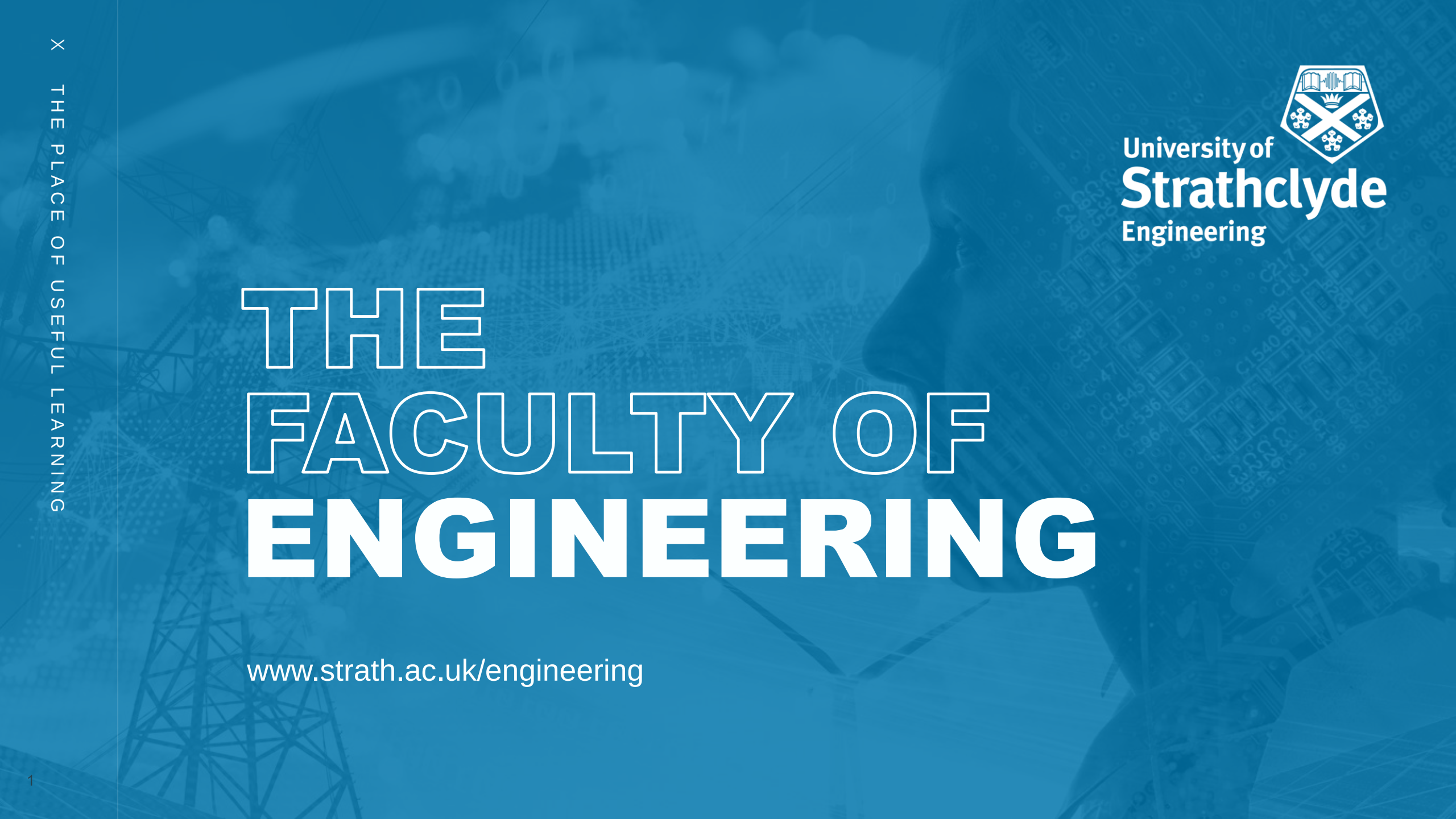
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The EASE Project

