

Transition Plan

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# Introduction

## **About Urenco Group**

Urenco is an international supplier of uranium enrichment services, fuel cycle products and related solutions with sustainability at the core of our business. Operating in a pivotal area of the nuclear fuel supply chain for over 50 years, we understand the importance of energy security and facilitate the reliable delivery of low carbon electricity generation for consumers around the world.

With our head office near London, UK, Urenco's global presence ensures diversity and security of supply for customers through enrichment facilities in Germany, the Netherlands, the UK and the USA. Through our technology and the expertise of our people, the Urenco Group provides safe, cost effective and reliable services, operating within a framework of high environmental, social and governance standards, complementing international safeguards.

Urenco is making a positive contribution to global climate change goals through our core business and we are committed to achieving net zero carbon emissions by 2040.

We are committed to continued investment in the responsible management of nuclear materials; innovation activities with clear sustainability benefits, such as nuclear medicine, industrial efficiency and research; and nurturing the next generation of scientists and engineers.

We are bolstering worldwide energy security through our capacity programme. This is a long term plan to extend and refurbish enrichment capacity at all of our sites to meet increasing customer demand as more countries and utility companies turn to nuclear for the first time, or seek to extend and/or diversify fuel supplies for existing nuclear operations.

Planning and preparation works are progressing at speed for capacity extensions and refurbishment campaigns. Key hires and contractors are also coming on board to ensure we can deliver.

For example, at our US site in New Mexico, UUSA, multiple new centrifuge cascades will be added to an existing plant. This will be the first project to be delivered as part of the programme, and will provide an additional capacity of around 700 tonnes of SWU per year, a 15 per cent increase at the site, with the first new cascades online in 2025.

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# Introduction

As a global uranium enrichment company, we facilitate the generation of clean, reliable nuclear energy.

Within Urenco, we have an ambitious goal to make our operations net zero by 2030.

Our commitment to the Science Based Target initiative (SBTi) is to achieve a 90% absolute reduction in scope 1 (direct) and scope 2 (indirect) emissions by 2030, and a 30% reduction in scope 3 (supply chain) emissions by the same year. We expect the SBTi to validate our targets in early 2024.

The aim of our first Net Zero Transition Plan, is to turn this ambition into action.

I am very pleased to publish this transition plan which ensures we are transparent and accountable as we work to achieve our ambition, and most importantly, deliver for a net zero world.

#### **Bridget Sparrow**

Chief Operating Officer and Net Zero Sponsor



Urenco is committed to taking action and playing its part in the net zero transition and a future net zero world"



# Introduction

### Climate, Net Zero and nuclear

In 2015, the international Paris Agreement was adopted to limit global temperature rise to well below 2°C, and preferably below 1.5°C, compared to pre-industrial levels. Since then the Intergovernmental Panel on Climate Change (IPCC) has strongly recommended that temperature rise must be limited to no more than 1.5°C and net zero carbon dioxide emissions achieved by 2050 to ensure the best chance of preventing catastrophic climate change.

Urenco has signed the Climate Pledge and is committed to achieving net zero by 2040. In so doing, Urenco is committed to following a science based approach to net zero.



# Transparent advocacy to support the establishment of policy frameworks which recognise the role of nuclear energy for the path to net zero:

Urenco's stakeholder engagement is a core aspect of our commitment to good governance and contributing to a sustainable net zero future. It enables us to engage key stakeholders across government, industry, business and academia about our operations and our industry; understand specific issues and concerns; and inform the policy framework for the future of civil nuclear power across a range of policy areas.

## Promoting the complementary role of nuclear power and renewables in the transition towards a net zero future:

Urenco believes that nuclear energy should be at the centre of government energy policy to limit fossil fuel emissions, meet targets for GHG reduction, and strengthen global energy independence. We actively promote this position. Urenco is also advocating for greater international cooperation to progress advances in global policy frameworks to recognise the role of nuclear energy alongside renewables in the clean energy transition.

Ensuring the resilience of the nuclear fuel supply chain in the energy transition: The continued investment in new nuclear capabilities globally to accelerate the transition from fossil fuels will require tangible and meaningful policy support to preserve and enhance Urenco's and the wider fuel supply

chain's capabilities to meet increased fuel demand. Urenco believes that long term political guidance and regulatory certainty creates the confidence needed by both suppliers and consumers to commit to sustainable long term contracts; contracts that are necessary to support investment in nuclear fuel infrastructure.

