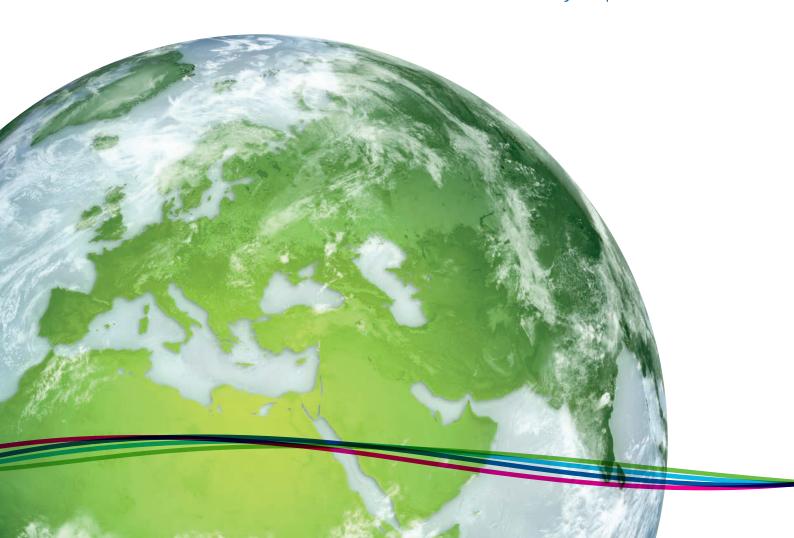


# Delivering for a net zero world

Sustainability report 2021



# Our sustainability highlights

# **Our sustainability commitment**

Urenco is committed to a greener and more sustainable future by furthering nuclear energy's contribution. We will make a positive impact 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.



# Strong safety performance -

Total Recordable Injury Rate of 0.27 resulting in six total recordable injuries.



**780,000** GWh of electricity from nuclear power, avoiding approximately **320** million tonnes of carbon emissions.

We refreshed our Sustainability Strategy to focus on **three** 



Environmental impact, Social impact, and Governance and ethics (ESG). We hosted our second conference for our



champions, showcasing speeches from two I&D experts in leading external organisations in both the UK and the US.

Approximately **two**million patient
treatments were
performed using medical
radioisotopes produced
from our enriched stable
isotopes products.

We approved 9 new social investment partnerships.

of 16% for scope 1 (direct)
and 9% for scope 2
(indirect) carbon emissions
compared with 2020.

We reduced our water withdrawal by **12%** from 2020.

Our global 'Richie' education Programme reached an estimated **57,000** schoolchildren.

We again met 100% of our customer deliveries.

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# Our sustainability vision:

Urenco is committed to contributing to a sustainable net zero future. We will operate safely and form partnerships with our supply chain to deliver measurable positive impact for our people, our communities and help the world to decarbonise. In line with our Sustainability Strategy (page 10), this report follows the Environmental impact; Social impact; and Governance and ethics building blocks.

Environmental, social and governance (ESG) is a framework for evaluating the extent to which an organisation acts on behalf of social goals that go beyond the role of maximising profits on behalf of the organisation's shareholders. The social goals identified within an ESG framework usually include working to achieve a particular set of environmental goals, a second set of goals aimed at supporting specific social movements and a third set of goals designed to ensure that the organisation is governed in a way that is consistent with the objectives of the diversity, equity and inclusion movement.

A number of governmental and financial institutions have developed ways to measure the extent to which an organisation is aligned with ESG goals, the most prominent of which is the United Nations, which adopted 17 Sustainable Development Goals (SDGs) in 2015. The term ESG was used first in a 2005 report entitled "Who Cares Wins", a joint initiative of financial institutions at the invitation of the UN

#### COVID-19 Regulations

All images in this report reflect the regulations in force in the relevant jurisdictions at the time the images were taken.



# This was the year in which we moved forward the understanding of the nuclear industry's and our important roles in achieving net zero.

At Urenco we firmly believe that nuclear power, alongside renewables, has a key role in the clean energy transition by generating reliable, low carbon electricity and hydrogen or hydrogen based synthetic fuels. As a long term partner to the nuclear industry with a critical role in the nuclear fuel cycle we spent a significant amount of 2021 working to support policymakers. You can read more on page 20 about how our investment in hydrogen research and collaboration with other industry groups is helping to inform political and public understanding of the important global role nuclear can play in meeting the decarbonisation challenge.

Urenco was the first nuclear organisation to sign The Climate Pledge and one of the initial 100 organisations committing to achieve net zero emissions by 2040 (ten years ahead of the Paris Agreement). Our presence and the role of nuclear at the COP26 climate change conference in Glasgow was widely reported, placing us front and centre in this vital global debate. Highlights for me included speaking at the IAEA presentation 'Nuclear Innovations for a Net Zero World', holding our own hydrogen themed event with EDF and collaborating with several other industry groups, including the Nuclear Institute's Young Generation Network representatives (pictured).



What was clear was that support for, and the visibility of, nuclear is growing. Find out more on pages 13.

Ultimately we will be judged by what we do today and we need to take responsibility for how our actions may irrevocably impact the future for tomorrow's generations.



This chimes with a key Urenco behaviour: 'Act today for tomorrow' and very much sums up the Urenco approach to sustainability.

From the valuable contribution we make to the low carbon economy, to the socially responsible way we conduct our business, sustainability shapes our customer partnerships and guides our decision-making at all levels. Sustainability is a corporate priority. As one important initiative we are translating our Climate Pledge commitment into a clear roadmap with science based targets. In this respect we are committed to reduce our combined scope 1 and scope 2 greenhouse gas emissions by 100% and our scope 3 emissions by 30% by 2030. It is our intention to make a fast and strong contribution to achieving this goal within Urenco's operations. You can read more about our plans on pages 14-15 and see how we are already making headway through the different case studies detailed in this report. In addition, we have gained a reputation for being good stewards of our nuclear fuel legacy. Urenco is an established supporter of sustainable solutions modelled on new nuclear technology and we are at the cutting edge of exciting enrichment research (pages 16-21).

Our commitment to adding social value to the communities where we operate continues to grow, with the addition of nine new social investment partnerships during 2021 alongside our longer standing partnerships. I would encourage you to read more about these on pages 26-33 and to get in touch if you have a project or partnership opportunity that fits our sustainability goals and where we might make a positive contribution.

Our people are at the core of our success. The determination and hard work of our employees and contractors during 2021 to maintain business as usual during an incredibly challenging time is something I applaud and am very thankful for.

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Sustainability is a corporate priority and we are translating our Climate Pledge commitment into a clear roadmap with science based targets."

As working conditions slowly return to normal I have been pleased to be able to visit our enrichment sites and see colleagues in person again. Through our culture programme (page 22) we are working together to ensure Urenco is a great place to work, with a strong focus on leadership and behaviours, 'creating a winning team' with opportunities for people to thrive in an inclusive and diverse environment. Our people enable us to deliver on our commitments. They are the reason we continue to have the energy to succeed.

In 2022, under our sustainability strategy we will further implement our plans to realise nuclear energy's contribution to a greener and more sustainable future. This will include continuing to provide our customers with the excellent, safe service we are known for, supporting them to fuel both existing reactors and nuclear new builds with current and advanced technologies, and investing in our centrifuge and associated technology. Our culture, inclusion and diversity, and social impact work will progress at pace. We will also continue to explain nuclear's contribution to a net zero world and we will continue to deliver on our own action plan to provide our customers with a fully CO2 free nuclear fuel. What is needed to realise nuclear's full potential in this regard, is for investment to be unlocked. We look forward to constructive conversations and strong industry and government collaboration over the coming year to achieve these essential ambitions.

**Boris Schucht** Chief Executive Officer





Sustainability is a key priority for Urenco and integral to everything it does. As early signatories of The Climate Pledge, our publicly stated ambition is to be carbon neutral and reach net zero by 2040.

# CLIMATE PLEDGE

During 2021, my fellow Committee members and I have continued in our commitment to oversee and help drive forward key sustainability policies across Urenco. Our main areas of focus are the monitoring of key performance indicators (KPIs) across the full range of relevant sustainability issues, such as health and safety, environment, security, social performance and inclusion and diversity (page 11). Despite some challenges, our sustainability credentials continue to build and our performance has been strong.

This year, across all aspects of sustainability, a key theme was how the group continued to adjust its approach to maintain performance whilst supporting our people, during the COVID-19 pandemic. Another major workstream was embedding the refreshed Sustainability Strategy into the organisation, building on existing performance and focusing on sustainability priorities for our industry and society for the 2020s.

Furthermore, we reviewed a Group-wide analysis of equal pay, the outcome of the DuPont Safety Survey (page 35) and the outcome of the Group's first inclusion and diversity survey. We also provided input and oversight to the ongoing culture programme (page 22).

In February 2021, a proposal for Urenco to sign The Climate Pledge and commit to achieving net zero carbon emissions by 2040 was endorsed by the Board. In making its decision, the Board had regard to all factors, in particular the long term success of the company and impact of the Company's operations on the community and environment. Consequently, we were the first nuclear organisation to sign up to The Climate Pledge, and we actively participated in the United Nations Climate Change Conference, COP26, which brought world leaders to Glasgow to act collectively to limit temperature rises and climate change. Hence, Urenco has fully embraced the main objectives of The Climate Pledge and COP26 (pages 13-15).

Across the year, we also reviewed the Group's first climate submission to the Carbon Disclosure Project (CDP), the results of which exceeded expectations (page 14) and saw us scoring highly on a range of issues.

We provided oversight to the ongoing development of the Group's roadmap and targets to meet our net zero commitment and approved the adoption of the definition of net zero developed by the Science Based Target initiative – the de facto industry standard and currently the most credible approach (page 15).

The Sustainability Committee reviewed the Group's social investment principles, and endorsed a proposal to increase social development investment in 2022 with particular regard to key stakeholder groups, including local communities in the surrounding area of each site. In addition, we approved the establishment of a Social Investment Committee comprised of employees across the business. Further information about Urenco's varied Social Investment Programme can be found on pages 26-33.

This year the format of our Sustainability Report follows the familiar ESG (environmental impact, social impact and governance and ethics) headings, highlighting our performance across these three building blocks, as identified in our refreshed Sustainability Strategy which was approved in 2021. Throughout the year we have revitalised and embedded our approach to sustainability across Urenco, building on our performance. We have well established, clear benchmarks, externally validated and robust measurement tools and are introducing processes that equip us for the challenge ahead. Going forward we can be certain our sustainability activity will be prioritised, focused and ambitious for ourselves, our industry, and the global community.

#### **Miriam Maes**

Chair of the Sustainability Committee

# **Business model**

Urenco is an international supplier of uranium enrichment, fuel cycle products and related services with sustainability at the core of our business. Operating in a pivotal area of the nuclear fuel supply chain for more than 50 years, we facilitate zero carbon electricity generation for consumers around the world.



With our head office near London, UK, our global presence ensures diversity and security of supply for customers through enrichment facilities in Germany, the Netherlands, the UK and the USA.



