

SUSTAINABLE DEVELOPMENT GOALS

Cleaner cooking, electricity, better lives: A case for reliable, affordable energy

Nutritious food, clean water and basic healthcare for all may be obvious high-priority targets for the international community, but we shouldn't ignore energy. Reliable and affordable energy is as vital for today's developing and emerging economies as it was before the Industrial Revolution. Driven mostly by its five-fold increase in coal use, China's economy has grown 18-fold over the past 30 years while lifting 680 million people out of poverty.

The energy ladder is a way of visualising stages of development. At the bottom are traditional biofuels — firewood, dung and crop waste. Almost three billion people use these for cooking and heating indoors, which is so polluting that the World Health Organisation (WHO) estimates they kill one of every 13 people that die on the planet.

The next rung on the ladder is "transition fuels" such as kerosene, charcoal and liquified petroleum gas, while the top of the ladder is electricity. Because electricity is often powered by fossil fuels, it contributes to global warming. Hence an alluring option could be to move to clean energy, like wind, solar and hydro. Some are suggesting that developing countries should skip the fossil step and move right to clean energy.

What should the world prioritise? Fifteen years ago, the world agreed the Millennium Development Goals (MDGs), ambitious targets to tackle poverty, hunger, health and education. These goals have given direction to international aid and mostly led to improvement.

Now, the UN is considering the next set of targets for 2015-2030. Some argue that we should continue with the few, sharp targets from the MDGs, since we are not done. Others point out that many other issues, like environment and social justice, also need attention. At Copenhagen Consensus, we have asked some of the world's top



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COMMENTARY DR BJØRN LOMBORG

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economists to carry out analyses within all major challenge areas, estimating the economic, social and environmental costs and benefits of different targets.

So, should the almost-three billion people cooking with toxic open fires take higher priority than the broader, long term objective of cutting back on fossil fuel use? It turns out there are smart ways to help on both accounts, say Isabel Galiana and Amy Sopinka, the two economists who wrote the main paper on energy.

Burning firewood and dung on open indoor fires is inefficient and causes horrendous air pollution. More than four million

people each year die from respiratory illness because of smoke from indoor open fires. In Kenya alone, the WHO estimates 15,700 people die each year. In Uganda, another 13,200 die annually.

Most of these are women and children, who are also the ones spending their time fetching firewood, often from quite far away. Providing cleaner cooking facilities — efficient stoves that run on liquefied gas — would improve health, increase productivity, allow women to spend time earning money and children to go to school.

The economic benefits of getting everyone off dung and wood are as high as the human welfare

ones — more than \$500 billion each year. Costs would be much lower, about \$60 billion annually, including grants and subsidies to purchase stoves. Every dollar spent would buy almost \$9 of benefits, which is a very good way to help.

However, the economists also provide a more realistic (and more efficient) target. Since it is awfully hard to get to 100 per cent, they suggest providing modern cooking fuels to 30 per cent. This will still help 780 million people, but at the much lower cost of \$11 billion annually. For every dollar spent, we would do more than \$14 worth of good.

While clean cooking is important, electricity can bring different benefits. Lighting means that students can study after dark, clinics can refrigerate vaccines, and water can be pumped from wells so that women do not have to walk miles to fetch it. Nearly 84 per cent of Kenya, or about 33.4 million people, still miss access to electricity, according to 2011

data by the International Energy Agency. Only nine per cent of Ugandans had electricity in the same year.

The value of getting electricity to everyone is about \$380 billion annually. The cost is more difficult to work out. To provide electricity to everyone would need the equivalent of 250 more power stations, but many rural areas may best be served by solar panels and batteries. This is not an ideal solution, but would still be enough to make an enormous improvement to people's lives. The overall cost is probably around \$75 billion per year, which still does \$5 of benefits for each dollar spent.

If we want to tackle global warming, on the other hand, there are some targets we should be wary of; for example, doubling the world's share of renewables, particularly solar and wind is a rather ineffective use of resources. The extra costs of coping with the intermittent and unpredictable output of renewables makes them expensive, and the cost is likely to be higher than the benefits.

However, the world spends \$544 billion in fossil fuel subsidies, almost exclusively in Third World countries. This inhibits public budgets from being able to provide health and education, while encouraging higher carbon dioxide emissions. Moreover, fuel subsidies mostly help rich people, because they are the only ones to afford a car. To phase out fossil fuel subsidies would be a phenomenal target because it would cut carbon dioxide while saving money for other and better public uses. The economists estimate that every dollar in costs would do more than \$15 of climate and public good.

With such high-return targets, the economic evidence shows that — if carefully chosen — energy targets should definitely be part of the goals for the next 15 years.

Dr Bjørn Lomborg, an adjunct professor at the Copenhagen Business School, directs the Copenhagen Consensus Centre, ranking the smartest solutions to the world's biggest problems by cost-benefit. He is the author of The Skeptical Environmentalist and Cool It. His new book is How To Spend \$75 Billion to Make the World a Better Place.



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Kenyan trends, insights and terms on Twitter through letters of the alphabet

By **CHRISTABEL LIGAMI**
Special Correspondent

APPROXIMATELY 700,000 Kenyans on Twitter are active each month out of a possible 2 million users in the country, says a report by Nendo Ventures, a Nairobi-based social media strategy and digital story telling consultancy.

Dubbed *A-to-Z of Kenyan Twitter*, the report is presented using

the 26 letters of the alphabet, each with an accompanying explanation, visual, video and supporting digital material.

It features Kenyan terminologies, brands and personalities. Notable inclusions are events, television shows, politicians, musicians, athletes and socialites.

"The *A-to-Z of Kenyan Twitter* celebrates the culture, quirks and characters behind the millions

of updates that are shared with the world," said report author and founder of Nendo, Mark Kaigwa.

700,000

The number of Kenyans who are active on Twitter each month, out of a possible 2 million

The publication will serve as a guide for local, regional and global businesses and brands seeking to connect with Kenyans online, said Mr Kaigwa.

"Whether government, business or society, it is paramount to engage online Kenyan communities from a point of understanding if one wishes to create and derive value," Mark Kaigwa affirmed.

The digital publication, website

and campaign presents 26 of the most important trends, insights and terms from the Kenyans on micro-blogging social networks.

Launched online from Nairobi using the hashtag #AtoZofKOT, the publication features an array of social networks, each highlighting aspects of *The A-to-Z of Kenyan Twitter's* in different forms including video, audio, photographs, an animated photo and more.