

The Gender and Energy Research Programme: What we know so far and policy considerations

Energy policy is usually gender-blind. This makes it harder to achieve SDG targets relating to gender equality and sustainable energy access for all. The Gender and Energy Research Programme is helping to build the knowledge that countries need in order to develop and reform their energy sectors in a more gender-sensitive way. Energy interventions affect men and women differently. Both can benefit substantially, but only if their differential needs and differing ability to access energy services are properly understood. Gendered approaches can help empower women and reduce poverty. They can help deliver energy interventions that are effective, efficient and sustainable.

Why the research?

Energy matters; gender matters. Both are critical in international efforts to reduce poverty and combat climate change. Goal 5 of the SDGs is to "achieve gender equality and empower all women and girls", whilst goal 7 aims to "ensure access to affordable, reliable, sustainable and modern energy for all". The latter is the focus of the UN's high profile initiative on Sustainable Energy for All (SEforALL). The Gender and Energy Research Programme was initiated in order to extend the knowledge base that policymaking requires in order to pursue these two goals effectively. A defining feature of the research programme is the firm belief that goal 7 can be better served if energy issues are examined from a gender perspective. The programme is also concerned with understanding to what extent, and under what conditions, increased energy access can contribute towards goal 5 and, thereby, also towards poverty reduction. A major purpose of the programme is to start addressing the distinct shortage of data concerning linkages between gender and energy access.

Funded by DFID and led by ENERGIA, the research programme began in 2014 and will run until the end of 2018. Phase 1 of the project was completed in 2016. Its aim was to examine current knowledge and research on energy and gender, and thus identify the gaps, priorities, and methodologies that are now guiding empirical research in phase 2 of the programme. The purpose of this policy brief is to summarise lessons learned so far, including potential policy implications.

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The research approach

The questions that policy makers need answers to in the pursuit of goals 5 and 7 of the SDGs are complex and wide ranging. Firstly, because modern energy comes indifferent forms, has many different uses, and many potential effects. Secondly, because women's empowerment can be defined and achieved in various different ways. To tackle this diversity, and based upon ENERGIA's extensive experience with gender and energy, the programme has identified five broad themes (see box) within which it is believed that new knowledge on gender and energy needs to be generated, both inside the timeframe of the programme and beyond. Five research projects are currently being implemented by the programme under each of the themes, and another two will be commissioned in the first quarter of 2017.

As part of the phase 1 scoping process, and in preparation for the empirical work in phase 2, each project reviewed existing literature relating to its broader theme and its specific focus within that theme, as well as undertaking field visits and stakeholder consultations. Separate research was also commissioned to learn lessons from the experiences that ENERGIA and other organisations



Theme	Project
1. Electrification through grid and decentralised systems	Focus on factors that enhance and restrict women's empowerment through electrification (Kenya, Nepal, India)
2. Productive uses of energy	Gendered energy choices and energy impacts in the informal food sector (Rwanda, Senegal and South Africa)
3. The political economy of gendered energy access	How can rural women be empowered to gain access to modern energy services in both production and social reproduction? (India and Nepal)
4. Gender and Energy Sector Reform	Effects of cooking and lighting fuel subsidies and their reform on women in low-income households (Bangladesh, India and Nigeria)
5. The role of the private sector in scaling up energy access	Women's involvement in village level enterprises selling low-cost off-grid LED lighting (Rwanda)

have themselves encountered in applying gender approaches to energy policy and practice. A detailed analysis of lessons learned by the programme so far is provided in the phase 1 Technical Note.

What have we learned so far?

One of the key findings of the programme so far is that the volume of research on the relationship between gender and energy is still relatively small, although many efforts, including this programme, are being made to fill the gaps. The existing evidence does support some general propositions. Access to sustainable energy can transform the lives of women and men in multiple ways contributing significantly to improving their quality of life. However, energy interventions are usually gender blind, with little attention being given to the specific interests of women. Yet it is clear from the literature that energy interventions impact women and men differently, and that policy making is failing to take this into account and therefore risks missing key targets. The different roles played by men and women, both inside and outside the home, translate into different demands for energy and different effects when there are changes in access. The effects depend upon which energy sources are introduced as well as the cultural and socioeconomic context.