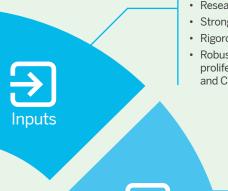




Images top to bottom: Urenco UK; Urenco Nederland; UUSA; Urenco Deutschland



# Zero Carbon



Outputs

- Over 1,500 highly skilled and well-trained employees
- · Detailed market intelligence
- · Leading centrifuge technology
- · Research and Development function
- · Strong customer service
- · Rigorous supplier and compliance audits
- Robust commitment to nuclear safeguards and nonproliferation through the Treaties of Almelo, Washington and Cardiff, and government oversight



- Advancement of next generation fuels and technologies
- Commitment to meet net zero emissions by 2040
- Reliable transatlantic transportation services
- Enhanced stable isotopes offering for medical, industrial and research applications
- Responsible nuclear stewardship, including materials management and decommissioning
- Revenue: €1,669.3 million (2020: €1,700.1 million)
- EBITDA: €971.1 million (2020: €1,088.1 million)¹
- Net income: €364.5 million (2020: €505.3 million)
- Cash generated from operations: €1,027.6 million (2020: €1,171.4 million)
- Capital expenditure: €129.8 million (2020: €141.1 million)
- Net debt: €11.5 million (2020: €455.7 million)
- Contract order book: approximate value of €8.7 billion, extending into the 2030s















outcomes

- Strong safety performance Total Recordable Injury Rate of 0.27 resulting in six total recordable injuries
- More than 50 customers in 20 countries
- · Global enrichment capacity of 18,100 tSW/a
- 100% of customer deliveries met
- Enriched enough uranium to generate an estimated 780,000 GWh of electricity from nuclear power, avoiding approximately 320 million tonnes of carbon emissions
- Carbon emissions reduced by 16% (scope 1) and 9% (scope 2) from 2020 (using location based emissions factors)
- Water withdrawal reduced by 12% from 2020
- Approximately two million patient treatments performed using medical radioisotopes produced from Urenco enriched stable isotopes products
- Global 'Richie' education programme reached an estimated 57,000 schoolchildren
- 13 social investment partnerships approved

EBITDA is defined as earnings before exceptional items, interest (including other finance costs), taxation, depreciation and amortisation and joint venture results. Depreciation and amortisation are adjusted to remove elements of such charges included in changes to inventories and SWU assets and net costs of nuclear provisions.

# How we contribute to the Sustainable Development Goals

The Sustainable Development Goals (SDGs) are a universal set of goals to end poverty, protect the environment and ensure prosperity for all as part of the global sustainable development agenda.

On the following page, we have highlighted some of the goals that Urenco actively contributes to either directly through our own services or through those we support. Adopted by the United Nations (UN) member states in September 2015, the SDGs will shape government, business and civil society priorities to 2030.

# THE GLOBAL GOALS





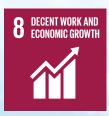
































The content of this publication has not been approved by the United Nations and does not reflect the views of the United Nations or its officials or Member States.

www.un.org/sustainabledevelopment/



# SDG 3: Good health & wellbeing

Safety is paramount at Urenco. We uphold the highest

safety standards, driven by our journey towards safety excellence with the desire to ultimately achieve interdependent World Class status on the DuPont Bradley Curve at each of our locations. We help facilitate low carbon energy through our role in the nuclear power supply chain, reducing pollution and positively impacting global health. We also produce medical radioisotopes for around two million patient treatments annually across diagnostics, therapy and pain relief.

- Safety: pages 35; 38; 39
- Stable Isotopes expansion: page 21
- Culture & wellbeing: pages 22; 36



# SDG 4: Quality education

Our Social Investment Programme helps nurture the

next generation of scientists and engineers by engaging young people in science, technology, engineering and maths, particularly through our Richie education programme. We also fund scholarships, awards, apprenticeships, graduates and internships and promote careers in the nuclear industry.

- Social Investment Programme: pages 26; 29; 32
- Interns, apprentices & graduates: page 33



#### **SDG 5: Gender equality**

We aspire to be inclusive, within and beyond Urenco, reflecting the society in which

we operate, and actively seek to reduce the gender gap in scientific industries.

• Marie Sklodowska-Curie Fellowship: Programme: page 31



# SDG 7: Clean and affordable energy

Nuclear power is integral to achieving an energy secure

and net zero future. Our role in the nuclear fuel cycle facilitates the production of clean, reliable and affordable energy, preventing millions of tonnes of CO2 being released into the atmosphere each year. We also support the research and development of advanced fuels and technological solutions for the future.

- Next generation fuels; Aurora study: page 20
- U-Battery advanced modular reactor: page 21



# SDG 8: Decent work and economic growth

Urenco offers well paid, highly skilled jobs and invests in our

people and the areas where we operate. As well as safe and secure working environments, we provide practical and financial support to local communities through charitable donations and employee volunteering. Partners in our Social Investment Programme also promote opportunities and economic advancement.

- Donations and volunteering: page 34
- Social Investment Programme: pages 26-33



# SDG 9: Industry, innovation and infrastructure

We support the research and development of innovative technologies and solutions in many areas. Our next generation fuels programme at our UK and USA sites is progressing to enable production of LEU+, low enriched uranium up to 10% uranium-235: a positive first step to potential production of other advanced fuels for civil nuclear power generation.

- Stable Isotopes: page 21
- Tails Management Facility: page 18
- U-Battery advanced modular reactor: page 21
- Next generation fuels: page 20



# **SDG 11: Sustainable cities and communities**

Our role in the production of nuclear power supports

communities by reducing their carbon emissions and helps make cities and local communities safe, resilient and sustainable. Our employees engage with local environmental projects and we fund charities and organisations that improve conservation and sustainable living.

 Social Investment Programme partnerships – Chester Zoo; Pump Aid; IAEA Food & Agriculture: pages 26-33



# SDG 12: Responsible consumption and production

Urenco is taking vital steps to improve nuclear sector circularity, including reducing site hazards and designing a Urenco metals recycling (UMR) facility. Our Tails Management Facility enables the reuse of hydrofluoric acid within industrial processes and Urenco Nuclear Stewardship (responsible for the management of nuclear materials, decommissioning and recycling) has successfully secured a contract to manage, treat and dispose of metallic waste from the UK's nuclear facilities until 2024.

 UMR facility; TMF; Urenco Nuclear Stewardship: pages 17-18



#### SDG 13: Climate action

We were the first nuclear organisation to sign up to The Climate Pledge to reach

net zero by 2040 and play a crucial role in the nuclear fuel cycle facilitating the production of low carbon energy. Nuclear is required to tackle climate change, as it is the only proven, scalable and reliable low carbon energy source. We are actively working to ensure our own operations achieve net zero by 2040.

- COP26: page 13
- The Climate Pledge: pages 5; 7
- Energy use and climate change: pages 14-15



# **SDG 16: Peace, justice and strong institutions**

Urenco is fully compliant with and committed to the treaties,

laws and regulations that govern the nuclear energy industry and promote the peaceful application of nuclear power, including the Treaty of Almelo, the Treaty of Washington and the Treaty of Cardiff. These international agreements ensure we consistently meet the stringent inspection criteria set by global governing bodies, the IAEA and EURATOM, which act as a model for nuclear non-proliferation.



# SDG 17: Partnership for the goals

Urenco is actively creating partnerships and

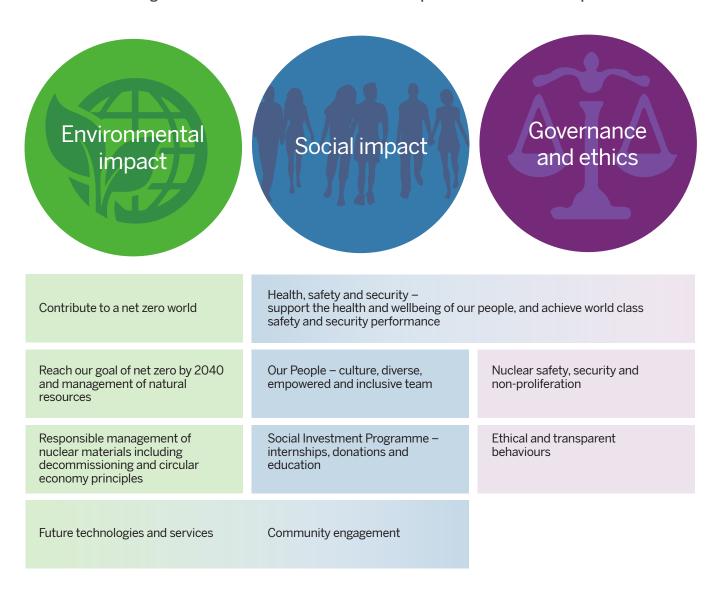
collaborations that support sustainability and sustainable development. All our social investment partnerships align and contribute to sustainable development goals. For example, Pump Aid supports SDGs 6 and 8.

- Pump Aid: page 30
- IAEA Food & Agriculture: page 26



# ESG building blocks of sustainability

Our refreshed Sustainability Strategy focuses on three building blocks: Environmental impact, Social impact and Governance and ethics. In 2021 we defined new key performance indicators to ensure we can demonstrate our long term contribution to a net zero world and specific Sustainable Development Goals.



## Performance Against Targets 2021

Total Mariot Ramot largete 2022				
Focus area	Target	2021 performance against target		
Health and safety, safeguards and security	Annual reduction in Total Reportable Injury Rate (TRIR: LTIs/MTIs per 200,000 hours worked)	(TRIR 2021 = 0.27; TRIR 2020 = 0.28) 4% decrease		
	Zero missed deliveries	0		
Supplier of choice	Zero customer complaints	0		
	Annual reduction in electricity use	2% decrease		
See Mar	Annual reduction in water use	13% decrease		
Environmental impact	Annual reduction in low level radioactive material for disposal generated from operating plants	16% decrease		
	Annual reduction in conventional waste sent to landfill/incineration*	47% decrease		
Asset integrity	5S good housekeeping score: >85%	92% (average across sites)		
Employee engagement	Percentage of female job holders in top A-C roles by 2025: ≥20%	20%		
Community ongogoment	Physical workshops: 8,000 children	5,325		
Community engagement	Digital downloads: 100,000 children (stretch target)	51,690		
Community engagement	Digital downloads: 100,000 children			

## **Key Performance Indicators 2022**

Ney Ferformance indicators 2022			
Area		Strategic Target	KPI
Environmental impact	1	By 2025, reduce operational water withdrawal by 15% compared to a 2020 baseline.	Rolling annual operational water withdrawal.
	Natural Resources		Number of projects to reduce water withdrawal per site.
	<b>2</b> Net Zero	Achieve net zero by 2040.  Reduce Urenco's combined scope 1 & 2 emissions by 100% by 2030 from a 2019 baseline.  Reduce Urenco's scope 3 emissions by 30% by 2030 from a 2019 baseline.	Rolling annual reduction to scope $1\&2$ carbon emissions.
			Rolling annual reduction to scope 3 carbon emissions.
Social impact		By 2025, invest €5 million in a diverse range of skills focused on achieving a net zero future, including supporting 50 interns by 2025 and forming at least 10 strategic charitable partnerships by 2025.	Rolling number of interns supported each year.
	<b>3</b> Social Impact		Rolling number of strategic charitable partnerships formed.
			Rolling spend on Social Investment Programme between 2021 and 2025.
		Urenco aims to transform its leadership to become a more culturally diverse company: >30% women in leadership/management roles by 2025 and 20% diverse workforce by 2025.	>30% women in A-D roles by 2025.
	<b>4</b> Culture		>20% other under-represented group* in all job holders by 2025.
			>95% of Managers will undergo training on Inclusive Leadership by end of 2023.
Governance & ethics	<b>5</b> Health, Safety	Achieve an Interdependent Safety Culture by 2025.	Total Recordable Incident Rate (TRIR) of 0.34.
	and Wellbeing		Zero fatalities.
	6 Nuclear Safety, Security and Non-Proliferation	No nuclear safety or proliferation impacts from Urenco operations.	Zero nuclear safety or proliferation regulatory breaches.

