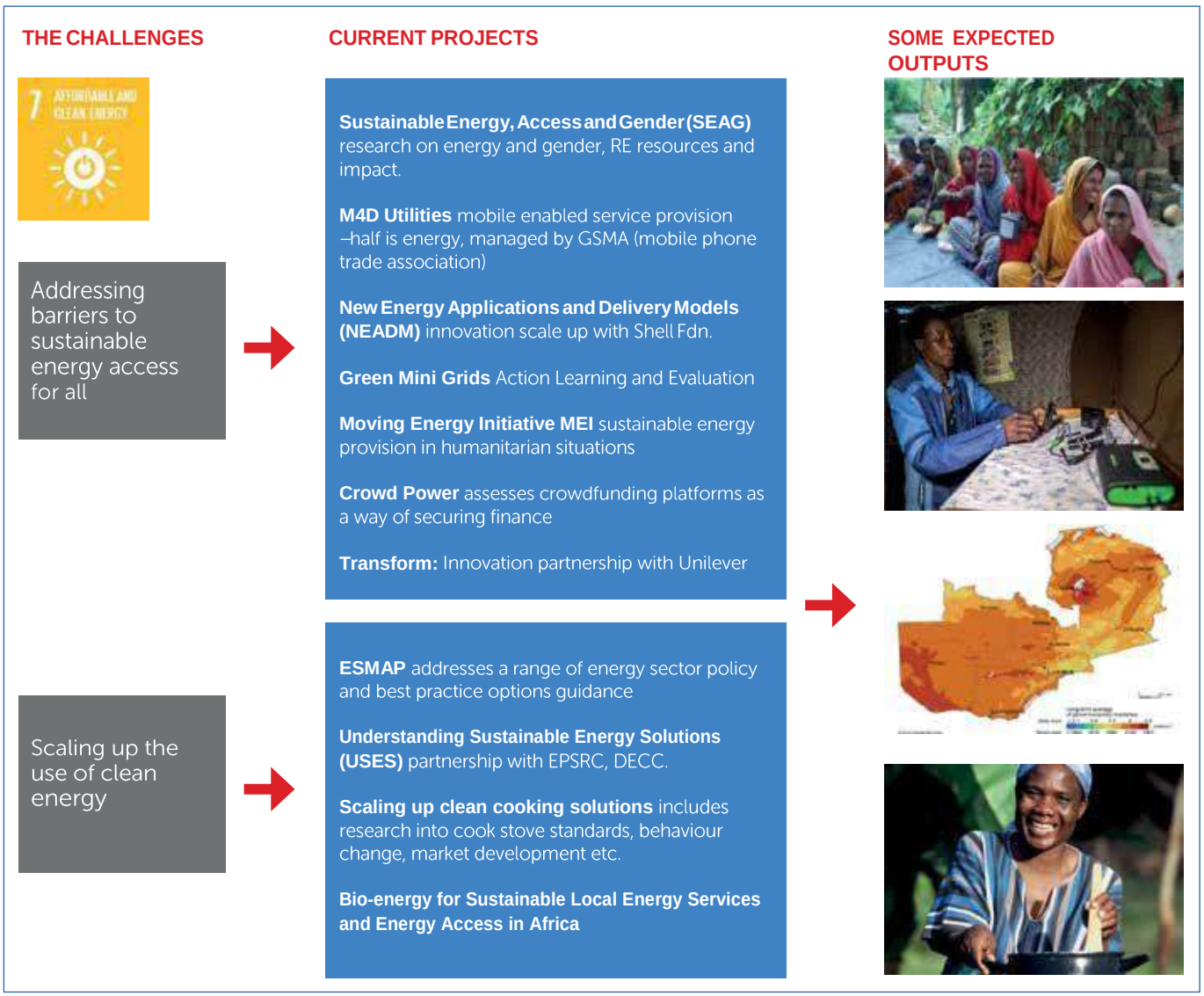
Gender and Energy Research Programme
DFID perspectives

