

The 'smart villages' initiative

Following on from a scoping study funded by the Malaysian Commonwealth Studies Centre (MCSC), the European Academies Science Advisory Council (www.easac.eu) and MCSC are undertaking a study of sustainable energy provision to enable the creation of 'smart villages' in Africa and India. In smart villages, energy access acts as a catalyst for development, enabling education and local business opportunities, improving health and welfare, and enhancing democratic engagement. As such, energy access can provide a much needed driver for sustainable economic development and growth for a major (circa 2 billion people), but neglected, sector of the world's economy.

The study is focussing on the science of energy provision in off-grid villages in developing countries (science being defined broadly to include the natural, social and engineering sciences), and is being undertaken collaboratively with key stakeholders to ensure that the initiative is firmly rooted in addressing real-world issues, and achieves effective uptake and impact. By bringing together top European, African and Indian scientists with local stakeholders (entrepreneurs, villagers, NGO's, financiers and policy makers etc.) in a series of workshops in Africa, India and finally Brussels, the study aims to develop an insightful, bottom-up view of the challenges of village energy provision for development, and how they can be overcome.

The prime objective will be to inform EU policy making and initiatives on energy for development, in particular Directorate General (DG) Development and Cooperation, and also DG's Energy, Climate Action, and Research and Innovation. The study will be undertaken collaboratively with relevant national academies, and networks of academies, in Africa and India/Asia. Through them, the study will also inform national and regional policy makers (in particular, for Africa, the African Union).

The workshops in Africa, India and Brussels will be held over a 12 month period commencing in autumn 2013. Innovation competitions for your researchers and entrepreneurs will be run in association with the workshops in Africa and India to identify new and innovative ideas for how the challenges of village energy for development can be overcome. The final workshop in Brussels will bring together participants from the previous workshops with experts, policy makers and thought leaders from the EU, in order to draw key conclusions from the study and to formulate advice to EU and national policy makers by the end of 2014 on how the challenges of providing sustainable energy as a catalyst for 'smart villages' may be addressed.

A preparatory phase is currently underway to identify key research groups in Europe, India and Africa concerned with village energy in developing countries, to develop a more complete picture of EU initiatives on energy in developing countries, and to make contact with key policy makers and experts. It will inform the establishment of a steering group for the study comprising key experts and players from Europe, India and Africa, which will meet for the first time in late spring 2013.

The Swedish National Science Academy and bodies funded by the Swedish Government (the International Science Program and the Swedish Secretariat for Environmental Earth System Sciences) will collaborate on the African workshop given their strong experience in Africa. It is expected that the Network of African Science Academies (NASAC) and the African Technology Policy Studies network (ATPS) will wish to participate if sufficient funding is available.