

# **\$2.5 Trillion to be Invested in Renewables in Asia-Pacific to Build the Power Capacity Needed in 2030**

July 1, 2014 (Source: BNEF) – The Asia-Pacific region will invest a massive \$3.6 trillion over the years ahead to equip itself with the power capacity it needs for 2030. Two thirds of that sum will go on renewable generation technologies such as wind, solar and hydro-electric, according to a major report from research company Bloomberg New Energy Finance.

The report, BNEF 2030 Market Outlook, based on modelling of electricity market supply and demand, technology cost evolution and policy development in individual countries and regions, forecasts that Asia-Pacific will account for more than half of the 5TW of net new power capacity that will be added worldwide in the next decade and a half.

This will equate to \$3.6 trillion of investment in Asia-Pacific.[1] Fossil fuel sources such as coal-fired and gas-fired generation will continue to grow in the region, despite rising concerns about pollution and climate change, but the biggest growth will be in renewables, with some \$2.5 trillion invested and 1.7TW of capacity added.

Milo Sjardin, head of Asia Pacific for Bloomberg New Energy Finance, said: “The period to 2030 is going to see spectacular growth in solar in this region, with nearly 800GW of rooftop and utility-scale PV added. This will be driven by economics, not subsidies – our analysis suggests that solar will be fully competitive with other power sources by 2020, only six years from now.

“However, that does not mean that the days of fossil-fuel

power are over. Far from it – rapid economic growth in Asia will still drive net increases of 434GW in coal-fired capacity and 314GW in gas-fired plant between now and 2030. That means that emissions will continue to increase for many years to come.”

Looking at individual countries in the region, China is forecast to add a net 1.4TW of new generating capacity between now and 2030 to meet power demand that is double that of today. This will require capital investment of around \$2 trillion, of which 72% will go to renewables such as wind, solar and hydro.

Japan’s power sector will experience a very different trajectory in the next 16 years, with electricity demand only regaining its 2010 levels in 2021 and then growing at a modest 1% a year, as efficiency gains partially offset economic growth. Some \$203bn is expected to be invested in new power generation capacity by 2030, with \$116bn of that going to rooftop solar and \$72bn to other renewable technologies.

India is forecast to see a quadrupling of its power generation capacity, from 236GW in 2013 to 887GW in 2030, with 169GW of the additions taking the form of utility-scale solar and 98GW onshore wind. Hydro will see capacity boosted by 95GW, coal by 155GW and gas by 55GW. Total investment to 2030 will be \$754bn, with \$477bn of that in renewables.

## **GLOBAL NUMBERS**

Globally, Bloomberg New Energy Finance expects \$7.7 trillion to be invested in new generating capacity by 2030, with 66% of that going on renewable technologies including hydro. Out of the \$5.1 trillion to be spent on renewables, Asia-Pacific will account for \$2.5 trillion, the Americas \$816bn, Europe \$967bn and the rest of the world including Middle East and Africa \$818bn.

Fossil fuels will retain the biggest share of power generation

by 2030 at 44%, albeit down from 64% in 2013. Some 1,073GW of new coal, gas and oil capacity worldwide will be added over the next 16 years, excluding replacement plant. The vast majority will be in developing countries seeking to meet the increased power demand that comes with industrialisation, and also to balance variable generation sources such as wind and solar. Solar PV and wind will increase their combined share of global generation from 3% last year to 16% in 2030.

Michael Liebreich, chairman of the advisory board for Bloomberg New Energy Finance, commented: "This country-by-country, technology-by-technology forecast of power market investment is more bullish on renewable energy's future share of total generation than some of the other major forecasts, largely because we have a more bullish view of continuing cost reductions. What we are seeing is global CO2 emissions on track to stop growing by the end of next decade, with the peak only pushed back because of fast-growing developing countries, which continue adding fossil fuel capacity as well as renewables."