Fuelling the reactors of tomorrow: The long term future is likely to see a transition to a mix of emerging new nuclear technologies, including small modular reactors (SMRs), microreactors and other advanced designs. The global nuclear fuel supply chain will therefore need to meet demand for a range of different fuel types, including advanced fuels for the new generation of reactors and Urenco stands ready to support. Urenco is advocating for policies to accelerate exciting new developments in the development of advanced nuclear fuels.

**Unlocking the nuclear hydrogen economy:** Hydrogen derived from nuclear is a zero carbon source, emitting no CO2 at the point of generation and can be a low-risk route to additional hydrogen production. Urenco advocates for policies which embrace the potential for nuclear produced hydrogen to decarbonise sectors such as heavy industry, transport and direct heat – maximising economic growth and regional prosperity.





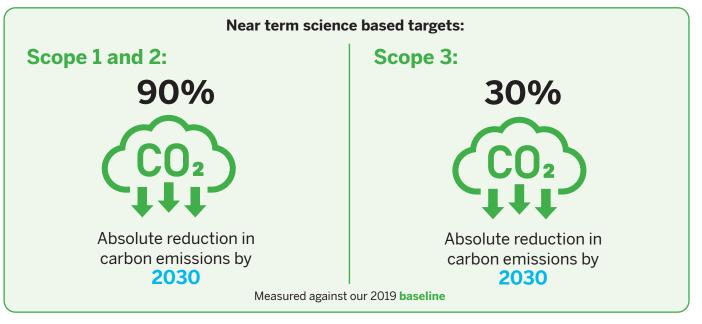
## **Targets**

In 2021, Urenco signed the Climate Pledge, committing to becoming net zero across scopes 1, 2 and 3 by 2040. Since then we have set science based near term targets for 2030 covering all scopes and aiming to become net zero in our direct operations (scopes 1 and 2) by this date.

We have followed the guidance from the SBTi to ensure that our targets exceed the thresholds required and, as of 2023, are in the process of getting these targets validated by the SBTi.



DRIVING AMBITIOUS CORPORATE CLIMATE ACTION



Urenco is committed to being **net zero** in its direct operations by **2030**, therefore we will also **neutralise** any residual scope 1 and 2 emissions, up to a maximum of **10%**, when measured against our 2019 **baseline**.

#### What is net zero?

Net zero is achieved when the amount of greenhouse gases released is balanced out by the amount removed from the atmosphere and permanently stored.

#### **Neutralisation**

Neutralisation refers to removal of carbon from the atmosphere and then permanently storing it. This can be done using biological or technological methods.

#### Baseline year

We follow the GHG Protocol Corporate Standard and SBTi Net Zero Standard for a best practice approach to rebaselining of emissions. In 2023, we rebaselined our 2019 emissions following these guidelines. The values within this Transition Plan are those from our rebaselined 2019 calculations.





### **Timeline**



People: recruiting net zero leads at all sites

#### **Scope 1 - Planning:**

- Set up working groups on priority emissions
- Identify and evaluate financial impact of scope 1 decarbonistation programme
- Develop project implementation schedule

### **Scope 2 - Evaluating:**

- Evaluating self-generation opportunities at all sites; financial modelling
- Evaluating contractual switch opportunities at all sites;
  financial modelling and risk profiles developed

#### **Scope 3 - Developing Roadmap**

- Roadmap developed (nuclear fuel cycle and non-uranics)
- Evaluating supply chain ambition; understanding their targets

#### Scope 1

Reduction plan developed for each site with Group-wide overarching plan

#### Scope 2

- Reduction plan developed, site by site feeding into the Group plan ambition to reduce all scope 2 emissions to zero by 2030.
- Integrating projects into long term business planning process

#### Scope 3

Supplier engagement plan developed

#### Scope 1, Scope 2, Scope 3

Net zero across all scopes (1, 2, 3)





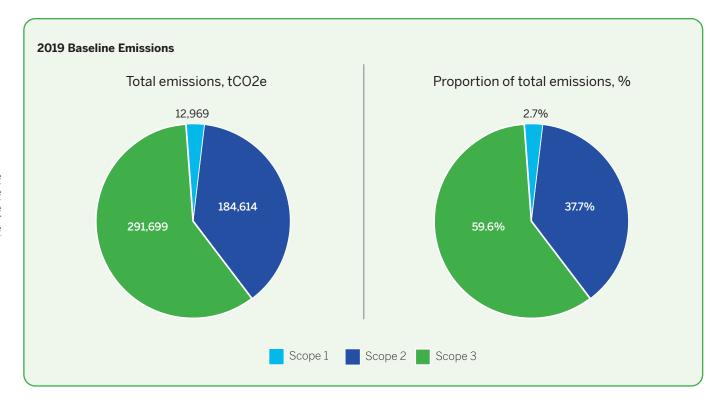
### Baseline

Urenco has been measuring its carbon footprint across all three scopes from 2019. With the data available, we have set 2019 as our baseline year.

