



ASIA-PACIFIC COUNTRIES HAVE KEY ROLE IN ACCELERATING GLOBAL SUSTAINABLE ENERGY TRANSITION

By - Rachel Kyte, Sustainable Energy for All

Achieving global economic growth in a sustainable manner hinges entirely on getting the energy transition right. This means reducing our dependence on fossil fuels through expanding the use of renewable energy and, critically, improving the efficiency of energy use.

As the world's most populous region and the epicenter of global economic growth, Asia-Pacific countries must lead the way for energy access, energy efficiency and renewable energy. The region is pivotal to achieving the ambitions of the Paris Climate Agreement, which calls for cutting global carbon pollution 80 percent by 2050.

It is hugely encouraging that countries like China and India have committed to aggressively reduce their carbon emissions, while adding record amounts of renewable energy. Still, energy consumption in these two countries will inevitably grow as more people join the middle class and many millions more get electricity for the first time. It is critical that, firstly, we achieve massive improvements in efficiency to limit demand. We then need to generate as much as possible using renewables to reduce the use of fossil fuels which must be used as cleanly as possible.

A key driver is government leadership and supportive policies. A standout in this regard is China, which is seeking to achieve multi-fold economic growth in the next few decades using the roughly the same amount of energy it uses today. China is a world leader in new mandatory energy efficiency policies, accounting for 70 percent of all new policies adopted globally in 2016, according to a new "Energy Efficiency 2017" report by the International Energy Agency.

The Chinese government's commitment to carbon pricing and the way it publically sets out its goals, such as for phasing out petroleum-driven cars and fuel efficiency standards for trucks, provide clear signals to the public and private sector which allow for long term thinking and provide markets with the stability to unlock finance.

In stark contrast are countries such as Indonesia, which has enormous opportunities for enacting policies to reduce its energy footprint. Without new policies, the country is on track to require 4,000 megawatts of new generating capacity every year to 2025.

We constantly miss opportunities to maximize energy productivity. One example that comes to mind is the energy associated with shipping liquid natural gas (LNG) around the world. Natural gas needs to be cooled and condensed, to minus 162° Celsius, to make it a liquid so it can be transported on ships. It is then re-vaporized so it can be used as a gas. Yet, of the 111 LNG import terminals worldwide, only 23 undertake any form of cold recovery – a massive missed opportunity.

As temperatures and income levels rise across Asia, demand for refrigeration, air conditioners and other cooling services is skyrocketing. India alone could see a doubling in air conditioner energy demand in the

next 15 years, requiring as many as 300 new power plants to be built, many of them fired by coal.

This trend is an enormous threat and efficiency is, again, the key. More efficient equipment exists but far bigger gains can be expected through efforts such as India's Super-Efficient Air Conditioning initiative launched earlier this year. Another opportunity is the recent Kigali Amendment to the Montreal Protocol: this requires the phase-down of high-polluting refrigerants commonly used in ACs and other cooling equipment and is an opportunity to re-think the design of appliances to make them more efficient as well.

Consider that 75 percent of food consumed in developed countries is transported through cold chains. In India, it's only 4 percent, which explains why the country loses up to 40 percent of its fruit and vegetable output every year and all the energy used to produce those wasted crops is also wasted.

New technologies – with catchy names like the Solar Polar Cooler, Cool Pushcart and the Magic Fridge – are popping up in Asia and elsewhere to help preserve food. However, their growth potential remains unclear due to the fragmented nature of cold chains in many countries. India, for example, has a growing number of rural farmers who are using new cold storage technologies, but they are still unable to get their products to commercial markets due to the lack of refrigerated transport vehicles.

The huge increase in investment in renewable energy generation is welcome and necessary, but we still miss a similar increase in investment in efficiency. Why? I would like to leave you with one idea: energy efficiency requires a deeper involvement of a wider range of stakeholders to make decisions, whether that is in a factory, in an apartment complex, or making use of waste cold described above. We need integrated strategies about how to deliver the services people need, not just one technological fix that addresses only one part of the problem. We need to think creatively about new partnerships that maximize synergies of energy supply and demand.

Asian government leaders face enormous challenges in growing their economies sustainably and inclusively, and I am encouraged by the broad action I am seeing but we need more. Energy productivity efforts must be elevated to be a top priority if we are to achieve our long-term goals for sustainable development and a healthy environment.

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