Alistair Wray

Introduction

The UK's Department for International Development (DFID) is very pleased to be working with ENERGIA on this Gender and Energy Research Programme. Modern energy services are crucial for poor people, especially women and girls, in improving wellbeing, accessing social services and promoting productive employment. Girls' and women's opportunities are often the most constrained by a lack of light and power – with direct implications for movement at night, personal safety, education and economic activities. As we work towards addressing the needs of the more than one billion people who do not have access to reliable and affordable energy services, and the many hundreds of millions more who are poorly served by unreliable grid connections, it is crucial that we understand and take into account the different energy needs of women and men, girls and boys. Moreover, electrification can enable women to perform more productive activities and earn more, thereby reducing the gender wage gap. In addition to job opportunities created by scaling up access to modern energy services, employment is stimulated in enterprises providing these services and in supply chains. Gender perspectives are widely recognised as important in shaping the energy sector and the provision of services but these often evaporate when it comes to energy sector decision-making. This research programme will provide important insights and a robust evidence base to help ensure that energy services provide equal opportunities.

Figure 1: Energy and Innovation projects in DFID's Research and Evidence Division (RED)



Policy context

The Sustainable Energy for All initiative and the new Sustainable Development Goal for Affordable Clean Energy (SDG7) have reinforced the central role of energy in development, including the cross-sectoral linkages to education, health, production and climate action and to gender equality (SDG5). DFID has responded with a new Energy Policy Framework that is a central pillar of its Economic Development Strategy, and has recently launched an Energy Africa initiative that aims to accelerate the expansion of the household solar market to help bring universal electricity access in Africa forward from the current trajectory of 2080 to 2030. This seeks to raise awareness of the decreasing cost and increasing efficiency of solar systems, and the spread of mobile payment systems, which make affordable clean electricity possible at less than the cost of kerosene, with a huge potential for market scale-up if the policy, regulatory and financial barriers for entrepreneurs are addressed. This builds on earlier DFID-funded research and innovation.

Gender perspectives are an important and essential crosscutting consideration in all DFID operations and research work streams. This is underpinned by the UK Gender Equality Act which came into force in May 2014 and makes consideration of gender equality a legal requirement ahead of any funding decision. The Gender and Energy research programme will provide important insights to ensure that energy intervention outcomes are optimised. An early activity of the programme was a "Review of how the work of Ashden Award winners impacts the lives of women and girls", conducted in association with Ashden and ENERGIA.

Building the evidence base

DFID has been supporting research in the energy sector for a number of years. Current programmes can be grouped around the challenges of promoting sustainable energy access for all and of scaling up the use of clean energy (see Figure 1). They include working with the Global Alliance for Clean Cooking to scale up clean cooking solutions, with the Shell Foundation on scaling up innovation, with the global mobile phone association, GSMA, on mobile technologies for development plus a number of sustainable energy research programmes covering a range of contexts and technologies including energy for displaced populations and bioenergy.

Recent programmes often have several complementary components. The Sustainable Energy, Access and Gender programme (SEAG), which includes this Gender and Energy Research programme with ENERGIA, is a good example of this approach. It has three components that are designed to inform energy access programmes such that they fully incorporate gender perspectives, optimise the use of clean energy resources, and promote and track inclusive energy access and its uses.

The three components comprise:

- Building the evidence base for improving energy investment effectiveness by understanding and better addressing women's specific needs for modern energy services through empirical research, led by the energy and gender network ENERGIA.
- Improving knowledge of renewable energy potential though supporting resource mapping in selected countries and making the data publically available to catalyse investment, working with the World Bank's Energy Sector Management Assistance Programme (ESMAP).
- Energy access analytics aimed at better understanding and measuring energy access, its use and benefits in meeting the domestic, social and productive needs of poor communities and households. This component supports the collection of data for the production of the first SE4ALL State of Energy Access Report (SEAR), as well as new editions of Poor People's Energy Outlook, and a review of energy access interventions serving the urban poor.

