed our employees to stay fully connected and engaged.

We achieved a 77% workforce completion rate of our Sustainability E-Learning at the end of FY19 across our European business.

## Employee development

Epson Europe aims to support our people in their development and provide greater opportunities for growth within the organisation. We are committed to providing training that is adapted to our employees' roles and goals, ranging from management and sales excellence programmes, aspiring manager development programmes to bespoke training workshops for individuals and teams. As a company, we also provide financial support for personal and professional development.

In the past year, we have continued to invest in employee development, and Epson Europe employees have spent a total of over 19,300 hours on training.

## Volunteering at Epson

Our local offices are already actively engaged in their local communities, and this year has seen employees across Europe dedicate time and money to causes of their choosing. Donations and employee working hours for volunteering projects in key markets this year totalled over €150,000 across Europe.

## Reducing our environmental impact

Our employees are committed to environmental sustainability and we want to support their personal commitment in the way we support their role within the company.

Despite our growing team in Europe, the changes we have brought into our workplaces have reduced direct and indirect CO<sub>2</sub> emissions per employee by 9.15% compared to last year.

Business travel is another source of CO<sub>2</sub> emissions, which is why we have committed to reduce business flights by 19% by 01 April 2025 (as compared to benchmark financial year 2017). In the past year, CO<sub>2</sub> emissions from business travel flights have reduced by 10.4%.

# Spotlight on local projects



## School students deliver for charity

Employees at our UK head office recently voted for the Human Milk Foundation as their three-year charity partner. The small, independent local charity collects donated human milk for babies and delivers it to hospital neonatal intensive care units and families at home in urgent need.

As part of Epson's support for the charity across PR, marketing, social media and fundraising, students from Longdean, a local school, were tasked with producing a design for the charity's delivery car to be wrapped and branded.

The car is the first ever urgent donor milk bank delivery car in the UK and the branding is intended to help to raise awareness of the charity out on the road. The design the students came up with was based on the components and molecules in human milk and the snowdrop flower which is the charity's emblem.

Kate Levesley, art teacher at Longdean School, said: "The students have thoroughly enjoyed working with Human Milk Foundation and Epson. Working collaboratively on a live project has given them an insight into the world of design and made them see the process from design and consultation to the finished product."

Dr. Natalie Shenker, Co-Founder of The Human Milk Foundation, said: "It's been wonderful to collaborate on this project and see the 'Milk Mobile' come to fruition. We're very impressed with the hard work the students put into creating the car wrap design."

Epson has a number of projects planned with the charity over the next few years, including tree planting and fundraising through donations linked to product sales. Employees have raised nearly £20K to date for the charity and donated products have significantly streamlined the charity's operations.

Car designed by students from Longdean School







O Pinhal de Leiria forest in Portugal



## Recovery of an ancient forest devastated by fire

O Pinhal de Leiria is an ecologically important, ancient pine forest in one of the largest natural areas of Portugal. In 2017, severe forest fires devastated more than 80% of the area's trees, and earlier this year, our Epson Portugal team were inspired to join forces with a number of our partners, suppliers and customers to help re-forest the area.

Lisbon was named as the European Green Capital 2020 and Epson is directly involved in several projects in the city, aligned to our Environmental Vision 2050. The reforestation project was part of Epson Ibérica's ongoing commitment to sustainability in Portugal, where the team has been collaborating in a biodiversity initiative.

The activity at O Pinhal de Leiria included a team of sixty people including all of Epson Portugal's employees. One thousand trees were planted – helping not just to re-forest the affected area, but to also take positive steps towards achieving its CO<sub>2</sub> reduction goals.

Joan Escoté, Sustainability Manager for Epson Ibérica highlights the huge effort and commitment from everyone who collaborated in this initiative, saying “We were overwhelmed by the enthusiasm of our customers and partners who joined us to help the recovery of O Pinhal de Leiria. Epson Ibérica is fully committed to aligning to the UN Sustainable Development Goals, not just with direct initiatives like this, but also in driving SDG awareness through educational activities, learning sessions and webinars.”



**Joan Escoté**

Sustainability Manager for Epson Ibérica

## New Horizons – inspiring young people

Our New Horizons programme was launched last year with the aim of introducing 10,000 students to sustainable technology and inspiring them to achieve their career goals. We have now over-achieved on our target, with more than 11,000 students of all ages having participated in a whole variety of activities across Europe. Some of the highlights include:



### UK: Paper Mill education grants and Eco top trumps

The Epson UK team created a number of educational programmes for local students, aimed at increasing awareness of sustainability and climate change. A fun Eco-Top Trumps card game was introduced in partnership with Eco-Action games and has been used as part of a hands on, interactive presentation to local school children.

