Examples of UK international DSM activities

Market Accelerator for Green Construction

Market Transformation and Green Building Benefits
The need

- Buildings account for 1/3 of total global final energy use and 19% of energy-related GHG emissions, with a 45% increase in building related emissions since 1990.

- In UK, around 80% of buildings in 2050 are already standing; in many developing countries the reverse is true.

- With a 40–70 year economic lifespan of buildings, poor design locks in emissions for many decades. By 2035, nearly 2/3 of buildings standing in 2060 will already be built.
What & how

- UK is providing £106m to create a new international Market Accelerator for Green Construction in developing countries.

- A collaboration between the UK and the International Finance Corporation (IFC) to drive the financing and construction of more energy efficient buildings in developing countries.

- Via green building standards, we are aiming to build evidence, awareness and understanding of the risks and benefits of greener construction practices.
The Impact

- £1.2b to £2b of green buildings constructed, 1.5m2 to 2.6m2 of floor area (equivalent to c.18,750 to c.32,500 homes).

- Saving: 0.5m to 0.8m tCO2e, 6.5m3 to 11.2m3 of water, 0.8m to 1.3m MWh of energy.

- Environmental, social and economic co-benefits.
Examples of UK international DSM activities

Accelerating Clean Energy Innovation in Developing Countries
Programme objectives

• £40m of International Climate Finance ODA budget

• Part of the UK Government’s Mission Innovation commitment

• Accelerate clean energy technology innovations – through advancements in TRL levels & TA – that will have transformational impacts in developing countries
The need for innovation

• “Innovation is a key driver of productivity and economic growth” – OECD, 2017

• On average, 0.1% of total public spend is allocated to energy R&D – IEA, 2018

• Investment in energy sector RD&D still accounts for less than 5% of global RD&D activity & 90% of activity is funded and undertaken within the same country – UNFCCC, 2017
Thematic priorities & DSM

**Low carbon cooling**
- Improved thermal comfort and control
- Improved efficiency

**Industrial decarbonisation & CCUS**
- Improved efficiency
- Clustering & symbiosis

**Energy storage**
- Integration of renewables
- Ancillary source of power
- Encourages EV infrastructure