We report on scope 2 emissions using a market based approach.

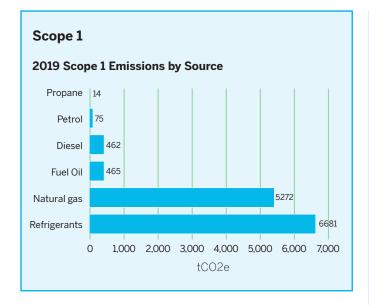
#### Our baseline emissions

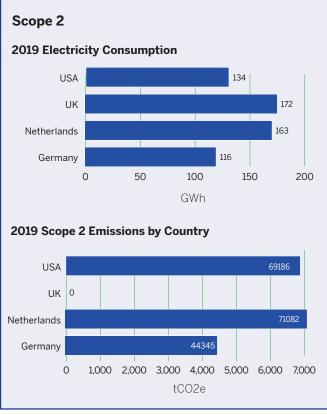
Scope 1	12,969 tCO2e
Scope 2 (market based)	184,614 tCO2e
Scope 3	291,699 tCO2e
Total	489,282 tCO2e









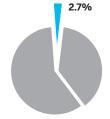


#### Scope 3

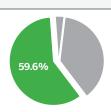
2019 Scope 3 Emissions by Reporting Category	tCO2e
Purchased goods and services	192438
Capital goods	22759
Fuel- and energy-related activities	39521
Upstream transportation and distribution	12767
Waste generated in operations	396
Business travel	3155
Employee commuting	2072
Upstream leased assets	3
Downstream transportation and distribution	674
Processing of sold products	4871
Use of sold products*	
End of life treatment of sold products	4871
Downstream leased assets*	
Franchises*	
Investments	8172

We report on 12 of the 15 scope 3 categories as defined by the GHG Protocol: Corporate Standard. We review these categories annually to ensure that reporting is accurate and relevant to the latest guidance.

\* Not currently reported on by Urenco











# Action

## Reducing Emissions: Scope 1

Urenco's core business is the enrichment of uranium for the use in electricity power generation. We are a key part of the nuclear fuel cycle, enabling low carbon electricity to be generated from our enriched uranium product. We use energy efficient gas centrifuge technology which is powered by electricity, however, the support systems for our plant do use carbon emitting sources.

We have the following **scope 1** emissions sources at our sites:

Petrol | Diesel | Fuel oil | Biodiesel Propane | Natural Gas | Refrigerants

with the three biggest challenges for decarbonisation being diesel (3.6% of total 2019 scope 1 emissions / 462 tCO2e), natural gas (40.7% of total 2019 scope 1 emissions / 5272 tCO2e) and refrigerants (51.5% of total 2019 scope 1 emissions / 6681 tCO2e). Whilst diesel and fuel oil emissions were comparable in 2019, the technical challenge of decarbonising diesel fuelled stationary generators is a greater challenge, as these generators are vital for asset protection and plant operability.

Working groups were set up in 2023 to develop solutions for our main scope 1 emission challenges of refrigerants, natural gas and diesel fuel use. These groups will produce feasibility studies with the purpose of integrating net zero principles into our plant design standards.



One of the biggest scope 1 challenges we face is to lower emissions from refrigerants, as cooling systems are integral to our plant processes. We will investigate the feasibility of using natural

refrigerant replacements to lower the Global Warming Potential (GWP) of refrigerants used by Urenco. We will use the knowledge and expertise within the Urenco organisation to evaluate future plant design changes with net zero principles being fully considered. We recognise that collaboration will play an important part of becoming a net zero organisation and have started engaging with our current cooling system suppliers for development of low carbon solutions.



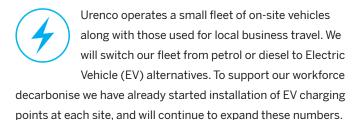
We will eliminate the use of natural gas across all of our sites by 2030, through investing in electric boilers, heat pumps or heat recovery technologies.

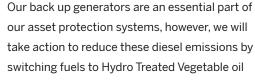


take action to reduce these diesel emissions by switching fuels to Hydro Treated Vegetable oil (HVO) from sustainable sources.



We will eliminate the need for propane and fuel oil, used for heating buildings by replacing with heat pumps or using heat recovery from waste heat sources where possible.







# **Action**

## **Reducing Emissions: Scope 2**

We recognise that the net zero transition will likely require greater amounts of low carbon electricity to enable switching away from carbon intensive fuel sources. To complement this approach, we will measure and report on our energy intensity per product output and aim to reduce this value as we embed energy efficiency within our plant designs.



