



Energy & health for a **BETTER WORLD**

**Energy & Health
Overview**

**Practical
ACTION
CONSULTING**

We are Practical Action

An international development organisation putting ingenious ideas to work so people in poverty can change their world.

We're a global change-making organisation that works in more than 20 countries and operates from 11 regional offices across Asia, Africa, Latin America and the UK.

In recent years, we have focused on four inter-related sectors and, importantly, on the nexus between them. These focus areas are: access to renewable energy; agriculture and food security; urban water, sanitation, hygiene and waste management; and disaster risk reduction.

We believe in the power of small to change the big picture. And that together we can take practical action to build futures free from poverty.

The nexus between energy and health is multi-faceted. Access to energy is vital for almost all aspects of health service delivery including: lighting; water supply (pumping, treatment, purification); refrigeration (cold storage vaccines, blood banks); medical equipment (incubators, ventilators, microscopes, ultrasound equipment); and IT and communications.

At the same time, lack of modern energy access itself contributes to ill-health – most significantly, emissions from traditional stoves, paraffin lamps and fossil fuels are a major cause of respiratory and cardiovascular diseases and cancer, with the WHO estimating that they result in some 3.8 million additional premature deaths per year worldwide.

COVID-19 has compounded the challenges and risks associated with the lack of clean energy access. Indoor air pollution from cooking makes people more vulnerable to COVID-19 and energy is needed to support communications, enable households to maintain lockdowns, provide water for hand-washing; enable testing and tracing; provide refrigeration for vaccines; and for health facilities to treat those affected by the virus.

Without access to modern energy supplies there is little prospect of delivering key community services. In turn, international development goals will not be achieved if health, education and other local facilities are not effective due to a lack of energy.

Our experience in energy & health

Whilst Practical Action Consulting is not a healthcare organisation, we have significant experience of enabling healthcare professionals to deliver services using the improved provision of energy access. Our experience includes:

- **Convening stakeholders** from related sectors to share expertise and find optimal solutions
- **Ability to engage with healthcare service providers** to help them understand energy needs and develop joint approaches for the two sectors
- **Electrification of health and other community facilities**; use of business models that will enable healthcare and broader community needs to be addressed together
- **Bottom-up participatory approaches** considering the whole community system, respond to associated energy demands, and ensure relevant ownership models for long-term sustainability



Contact us

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Examples of our energy & health projects:

Clean Combustion Guidelines Toolkit, WHO, 2015

A framework for implementation of the WHO's Guidelines for Indoor Air Quality: Household Fuel Combustion. The Guidelines were intended to inform and support energy planning for public-health professionals, enabling them to bring about the transition to modern household energy as quickly and equitably as feasible. This advanced efforts to increase access to clean and safe household energy, thereby delivering genuine and substantial health gains.

Sustainable Energy for Rural Communities (SE4RC), Malawi & Zimbabwe, EU 2015 – 2019

The project aimed to develop, construct and operate solar-powered mini-grid schemes to support households, key community facilities (including healthcare), small businesses, irrigation schemes and battery-charging for energy kiosks. Practical Action managed the project implementation (including installation, ensuring community ownership, and providing local capacity building). This resulted in improved storage of vaccines and medicines that required refrigeration, and facilitated medical procedures at the local clinic. The project was crucial for improving the provision of health services, not only reducing the distances travelled by community members seeking medical services but also enabling 24-hour operation. Find out more: <https://practicalaction.org/our-work/projects/se4rc/>

Poor People's Energy Outlook (PPEO), multi-country, FCDO / Mott MacDonalds / GIZ, multi-year

The PPEO is a series of high-profile international publications that report unique perspectives of energy access in developing countries. The third edition was focussed on energy for community services: health, education, public institutions, and infrastructure. It analysed a number of geographical, environmental and development contexts in a range of countries. It places the spotlight on the contribution that improved energy access can make towards community services. Subsequent PPEO reports have also addressed clean cooking and subsequent health repercussions.

Moving Energy Initiative (MEI), Burkina Faso, Kenya and Jordan, E4I / FCDO, 2015 – 2019

The MEI project aimed to meet the energy needs of displaced people in a safe, sustainable manner developing solutions for heating/cooling, cooking, lighting, electrification and water and sanitation. The work gave special attention to women and girls in terms of health, safety and empowerment. The project aimed to: test appropriate sustainable energy solutions for domestic and commercial purposes; research sustainable energy policies and practices that might inform and influence donors, host governments, national and international organizations to prioritise access to sustainable energy for displaced populations; test private sector engagement models in the provision of appropriate energy products and service.