# **Our Sustainability Strategy**

#### **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.

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 multiyear partnerships with charitable organisations and enhanced alignment of our internship, educational and other social programmes with our wider sustainability priorities.







Clockwise from top left: Simone Rossi, EDF Energy CEO Felix Chow-Kambitsch, Aurora Boris Schucht, Urenco CEO and Rt Hon Amber Rudd

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 pages 8-9 and on the sustainability pages of our website.

#### Policy and regulation

As the momentum around the energy transition and decarbonisation agenda continues to build, this has changed the debate on nuclear energy, creating demand for policy action in 2022 to help push new nuclear and advanced nuclear technologies. Bipartisan support for nuclear is increasing but, in any jurisdiction, a change in government and policy priorities or an unanticipated macroeconomic, geopolitical or natural disaster event can also change policy direction.

Our operations and development are controlled by our ability to meet the stringent regulatory requirements of each jurisdiction in which we operate and supply. We are accountable to multiple national governments and subject to public scrutiny and penalties if required standards are not met. Urenco continually monitors global nuclear policy.

We engage with policymakers and stakeholders to ensure that the benefits of nuclear as a sustainable, long term and low carbon source of energy are understood and considered as part of both the energy debate and future government policy.

We also actively engage with the legislative process to support the passage of industry specific legislation.

Urenco maintains compliance activities across the business. Our strong relationships with government regulators are managed locally by our Government Affairs Directors and Heads of Compliance at our enrichment sites. while our organisation-wide functions also maintain an open dialogue with both national and transnational regulators (e.g. the IAEA), and other government agencies. We maintain a strong internal knowledge transfer to ensure that key information and insight from our engagement with government officials and regulators is shared across the organisation with policies, procedures and ways of working updated and amended as necessary.

#### What is net zero?

The term net zero means achieving a balance between the carbon emitted into the atmosphere, and the carbon removed from it. For this to occur, the amount of carbon added to the atmosphere must not exceed the amount removed.

It is important that we make a positive contribution to global climate change goals through our core business and by committing to achieve net zero carbon emissions by 2040.

In 2021, we welcomed the UK Government net zero strategy which places nuclear at the heart of the clean energy solution, took part in COP26 and signed The Climate Pledge, publicly stating our net zero commitment.

• 0 0 0 0 0 0 0 0 0 0 0

# 31 OCT - 12 NOV 2021 GLASGOW

# GP26





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.

Image above: Boris Schucht, Urenco CEO, and Simone Rossi, EDF Energy CEO

# **Environmental impact**

# Energy use, TCFD & climate change

#### **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.** 

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.

### **Near term targets**

To support the achievement of our 2040 goal, we have set near term targets for scope 1, 2 and 3 emissions which are aligned to the latest scientific advice for carbon reductions to meet the global net zero challenge

# Combined Scope 1 & 2

100% reduction by 2030

#### Scope 3

30% reduction by 2030

## Know your scopes

These are the basis for mandatory greenhouse gas (GHG) reporting in the UK. Scope 3 presents the biggest challenge.

Committing to net zero means reducing Urenco's carbon footprint across all 3 scopes.

#### Scope 1

GHG emissions that a company makes directly which includes diesel/petrol used in Urenco fleet, natural gas, propane, fuel oil & refrigerants.

#### Scope 2

GHG emissions that a company makes indirectly, such as the electricity purchased by Urenco.

#### Scope 3

All GHG emissions from the company's wider value chain. For Urenco this includes purchased goods and services, employee commuting, transportation and uranium feed.

Neutralised residual emissions – neutralisation is the permanent removal and storage of carbon from the atmosphere. Any carbon emissions that cannot be reduced by Urenco will need to be neutralised after 2040.

We have defined new key performance indicators and our roadmap to net zero by 2040 as part of our commitment to The Climate Pledge. The roadmap has set science based targets covering our scope 1, 2 and 3 emissions and focuses on the areas of operational energy and efficiency, energy procurement and onsite generation, procurement (non-uranics), Nuclear Fuel Cycle (including transportation), Group net zero investment guides and communications.

# In 2021 Urenco decided to adopt market based reporting as our standard

approach. We believe this better reflects the actual environmental impact that Urenco has and shows the benefits of the procurement decisions that we make regarding our electricity contracts. As electricity is our single largest emissions source, accurate reporting of this impact is key to the accuracy of the entire footprint. In the UK we already source our electricity from a 100% nuclear tariff (covering 30% of our global consumption). As part of our net zero roadmap, we have a committed plan to move our remaining global consumption to a renewable tariff following the expiry of the existing contracts.

# Task Force on Climate-Related Financial Disclosures

In 2022, we began undertaking a gap analysis against aligning with the Task Force on Climate-Related Financial Disclosures (TCFD) requirements. This allows us to better understand our climate related risks and opportunities. Further work in 2022 and 2023 will embed these recommendations into our business.

Urenco's total carbon footprint increased by 11% in 2021 compared to the previous year. This was driven by a 23% increase in scope 3 emissions, countered by decreases in scope 1 and 2 emissions of 16% and 9% respectively. The increase in scope 3 emissions resulted from the inclusion of a new sub-category in 2021, well to tank emissions, derived from the production, processing and delivery of a fuel and/or electricity. This sub-

category now makes up 20% of our total scope 3 emissions. It has been included as we progress towards more complete alignment with industry best practice and we intend to include it in our baseline when we conduct a re-baselining exercise later 2023. This will provide a page.

in 2022. This will provide a more comparative footprint, and we expect this to show an overall reduction in emissions, given that absolute electricity consumption has decreased by 2%.



If we were to exclude this sub-category from the 2021 footprint to allow like-for-like comparison, we would see a 3% reduction across all scopes. Although this does not meet the 4.2% linear reduction rate required to align with a 1.5 degree pathway in accordance with the Science Based Targets initiative, it does show that the period of roadmap development resulted in a reduction. We expect the pace of reductions to increase as our roadmap is embedded within the different sites and functions of the business.

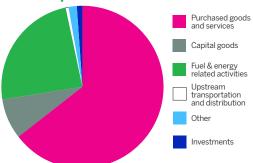
In 2021 our total energy use decreased by <1%. The decrease in our scope 1 emissions was driven predominantly by a 33% reduction in leakage of refrigerant gases. The reduction in scope 1 comes despite an increased usage of natural gas (+19%) from our Tails Management Facility commencing operations.

#### As part of its remit, the Site Net Zero Task Force 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 decreased 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.

The most material category for Urenco remains the emissions from the goods and services we procure, accounting for 65% of our total scope 3 emissions. Almost 50% of the emissions from this category 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.

#### Scope 3 emissions



2021 was a year still experiencing the effects of the COVID-19 pandemic. As such, working from home emissions were 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 decreased by 12.1%. This was mainly due to changes in operational processes. For example, we introduced rainwater harvesting at our Tails Management Facility. Our 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.

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, which is located in a water stressed environment, we are investigating potential options to reduce the impact of water abstracted from the nearby aquifer. As part of our Social Investment Programme, we have partnered with Pump Aid to restore water availability in water stressed areas of Malawi (page 30). We have also invested in a new fire ring main replacement at our Capenhurst site to fix leaks and conserve water.

# 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 developed two large scale onsite solar panel installations (solar PV arrays): one on the roof of a building and another on new carports. These installations are expected to 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 tCO<sub>2</sub>e avoided emissions, comparable to the annual 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 heating, ventilation and air conditioning 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. It 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. 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 began to a chilled water system, estimated to save 1.441 MWh/vear due to efficiency improvements. This project is planned to be substantially complete by the end of 2022. Additionally, we started a study to investigate the feasibility of wind and solar electricity generation that have the potential to supply 100% of UUSA's energy needs. Urenco expects to switch all of our energy contracts in the US to low carbon sources by 2024, and by 2030 for the whole Group.

# Urenco supporting EDF's nuclear fuel recycling

In 2018 Urenco entered into an enrichment contract with EDF to serve EDF's French reactor fleet and in 2021 started preparing for the first delivery.

The high value and long term contract supports the recycling of nuclear fuel by enriching uranium recovered from fuel, which has been previously used and reprocessed.

The technical complexities of enriching this material involve expertise from across Urenco and the upgrading of our facilities in line with current licences and regulatory bodies. Urenco is pleased to be part of EDF's plans to recycle spent nuclear fuel. This is a testament to Urenco's technical capabilities.



# Urenco commended for responsible stewardship of waste

Urenco has been commended by both the Nuclear Decommissioning Authority (NDA) and the Office for Nuclear Regulation (ONR) for its responsible stewardship of nuclear waste materials.



We store 95% of the UK nuclear industry's depleted stock, including oxides on behalf of the NDA, and legacy uranium hexafluoride cylinders. The ONR praised Urenco for the work it had carried out on modelling how the ageing process was affecting those cylinders. Using a well defined model, Urenco has been able to inform our maintenance and care of the cylinders for the next 50-100 years.

There are 9,500 legacy cylinders stored under cover at the Capenhurst site, which are routinely inspected. As part of the maintenance process, we have developed a new patching technique which has been successfully deployed on three occasions.

UNS has a proven track record of responsible nuclear material storage and continues to work closely with the NDA to identify legacy oxides and other materials which can be safely stored at the Capenhurst site.

#### **Nuclear materials management**

Urenco is committed to continued investment in the responsible management of nuclear materials. We have two UK subsidiaries focused on this area:

- Urenco Nuclear Stewardship focuses on storage, decommissioning and waste management.
- Urenco ChemPlants operates our Tails Management Facility (TMF), a £1 billion investment.

#### **Urenco Nuclear Stewardship**

Urenco Nuclear Stewardship has been in operation since 2012. Its core expertise centres on waste management, decommissioning and long term storage of nuclear materials. It serves Urenco's requirements for these capabilities and uses them to meet the needs of our customers.

#### **Waste management**

Urenco Nuclear Stewardship operates a new waste management facility and has strong technical expertise in waste strategy, characterisation, packaging and transport. In 2020, it successfully secured a position on the Low Level Waste Repository waste framework to manage, treat and dispose of metallic waste from UK nuclear facilities over the next four years.

#### **Decommissioning**

During the last decade, Urenco Nuclear Stewardship has been contracted to deliver decommissioning projects for the Nuclear Decommissioning Authority (NDA). It is also responsible for decommissioning projects across Urenco.



# **Urenco Nuclear Stewardship**

# Another nuclear legacy milestone

Urenco Nuclear Stewardship houses the UK's former Gaseous Diffusion Plant, which was historically used in the uranium enrichment process.

This plant has reached another milestone through the completion of the decommissioning of cubicles that were once used for processing enriched materials.

The building has been successfully cleared following safe dismantling, decontamination and disposal of wastes. The nature of the material processed meant the cubicles were identified as one of the biggest challenges of the £300 million contract with the Nuclear Decommissioning Authority (NDA).

By completing successful trials and applying learning gained during the decommissioning of a similar, but less challenging, facility, Urenco Nuclear Stewardship identified solutions to reduce disposals to the Low Level Waste Repository and saved the NDA nearly \$4 million.

The success of the cubicle dismantling and cleaning is just one of many facets of the decommissioning of legacy facilities on the Capenhurst site. Since taking ownership of the site from BNFL and then Sellafield Ltd, Urenco Nuclear Stewardship has grown its capabilities in waste management

along with the decommissioning of nuclear facilities. A decade of complex characterisation and waste-led dismantling of contaminated materials has given Urenco Nuclear Stewardship the vast experience they are now offering to support the nuclear industry.