Immediate benefits to women

Access to modern energy services saves time and reduces drudgery. Collecting water and firewood, cooking and food processing, as well as cleaning and other domestic chores place an especially heavy burden on women's time. Water pumps, mechanised grain milling/food processing, and LPG for cooking can all help reduce this burden, freeing up women's time. Electric lighting permits better time management and further extends the time women have available for other activities. These include income generation, education, social networking, watching TV and recreation - many of which themselves depend upon electricity or other modern energy sources. There are also health benefits relating to reduced indoor air pollution caused by kerosene lamps and stoves, a cleaner and more hygienic home, and better health clinics. These improve the health of women and the children they care for, again freeing up time.

Empowerment

It is clear that women and girls gain some very immediate benefits from access to modern energy services. A more complex question concerns whether the direct benefits outlined above translate into women's empowerment (SDG 5). There is some evidence to suggest that it does, or at least can do under the right circumstances. The potential for economic empowerment stems from increased income earning opportunities, which in turn are aided by the freeing up of women's time, more convenient sources of energy for businesses activities, and by employment and business opportunities in the energy supply chain itself. There is a strong positive correlation between the use of electricity, the uptake of modern cooking stoves and increased access to income opportunities for women. Mobile phones and the internet also improve women's capacity to undertake business activities, particularly when social norms restrict movement outside the home or village.

However, whilst modern energy services have the potential to empower women economically, whether they do or not depends on other factors. Women need more support than men to become entrepreneurs, local customs can inhibit the uptake of income generating opportunities, and new opportunities for paid work may merely substitute one burden for another, without empowering. Mitigating or compensating for these factors in the design of energy projects is important for achieving various policy goals.

Empowerment extends **beyond economic empowerment.** It is about freedom to choose and the ability to define and exercise rights, both inside and outside the home. Reducing drudgery and freeing up women's time for other activities (including, but not limited to, economic activities) contributes to that freedom. Education plays an important role in helping women understand and exercise their rights, as well as increasing employment prospects. Electricity access is linked to increased school enrolment for girls and electric light enables girls (and boys) to spend more time on their education. Television and radio can play an educational role, providing information on health issues, as well as contributing towards changing social attitudes towards women by raising awareness of their rights and highlighting the unacceptability of domestic violence.

How does a gendered approach to energy help?

There is plenty of evidence of gendered approaches being applied successfully at the project level. Application at higher level policy making is also taking place, but at a slower pace, so its impact is harder to discern. At the project level, interventions that take explicit account of gender are more likely to achieve gender equitable outcomes. A gendered approach is especially important for female headed households which are often over-represented in low income quintiles and struggle more than most with the high up-front costs of accessing modern energy services. Gendered approaches are achieving increased connection rates for this group. They are also helping to address other barriers to access, such as conservative attitudes with regards to women's roles (both inside and outside the home) and the low value that is often placed upon women's time. These barriers are greatest in cultures where women do not traditionally engage with business or employment, and in economies where income generating opportunities are generally scarce, for both women and men.

The evidence also suggests that gendered approaches to energy projects also have a positive impact on the achievement of the project's broader goals and targets, benefiting other energy stakeholders in addition to women. Working with energy utilities to raise their awareness of women's specific problems of access can help overcome some of the barriers utilities face in expanding services. The expansion of energy services, that gendered approaches facilitate, can benefit many organisations and businesses, including the utilities themselves. It can benefit men as well as women, in their role as energy consumers, and by creating new employment opportunities and better working conditions, both inside and outside the energy sector. And it can benefit children due to the advantages conveyed by better health and education and higher household income.

