
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.



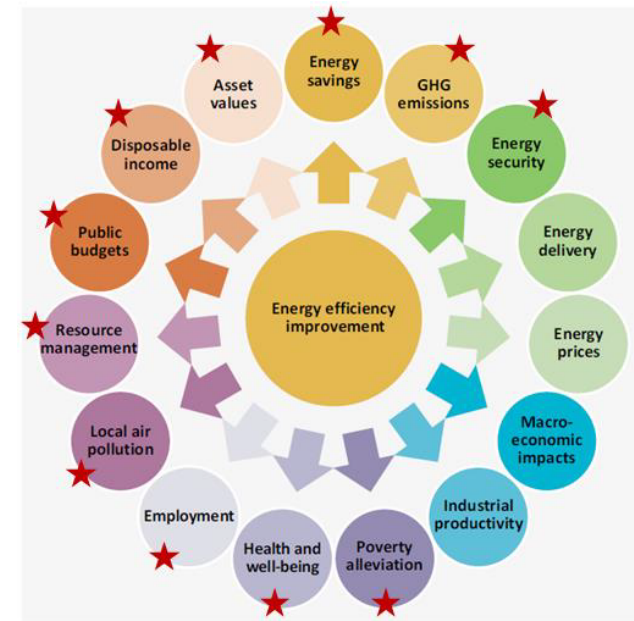
What & how

- ❖ 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*

Emma Richardson, International Climate & Energy, BEIS

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