Rural Energy Access through Social Enterprise and Decentralisation

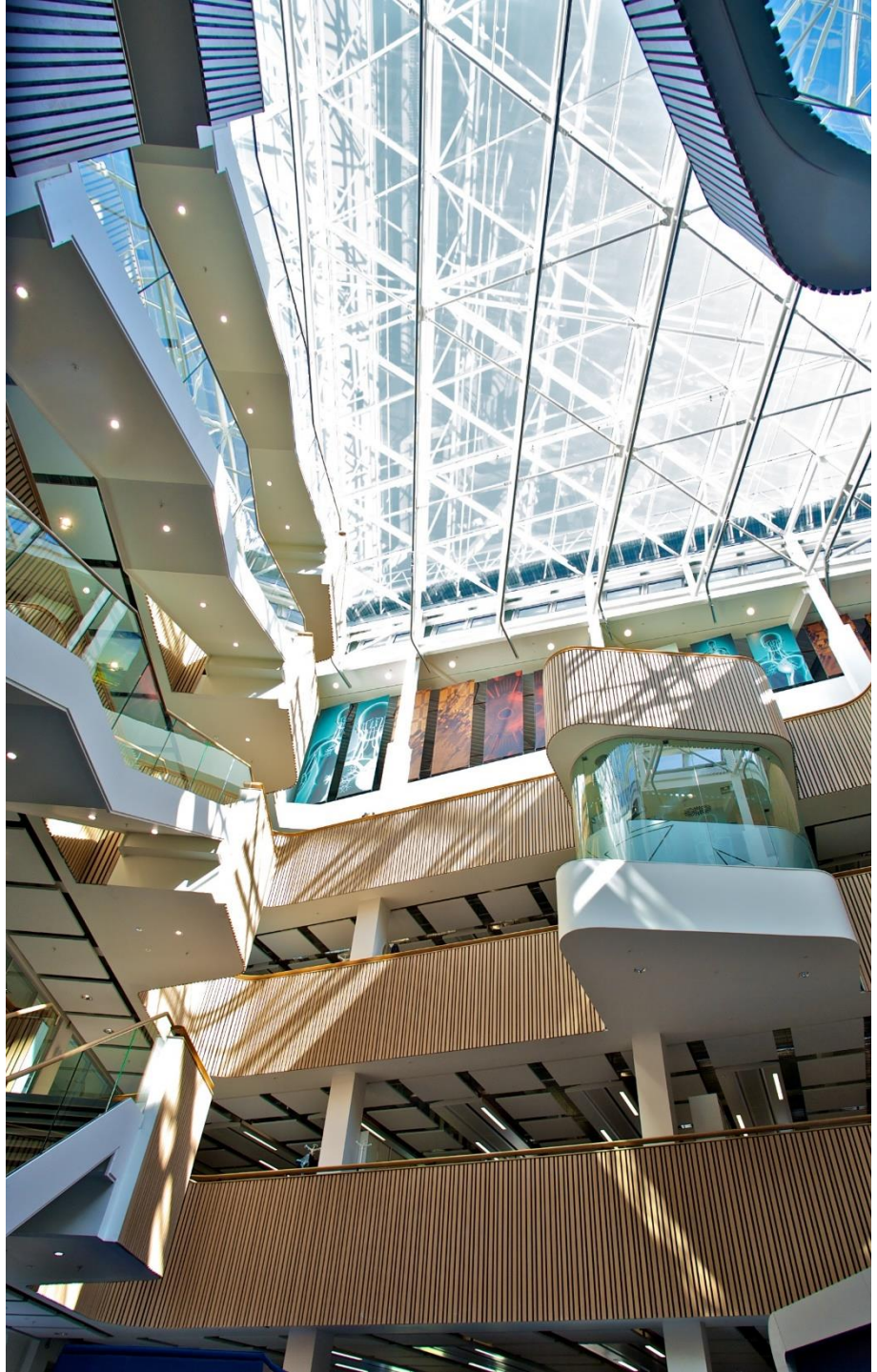
Damien Frame

Institute of Energy and Environment

The University of Strathclyde

The University of Strathclyde

- Founded in 1796 by Professor John Anderson as the '*place of useful learning'.*
- A leading international technological and socially-progressive university
- Over 25,000 students from more than 100 countries
- More than 250 undergraduate and 200 postgraduate degree courses offered
- Four academic faculties:
  - Engineering
  - Humanities and Social Sciences
  - Science
  - Strathclyde Business School



Reputation

Daily Mail University Guide 2024:

- Strathclyde ranked 8th in the UK overall
- Scottish University of the Year 2024 - Winner
- UK University of Year 2024 – Runner-Up

Triple E Awards 2023:

- European Entrepreneurial University of the Year - Winner

Queen's Anniversary Prizes for Higher and Further Education:

- 2021 – Advanced Manufacturing
- 2019 – Energy Innovation

Winner of 10 Times Higher Education (THE) Awards since 2012:

- UK University of the Year (2012/13 and 2019/20)
- Entrepreneurial University of the Year (2013/14)
- Business School of the Year (2015/16)

Ranked 36th in the world for contribution to UN SDGs (THE Impact Rankings 2023)

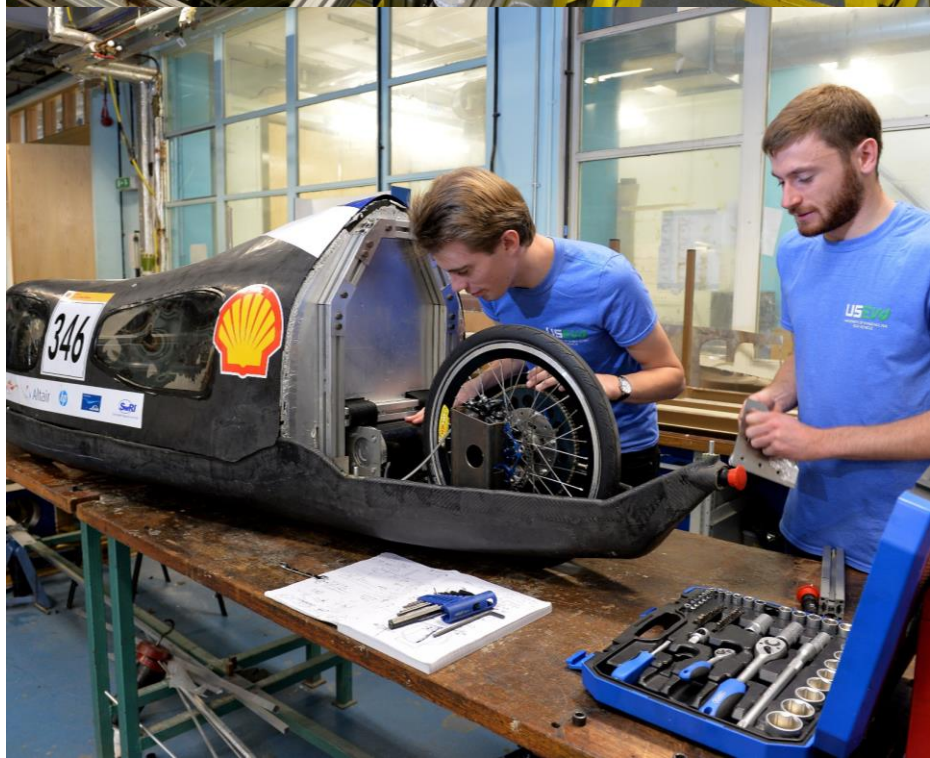
Athena Swan Silver Award, for advancing gender equality in HE

Engineering Rankings

- **Marine/ Ocean Engineering** – Ranked Number 1 in Europe and Number 3 in the world by Shanghai Ranking's Academic Ranking of World Universities 2022
- **Civil Engineering** – Ranked Number 3 in the UK (and Number 1 in Scotland) by the Guardian University Guide 2024
- **Medical Technology and Bioengineering** - Ranked Number 3 in the UK (and Number 1 in Scotland) by The Complete University Guide 2024
- **Chemical Engineering** - Ranked Number 5 in the UK (and Number 1 in Scotland) by The Times/ Sunday Times Good University Guide 2024
- **Architecture -** Ranked Number 8 in the UK by The Times/ Sunday Times Good University Guide 2024
- **Electronic and Electrical Engineering - Ranked Number 9 in the UK (and Number 1 in Scotland) by The Times/ Sunday Times Good University Guide 2024**
- **Mechanical Engineering** - Ranked Number 9 in the UK by The Times/ Sunday Times Good University Guide 2024
- **Manufacturing & Production Engineering** – Ranked Number 10 in the UK (and Number 1 in Scotland) by The Complete University Guide 2024

Faculty of Engineering

- One of the largest centres for Engineering education in Europe
- Largest Faculty of Engineering in Scotland
- 8 world class departments covering all the key engineering disciplines
- Over 40 undergraduate programmes and almost 70 postgraduate taught programmes to choose from



Scottish Government Support

- Scotland, Malawi, Zambia and Rwanda
- £15m per annum - focussed International Development Fund
- £24m Climate Justice Fund
- Renewable Energy as an underpinning enabler