Overall, while the SEAG programme is still in its early stages, some initial deliverables are beginning to emerge. The Gender and Energy programme is completing the scoping phase of the five identified research themes (i. Electrification (grid distribution and decentralised systems); ii. Productive uses of energy; iii. The political economy of energy sector dynamics; iv. Energy sector reforms and regulation, and v. The role of the private sector in scaling up energy access) and finalising the initial commissioned study on "Lessons learned from gender approaches in the energy sector". A finding from this and other research programmes is that one frequently underestimates the time that it takes to put research teams in place, often involving a number of partners in conducting literature reviews, identifying knowledge gaps and verifying the proposed research work plans. Typically, the first year of such research programmes is spent on procurement processes, establishing common reporting practices and verifying the state of knowledge in the field. This is invariably time well spent: it provides the opportunity to confirm the relevance of the identified research themes, to agree research milestones and additionally offers opportunities for cross-team networking and identification of best practices. Another generic lesson is the importance of early discussions around research take-up and influencing sector policies. Including political economy expertise in the teams is not only very relevant to the gender and energy research themes but also strengthens the ability of teams to engage with policymakers and produce evidence that is relevant to decision-makers. The experience of the other major ENERGIA programme on Women's Economic Empowerment also supports this observation.

Opportunities for cross-learning and research take-up

Just as there are opportunities for cross-learning between the Gender and Energy research teams and ENERGIA, so there are opportunities for lesson sharing between other DFID research programmes and

initiatives, as well as the wider energy sector. The good links established by ENERGIA with the Sustainable Energy for All secretariat is an excellent example of potential influence and promoting the transfer of research to users, and these are encouraged. Within DFID, we will continue to investigate the scope for greater cross-learning and networking between research programmes and related initiatives such as Energy Africa. A key challenge is to take advantage of the latest developments in the fast moving energy sector to ensure that research remains relevant and addresses the opportunities and barriers that emerge. A couple of examples can illustrate this.

Digital and financial inclusion for women

Tremendous advances have been made in the provision of solar home systems, with microfinance and pay-as-you-go schemes making these systems affordable to growing numbers of households. DFID has supported innovation scale-up by incubating business models such as those offered by M-Kopa and d.light. Opportunities exist and can be promoted for women entrepreneurs to become involved, as has been highlighted under ENERGIA's Women's Economic Empowerment programme. However, increasing use of mobile connectivity and 'mobile money' to access energy services reveals another gender gap and barriers to women's use of mobile phones as highlighted by DFID's work with GSMA, the global mobile phone association. Globally, over 1.7 billion females in low and middle income countries do not own mobile phones and women are 36% less likely than men to have a mobile money account. There are also significant regional differences. (see Figure 2).

There are many barriers to women owning and using mobile phones. However, the rapidly increasing use of mobile technologies in expanding energy access provides opportunities for collaboration between our Gender and Energy research and that on the use of mobile technologies for development.

Gender and energy needs in refugee situations

A recently completed DFID-funded study into Heat, Light and Power for Refugees – Saving lives, reducing costs – has looked at energy use amongst the almost 60 million people forcibly displaced by conflict, and the financial and human costs of their current methods of obtaining energy. A key finding is that their energy use is economically, environmentally and socially unsustainable, and that children and women bear the greatest costs. The Gender and Energy research programme's emphasis on analysing gender relations, on examining how access to energy could transform gender relations and empower women and girls, and on policy influencing should have important implications here, especially given the increasing proportion of donor funding, including from DFID, being directed to fragile and conflict-affected situations.

Conclusions

Energy interventions are now widely recognised as central to development in terms of meeting poor households basic needs, improving wellbeing, expanding livelihoods and boosting economic opportunities. DFID has a growing portfolio of energy interventions, underpinned by energy-related applied research and innovation programmes, which all must address gender equality. Nevertheless, the ENERGIA Gender and Energy research programme is unique in mainstreaming this relationship through a significant long-term gender-focused programme. Drawing on the resulting analysis and using the lessons learnt from the research to influence energy sector policies, investment decision-making and implementation will be crucial for optimising energy access for all. We are encouraged by the progress to date, the research studies identified under the five work streams and the scoping phase activities undertaken. Already, it is clear that a key to a successful outcome is to proactively promote research take-up and the influencing of policy to ensure that the energy sector reaps the benefits of the overall programme that must be greater than the sum of the individual research activities. We look forward to helping make that a reality.

Figure 2. The gender gap in mobile money accounts Source: Global Findex data 2014