



Delivering for a **net zero** world

Annual report and accounts 2021



Sustainability

We have refreshed our sustainability strategy, which is now focused on three building blocks: environmental impact; social impact, and governance and ethics (ESG). This followed a materiality assessment, gathering the views of key stakeholder groups through interviews with industry and sustainability experts, a customer survey, and an employee survey and workshops.

**SUSTAINABLE
DEVELOPMENT
GOALS**

**THE
CLIMATE
PLEDGE**

Our sustainability priorities are to make a positive contribution to global climate change goals through our integral role in the nuclear fuel cycle and a commitment for Urenco to achieve net zero carbon emissions by 2040. We are increasing our social investment, with a clear focus on multi year partnerships with charitable organisations and enhanced alignment of our internship, educational and other social programmes with our wider sustainability priorities. We also have a strong focus on governance and ethics – ensuring we are fully compliant with regulatory frameworks, preserving the security of the civil nuclear industry, operating in an open and accountable manner, and ensuring Urenco remains a trustworthy and valuable contributor to society.

We are committed to making a valuable contribution to the United Nations Sustainable Development Goals (SDGs) and a summary of how we contribute to each can be found on the sustainability pages of our website.

We are currently working on defining new key performance indicators and our roadmap to net zero in advance of 2040 as part of our commitment to The Climate Pledge. The roadmap will set science aligned targets covering our scope 1, 2 and 3 emissions and focus on the areas of 'operational energy use and efficiency', 'supply chain engagement' and 'energy procurement and onsite generation', followed by neutralising residual emissions.

To support the achievement of our 2040 goal, we are setting interim targets to ensure we make the progress needed to help keep global temperature rise to below 1.5 degrees.

Safety is the first of Urenco's five key values – we are proud of keeping our people, the community and the environment safe and secure from harm, and maintaining the reputation of our industry, products and services (page 8).

Our aim is to achieve the 'interdependent' stage of the DuPont Bradley Curve, taking personal accountability for our safety and the safety of others. Over 1,800 Urenco employees and contractors participated in a global DuPont safety perception survey in 2021 to evaluate the progress of our safety culture, and in almost every part of our organisation there was an improvement in the score, which we will build on further. The security of our sites and operations is of fundamental importance to society to protect our people, physical assets and technology. Euratom, the International Atomic Energy Agency, the Nuclear Regulatory Commission and Office for Nuclear Regulation continued safeguarding inspections at our sites in 2021 and their objectives were met. Improvements included a group wide review and reissue of security procedures, along with ongoing investments. We are preserving the privacy of personal data, and continued to ensure strict adherence to all relevant regulatory and industry standards.

Energy use and climate change



In 2021, the ambition to tackle climate change became more embedded within our organisation. We made our first Carbon Disclosure Project (CDP) submission in July. CDP is a publicly available database of carbon, water and forest related performance for companies. We disclosed our 2020 carbon performance, climate risks, mitigation and targets, and gave examples of our energy policy engagement work. We achieved a B- score.

² Low carbon is defined at Urenco as nuclear or renewable sources.

CDP ratings range from A to D. Urenco's score of B- is the equivalent of acting at a 'Management' level for environmental stewardship, the second highest of four levels.

Being part of this initiative allows us to benchmark our carbon performance and management against other companies, including our customers and competitors. We will submit an update to the CDP each year to publicly and transparently demonstrate our commitment and progress towards net zero carbon.

TCFD

TASK FORCE ON
CLIMATE-RELATED
FINANCIAL
DISCLOSURES

In 2022, we will undertake a gap analysis against aligning with the Task Force on Climate-Related Financial Disclosures (TCFD) requirements. This will allow us to better understand our climate related risks and opportunities.

In 2021 our total energy use reduced by <1% and our total emissions scope 1 and 2 reduced by 16% and 9% respectively. The decrease in our scope 1 emissions has been driven predominantly by a 33% reduction in leakage of refrigerant gases. The reduction in scope 1 comes despite an increased usage of natural gas (+19%) from our Tails Management Facility commencing operations in the reporting year.

Our Energy Savings Group promotes energy efficiency across our sites, with a particular focus on electricity usage, which accounts for almost half of our total scope 1, 2 and 3 emissions.

Our electricity consumption across all four enrichment sites reduced by a further 1.9% in 2021. We have implemented a range of efficiency measures, including the installation of speed controlled motors to pumps and reducing output on various operational systems. Please also see our disclosure in line with the Streamlined Energy and Carbon Reporting (SECR) requirements (page 67).

