

7 AFFORDABLE AND CLEAN ENERGY



Goal Seven calls for universal access to modern and clean energy, improving energy efficiency and decreasing negative environmental impact of energy use. Highlights of the baseline status of the region cover three important aspects of the goal: increasing access to energy services, increasing share of renewable energy and improving energy efficiency. Although more data is needed for comprehensive assessment of the progress towards this goal, the trends indicate that with the right policy focus, including on energy efficiency and renewable energy investments, it will be possible to meet the targets without jeopardizing the achievement of the thematically related targets on climate change.

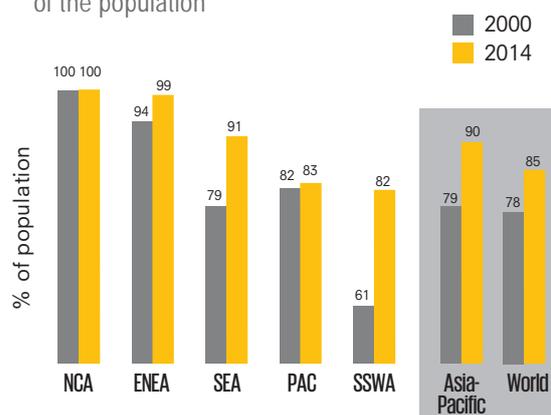
Over 400 million people in the region still have no access to electricity

Between 2000 and 2014, the proportion of the Asia-Pacific population with access to electricity rose from 79% to 90%. The greatest progress was in South and South-West Asia at 21 percentage points. North and Central Asia achieved universal access.

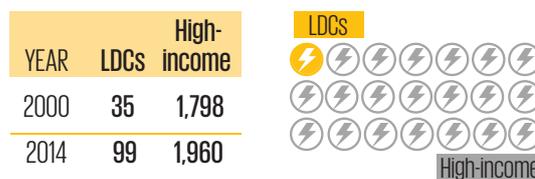
Nevertheless, over 400 million people in the Asia-Pacific region still have no access.

Moreover, even those people with access are using relatively small amounts of electricity. Supplies may be erratic or expensive. Residential consumption per capita in the Asia-Pacific region is only around half the global average – and is particularly low in the LDCs where the average is only around one twentieth of that in the region’s high-income economies.

Access to electricity, 2000 and 2014, percentage of the population



Residential electricity consumption, kWh per capita, 2000 and 2014



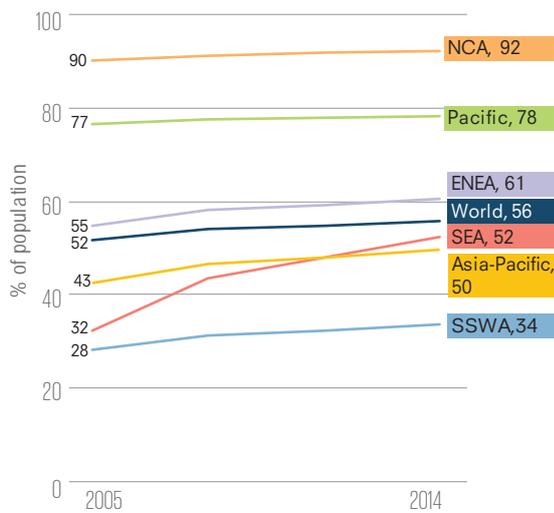
Every other person living in the Asia-Pacific region is exposed to health hazards in their home when cooking as a result of relying on unclean fuels or inefficient technology



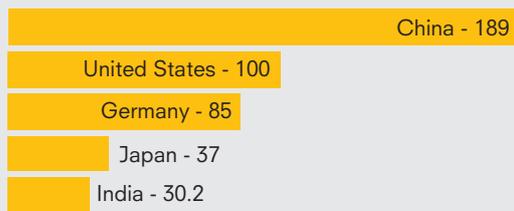
Cooking with dirty fuels and inefficient technology causes indoor air pollution and is a major health hazard. Between 2005 and

2014, the proportion of the region’s population with access to clean cooking fuels rose from 40%, but only to 51%. From only 32 per cent in 2005, 52 per cent of the South-East Asian population relied on clean fuels and technology in 2014. Migration to cities has also helped, since urban areas generally offer access to less polluting alternatives.

Reliance on clean fuels and technology for cooking, percentage of population, 2005 and 2014



Renewable electric power capacity, solar PV and wind power, top five countries in the world, GW 2015



To meet the renewable energy target, the region needs substantial expansion of renewable energy generating capacity

Despite impressive increases in the region's renewable energy production from 2000 to 2014 the share of renewable energy in overall energy supply of the region has declined. There were particularly large declines in South-East Asia (32 to 26 per cent) and South and South-West Asia (29 to 21 per cent).

Nevertheless there is good news about investment in renewable energy capacity. In 2015 at the global level, investment in renewable energy surpassed investment in fossil fuel-based technology.

In Asia and the Pacific, the expansion of renewable energy capacity has been particularly impressive for technologies that exploit solar and wind energy for generating electricity. China is the world leader and Japan and India are also in the world's top five in terms of solar and wind electricity generating capacity.

Source: REN21, Renewables 2016 Global Status Report (2016)

As the region's output has increased, its energy intensity has declined

A country's energy efficiency can be tracked through its 'energy intensity' – how much energy is being used to generate each unit of economic output. A high energy intensity can make it more difficult to achieve environmentally sustainable economic growth.

It is, however, also important to take into account the country's economic structure. For example, all other factors being equal a country with a large manufacturing sector would consume more energy per unit of GDP than a country with a large service sector. So this indicator needs to be interpreted carefully when being used to inform policy decisions.

The figure shows how the region's energy intensity fell as GDP growth outpaced the

growth in total primary energy supply (TPES). SDG target 7.3 is to double the rate of improvement in energy efficiency, so the region is off to a promising start: between the periods 2000-2004 and 2010-2014 the rate of improvement increased threefold, from 3% to 9%.

Energy supply per unit of GDP, Asia and the Pacific, indexed to the year 2000