The area where the Epson UK office is based has a rich paper industry heritage – it's home to Frogmore Paper Mill, the world's oldest mechanised paper mill and birthplace of paper's Industrial Revolution. Epson UK has provided a £5,000 education grant to the mill, enabling local schools to take students along for free educational tours. They learn about paper recycling, SDGs and sustainability and about our own PaperLab.

### France: Txiki Festival

The annual Txiki festival is run by an NGO, with a focus on educating children on images and media. The theme this year was Earth, and the festival, which took place in Biarritz, offered children, teens and their parents innovative workshops around content design and the development of critical thinking about images.

One of the workshops, run by the NGO Surfrider was an awareness campaign for the environment, and was supported by Epson France. Around 300 children took part in the activity which included an Epson photo booth where they had their photos taken with the SDGs they had chosen to contribute to. Their photos were printed on an Epson EcoTank printer for them to take away. Many of the children learned for the first time about SDGs.

### Germany: Environmental and paper recycling classes

The team in Epson Germany partnered with Deutsche Umwelt-Aktion e.V. to run environmental classes for more than 1,700 primary school children. Through fun, creative sessions, the children learned about sustainability and key issues such as recycling and energy efficiency.

Special interactive classes took place to raise awareness for the Global Day of Action for SDGs, and the children got hands-on recycling paper from old newspapers and discovering the history of energy generation, from steam engines to solar powered toys.

### Spain: Green Playgrounds

Epson Spain has partnered with the NGO Gepec to promote biodiversity and the importance of green spaces in schools for educational purposes. The campaign involves a series of posters which illustrate the need for 'living playgrounds for a living education.'

Our dye sublimating print technology was key to creating posters that were suitable for hanging outdoors on school fences to drive as much awareness as possible with the students, teachers, parents and the local community. Epson also helped subsidise biologists from the NGO to run a series of talks for the children on biodiversity.



## Engaging the next generation in urban sustainability



Luca Cassani, Corporate Sustainability Manager, Epson Italy

Urban areas occupy only 2 percent of the surface of our planet but are the cause of 80 percent of CO<sub>2</sub> emissions. With more than half of the planet's population living in cities, finding innovative approaches to sustainable urban regeneration is essential.

Our Italian team took part in the first Social Innovation Campus, an international event in Milan which engaged young people on the social and environmental impact of living in cities and challenged them to think about urban regeneration and the role of technology.

A collaboration between technology companies, universities and research institutions, the two-day event was attended by around 800 students and involved conferences and interactive workshops to stimulate discussion on topics such as environmental sustainability, innovation against inequality, social enterprise and impact measurement.



Participants at the Social Innovation Campus.

Epson Italy's Managing Director, Massimo Pizzocri took part in the opening panel discussion, with Luca Cassani, Epson Italy's corporate sustainability manager delivering workshops on sustainable technology. During a 36-hour hackathon, 10 teams of 20 students were challenged to design their own sustainable city, with each team equipped with an Epson EcoTank printer.

*"Technology is fundamental to our ability to live in our cities in a sustainable way. From an economic and environmental point of view, we must do more with less – choosing new technologies that offer a minimal environmental footprint but performance that's equal to, if not superior to, those in common use today."*

**Luca Cassani**  
Sustainability Manager, Epson Italy



## Mask donation to care homes in the UK and Germany

At the start of the pandemic, PPE was in short supply in care homes, with masks difficult and expensive to obtain. Our team at our German office in Meerbusch quickly put a plan into action. A local partner whose business building exhibition booths was on hold due to the pandemic, switched to mask production. A total of 2,000 masks were printed, with 500 donated to a local care home and the remainder provided to our employees.



Supported by Epson Germany: Supplier switches from exhibition stand to face mask production during Covid-19-crisis

Employees at Epson Telford produced over 150 protective face visors for care homes and charities in the local community. The idea came about when the factory needed additional PPE for their employees, in addition to the face masks staff were already wearing.

Managing Director, Kevin Browne explains: 'We had plenty of offcut recycled plastic available and so we sourced some foam and elastic and the team came up with a simple design for a face visor that fitted neatly on the head like a cap.'

Employees then had the idea that that their new design could also benefit the local community as many Epson staff had relatives working in local care homes and charities where there was a real need for PPE.

It was a great team effort which boosted morale, and the care homes were delighted to receive our face visors. It has helped increase the number of family visits to relatives in care homes, and the team in Telford are now in a position to make more face visors whenever they are requested.

# COVID-19 pandemic: what can we learn?

Climate change hasn't stopped for COVID-19. While the world works hard to recover from the pandemic, the earth's temperature continues to rise and the threat to our planet and future generations remains just as critical.

