



The SDG Accord

The University and College Sector's Collective Response to the Global Goals

Integration of SDGs in

- Institutional governance/strategic level
- SDGs in research
- SDGs in campus operations
- SDGs in curriculum development
- SDGs in student engagement activities
- SDGs into community activities
- SDGs at a whole-institution level

Focus on

- Goal 1 - No poverty
- Goal 2 - Zero hunger
- Goal 3 - Good health and wellbeing
- Goal 4 - Quality education
- Goal 5 - Gender equality
- Goal 6 - Clean water and sanitation
- Goal 7 - Affordable and clean energy
- Goal 8 - Decent work and economic growth
- Goal 9 - Industry, innovation and infrastructure
- Goal 10 - Reduced inequalities
- Goal 11 - Sustainable cities and communities
- Goal 12 - Responsible consumption and production
- Goal 13 - Climate action
- Goal 14 - Life below water
- Goal 15 - Life on land
- Goal 16 - Peace, justice and strong institutions
- Goal 17 - Partnerships for the goals

SDG Accord Reporting 2021 CASE STUDY

Modern Energy Cooking Services ([MECS](#))

Modern Energy Cooking Services ([MECS](#)) is a five-year programme funded by UK Aid (Department For International Development). By integrating modern energy cooking services into the planning for electricity access, quality, reliability and sustainability, MECS hopes to leverage investment in renewable energies (both grid and off-grid) to address the clean cooking challenge. MECS is implementing a strategy focused on including the cooking needs of households into the investment and action on 'access to affordable, reliable, sustainable modern energy for all'. The five-year programme combines creating a stronger evidence base for transitions to modern energy cooking services in DFID priority countries with socio-economic technological innovations that will drive the transition forward. It is managed as an integrated whole, however, the programme is contracted via two complementary workstream arrangements as follows:

- An Accountable Grant with Loughborough University (LU) as leader of the UK University Partnership;
- An amendment to the existing Administrative Arrangement underlying DFID's contribution to the Energy Sector Management Assistance Programme Trust Fund managed by the World Bank.

BENEFITS

1. SDG 7 envisages universal access to modern energy for all by 2030. Whilst the international community had made some significant progress towards electricity access, 4 billion people globally remain at least partially dependent on dirty polluting fuels for their cooking needs. Moving those people onto cleaner fuels under SDG7 is one of the SDG targets which remains furthest from being realised. Finding imaginative new ways of addressing this challenge is the central focus of the MECS programme
2. The intended outcome is a market-ready range of innovations (technology and business models) which lead to improved choice of affordable and reliable modern energy cooking services for consumers. We are promoting the adoption of MECS principles within the SDG 7 global tracking framework and other international targets related to cooking and are working with a range of countries and other partners in incorporating modern energy cooking services in energy policies and planning.

BARRIERS

1. Changing the ways in which people cook is a cultural as well as a technical and economic challenge. A significant part of the programme has involved working with cooks in exploring how different cleaner alternatives relate to their cooking practices and preferences. Programmes of awareness raising, cooking demonstrations and recipe development play an important role alongside the development of new appliances
2. One of the major issues we face is that for those living in remoter off-grid regions cleaner alternatives for cooking (eg electricity, biogas, lpg or ethanol) are more expensive than their dirtier counterparts where, for example, people may simply be able to collect firewood for free. To reach these communities, we need new approaches that can make cleaner alternatives accessible. Accordingly, MECS has a considerable element of its programme that is looking at financial mechanisms which can reduce the cost of these cleaner alternatives to the consumer. These

WHAT IS THE CHEAPEST WAY TO COOK HEAVY FOODS?

We wanted to know if anything could beat an **Electric Pressure Cooker (EPC)** on cost, so we baked 500g of yellow beans as carefully as we could on charcoal, kerosene, LPG, an electric hotplate and an EPC. We did it side by side & just pre-cooked them so that we could directly compare between them.

Method	Approximate Cost (KSh)
charcoal	40
kerosene	28
LPG	38
hotplate	38
EPC	10

We used all the tricks in the book - lids on the sufurias, turning down to a simmer, just enough water, etc. However, we still couldn't get close to an EPC.

Not only was it seven times cheaper than charcoal, but it cooked in half the time without any stirring or topping up of water or fuel!

CONCLUSIONS

The partnership comprises seven UK universities and international partners, including the World Bank. As well as developing holistic technical solutions to allow people to cook cleanly and safely, the researchers are exploring effective economic and business models, environmental evaluations and the social implications of the transition

This collection of field-tested evidence is crucial for convincing decision-takers and policymakers to manage the investments and institutional changes needed to effectively and affordably accelerate the transition.

More importantly, perhaps, the project will explore how best to make modern cooking technologies acceptable to the communities that could most benefit from them.