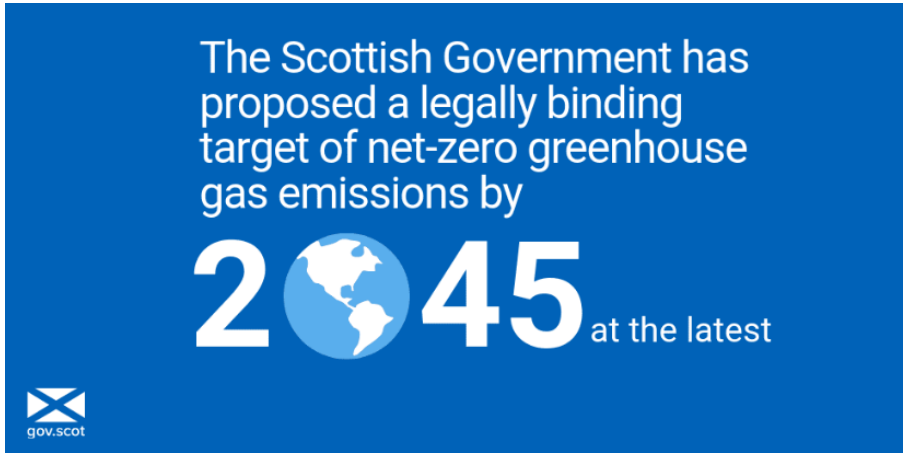
The Scottish Government
Riaghaltas na h-Alba

The EASE Project

Scottish Context

Strong domestic policy focus on delivering Net Zero through local energy planning and action

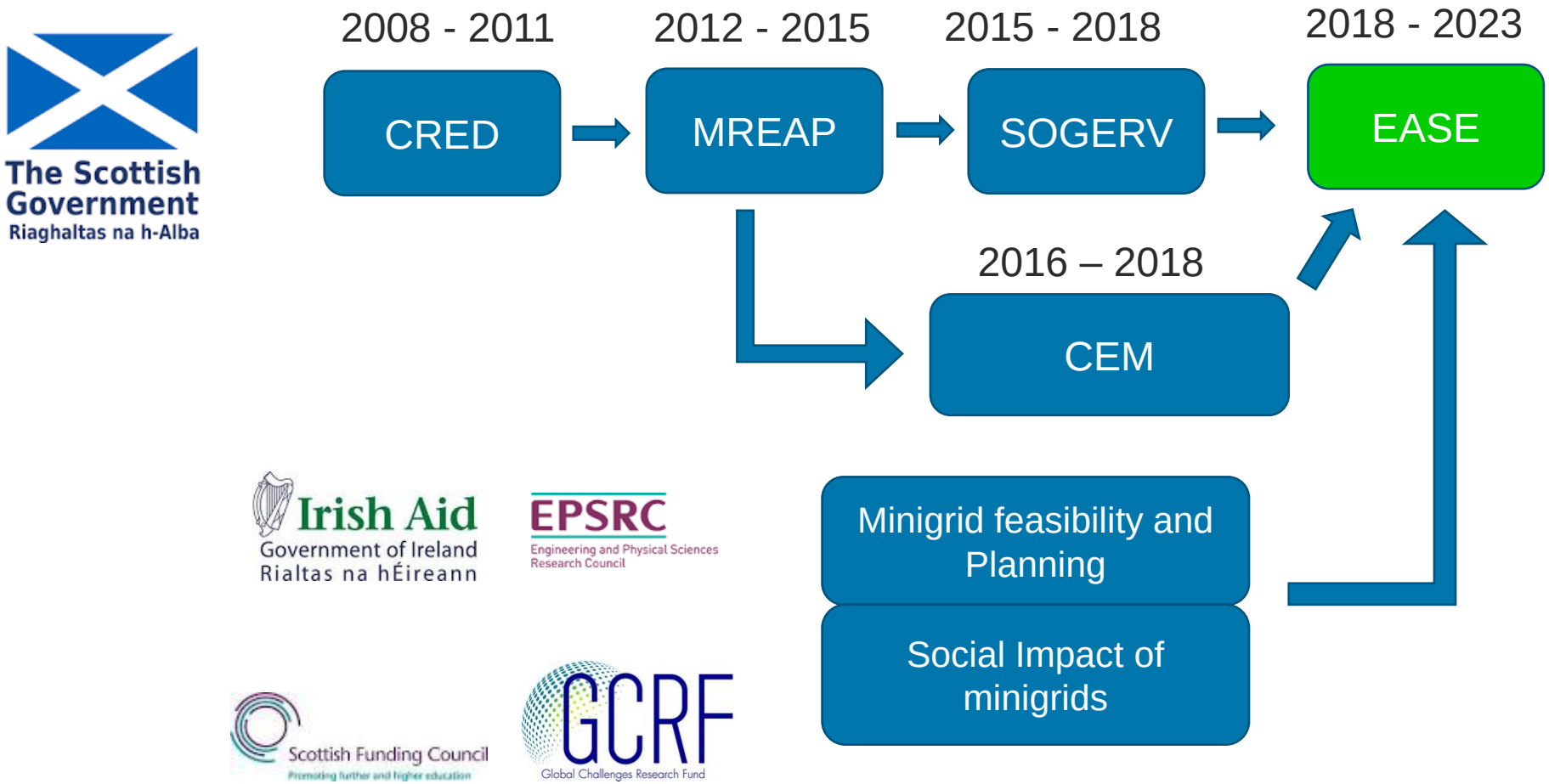
- Community Energy Policy Statement (Sept 2015) – confirmed a 2020 target for 500MW installed capacity of community and locally-owned renewable energy generation
- Local Energy Policy Statement (2021) *By 2030, we aim to be able to generate 50% or more of Scotland's overall energy consumption from renewable sources, and by 2045 we aim to decarbonise our energy system almost completely. A shift towards more localised energy solutions is a vital part of our journey to a net zero future with Local Energy developing alongside (and within) a vibrant national energy network.*