Urenco's primary energy source is electricity, used to enrich uranium for civil nuclear power generation.



We will fully decarbonise our electricity supplies by 2030 at all our sites. This will be done by either switching to nuclear and / or renewable backed grid contracts, the use of Power Purchase

Arrangements from nuclear, wind and solar electricity generators or a combination of both.



To support the reduction in emissions associated with our electricity use, we aim to install solar photovoltaic arrays at all of our operating sites.





## **Action**

## Reducing Emissions: Scope 3

Purchased goods and services are the largest emission source in scope 3 for Urenco. This can be split into two main categories: nuclear fuel cycle and non-uranic procurement.

## **Nuclear Fuel Cycle**



Supplier engagement is a key part of decarbonising this category of emissions for Urenco. We will encourage our suppliers to measure and report their own carbon emissions.



Our uranium purchasing policy will have sustainability and net zero integrated into it to encourage low carbon supplies.

We will improve the way we measure our scope 3 carbon footprint by using actual data from our suppliers through our engagement programme. This will allow us to move away from industry average data and be able to report on actual carbon intensity improvements.



Collaboration is fundamental to achieving scope 3 carbon emission reductions. By using better data reporting methods we will identify our carbon intensive suppliers and encourage carbon

emissions reductions through science-based carbon emission target setting.

#### **Non-Uranics**



Following on from our partnership commencing with Ecovadis in 2022, we will improve our data collection by moving away from spend data and using actuals provided by our suppliers.

## ecovadis

We will prioritise carbon reduction efforts by identifying our most carbon

intensive suppliers and encouraging decarbonisation in line with Urenco's net zero ambition.



To support this supplier engagement programme, we will upskill our Procurement teams to become skilled in sustainable procurement.



Our policies and procedures governing our procurement activities will be regularly updated to ingrate sustainability throughout the procurement process.



## Governance

## Reporting

The Net Zero Transition Plan is governed and approved by the Urenco Executive Committee (ExCom) in line with the responsibilities of the ExCom as detailed in the Urenco Annual Report. Progress against this Net Zero Transition Plan will be reported to the ExCom on a quarterly basis.

## **Urenco Limited Board and Sustainability Committee**

Overall progress of the Net Zero Transition Plan will be reported to the Urenco Limited Board on an annual basis.

The Urenco Sustainability Committee (SusCo) met three times in 2023. Carbon emission performance will be reported to the SusCo at each meeting, in line with the duties of the Sustainability Committee as detailed in the Urenco Annual Report.

## **Net Zero Programme**

Urenco's commitment to net zero is underpinned by resourcing dedicated net zero roles throughout the organisation. This programme's executive sponsor is the Chief Operating Officer, who reports directly to the Chief Executive Officer and sits on the Executive Committee.

Urenco's Head of Group Sustainability Programme is responsible for achieving the net zero targets, with the Net Zero Programme Manager a direct report.

The Net Zero Programme Manager is responsible for leading the development and execution of the Urenco Net Zero Programme to ensure that carbon reduction targets are met. Each of our operating sites has a dedicated net zero lead appointed with responsibility for implementing site level carbon reduction initiatives to meet the wider Group targets.

#### **Executive Remuneration**

Executive Directors participate in long term incentive plans (LTIP) which form financial awards based on performance scores. The LTIP structure for the last reporting cycle, 2023, included a specific sustainability criteria, focussed on carbon emission performance to targets. This element formed 10% of the total LTIP performance score for 2023.

## **KPI Reporting**

Our sustainability KPIs include carbon specific reporting metrics. Sustainability KPI 2, which is reported in our Annual Report, measures progress of carbon emission reductions against our baseline year. These KPIs are:

- Rolling annual reduction to scope 1 and 2 carbon emissions
- Rolling annual reduction to scope 3 carbon emissions

These KPI updates are reported to our Sustainability Committee three times a year.

#### **Data Assurance**

Urenco ensures that scope 1 and 2 data is externally assured each year and reported through its Annual Report. Scope 1 and 2 data undergoes limited assurance for each reporting cycle, covering the period 1 January to 31 December in that reporting year.

### **Net Zero Transition Plan Progress**

Reporting of progress of the Urenco Net Zero Transition Plan will be done annually through the Urenco Annual Report and the Urenco Net Zero Transition Plan Progress Report, both normally published in O1 each year.

## **Accountability and Transparency**

Urenco's near term targets will go through external validation by the SBTi in early 2024. We have disclosed to CDP annually since 2021 and will continue to do so each year, publishing our score in our Annual Report and Net Zero Transition Plan Progress Report.