Urenco have calculated our scope 3 emissions for the third year running. Our scope 3 impact has increased by 23% in 2021; however this is predominantly due to the inclusion of several new categories included in our inventory for the first time. This methodological change has been made in line with shifts in reporting best practice guidance and improves the overall accuracy and completeness of our emissions inventory. An additional improvement in our data quality means that we have been able to use actual emissions data rather than estimated values, resulting in emissions reductions for some categories. Where these methodological changes have been implemented Urenco will continue to assess the impact and re-baseline previous emissions years as appropriate.

The most material category for Urenco remains the emissions from the goods and services we procure, accounting for 65% of the total. Almost 30% of the impact arises from the value chain of the uranium feed that we directly source. We are already making changes within our procurement processes to improve the quality of the data that we receive from suppliers which will allow us to gain further insight into the drivers of this impact and where we can work with our suppliers and partners to influence emissions reductions in our value chain.

2021 was a year still experiencing the effects of the COVID-19 pandemic. As such, working from home emissions have been calculated in lieu of employee

commuting, where appropriate, for our office based staff. The pandemic also saw continuing low levels of business travel, with a 56% drop in 2021 from 2020.

Most of Urenco's water consumption is used for evaporative cooling of industrial processes and the volume used largely depends on climatic conditions. There is always a trade-off between water use and electricity use for refrigeration. Since 2017, we have experienced annual reductions in water use, and in 2021 water withdrawal reduced by 12.1%. This is mainly due to changes in operational processes. For example, we have introduced rainwater harvesting at our Tails Management Facility. Our future plans include working closely with local water companies in the Netherlands to investigate water saving measures. In addition, we are testing a new cooling tower technology at Urenco Nederland to reduce waste water during cooling. Further detail will be included in our Sustainability Report published in the summer.



We value water as a shared resource and take care that our water use does not reduce its availability to others. We are therefore also focusing on reducing the water abstracted from local rivers or groundwater sources. For example, at our New Mexico site, we are investigating potential options to reduce the impact of water abstracted from the nearby aquifer.

Sustainability

CASE STUDIES



Urenco takes a sustainable approach to financing investments

The world of finance is evolving to address investor and lender concerns about environmental issues, including climate change, and increased focus on the social and governance performance of companies they work with – ESG.

With this in mind, in 2021 Urenco signed a new sustainability linked bank facility. As part of the facility negotiation, we presented Urenco's sustainability objectives to our banks. The bank facility includes commitments on carbon reduction, water management and safety. If we achieve preset targets, we will benefit from slightly lower interest costs. If we fail, we will need to explain why and have higher costs.

This is a revolving credit facility of €500 million provided by ten banks and runs until 2026.

Climate change and energy savings improvements in 2021

- Urenco Nederland created 10 new charging points for employee parking and made provision for an additional 20. In total, there are currently 18 charging points in the car park for employees and visitors, and an additional five at other areas of the site. In 2021 Urenco Nederland also commissioned a project in which the natural gas consumption of the Recycling Centre can be reduced to zero. Natural gas is currently used to generate steam to condition (humidify) the incoming air of the ventilation system. This system will be replaced with a new one, which will use waste heat from an enrichment plant. In addition, Urenco Nederland has been assessing the feasibility and development of two onsite large scale solar panel installations (solar PV arrays): one on the roof of a building and another on new carports. It is expected this would reduce the site's peak electricity demand by up to 20%, resulting in an annual average reduction of 2% from the grid. This is equivalent to a 2,800 MWh reduction and 1,400 tCO₂e avoided, comparable with the usage of a thousand Dutch households.

- Urenco Deutschland implemented a new design for adjustable electrical compensation in its enrichment unit UTA-2. This new design allows the operation mode to be adjusted and the activation/deactivation of an energy saving mode in a safe and flexible way. This, combined with other initiatives, including the removal of HVAC systems that are no longer required, and the initial test phase of modified temperature control systems, will realise electricity savings of over 200 MWh annually.
- Urenco UK achieved a further reduction of output power on bulk convertor systems, saving an additional 547 MWh in 2021, and an estimated 1,745 MWh per annum in future years. They also installed speed controlled motors to pumps, saving 501 MWh in 2021, and an estimated 2,589 MWh per annum in future years. In addition Urenco UK has been progressing a feasibility assessment of an onsite solar PV array, which would have a peak load of 8-9 MWh, producing approximately 9GWh of electricity annually. Design work also continues on a major project to increase the efficiency of the cooling water system, which aims to reduce our electricity use further.
- Urenco USA installed LED lighting in the Security Building at end of 2021, saving an estimated 178 MWh/year in electricity usage. Upgrades commenced to a chilled water system, estimated to save 1,441 MWh/year due to efficiency improvements. This project is planned to be substantially complete by the end of 2022. Additionally, a study was commenced to investigate the feasibility of wind and solar electricity generation that have the potential to supply 100% of UUSA's energy needs. This study is on track to be completed in the first half of 2022.