Key Targets

- 20GW more renewable electricity by 2030
- Including 2GW of community and locally owned energy
- 5GW of Hydrogen production by 2030
- 50% of all energy consumption from renewables by 2030
- Phase out the need for new diesel and petrol cars by 2030

Timeline and Prior Work



EASE Project Details

Project Timescales: 01/10/2018 to 31/03/2023 then extension to 31/04/2024

Total project budget £1.55m

The EASE project works to address energy poverty in marginalised communities in Dedza and Balaka through the deployment of appropriate renewable energy infrastructure and service provision, developing sustainable social business models and supporting the delivery of national policy regarding energy access and decentralisation.

Specifically, EASE aims to support SDG7 and SE4All targets by:

- Deploying solar PV microgrids with linked ‘satellite’ kiosks and solar PV Energy Hubs
- Piloting District Energy Officers in Dedza and Balaka to undertake a range of capacity building and support activities to improve the enabling environment for energy projects.

The EASE Project

Project Vision

District Energy Officers:
- Energy planning
- Capacity building
- Support

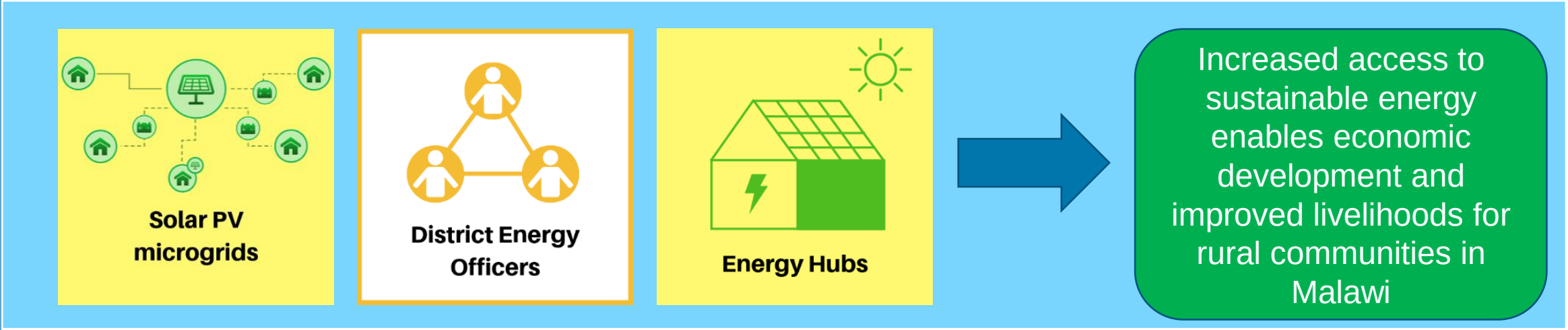
Creating enabling environment for…

Social Enterprises delivering energy services to rural communities

Rural communities with capacity and support to develop own energy projects

Contributing to…

District Energy Officers within EASE



Targeted Outcomes

- Target communities in Dedza and Balaka, have access to sustainable energy via local Renewable Electricity Infrastructure
- Improved energy access has fostered sustainable economic development of the target communities
- Through DEO piloting, Dedza and Balaka have a strong enabling environment to support renewable energy developments