# Progress to next phase of Metals Recycling Facility

Urenco has approved the progression of the Urenco Metals Recycling (UMR) facility project based at Urenco Nuclear Stewardship in Capenhurst. The project will now move into the design phase.

The facility, planned to begin operation in 2024, will provide a wide range of metallic treatment services for recycling and disposal. This will include size reduction, surface decontamination and metal melting for a range of metal types.

The UMR facility will serve the needs of the nuclear industry by bringing services to UK sites that can currently only be accessed overseas.

Urenco Nuclear Stewardship Head of Operations Mike Lewis said:

"This is a positive step in Urenco's journey to share our waste management expertise with the industry. In bringing the Urenco Metal Recycling facility to Capenhurst, we are creating a strategic asset that will support various decommissioning efforts.

"Furthermore, our expansion of our metallic treatment services undoubtedly strengthens our offer as service providers under the LLWR Metallic Waste Treatment Services framework, which Urenco Nuclear Stewardship was successfully included within last year."

### **Collaboration with Harwell**

In October 2021, Urenco Nuclear Stewardship took the last delivery of drums from Magnox's Harwell site as part of a wider Nuclear Decommissioning Authority (NDA) project to consolidate material from across the NDA estate.

A total of 57 drums have now been accepted into long term storage at Capenhurst. The initial delivery of Harwell drums to Urenco Nuclear Stewardship at the Capenhurst site started in June 2021. From start to finish, this campaign has been completed safely and efficiently, demonstrating good working practices across the team.

Commenting on the milestone, Carwyn Richards, Urenco Nuclear Stewardship Operations Manager, said: "The execution of each Harwell delivery and subsequent activities were carefully carried out by the maintenance technicians.

"The outcome of this was 15 successful deliveries over a four month period. This was a great effort from those involved."

# Urenco Nuclear Stewardship realising savings and expanding its offering

Innovative thinking has resulted in Urenco Nuclear Stewardship realising over £600,000 in cost-savings, thanks to its industry-recognised experts' waste packaging solutions, as part of a decommissioning project for the Nuclear Decommissioning Authority (NDA).

Urenco Nuclear Stewardship has been successfully progressing the decommissioning of legacy nuclear facilities at Capenhurst. As part of the contract with the NDA, Urenco Nuclear Stewardship removed internal cell structures which had been used to safely store depleted uranium in steel drums, dating back 60 years.

As with any demolition project, there was a significant amount of material that required responsible management through recycling and disposal. Urenco Nuclear Stewardship's project team and waste management experts worked hard to develop efficient, innovative and cost-effective waste packaging solutions, while also ensuring safety remained the number one priority.

Urenco Nuclear Stewardship is nearing the end of the decommissioning agreement with the NDA that sees more than 20 projects being completed by 2024 – forecast to be ahead of schedule and realising a multimillion pound cost saving.



# Tails Management Facility provides significant process improvement and reduces customers' carbon footprint

In early 2021, our Tails Management Facility (TMF) entered into operation, marking a significant change in how we manage the tails output from our enrichment process. This facility is one of only a handful worldwide capable of deconverting depleted uranium hexafluoride (UF $_6$ ) into more stable uranium oxide (U $_3O_8$ ) form.

All utility and ancillary systems, including cylinder handling, cylinder washing and uranium oxide storage, completed their commissioning stages, with decontamination, maintenance and residues recovery facilities being brought online to support the deconversion process. The deconversion process started active commissioning towards the end of 2020 and moved to first production of U<sub>3</sub>O<sub>8</sub> towards the end of 2021.

# The TMF is now in stable operation with rates being progressively increased in line with commissioning plans.

Several key milestones have been met, including full testing of all safety systems; the production of in-specification  $\rm U_3O_8$  which is now stored in the Uranium Oxide Store; the production of in-specification hydrofluoric acid; and the automatic transfer of feed continuously from several cylinders. The plant has also gone through several planned outages during which no major issues were revealed.

In 2021 Urenco commissioned a carbon lifecycle assessment of the facility to better understand the impact it may have on our own carbon footprint, and also the potential benefits.

When running at current full capacity, we anticipate that the TMF will add approximately 2% to our scope 1 and 2 carbon footprint. As expected, the core deconversion process accounts for the majority of the emissions from the facility (approximately 60%).



The ancillary processes within the facility, including the capability to wash cylinders to prepare them for reuse and other recovery and maintenance activities, account for <10% of the total.

A significant co-benefit of the TMF is the production of hydrofluoric acid for sale to industry. While not the core driver of the facility from a technological or financial perspective, the carbon intensity of the hydrofluoric acid produced is approximately 70% lower than two of the conventional production routes for this product. The reduced carbon intensity of the production process enables Urenco to provide a benefit to customers who use the product within their own processes and thereby reduce the carbon footprint of their own products. The process also ensures that the maximum amount of useable product is generated in the facility, minimising waste outputs.



Images above: Tails Management Facility; Deconversion kiln Image right: Wild meadow habitat at the entrance of UTA-2 building, Urenco Deutschland



# Future technologies and services, and research





## **Next generation fuels**

As a leader in the nuclear industry, we are well positioned to provide the enrichment services needed to support the nuclear industry's efficiencies, advancements and innovations in fuel production.

Urenco's programme to enable the production of LEU+, low enriched uranium up to 10% uranium-235, at our US and UK sites (UUSA and Urenco UK) is progressing quickly with the completion of detailed technical feasibility and plant optimisation plans. This new product can be used in existing light water reactors seeking to achieve higher levels of safety and improved economics. Urenco's existing advanced gas centrifuge technology is capable of producing LEU+ and few modifications will be needed to the current facilities at UUSA and Urenco UK.

LEU+ is a positive initial step towards the subsequent potential production of other advanced fuels for civil nuclear power generation and a project to create an advanced fuels facility has commenced. It will be designed to supply research and test reactors, as well as the emerging market to fuel advanced reactors.





Images top to bottom: UUSA; Urenco UK

This includes the fuel requirements for U-Battery, an advanced modular reactor development Urenco is supporting.

Advanced fuels can be produced using our existing centrifuge technology. We are currently focusing on developing the commercial scope of the new facility, confirming its location, capacity and how it will connect to existing plants. This project is being undertaken within the framework of international agreements related to Urenco. We have the knowledge and experience to play a leading role in this area, which will provide an enhanced service for our customers and make a positive contribution to net zero targets.

# **CASE STUDIES**

# Decarbonising hydrogen in a net zero world

In September 2021, Urenco published the findings from an independent study that it initiated with Aurora Energy Research to investigate the benefits of deploying both nuclear and renewables in hydrogen production, to support the energy

The report, called 'Decarbonising Hydrogen in a Net Zero Economy', was supported by the International Atomic Energy Agency, EDF and Lucid Catalyst.

The key findings of the study included:

- To facilitate rapid decarbonisation and cut dependency on fossil fuels, both nuclear and renewables are needed for power and hydrogen production.
- Together, nuclear and renewables can provide the hydrogen volumes needed for net zero in 2050.
- Deploying large volumes of nuclear alongside renewables is economically efficient, reducing the net present value of the UK's total system spend by 6-9% (£40-60bn) to 2050.
- Combining hydrogen and nuclear leads to competitive costs. Using heat and electricity together from a nuclear power plant for hydrogen production provides a strong cost advantage.

While the study is focused on the UK, the results are applicable to other countries, including developing nations.



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# **U-Battery mock-up**

A full scale, first of its kind mock-up of the main vessels of an advanced modular reactor (AMR) was revealed in September 2021 at an event hosted by U-Battery and Cavendish Nuclear.

The project was to design and manufacture a full size mockup of the reactor pressure vessel, the intermediate heat exchanger vessel and the connecting duct. Its successful completion marked a major milestone towards using AMR technology to provide a low carbon, cost effective, locally embedded and reliable source of power and heat for diverse applications, including energy intensive industries and remote locations.

It also demonstrated how the AMR can be built using modular techniques, making it easy to construct and transport.

The project was the result of an award made by the UK Government's Department for Business, Energy and Industrial Strategy under the Advanced Manufacturing and Materials programme. Part of the Government's Nuclear Innovation Programme, the objective was to enable research and development to bring innovative nuclear technologies to market.

In addition to the Advanced Manufacturing and Materials programme, U-Battery is participating in Phase 2 of the UK Government's Advanced Modular Reactor Competition. In July 2020, it was one of three vendors to progress from Phase 1 to Phase 2 of the competition and was awarded £10m of funding to initiate design and development work.



#### Stable Isotopes expansion

Urenco Stable Isotopes officially opened its new Leonardo da Vinci (LDV) cascade in October 2021. Like the Renaissance polymath after whom the facility is named, the cascade is extremely versatile. It is designed for the enrichment of multiple isotopes – including those of germanium, xenon, selenium and silicon – for medical, industrial and research applications.

The growing market in this field has led us to expand our facility to meet the demand, especially for products in the medical field – for example, Xenon 129. This product is used in MRI imaging to detect lung diseases. Urenco Stable Isotopes is also conducting research to discover solutions for cancer treatment. By producing enriched stable isotopes, Urenco plays an important role in the supply chain for medical radioisotopes, which are used in therapy and diagnostics.

Urenco Stable Isotopes has operated for over three decades at Urenco Nederland in Almelo and hundreds of thousands of patients are treated every year with products made from our enriched stable isotopes. Other applications are very varied and include products for superfast computer processing power.

We are looking forward to working with customers on new research and development projects, producing high quality, cost efficient solutions that will change lives.



Image above: Stable Isotopes.

# Social impact

**Our Culture** 

Through our long term culture programme we are working towards ensuring our culture is fully inclusive – an environment where all voices are heard, and diversity can thrive – which will enable us to make positive progress delivering our priorities.

Over the past year, feedback from our people has informed our focus on three priorities: leadership, empowerment/accountability and transparency/collaboration. To deliver on these priorities it is vital that we all aspire to the same high standard of behaviours. New Urenco behaviours have been developed, linking to our values and Code of Conduct. This followed organisation wide consultation with employees.



The behaviours are:

**One Urenco** – actively collaborates to form winning teams and embodies transparency, respect and inclusivity;

**Act today for tomorrow** – embraces continuous improvement and innovation, and acts consciously with a broader and longer term perspective in mind; and

**Own our results** – ensures physical and psychological safety, maintains integrity, and empowers by holding self and others accountable.

We are clear that our leaders must be role models for these behaviours.

Across the organisation we have learned about these behaviours through a variety of tools, resources and ongoing dialogue. This is a long term commitment and will be a continuous journey of learning for leaders and employees.

Part of our learning about the Urenco behaviours in 2021 involved the rollout of three modules of leadership training to over 100 leaders and senior managers, focusing on the benefits of having open and transparent conversations, and giving and receiving positive and constructive feedback. This was the foundation of a global leadership programme in 2022 to further develop our leaders, as well as those of tomorrow, with the skills they will need as our business continues to evolve. Our aim is to develop more skilled, aligned and energised leaders who are committed and willing to learn.

This is part of our wider, long term culture programme to help ensure we are fully inclusive and foster an environment where all voices are heard and diversity can thrive. This in turn will help us deliver on our business priorities.

The programme will see around 90 current and future leaders, from across the company, take part during 2022.

It is sponsored by our CEO, Boris Schucht, and individuals will be selected carefully to ensure a mix of function, location and diversity.

We will be able to monitor the progress of our efforts on cultural improvement through a new, agile employee feedback platform which we began rolling out in 2021 called "Your Voice". Currently in place at Head Office and within lead teams at Urenco's sites, Your Voice will ultimately allow managers to access their own dashboards of data so they can track regular feedback from their people and respond with productive discussion and action accordingly. This is another means of encouraging feedback to be shared to support positive cultural development.



