



# Global tracking framework puts numbers to sustainable energy goals

By Vivien Foster  
Energy Sector Manager, World Bank Group

**H**ow many people around the world lack access to electricity and safe household fuels? What's the share of renewable energy in the global mix? How are we doing in improving energy efficiency?

The Sustainable Energy for All Global Tracking Framework Report, produced by a 15-agency team that included the World Energy Council, answers these questions. It presents detailed country-level and global data that outline the scale of the challenges ahead as countries try to meet the three objectives of the Sustainable Energy for All Initiative: providing universal access to modern energy, doubling the share of renewable energy in the global energy mix, and doubling the rate of improvement in energy efficiency – all by 2030.

The report tells us that 1.2 billion people – almost equal to the population of India – don't have access to electricity, and that 2.8 billion rely on wood or other biomass for household fuel. Those solid household fuels produce health-damaging indoor pollution that contributes to about four million premature deaths a year, most of them women and children. The report also tells us that most of the people still without access live in 20 countries in developing Asia and Sub-Saharan Africa, and that about 80 percent of them live in rural areas.

## How quickly is energy access expanding?

Although 1.8 billion people obtained connections to electricity between 1990 and 2010, the rate was only slightly ahead of the population growth of 1.6 billion over the same period. Electricity expansion growth will have to double to meet the 100 per cent access target by 2030. Getting there will require an additional US\$45 billion invested in access every year, five times the current annual level. The carbon cost of such expansion, however, is low: to bring electricity to those without it would increase global carbon dioxide emissions by less than one per cent.

Sustainable Energy for All, a global coalition of governments, the private sector, civil society, and international organisations, aims to achieve this while also doubling the amount of renewable energy in the global energy mix from its current share of 18 percent to 36 per cent by 2030. The initiative also seeks to double the rate of improvement in energy efficiency. SE4ALL was launched in 2011 by United Nations Secretary-General Ban Ki-moon, who now chairs its advisory board with World Bank Group President Jim Yong Kim.

The Global Tracking Framework is a milestone in this effort, according to World Bank Vice President for Sustainable Development Rachel Kyte, a member of the Sustainable

Energy for All Initiative's executive committee. "It provides baseline information on where we are in the journey toward meeting global energy goals," she adds. "Everyone will be able to measure their progress towards the baseline. And we know that's important, because what gets measured is what gets done."

## Where can we make the biggest difference?

The report identifies high-impact countries that offer the most potential to make rapid progress:

- Twenty high-impact countries in Asia and Africa account for about two-thirds of all people without electricity access and three-quarters of those using solid household fuels.
- Another 20 high-impact countries account for 80 per cent of energy consumption and will need to lead the way on doubling the share of renewables to 36 per cent of the global energy mix and doubling improvement in energy efficiency.
- One example of high-impact progress is China: the world's most populous country is the largest consumer of energy, but it is also leading the world in expansion of renewable energy and the rate of improvement in energy efficiency.

The report concludes that decisive action is needed to achieve these goals, including fiscal, financial and economic policy incentives, phasing out fossil fuel subsidies, and pricing carbon.

The global community will also have to invest in energy improvements. The report estimates that existing investments in energy totaling about US\$409 billion a year need to more than double to achieve the three goals. An additional US\$600-800 billion is needed, the report says, including at least US\$45 billion for electricity expansion, US\$4.4 billion for modern cooking fuels, US\$394 billion for energy efficiency, and US\$174 billion for renewable energy.

The Global Tracking Framework also clarifies the likely pattern of efforts across geographical regions toward the achievement of the three objectives, based on their starting points, their potential for improvement, and their comparative advantage. For energy efficiency, the highest rates of improvement – about minus four per cent annually – are projected for Asia (particularly China) and the countries of the former Soviet Union. For renewable energy, Latin America and Sub-Saharan Africa (the latter owing to its strong reliance on traditional biomass) emerge as the regions projected to reach the highest share of renewable energy in 2030 – in excess of 50 per cent, while much of the rest of the world will be in the 20-40 per cent range. 