Project Achievements

- 2 village microgrids with 3 associated kiosks deployed in Dedza by Self Help Africa, now managed by their new Social Enterprise, Kuyatsa.
- An integrated Energy Hub/Irrigation system deployed by CEM in Balaka and a school based Energy Hub in Dedza, managed under CEMs existing Social Enterprise business model.
- In total, 8 off-grid renewable energy systems in place and serving target communities.
- In addition, during the project, CEM contributed to the national COVID response by installing 6 solar PV systems at rural hospitals to support oxygen supply.

Project Achievements

Capacity building and training has been delivered to:

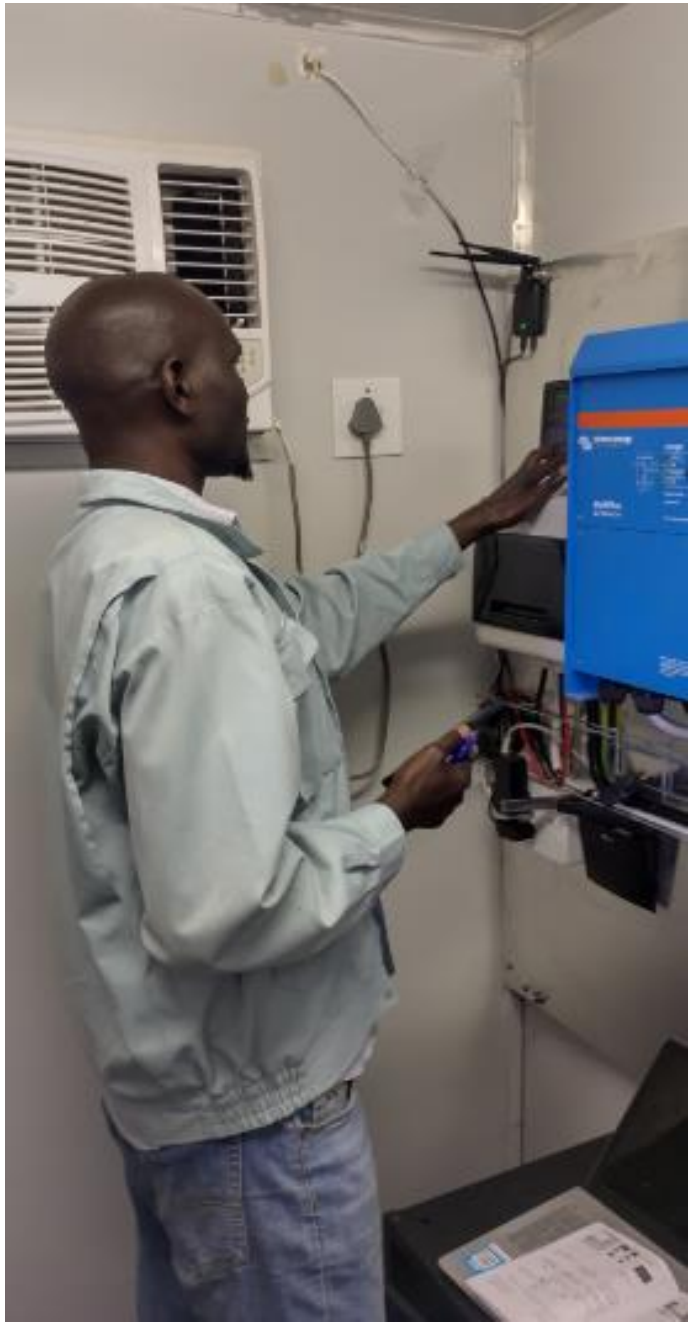
- 342 community entrepreneurs
- 280 District NGO and local govt employees
- 170 extension workers from other sectors (education, health, agriculture, water)
- 20 Local Technicians supporting each of the 20 ADCs in Dedza and Balaka.

During the extension period 2023/24, capacity upgrades and additional connections have been delivered at the energy hubs and microgrids. And refresher training given to the communities.

More than 10 high quality learning outputs have been published (academic papers, policy briefs and technical papers) along with several datasets and tools. These have been shared widely through conference presentations and webinars.

The EASE Project

The EASE Project



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Community Energy Malawi

Self Help AFRICA

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