Image above: Urenco USA has partnered with the Leaders Programme, a non-profit organisation that provides advocacy and support to people with intellectual and developmental disabilities in Lea County, New Mexico.





## **Inclusion and diversity**

The ability to demonstrate a consistent level of performance regarding inclusion and diversity is increasingly important in determining how an organisation is perceived by key external stakeholders, and minimises reputational and regulatory risks.

For Urenco, and indeed the broader nuclear sector, there is also a critical need to acknowledge the importance that a more diverse and inclusive culture will have in attracting and retaining the talent required in the future to enable us to play a fundamental role in sustainable energy and the move to a net zero world.

Improving the gender mix within the business is a priority for Urenco and we have updated our goals linked to retention, inclusion, development (including training), succession planning and recruitment. Work is also being expanded to include other critical areas of inclusion and diversity (I&D) beyond gender, including disabilities, cultural diversity and LGBTQIA+. "Including U" champions have been recruited across the organisation to support and promote local inclusion and diversity awareness initiatives and activities, with a lead champion for each Urenco location. There has been a successful initial rollout of I&D awareness training, along with follow-on training on inclusive leadership, known as "Empowering U". Other initiatives have included our second global conference for our I&D champions, held virtually in the autumn and showcasing speeches from two I&D experts in leading external organisations.

The "winning team" Urenco needs to develop for tomorrow will have greater expectations of its employer and the culture within which it will be able to succeed, including different ways to work as experienced during the management of Urenco through the COVID-19 pandemic.

Inclusion and diversity is a strategic imperative and a critical element of our culture programme. We now have in place a new global strategy with goals that will effect a positive step change for Urenco

The programme contributes to successful organisational outcomes and ensures that we develop an inclusive culture with opportunities for all.

As part of our commitment to deliver a more inclusive and diverse organisation, we have appointed Urenco's Chief Financial Officer as the Executive Sponsor of Urenco's inclusion and diversity programme.

Inclusion and diversity is a strategic imperative and a critical element of our culture programme."

Image above: Employees at Urenco's Head Office stand under a balloon arch to mark Pride Month in June 2022.



# Demographic and Inclusion survey

In our demographic and inclusion survey, 45 colleagues (5%) identified as having a long term condition or impairment. We focused on disabilities across all our sites as a main I&D theme in 2021, alongside gender equality, cultural diversity and LGBTQIA+. Our I&D themes are intended to increase awareness and understanding, and encourage conversations, so we can learn together with the aim of minimising any stigma and accepting that we're all different. Our survey also highlighted that inclusion requires greater attention to optimise our efforts on diversity. This is therefore a core pillar of our new I&D strategy to 2025.

# Second Inclusion and Diversity virtual conference

Urenco hosted its second global conference for its Inclusion and Diversity (I&D) champions. The conference focused on the theme of celebrating progress and inspiring for the future.

Urenco Chief Financial Officer and I&D executive sponsor Ralf ter Haar, opened the event by commenting on how far Urenco has come in its efforts to create a more inclusive and diverse organisation in the last year, including the development of a new global I&D strategy and goals to 2025.

I&D champions from the various countries in which Urenco operates also heard from two inspiring external speakers.

The I&D champions also discussed their role, including the importance of networks and allyship and how to speak up against microaggressions.

Summing up, Ralf ter Haar said: "I was impressed with the engagement and willingness to share personal stories."

#### **European Forum**

Employee engagement is a key element to ensure a healthy and happy workplace and Urenco's long term success.

An example is our European Forum, which met virtually in April with Urenco CEO, Boris Schucht. The forum informs and consults employees on matters of a pan-European nature and is made up of representatives elected from each of Urenco's European sites. It provides a useful opportunity to update the representatives on a variety of topics, and answer questions and concerns that they raise on behalf of their site colleagues to inform future decision making. The forum is supplemented by multiple face to face and digital communication channels promoting two way dialogue.

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We believe that everyone in our organisation should have a voice."

#### **Celebrating U**



Celebrating U is an important part of Urenco's reward and recognition programme. Our people are our most valuable asset and the scheme aims to nurture high performance and highlight the winning team who are driving the long term sustainability of our business.

Every year, senior leaders are asked to nominate colleagues from across the organisation who act as role models for others. Twenty individuals were selected by the Executive Committee to receive a reward for their exceptional performance over the past year.

While some colleagues were nominated for strong leadership and swift actions to resolve challenges such as COVID-19, Brexit and technical issues on our sites, others put their energies into leading our I&D programme or shared their expert knowledge by coaching and supporting others.

Sadly the pandemic prevented us from holding a physical event to bring our 2021 Celebrating U cohort together. However their outstanding contribution to Urenco did not go unnoticed, and they all received a gift voucher to enjoy a well-deserved leisure break with a family member or friend. We showcased our 'top 20' in a series of stories on our intranet so colleagues could share in their success and be inspired by their achievements.

#### **Mental Health First Aiders**

We are proud of our first partnership with Mental Health First Aid England, a social enterprise offering expert guidance and training to support mental wellbeing.

Mental Health First Aider

We now have 30 employees at our UK sites trained as Mental Health First Aiders (MHFAs). Working in the strictest confidence, the MHFAs offer support to colleagues experiencing any work or non-work related mental health issues. Our MHFAs also host wellbeing sessions, often in collaboration with our I&D champions, with the aim of encouraging open discussion around mental health.

In addition, we offered a half day mental health awareness course to all Urenco employees in the UK.



# Social Investment Programme

These are the aims of our 2021 Social Investment Programme:

- 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.

#### Social investment

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

In 2021, our Board demonstrated its commitment to a sustainable future by approving an increased social investment budget and an enhanced programme was developed which focused on multiyear partnerships with charitable organisations to maximise social impact, reputational value and employee engagement. By the end of the year, nine new social investment partnerships were up and running, and there are more in the pipeline.

Collectively they cover three work streams aligned to our wider sustainability priorities:

- · Education, skills and research
- · Health and well being
- · Environment and net zero transition

As well as supporting our strategy, these partnerships are chosen based on their mission, values, contribution to global and local communities, and to specific UN Sustainable Development Goals.

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. These new partnerships are in addition to our four established commitments:

#### **British Science Association:**

**CREST Awards sponsorship** 

#### IAEA:

Marie Sklodowska-Curie Fellowship Programme

#### Richie Programme:

Science education workshops and online resources in the UK, the Netherlands & the USA

#### Science Museum:

Sponsorship of Wonderlab: The Equinor Gallery, UK



# IAEA Environment, Food & Agriculture Programme

As a 'Nuclear Saves' partner, Urenco is supporting the IAEA in transferring nuclear science and technology to countries to improve the health and prosperity of millions of people around the world.

The IAEA Environment, Food and Agriculture programme is looking at climate change adaption in crops. Nuclear technologies provide competitive and often unique solutions to help fight hunger and malnutrition, improve environmental sustainability and ensure that food is safe. Our funding will go towards developing "climate smart" agricultural practices to improve crop production and for further research into greenhouse gas (GHG) emissions and their sources, such as crops that flourish on saline water so they can grow in flood plains, or research into drought tolerant soils and yields.

This will help communities struggling with food security to support themselves and adapt to the challenges posed by climate change.

The solutions include isotopic techniques and irradiation, which have several benefits, including reducing bacterial contamination and preventing premature sprouting and ripening.

Through this partnership we are contributing to a coordinated research project on developing sustainable agricultural practices for the mitigation of GHGs.



We will work together to deliver sustainable, environment-friendly methods enabling countries to improve the health and prosperity of millions of people around the world. The new project Urenco supports is using nuclear science and technology to develop climate-smart agricultural practices to reduce emissions of greenhouse gases."

Najat Mokhtar IAEA Deputy Director General and Head of the Department of Nuclear Sciences and Applications





#### 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.

This partnership endorses and supports Chester Zoo's pioneering conservation research and its 2030 goal of empowering 10 million people to live more sustainably. Over the next three years the zoo plans to double the size of its current lab facilities, reinforcing its science programme and increasing its training capacity. This aligns with Urenco's core values in terms of innovation and leadership.

Chester Zoo, with Urenco's social investment, will not only continue to be a leader in conservation and preventing extinction, but will also increase its global impact by influencing zoos across the world.

The science lab project, also funded through Urenco's social investment, will help the zoo reach over 150,000 young people through different learning programmes. Further Urenco funding will also enable Chester Zoo to create job opportunities for graduates and trainees. Chester Zoo already works with other zoos in countries where Urenco operates, in the US, Germany and the Netherlands.

Chester Zoo is the most visited zoo in the UK and a conservation and education charity committed to preventing extinction. It is home to 20,000 animals, covers 128 acres of zoological gardens and hosts 2 million visitors every year.





#### **British Science Association**

We expanded our existing partnership with the British Science Association, beyond sponsoring their CREST Awards. By working together we are able to reach a wider audience of young people, offering dedicated downloadable resources designed to nurture an interest in science, technology, engineering and maths

The CREST 'Spinning Solutions' resource is for 7-11 year olds, teaching the concept of separation and its purpose in everyday life. And the CREST 'Enrich my classroom' resource includes a series of practical workshops on topics such as nanotechnology, magnetism and electricity (aimed at 11-14 year old students).



#### **Wonderlab: The Equinor Gallery**

Urenco is pleased to continue its association with the Science Museum. We sponsor Wonderlab: The Equinor Gallery, UK which is packed with handson, interactive exhibits and immersive experiences to enthral and excite young people about STEM.



# WHOBBS

# The Weekend Hunger Initiative, Hobbs, USA

This partnerships 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. Each week, volunteers pack and deliver bags of nutritional food to approximately 900 Hobbs Income Support Division students.



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If it was not for WHI Hobbs, the only nutrition some of our local students would have is what they eat at school during the week. UUSA is proud to support WHI Hobbs because we know every dollar goes to help feed children in need in our community."

**Lisa Hardison**Communications Manager, UUSA

# UCL IsoHope, Institute of Nuclear Medicine

Our partnership with IsoHope, a division of the University College London (UCL) Hospitals Charity in the UK, directly supports the work of the world-renowned Institute of Nuclear Medicine (INM). Urenco funding will go towards medical research, studies and the sharing of knowledge to better understand lung inflammatory and malignant diseases. Initially the research team will study the role of blood vessels using a specific positron emitter isotope tracer, the next phase will perform studies using a more novel positron emitter isotope tracer that measures cellular activity and the final phase will collate and present the findings to the medical community.





INM is a clinical and research unit, and the largest nuclear medicine department in the UK. It has had a partnership with UCL, a major public research university in London, for a long time. Research is undertaken on the UCL campus and INM uses this research to help overcome diseases that affect patients at University College Hospital. Over 19,000 patients come through INM's door every year. Its research includes turnour angiogenesis in cancer; physics and engineering; artificial intelligence and machine learning; and cardiac and vascular imaging.

# oyfo TECHNIEK MUSEUM

# Oyfo Science Museum, the Netherlands

Oyfo is an interactive science and technology museum aimed at primary and secondary school pupils and their families. Approximately 18,000 visitors are welcomed through the museum doors every year.

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.



Having a Urenco-branded interactive stable isotopes display at the museum in Almelo's neighbouring town of Hengelo will increase awareness of our organisation and the role of nuclear in medicine. It also aligns with our STEM agenda as the museum is popular with schools and families from the local community."

Judith Slijkhuis Head of Communications & PR, Urenco Nederland and Social Investment Committee Chair at Urenco





#### **Teach First, UK**

We are the first nuclear company to support science, technology, engineering and maths (STEM) education through a teaching provider in a partnership that will serve the most disadvantaged communities in England.

