Assessing the Multiple Benefits of Improving Product Energy Efficiency

Productivity, Innovation, Energy Access, and Services

SPEx Call Overview 7 April 2016, 12:00–14:00 GMT

Although it is generally accepted that energy efficiency provides numerous benefits beyond direct energy savings, these multi-benefits are rarely quantified. In countries where energy demand is constrained by insufficient supply to meet energy service needs, energy efficiency policies are expected to increase economic productivity and improve access to energy services.

This SEAD Policy Exchange Forum call will explore the benefits of improving product efficiency other than those directly related to reduced energy demand. Participants on the call will review the range of non-energy benefits resulting from improved product efficiency and explore methods for assessing their significance given different national circumstances.

The International Energy Agency (IEA) will provide an overview of the 2015 <u>Multiple Benefits Study</u> that characterized and sought to assess types of non-energy and climate benefits of product efficiency improvements. Three case studies will then be presented highlighting national experiences and approaches to assessing the benefits arising from energy efficiency policies for products. Finally, participants will discuss key questions related to assessing these non-energy benefits and explore potential options for follow-on activity that could take place with support from the SEAD initiative.

The first of the case studies will examine Ghana's key energy efficiency and conservation interventions and their cost of implementation compared to the considerable savings achieved, to demonstrate how energy conservation is more cost-effective than building energy generation capacities. Mexico's National Association of Home Appliance Manufacturers (ANFAD) will then present the recent national energy efficiency impact assessment and how energy efficiency measures have impacted on energy productivity, from the manufacturers' perspective. Finally, Energy Efficiency Services Limited will discuss how energy efficiency has been scaled up in India.



Presenters will touch upon a series of questions, including:

- What non-energy benefits from improved product efficiency have been identified?
- How have non-energy benefits been assessed?
- Has this benefits assessment been used to inform energy efficiency policies if so, how?
- What challenges are there to assessing these benefits?
- What additional research or collaboration could facilitate assessment of benefits and how they inform policy?

To support discussions, participants are encouraged to consider the following issues:

- → EE as Economic Policy Is energy efficiency seen in your country as a policy to promote economic growth, in terms of increasing the productivity of businesses and the disposable income of households? What type of evidence is needed to quantify this? Would providing this information facilitate buy in from a new group of stakeholders, for example your Ministries of Economy and Finance?
- → EE as Clean Energy Investment Strategy Energy efficiency policies, particularly regulations, have a strong leveraging effect on clean energy investment, that is, each euro spent at the program level results in hundreds or thousands of euros invested in high-efficiency equipment. Energy efficiency investment can also reduce fuel imports and defer investment in new power generation capacity. Is this well understood? Are energy efficiency policy investments considered on an equal footing to investments in renewable (or conventional) energy capacity? What type of analysis would most effectively demonstrate this, and what is the right audience to persuade?
- → EE as Industrial Policy For emerging economies particularly, a perceived threat to local manufacturers can be a significant barrier to energy efficiency policy implementation. On the other hand, adoption of high efficiency production could make local industries more competitive as exporters and reduce the costs to society of rapidly increasing energy demand. Could barriers to implementation be mitigated through direct support from industry ministries for R&D and retooling? What is the evidence needed to persuade ministries of industry to prioritize manufacturing of energy efficient products?