UN CLIMATE CHANGE CONFERENCE UK 2021

IN PARTNERSHIP WITH ITALY

CASE STUDIES



COP26

In November, Urenco's CEO, Boris Schucht, spoke at the International Atomic Energy Agency's COP26 event, 'Nuclear Innovation for a Net Zero World'.

The event aimed to create conversations between government and industry on the complementary role of nuclear power and renewables in the transition towards a carbon neutral future, and how international cooperation is needed to enable this transition to net zero, through advances in technology, but also financing mechanisms and global policy frameworks.

Boris Schucht presented findings from the "Decarbonising Hydrogen in a Net Zero Economy" study Urenco commissioned from Aurora Energy Research and highlighted how innovations in nuclear can support low cost and low carbon hydrogen production.

Urenco and EDF then hosted a reception in Glasgow for COP26 delegates to discuss how hydrogen production can help us to achieve net zero.

Sustainability

Social investment

Urenco has evolved its approach to social investment as a significant element of our refreshed sustainability strategy.

In 2021, our Board approved an increased social investment budget and an enhanced programme was developed focused on multi year partnerships with charitable organisations to maximise social impact, reputational value and employee engagement.

Site teams and Head Office work together to deliver the partnerships and a Social Investment Committee has been formed, comprising representatives from multiple areas of the business. Causes are chosen based on their mission, values and contribution to United Nations Sustainable Development Goals, in three main workstreams aligned to our wider sustainability priorities:

- Education, skills and research
- Culture, health and social development
- Environment

The aims of the social investment programme are to:

- Strive to be a good corporate citizen and enrich the communities where we operate.
- Support the education, knowledge and skills of our local communities to contribute to the COVID-19 socioeconomic recovery and a sustainable future.



Examples of Urenco's current social investment partnerships are:

Chester Zoo, UK

Urenco has provided funding for the expansion of laboratory facilities to allow the zoo's science programme to increase its scope and scale. A science lab and education programme will be focused on the conservation of endangered species at the zoo.

The Weekend Hunger Initiative-Hobbs, US

This partnership aims to help alleviate food insecurity in Lea County, New Mexico. The state has the highest level of food insecurity in the US, reaching 23% in Lea County.

Oyfo Science Museum, the Netherlands

We donated a medical exhibit from Urenco Stable Isotopes to the museum, helping families engage with our contribution to nuclear medicine in a fun way.

Teach First, UK

This partnership will make a difference to disadvantaged schoolchildren living in the UK's most deprived communities. Through a combination of donations and volunteering, the project will support the recruitment, training, placement and development of new STEM teachers, with priority for schools in London / the North-West, supporting Urenco UK locations and wider nuclear industry locations.

IAEA Fellowship Programme

We pledged to donate for the next three years to the International Atomic Energy Agency's (IAEA) Marie Skłodowska-Curie Fellowship Programme. The programme provides scholarships to young women studying for a master's degree in a nuclear related subject.



Richie education programme

Another key contribution to our local communities is through our long standing Richie education programme, which provides workshops and digital resources for school children and university students to teach them about nuclear energy and the importance of protecting our planet. Getting young people engaged with STEM is important as it helps raise awareness of the opportunities and jobs in this critical area.

Due to COVID-19 restrictions, our sites were unable to host as many physical workshops in 2021 and needed to take new approaches. For example, our UUSA team distributed kits to local schools for students to take home and conduct their own experiments. Over 1,300 fifth grade students took part.

In December, we were delighted that our 2021 Richie Lecture returned for its seventh year at London's Science Museum, inside the Wonderlab: The Equinor Gallery.

This year's lecture, called 'Green Magic', focused on the environmental challenges we face, with a spotlight on the climate emergency. The theme was explored through a magic performance by our guest speaker, Megan Swann, President of the Magic Circle. Students discovered what climate change is, why it is a problem and how we can help protect our planet from its devastating effects.

Images above: Richie Lecture, Science Museum, London, UK