Urenco is partnering with education charity Teach First to support the recruitment, placement and training of over forty STEM teachers in schools.

These teachers will reach up to 10,000 secondary school pupils across our three year partnership, helping thousands of young people from disadvantaged backgrounds to reach their full potential.

Where possible, these teachers will be placed in schools close to Urenco's UK sites. However, we recognise the bigger picture of improving STEM education in schools where it's needed most.

Urenco and Teach First's social investment partnership comes as part of our wider Sustainability Strategy to engage with communities, enrich STEM education and provide opportunities

The Teach First trainees that our funding will support are key to helping us deliver this.

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We are proud to be the first nuclear company to support STEM education through Teach First, an established and respected route to encourage and develop a more diverse and inclusive pipeline of future STEM professionals. Through our Social Investment Programme we will enable Teach First to train and develop 45 new STEM teachers over a three year period, as well as creating opportunities for us to engage with schools through coaching and site visits."

Michael Bryant Marketing & Sales, Commercial, Urenco Jess McClymont, Head of Corporate Partnerships at Teach First, said: "Our country continues to struggle to find enough great STEM teachers to inspire the next generation. And it is the schools serving the most disadvantaged communities that are more likely to be affected by this shortage.

"We're delighted to be working with Urenco to plug this gap and recruit more outstanding STEM teachers into the schools that need them most. We believe our partnership will positively impact thousands of pupils, inspiring and developing the STEM pioneers of the future."

Teach First is an education charity fighting to make the education system work for every child. As a leading teacher training provider, it champions schools facing the biggest challenges by developing school leaders and plugging them into supportive networks, so that schools and pupils can thrive.

The charity has now recruited over 18,000 teachers and leaders, has over 95 head teachers in their Training Programme alumni and has supported over a million pupils.





#### **Pump Aid, Malawi**

This one year funding arrangement will support the training of nine local entrepreneurs in Malawi to construct and maintain around 5,000 community wells and pumps to combat high rates of pump non-functionality and food insecurity. This is an innovative social enterprise model to facilitate the availability of local clean water for around 45,000 people a year. Additionally, Urenco's partnership will support a community based childcare centre (CBCC), where early years provision and community education about sanitation can be promoted.

The partnership is also in line with UN sustainability goals, including decent work and economic growth.

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Quite simply, without your support, we wouldn't be able to offer so many rural communities access to clean water. This social enterprise is genuinely sustainable – training local people as mechanics to maintain, fit and supply the pumps. Urenco is supporting rural communities with the tools to become truly sustainable and to thrive and grow. Thank you Urenco."

**Duncan Marsh**Director of Programmes, Pump Aid









#### N/a'an ku sê Foundation, Namibia

Urenco is supporting a marginalised community in Africa through a new social investment partnership with the N/a'an ku sê Foundation, a conservation charity committed to preserving the landscapes, wildlife and culture of Namibia. Urenco is funding school meals, community education, an ambulance, a Lifeline Clinic and sustainable food practices, among other community projects.

The partnership will support the San Bushman community in Namibia, an indigenous population whose origins date back thousands of years. This is a community which is marginalised and impoverished, and our contribution will include funding 3,200 daily meals a month at a school and 900 meals a month at a health clinic, as well as a teacher for the children.

Urenco's support will also go towards a forest conservation and revegetation project which is part of The Queen's Commonwealth Canopy initiative.



The partnership is in line with UN sustainability goals, such as the environment, and inclusion and diversity.

Dr Rudie van Vuuren, CEO of the N/a'an ku sê Foundation, said:



We are proud to be affiliated with Urenco, whose corporate and social responsibility is not only positively impacting the lives of Namibia's marginalised San community, but also helping with the preservation of Namibia's landscapes and unique wildlife."

This partnership is the result of a suggestion from a Urenco employee. Always keen to explore ideas from our colleagues, the Social Investment Committee was pleased to receive a business case for consideration.

Geert Pluimers, Engineering & Projects, Urenco Nederland, said:

"Urenco is making a huge difference in the lives of many people by supporting the N/a'an ku sê Foundation. It links to our sustainability, inclusivity and diversity aims, and you can even become a volunteer. I've worked at Urenco for 37 years and once I heard about the Social Investment Programme I contacted the committee straight away to see if Urenco could help this community. It's so important to try to make a difference. I've seen their work firsthand and thought: 'If this can happen in a place where I walk and I can do something about it, I will.' That was my motivation to suggest the charity to the Social Investment Committee."



#### **Hobbs Municipal Schools Curriculum, USA**

Hobbs Municipal Schools Career Technical Education Center, or CTECH, is unique in New Mexico and provides technical programming, including preparation and certifications, to local high school students, equipping them for jobs in the immediate area when they graduate.

Working together, UUSA will help develop the curriculum where we have expertise and this partnership will act as a model for joint working between business and education. CTECH is paving important pathways for students who otherwise may not have had the opportunity to pursue a technical career.

An investment in CTECH is an investment in creating new and exciting career pathways in high demand professions for high school students in Hobbs, New Mexico, enabling students to learn technical skills and gain the qualifications needed to successfully obtain gainful employment upon graduation from high school. UUSA values hiring members of the local community and through this programme located near our facility, students will learn valuable technical skills that could open doors of opportunity for them, such as internships and employment with Urenco.



#### **IAEA Fellowship Programme**

We have pledged to donate for the next three years to the International Atomic Energy Agency's Marie Sklodowska-Curie Fellowship Programme. The programme provides scholarships to 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. This provides workshops and digital resources for school children and university students to teach them about nuclear energy and the importance of protecting our planet.

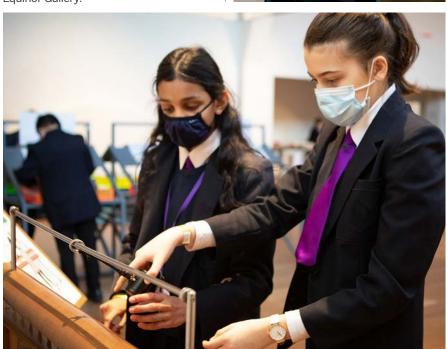
Getting young people engaged with science, technology, engineering and maths is important as it helps raise awareness of the opportunities and jobs in this critical area.

Due to COVID-19 restrictions, our sites were unable to host as many physical workshops as usual 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





# Benjamin, Work Control Coordinator, Urenco UK

At the age of 26, I have recently secured a position with the Work Control Team at Urenco UK as a Work Control Coordinator.



I started as an apprentice after leaving school, which allowed me to gain experience and learn a great deal about many aspects of engineering: mechanical; fabrication; electrical/instrumentation; and process/installation. I also discovered the various opportunities the wider nuclear industry holds and the global push for a low carbon future, which Urenco will play a key part in.

I have been lucky to win several apprenticeship awards, including UK Nuclear Apprentice of the year in 2018. It was a real privilege to be presented with such a prestigious award. Urenco then supported me to study for a degree in Mechanical Industrial Engineering, specialising in Engineering Management, which I will finish in July 2022.

I am so proud of my role at Urenco. The team around me are brilliant and all strive for excellence in the same way I do. We have a supportive manager and are empowered to promote continuous improvement to processes and procedures. It is an honour to be given that responsibility from the leaders of the company, whose level I aspire to reach one day.





#### Interns, apprentices & graduates

Urenco operates a range of placements for students in all of our locations and during the 2021/22 academic year eight interns were recruited across our European sites, with a further five expected to start. The internships vary in length and span across our functions.

Further to this, during Black History Month in October, Urenco signed up to the 10,000 Black Interns Programme. The internships aim to transform the horizons and prospects of young Black people in the UK by offering paid work experience across a wide range of industries, as well as world class training and development.

At Urenco, we are also proud to offer a range of apprenticeships, aligning with our commitment to nurture the next generation of scientists and engineers. At the end of 2021 we were supporting more than 30 apprenticeships across our European locations. In addition, we welcomed graduates into our business on training schemes, with three joining U-Battery in August.

# Ester, Compliance Specialist, Urenco Nederland

As a Compliance Specialist at Urenco, I have many different tasks and deal with colleagues in every department. The variety and scope of the work is what attracted me to the job three years ago. In the Compliance department, we translate legislation and regulations into practice, checking whether processes and activities are compliant. In this way, we help protect our licence to operate. Compliance looks at both management systems and operational safety.



One of my focus areas has been to develop content for our electronic learning environment to keep track of individual competencies and to show that we are fully compliant with regards to knowledge. Every employee and contractor at UNL uses the e-learning platform to complete training modules.

My manager encourages me to speak up and act accountably and responsibly, and the people around me are open to hearing new ideas. Urenco has also offered me personal and educational development opportunities.

When I joined the nuclear sector I did not have a strong opinion about it. But now, I think it is a fascinating field. When I tell people I work at Urenco, they often show an interest. I enjoy explaining to them what Urenco does in relation to uranium enrichment and the production of stable isotopes for nuclear medicine.

# Tim and Karl-Heinz,

Operations, Urenco Deutschland

Tim



In 2015, I started my apprenticeship at Urenco in Maintenance. After passing the exam at the beginning of 2019, I switched to Operations. At the same time, I started further training to become a state certified technician and passed the technical examination – Fachkundegespräch – later that year. I was tested on my knowledge in the presence of the regulatory body, the TÜV, and was proud to pass with flying colours! For me, a dream has come true. I'm happy to now be able to help this central unit at Urenco as a fully fledged member of the team and I have learned a lot from long standing colleagues, such as Karl-Heinz.

## **Karl-Heinz**



I have been with the company for 28 years and I am currently working as a Deputy Shift Leader. Tim's training shows the high level of performance and knowledge within Operations. There is an incredible amount of experience available and it is important that we use it to prepare the next generation for their future tasks. Learning on the job is crucial. Knowledge

is passed on internally and each operator has to prove their expertise on a continual basis. I would like to congratulate Tim on finishing his specialist knowledge examination, which completes a long term training plan. Urenco Deutschland is happy to have such a committed young colleague in its ranks.

Julieta, Pump Rebuild & Recycling Supervisor, UUSA



I was recently appointed as the Pump Rebuild & Recycling Supervisor at UUSA. I joined UUSA in 2011 as an Operator and I progressed through the department, leading me to serve as a Senior Operator and most recently as Deputy Shift Manager. I hold a Bachelor of Applied Arts and Sciences in Technology.

My experience at UUSA has been positive. I have been able to grow and gain expertise in a structured manner, which has led to my success. My time in Operations has helped me gain knowledge in the day to day operation of the plant and how the systems work together. This will help me focus on the interdependence between the operating systems and the pump rebuild recycling department. I often get asked why I work in the nuclear

industry. The reason is nuclear plays a pivotal role in our energy needs. This is especially true as the world works to reduce its carbon footprint. Urenco's experience in the industry, coupled with the innovative nature of it leaders and employees, will ensure a bright future for all of us. I am happy to be a part of that.

# Community engagement

# Donations & non-commercial sponsorships

Each site, plus Head Office, has a local community donations budget to give to projects of importance to the local community and to employees at the site.

Our focus is on projects where our involvement can make a significant difference. This includes preferring projects where we can share capacity and skills through employee volunteering, which can have a longer lasting effect than making a solely financial contribution.

#### **Volunteering in 2021**

Every year Urenco colleagues volunteer in their local communities, enjoying a corporate culture that encourages individuals and teams to spend a day adding value through positive action. Despite changing COVID-19 restrictions during the year, our people power was put to good use in 2021. Our volunteering initiatives included:

 Lockdown lifeline (below) – colleagues in the Netherlands supported needy households with fruit baskets and conversation, and have plans to refurbish a rundown local playground.