Policy considerations

It is evident that women can derive immediate benefits from access to modern energy services, that these can contribute to their empowerment, and that gendered approaches can simultaneously serve the aims of both SDG 5 and SDG 7 as well as other SDGs. However, to capture these opportunities policy needs to be much more attuned to gender issues than is currently the case. At present, most interventions in the energy sector are gender-blind, in that no explicit attention is being given to the differential needs of, or impact upon, men and women. Tools and methods exist to correct this shortcoming (see below).

Gender disaggregated data

One of the problems policy makers face in designing and evaluating gender sensitive policies and programmes is a lack of gender-disaggregated data. Household data needs to be disaggregated in order to identify the ways in which the needs of women and men differ, and hence the types of energy intervention that are most likely to be successful in expanding energy access for all. Statistical services can play an important role in addressing some of the gaps.

Engendering energy policy frameworks

Policy making in the energy sector is becoming more gender aware, with gender issues beginning to appear in the policy frameworks of some countries as a result of growing understanding of the constraints that women face. However, there is a need to go further, not only in mainstreaming gender in formal policy statements, but also in translating these statements into practice. A key objective of the research programme is to identify ways in which this can be done (see, for example, project 3 in Box 1, which is exploring political economy approaches to gender mainstreaming in the energy sector). Applying gender mainstreaming tools, such as ENERGIA's gender audit methodology can also help. It works at national, local and energy utility levels, builds indigenous capacity to ensure mainstreaming is sustained, involves stakeholders to generate consensus and create buy-in and ownership by policy makers, and produces specific targets and time frames.

Programmes and projects

Elements of good practice for incorporating gendered approaches in programmes and projects are known. Policy support for these creates new opportunities for learning and is likely to increase the long term effectiveness of energy interventions with regards to SDGs 5 and 7 and other SDGS. Gendered approaches at the project level should include

- commitment of management to gender mainstreaming
- addressing gender at the project design phase through Gender Action Plans (GAP)
- Inclusion of GAPs in the monitoring and evaluation (M&E) framework
- a clearly designated budget for gender mainstreaming activities
- building capacity at all levels within an organisation to mainstream gender

Energy sector development and reform

As countries embark upon energy sector reforms (in terms of technology, organisation, privatisation, and pricing), it is essential that gender be taken into account if policy makers are to achieve SEforAll objectives. The research programme is exploring how fossil fuel subsidies affect women's access to energy and the risks to women of removing these (see project 4 in Box 1). On current evidence and based upon the 'precautionary principle' subsidy removal should be accompanied by mechanisms for compensating women for potential losses. The programme is also comparing electrification through grid and decentralised systems from a gendered perspective (project 1). That, along with evidence from project 5 (exploring the role women can play in selling low-cost off-grid LED lighting) and project 2 (gender in informal food preparation and processing sectors) will offer insights into the implications for SDGs 5 and 7 of different types of structural change within the energy sector.

Intersectoral collaboration

Finally gendered approaches to energy require intersectoral collaboration. Interventions in agriculture, health, education, water and sanitation, social welfare, and other sectors all have potential implications for a gendered energy policy. Collaborative interventions and policy formulation can avoid unnecessary conflicts between the policy goals of different departments or ministries and create synergies in pursuit of the SDGs.

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The ENERGIA Gender and Energy Research Programme is funded by the UK Department for International Development (DFID). ENERGIA is an international network of like-minded organisations and professionals, active in 22 countries in Asia and Africa. Our vision is that women and men have equal and equitable access to and control over sustainable energy services as an essential human right to development. To achieve this, we:

- contribute to energy access for all by scaling up the delivery of energy services through women-led micro and small businesses,
- advocate for and provide technical support to mainstream gender approaches in energy policies and programmes,
- provide the evidence base for improving energy investment effectiveness through research,
- raise awareness and enhance knowledge of issues related to gender and energy through networking and knowledge products





