

A Short Review on Renewable Energy in the Asia Pacific

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Abstract

The Asia Pacific energy consumption in 2018 has increased by 37.5% from 4077 to 5606 Mtoe since 2008. Four countries make up 80% of the Asia Pacific primary energy consumption. China 54.7%, India 13.5%, Japan 7.6% and South Korea 5.0%. At a rate of -0.2% per annum and -12.3% per decade, Japan is the only country in the Asia Pacific, reducing its energy consumption. Each country has a different mix of (economic-dependent) sources. China & Indonesia have major coal mix, Thailand has a major natural gas mix, while Japan & Malaysia have balance coal and natural gas mix. Renewable energy mix in the Asia Pacific countries has an average of 14.3%, with China the highest and South Korea & Taiwan the lowest. To strategically reaching each RE target, individual country should consider the Levelized Cost of Energy (LCOE) which economically assess the average total cost to build and operate a power-generating asset over its lifetime divided by the total energy output of the asset over that lifetime.

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