- Sustainable planting (above) Head Office colleagues spent a day at Woodoaks Farm planting trees and hedgerows with help from Chiltern Rangers and the Soil Association, and we've been invited to return.
- Fabric face coverings volunteers from UUSA and their families made hundreds of face coverings for the local hospice and other non-profit agencies.
- Chester Zoo Capenhurst colleagues have established links with the zoo, having volunteered many times, and early on in the pandemic helped its urgent animal adoption fundraising campaign.
- Community build (right) pre-pandemic, a group of colleagues in Gronau, together with the residents of a facility for people with disabilities, designed and built a beautiful outdoor area and have plans to join the Gronau city 'litter pick'.



In the spirit of One Urenco, volunteering is an ideal way for colleagues to connect across the organisation in a different setting while having fun and helping our local communities and causes that are close to our hearts. We are always interested to hear from organisations with opportunities where we can make a difference.

## Safety, safeguards and security

#### Safety

Urenco operates in an environment subject to a wide range of health, safety and environmental laws, regulations and standards. If we fail to comply with these



requirements there is a risk that we will be subject to regulatory enforcement action, which is likely to adversely impact our employees, result in the imposition of restrictions on how we operate and could prove detrimental to our reputation.

We seek to operate to the highest standards of safety to maintain a safe environment for our employees, contractors and stakeholders and have implemented safety management systems designed to minimise risks and ensure compliance with safety standards through regular monitoring. Focused health and safety peer reviews are conducted, in addition to the formal requirement for independent compliance audits and reviews at all our facilities.

We ensure we meet regulatory requirements, follow regulatory protocols for the safe handling of uranium and other chemicals and focus on continuous improvement and the detection and elimination, or mitigation at a minimum, of potential hazards before incidents can occur.

By adhering to best practices in this area, we continually seek to ensure minimal impact on employees, contractors, the public and the environment.

#### **Global safety survey**

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, while maintaining the reputation of our industry, products and services.

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 continue to build on further.

Jenise Dahlin, one of Urenco's key safety leaders, said: "We continually strive to improve our safety culture and our endeavours with DuPont have helped us to track our progress over time as we continue our journey to excellence.

"Through this partnership, we have identified where improvements can be made in our management of safety, which includes having an environment where all personnel - employees and contractors are part of the daily safety conversations."

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.

#### The Safety Management **Improvement Project**

As part of our continued focus on safety and contractor safety management, we have been working alongside DuPont Sustainable Solutions to identify opportunities for improvement both in the operations and projects teams. It is important that we focus our efforts on preventing any and all injuries as we prepare for the new capital projects planned in the near future.

The Safety Management Improvement Project is split into four phases, the first of which we started in December 2021 with a survey to assess the status quo by conducting a broad gap analysis across the company. Once this was complete we held focus groups in Procurement, Health and Safety, Operations, Maintenance and with contractors, in addition to completing document reviews and stakeholder interviews.

The results of the gap analysis have been received and divided into the following categories:

- 1. General Observations
- 2. Standards and Processes
- 3. Organisation, Communication and Governance
- 4. Leadership, People and Capabilities.

The results include our strengths, areas for improvement and specific recommendations for achieving our goals.

The broader stakeholder team is currently designing the implementation plan for safely managing work activities across our sites and the pilot on the new approach will begin in the autumn of 2023.

### Wellbeing

#### **Our People**

During the COVID-19 pandemic, we have had detailed measures in place to ensure the safety and wellbeing of our employees, communities and key stakeholders, and to keep our plants operating. There was no interruption to our operations. The pandemic is likely to remain a challenge for some time and we will continue to ensure that our operations, and the health and safety of our employees and contractors, are maintained to the highest standards.

COVID-19 has not stopped us from continuing to develop and progress our culture programme, or continuing to support interns, graduates and apprentices joining the nuclear industry.

The COVID-19 pandemic is a global event that has presented significant challenges for all businesses in terms of financial, operational and commercial resilience. While Urenco has been able to successfully manage and minimise many of the near term impacts of COVID-19, there continue to be long term challenges that will test our resilience and ways of working.

More is known about COVID-19 and there are now widely available vaccines. We have managed to adjust and cope within operations, but there are still variants and COVID-19 remains a threat such that continued restrictions on site access are in place at all locations, including the use of masks and physical distancing, to protect the health and safety of our employees.

We anticipate that COVID-19 will continue to cause some disruption in 2022 and we are well placed to maintain the health and wellbeing of our employees and the integrity of our operations.

#### The Group of Vienna

Along with the International Atomic Energy Agency and a dozen leading nuclear industry companies, Urenco founded the Group of Vienna. The Group's mission is to accelerate and enlarge the contribution of nuclear technologies to meeting environmental, social and economic goals, and improve people's health and wellbeing.

Through annual roundtable meetings, the Group of Vienna will provide a platform for dialogue on how the nuclear industry can address some of the world's biggest problems. Climate change, food security, cancer treatment, water management and plastic pollution are just a few of the challenges that can be supported by nuclear techniques.

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The Group of Vienna will provide a platform for dialogue on how the nuclear industry can address some of the world's biggest problems."

#### **Board meetings**

Each year, the Board plans to hold one meeting at a Urenco enrichment facility. In 2021, that meeting was held at Urenco Nederland. In addition, workforce engagement sessions with colleagues from Urenco Nederland and Urenco ChemPlants took place virtually with the participation of all directors in informative and interactive sessions with colleagues at all levels of each organisation which set out their achievements and challenges during 2021. Board members were keen to ask questions and hear feedback from colleagues on operational matters, company culture, and health and wellbeing during COVID-19, among other matters. Due to the success of the virtual sessions during 2020 and 2021, it is intended that Board engagement sessions will continue to take place throughout 2022 and beyond.



## **Governance and ethics**

## Nuclear safety, security and non-proliferation

Urenco has a robust commitment to nuclear safeguards and non-proliferation through the Treaties of Almelo, Washington and Cardiff, and government oversight.

We are actively engaging with the relevant government departments and authorities to help design the future of civil nuclear power, promoting the evolution of regulatory regimes and continuing to be a reliable partner in the field of international non proliferation.

#### **Security and cybercrime**

We need to ensure the security of fissile material and our own technology and assets, particularly with regards to the increasing threat of cybercrime to the energy sector. This exposes Urenco to an ongoing risk which could result in the loss or corruption of data or disruption to operations, causing reputational damage.

We continue to work closely with the relevant government bodies, across the jurisdictions in which we operate, to ensure that we comply with all applicable national and international security requirements and understand the nature of new and emerging physical and cyber security threats.

Each of our sites is also supported by dedicated security resources to control access to sites, actively screen all employees, and ensure appropriate security policies and procedures are implemented. Security organisations for all Urenco facilities routinely meet to share both security data, recent developments and implementation of continuous improvements for threat prevention.

The Urenco Chief Information Security Officer (CISO) is responsible for ensuring that Urenco maintains effective threat intelligence and incident response capabilities to meet the challenges of the continually changing cyber environment. The CISO also ensures that cyber security and resilience capabilities are subject to regular review and risk assessment so we have the ability to prepare for, respond to and recover from cyber events or attacks which have the potential to negatively impact Urenco. The Information Security team has expanded significantly to deliver improvement projects aligned to the endorsed information security strategy.



Urenco has 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 seeing to it that we remain a trustworthy and valuable contributor to society."

It is of paramount importance that all employees adopt and uphold the company's high ethical standards at all times. These standards ensure we carry out our business professionally, fairly and with complete integrity. Urenco has an organisation-wide Code of Conduct, which sets out a series of non-negotiable behaviours for our employees. The Code includes our zero tolerance approach to bribery and corruption, and our commitment to upholding human rights in all areas of our business.

Our Code of Conduct is available at: urenco.com/investors/corporate-governance/code-of-conduct.



## Ethical and transparent behaviours

#### Supply chain management

Our responsible management of nuclear materials ensures we remain a trusted supplier of choice and helps us to facilitate low-carbon electricity generation for consumers and businesses around the world.

We have long working partnerships with our direct suppliers. Before proceeding with a new contract, we conduct a detailed due diligence process, with a comprehensive review of risks, including any safety or other environmental, social and governance concerns. We send all our nuclear fuel cycle suppliers our Code of Conduct and expect them to abide by the law and universal ethical standards.

We have a programme of supplier audits which check that our direct suppliers continue to comply with our expectations and those of our customers. If not, we will issue a Request for Action. Our Commercial and site teams can also raise any concerns they have regarding our suppliers though our global reporting system, ReAct. We will then engage with the supplier, request remedial action and confirmation that this has occurred. After six months we will review again to ensure that the corrective actions have been effective. We also follow up during the next audit. We track the effectiveness of remedial actions across our supply bases.

Management of our supply chain extends to our customers and other business partners. We have clear rules of engagement that apply to all of our business dealings and we expect our partners to be transparent with us. We conduct due diligence processes for all new customers, and our Head of Audit and Risk reports to our Board Audit Committee in instances where we have declined to work with a company or in cases where extra controls are required.

In addition, we have systems to monitor news feeds in real time, judicial decisions and other reporting to highlight any new information that could impact our risk assessment of a supplier.

We also take part in customers' audits. Our customers place particular emphasis on safety, quality and environmental protection. They may ask us to comply with their own codes of conduct and likewise expect us to ensure the same standards of our suppliers, and send questionnaires requesting detailed sustainability data and management information. Some customers conduct periodic audits of our plants against the standards we have achieved, including:

- ISO 9001:2015 (quality management),
- ISO 14001:2015 (environmental management)
- ISO 45001:2018 (occupational health and safety management).

# 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.

With this in mind, and in line with our desire to work with external partners to develop sustainable solutions, 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 10 banks and runs until 2026.

Location	Certificate	
Urenco Deutschland	ISO 9001:2015 (English)	
Urenco Deutschland	ISO 9001:2015 (German)	
Urenco Deutschland	ISO 27001:2013 (English)	
Urenco Deutschland	ISO 27001:2013 (German)	
Urenco Deutschland	EMAS (English)	
Urenco Deutschland	EMAS (German)	
Urenco Deutschland	ISO 14001:2015 (English)	
Urenco Deutschland	ISO 14001:2015 (German)	
Head Office	ISO 9001:2015	
Urenco Nederland	ISO 9001:2015	
Urenco Nederland	ISO 14001:2015	
Urenco Nuclear Stewardship	ISO 9001:2015	
Urenco Nuclear Stewardship	ISO 14001:2015	
Urenco UK	ISO 9001:2015	
Urenco UK	ISO 14001:2015	
UUSA	ISO 9001:2015	

## Stakeholder engagement & advocacy

Our stakeholder engagement activity and advocacy work during 2021 continued, in line with relevant restrictions on travel and the need to socially distance.

Through meaningful conversations and by taking up opportunities to network and participate in a variety of online and in person events, we have contributed to raising the profile and improving understanding of the role of nuclear, in tandem with other renewable sources of energy, as an important player in the quest for a sustainable, net zero future. It is important to have Government policies which recognise the benefits of low carbon technologies. We are working hard to help ensure the nuclear industry's voice is heard and demonstrate its complementary role along with renewables and other low carbon energy sources.

"We focused on developing positive relationships with a wide variety of stakeholders to enable us to play our role in making a contribution to individual countries' net zero goals. This is all thanks to the skills and enthusiasm of our employees and the strength of our business partnerships."