Individually and together we still have much more to do. We must remain focused and not allow ourselves to be diverted from the commitments we have made. As a global company this means remaining true to our international commitments on climate action and make the right choices now and in the future to prevent climate disaster.

Greener technologies and innovations can offer us a more sustainable future. While there is much further we need to go before our economies become truly circular the adoption of more carbon reducing technologies is an important and vital step in helping us achieve this goal.

The demand for greener products and services has never been stronger. This is especially true of the younger generations that are looking at their future with genuine concern and alarm. Their passion for sustainability is forcing companies to make changes. Young people are choosing not to do business with brands that don't share their values or demonstrate their same sense of urgency. They can see through the green washing and only want to buy from brands that act responsibly towards the environment.

Travel restrictions during lockdown have forced many businesses to adapt and even improve the efficiency of their operations with lower-carbon, remoter ways of working. While this is a positive step – there has been a small decline in carbon emissions this year – this cannot just be temporary. There can be no return to business as usual and we cannot simply become emission-free by flying and driving less. There is much further we need to go.

It is not all bad. There are many positive learnings we can take from this time. The pandemic has brought out the very best in our humanity. So many selfless and extraordinary individuals have worked tirelessly for the protection and wellbeing of others. We have all come together and adapted as a society so that everyone can stay safer. We have seen our communities and societal values strengthened and re-affirmed by the wonderful and positive efforts of so many.

This shows that in the face of adversity we can rise to the challenge, come together as a society and make a real difference. This same determination and resolve is what we need now if we are to overcome the growing threat of climate change.

The energy and commitment we have put into fighting COVID-19 as a community must now inspire the future of climate action.

We can take these learnings and go forward, not by repeating the mistakes of the past but by investing in a better, more sustainable and resilient future for our people and planet.



**Henning Ohlsson**  
Sustainability Director Epson EMEA



Epson is proud to feature a selection of awesome images from ocean photographer Ray Collins to illustrate the 2020 Green Choice Report.

Ray Collins started his photography career unintentionally, by shooting his friends surfing around his local area. The aim was to get one shot published, but within a few months, his photographs were featured on the front covers of several international magazines, thanks to his fresh perspective.

From 2012, he shifted his focus from surfing to the ocean itself, showing off the complex interplay between water and light, and capturing the burst of energy as the waves break on their journey to the shore.

Since then, Ray has become a global advocate for the ocean, and he has partnered with some of the biggest companies in a great variety of sectors, including technology, while working closely with NGO's, scientists, activists and charities to increase awareness of the environment.

Ray is an ambassador for Aquatech & Epson Australia and supported by Nikon, Patagonia, DaFin & SunZapper.



**Ray Collins**

Ocean photographer from Thirroul, New South Wales, Australia



Listen to Ray Collins talk about his photography



“My aim is to show the ocean as a living, breathing thing. To document it in all of its intimidating strengths; and to bring awareness to its delicate fragility.”

**Ray Collins**, ocean photographer from Thirroul, New South Wales, Australia

Beneath The Vortex: Ray Collins

**The following emission factors were applied for the calculation of CO<sub>2</sub> emissions:**

CO<sub>2</sub> emissions from Air Travel: DEFRA Emission Factors (Version 1.01, Updated 2018-031) CO<sub>2</sub> emissions from Transportation: GHG Protocol Emission Factors (IPCC 2006 Guidelines for National Greenhouse Gas Inventories)

CO<sub>2</sub> emissions from Warehouse Electricity: OECD/ IEA 2019 License Emission Factors (indirect location based emissions)

CO<sub>2</sub> emissions from Warehouse Gas: GHG Protocol Emission Factors (IPCC 2006 Guidelines for National Greenhouse Gas Inventories)

CO<sub>2</sub> emissions from Office Electricity: OECD/IEA 2019 License Emission Factors (indirect location based emissions)

CO<sub>2</sub> emissions from Office Gas: GHG Protocol Emission Factors (IPCC 2006 Guidelines for National Greenhouse Gas Inventories)

**GRI reference:**

This report is GRI-referenced (GRI 101: Foundation 2016)

**The report references the following disclosures**

**GRI 305: Emissions 2016:**

**GRI 102: General Disclosures**

Information on employees and other workers (102-8)

**GRI 300 Environmental**

**302: Energy**

Energy consumption within the organisation (302-1)

Energy consumption outside of the organisation (302-2)

**303: Water and Effluents**

**305: Emissions**

Direct (Scope 1) GHG emissions (305-1)

Energy indirect (Scope 2 – location based) GHG emissions (305-2)

Energy indirect (Scope 2 – market based) GHG emissions (305-2)

Other indirect (Scope 3) GHG emissions (305-3)

GHG emissions intensity (305-4)

**GRI 400 Social**

**405: Diversity and Equal Opportunity**

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