**Stephen Billingham** CBE, Urenco Chairman Highlights have included:

#### **February**

- Urenco became a Supporting Corporate member of FORATOM to further our ability to help advocate for nuclear within Europe.
- We supported a new Hydrogen Roadmap agreed by the UK Nuclear Industry Council, which is co-chaired by the Minister for Business, Energy and Clean Growth and the Chairman of the Nuclear Industry Association.

#### **April**

- Urenco CEO, Boris Schucht, was elected as a Board member of the World Nuclear Association. He joined esteemed colleagues from across the nuclear industry whose mission is to promote a wider understanding of nuclear energy among key international influencers, develop common industry positions and contribute to the energy debate.
- We held a virtual meeting of our European Forum, which informs and consults employees on matters of a pan-European nature and is made up of representatives elected from each of Urenco's European sites.
- We rolled out a demographic and inclusion survey to all employees, with over 70% of respondents sharing all of their demographic information.

#### June

 New Mexico State Senators, Representatives and staff from the New Mexico Legislative Education Committee toured our facility at UUSA.

#### **September**

- Urenco participated in the World Nuclear Association's virtual symposium. Among the speakers was Urenco's Chief Commercial Officer, Laurent Odeh, who joined the 'High Level Session on the future of nuclear energy' panel.
- We supported Nuclear Week in the UK Parliament, a series of nuclearrelated events aimed at educating and stimulating debate on why nuclear power is essential for achieving the UK's greenhouse gas emissions net zero target by 2050.
- Urenco attended the International Atomic Energy Agency (IAEA) General Conference, with Kees Jan Steenhoek, Director of Government Affairs at Urenco, speaking at the event, 'Innovations in the Production and Use of Nuclear Hydrogen for a Clean Energy Transition'
- Along with the IAEA and a dozen leading nuclear industry companies, Urenco founded the Group of Vienna. The Group's mission is to accelerate and enlarge the contribution of nuclear technologies in meeting environmental, social and economic goals and improving people's health and wellbeing.
- U-Battery attended the UK CIA Sustainability Conference to explain how the advanced modular reactor can help foundation industries achieve net zero.

#### **October**

- Urenco and Aurora Energy Research organised a roundtable discussion to further the debate on the role nuclear ought to play in the production of hydrogen.
- Urenco's Head of Sales, Kirk Schnoebelen, spoke at the World Nuclear Association (WNA) Strategic eForum 'Committing to Net Zero', where attendees discussed key net zero goals for the nuclear industry.

#### **November**

- The UK Department of Business, Energy & Industrial Strategy visited Urenco Nederland.
- Urenco attended COP26 and Boris Schucht, Urenco's CEO, spoke at the IAEA COP26 event, 'Nuclear Innovation for a Net Zero World'.
- Urenco and EDF hosted a reception for COP26 delegates to discuss how hydrogen production can help achieve net zero.

#### December

- Urenco exhibited and presented at the World Nuclear Exhibition (WNE) in Paris. which attracted 18,000 participants from 55 countries. We were also a supporting partner of the UK Pavilion at the WNE, organised by the Energy Industry Council and UK Department for International Trade.
- We attended Nuclear 2021, the UK industry's leading annual nuclear conference. We also exhibited and Steve Threlfall, General Manager of U-Battery, spoke at the panel discussion 'High Heat, Low Carbon: The Future Of AMRs.
- Urenco's Richie Lecture was held in London at the Science Museum's Wonderlab: The Equinor Gallery, engaging students in science. technology, engineering and maths.
- We hosted our second global conference for inclusion and diversity (I&D) champions.

#### **Governments**

We welcomed the UK Government making a number of recent interventions which show that nuclear power has a key role to play in the UK's energy transition and commitment to reach net zero by 2050. This includes the Government providing up to £1.7 billion of new direct funding to enable a final investment decision on a large scale nuclear project in the UK.

We were encouraged to see, in the USA, the Biden Administration supporting the use of nuclear power to meet energy needs and achieve emissions reduction goals, allowing the continued operation of the existing nuclear fleet (the largest in the world) and the development and deployment of advanced nuclear reactors and advanced fuels.

In the Netherlands, we were pleased to see an announcement that the new Government's coalition agreement contained a strong push for using zero carbon energy, with a decision to extend the life of the nuclear power station in Borssele and construct two new stations.

In Germany, where the phase-out of nuclear power generation continues under the new Government, we are confident that we can continue to demonstrate the long term positive contribution our enrichment plant there makes, particularly in relation to the retention of skills and advanced technology.



#### Ukraine

We remain deeply concerned about the current developments in Ukraine and our thoughts are with the people suffering as a result of the conflict. We are in contact with our customers and other stakeholders in Ukraine, offering both practical and humanitarian support. We continue to monitor and evaluate developments in Ukraine and the region closely, and we are working with government partners and other stakeholders in the UK, US and Europe to assess the potential impact. As a trusted global organisation we are well placed to play a significant part in offering a sustainable solution to the more immediate energy crisis.



#### Global Reporting Initiative (GRI)

All our GRI Disclosures are published online at: www.urenco.com/sustainability/sustainability-reporting Grouped together by five themes:











# **Independent Assurance of Urenco's 2021 Sustainability Data**

ISAE 3000 (2020) Statement | February 2022

# The nature of the assurance This is a report prepared by Corporate Citizenship for the management of Urenco.

Corporate Citizenship has undertaken a limited assurance of two data sets:

- first, selected sustainability performance data set out in Table 1;
- second, energy consumption data as set out in Table 2.

The data has been assured against Global Reporting Initiative's Principles for Defining Report Quality. In addition, the data for Scope 1 and Scope 2 GHG emissions has been assured against the provisions of the WRI / WBCSD Greenhouse Gas Protocol, 2015 revised edition.

The data relates to Urenco owned and leased facilities under its operational control across all geographies.

The assurance covers the period from 1 January 2021 to 31 December 2021.

Urenco is entirely and solely responsible for the production and publication of the data assured, and Corporate Citizenship for its assurance.

This engagement was performed in accordance with the International Standard on Assurance Engagement (ISAE) 3000 (2020) (Assurance Engagements other than Audits or Reviews of Historical Financial Information) and the relevant subjectmatter specific ISAE for GHG data (ISAE 3410, Assurance Engagements on Greenhouse Gas Statements).

GHG quantification is subject to inherent uncertainty due to factors such as incomplete scientific knowledge about the global warming potential of different GHGs and uncertainty around the models and parameters used in estimating GHG emissions.

Selected Sustainability Performance Data				
Scope	Source	Unit	Quantity	
Scope 1 GHG emissions	Combustion of fuel, refrigerants, and operation of facilities	Metric tonnes CO <sub>2</sub> e	14,425	
Scope 2 GHG emissions (location-based)	Purchased electricity, heat and steam	Metric tonnes CO <sub>2</sub> e	210,617	
Scope 2 GHG emissions (market-based)	Purchased electricity, heat and steam	Metric tonnes CO <sub>2</sub> e	124,787	
Water consumption	Total m <sup>3</sup>	Cubic metres	299,458	
Water withdrawn	Total m <sup>3</sup>	Cubic metres	446,450	
Water discharged	Total m <sup>3</sup>	Cubic metres	146,992	
Waste & recycling	Waste generated	Metric tonnes	798	
Occupational health and safety	Lost work days due to occupational accident or disease	Days	11	

The GHG emissions data has been prepared using the WRI / WBCSD Greenhouse Gas Protocol, 2015 revised edition, and the appropriate GHG conversion factors for company reporting as published by UK Department for Business, Energy & Industrial Strategy (BEIS) and the International Energy Agency (IEA), along with regionally published emissions factors.

Corporate Citizenship has complied with the requirements for independence, professional ethics, and quality control as stipulated by ISAE 3000 (2020).

Energy Consumption Data				
Source	Unit	Quantity		
Natural gas	kWh	32,426,718		
Fuel oil	kWh	1,033,329		
Diesel	kWh	1,948,367		
Petrol	kWh	398,905		
Propane	kWh	33,675		
Biodiesel	kWh	6,698		



#### **Assurance work performed**

The assurance work was undertaken from November 2021 to February 2022. The data set assured is that as provided on the 8th February 2022. Detailed records were kept of meetings and correspondence relating to the assurance. A team of three, led by a Senior Environmental Consultant, undertook the assurance and commentary process. An Associate Director acted as adviser to the project.

The assurance engagement was undertaken to a limited level. Corporate Citizenship's work has involved, but not confined to, the following elements:

- 1. Management interviews with site & regional primary data owners to understand the robustness and consistency of:
  - a. Data collection processes;
  - b. Training & guidance;
  - c. Understanding of key KPIs & reporting timeframes;
  - d. Clarity of roles & responsibilities.
- 2. A review of underlying data sources and substantiating evidence to support this year's reporting, to assess robustness of monitoring and reporting systems;
- 3. A review of year-on-year sustainability performance trends to identify any significant changes in operational eco-efficiency and investigate the reasons behind these trends:
- 4. A review of GHG calculations for accuracy and consistency with best practice guidelines;
- 5. A review of energy, water, waste and health & safety metrics, covering data consolidation & aggregation, conversions, calculations and reporting systems;
- 6. A review of group reporting to check for errors or omissions in data analysis, consistency with underlying data sets and reasonableness of reporting; and
- 7. A review of the calculation methodologies behind Urenco's market-based scope 2 emissions.

#### Our experience and independence

Corporate Citizenship is a specialist management consultancy, advising corporations that seek to improve their economic, social and environmental performance around the world and is a leading assurer of corporate responsibility and sustainability reports.

We have assured Urenco's sustainability data since 2016. During the 2021 reporting period, our work with Urenco focused exclusively on the assurance of this data.

#### Conclusion

Based on the scope of work and assurance procedures performed, nothing has come to our attention that causes us to believe that the data set out in Tables 1 and 2 is not prepared, in all material respects, in accordance with the GRI Principles for Defining Report Quality.

Further, based on the scope of work and assurance procedures performed, nothing has come to our attention that causes us to believe that data for Scope 1 and Scope 2 GHG emissions is not prepared, in all material respects, in accordance with the WRI / WBCSD Greenhouse Gas Protocol, 2015 revised edition. We note that the GHG accounting also complies with UK government environmental reporting guidelines: Including streamlined energy and carbon reporting guidance (2019).

#### **Corporate Citizenship Limited**

London 15th February 2022

## **Nuclear and net zero**

Nuclear is **the lowest carbon energy source,** on a level with
wind power

Nuclear has **saved 70 billion tonnes of CO<sub>2</sub>** globally since the industry began.

Nuclear is the only industry that **tracks, manages and pays** for its own waste.

Nuclear is an **important part of the energy mix** required to
reach net zero by 2040.

Nuclear energy and the nuclear industry is strongly aligned with the Sustainability Development Goals &

supports sustainable development.

It delivers 24/7 clean, flexible power.

1kg of uranium can release
3 million times more
energy than 1kg of coal.

One nuclear fuel pellet (the size of your thumbnail) will power an electric car 20,000 miles.

Nuclear and different renewables can be utilised together to provide efficient and affordable clean energy

We have not printed copies of this publication and would encourage you to read it online or as a pdf, rather than printing it locally, in the interest of sustainability.



We believe that nuclear power should and can play an important role in the clean energy transition. Achieving a sustainable energy system and meeting ambitious climate targets will be much harder without existing nuclear power and investment in new nuclear. We are supporting this through our production of fuel for carbonfree electricity generation, and we are also strongly committed to reducing our own carbon emissions through our membership and participation in The Climate Pledge."

Boris Schucht, Urenco's Chief Executive Officer

#### **Urenco Limited**

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