

LOW-CARBON ENERGY TRANSITION

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Beyond shifting from fossil fuels to renewable energy sources, **low-carbon energy transition entails potential changes in labour market and land use**. In Southeast Asia, such impacts will differ depending on the trajectories that countries are pursuing in their low-carbon energy transition efforts. Whereas Baseline Scenario (BAS) refers to a situation where ASEAN member states implement low-carbon energy transition based on their historical trends and without any policy interventions; ASEAN Member State Targets Scenario (ATS) refers to a trajectory where countries implement renewable energy and energy efficiency policies; Regional Aspiration Scenario (RAS) refers to a situation where countries implement stronger measures beyond ATS to meet the targets of regional energy cooperation plan (APAEC) 2016-2025; and Carbon Neutrality Scenario (CNS) refers to ASEAN countries pursuing measures in alignment with net-zero carbon emissions by 2050, Figure 1 shows that, in the next 30 years, there will be more people losing jobs if countries implement more rigorous low-carbon energy transition measures that are aimed at achieving regional targets (RAS) and net-zero targets (CNS) compared to less ambitious approaches in BAS and ATS. Figure 2 further demonstrates that, under the Regional Aspiration Scenario (RAS), Southeast Asian countries will need to allocate approximately ten times the current land area used for solar and wind power generation to accommodate their increased growth over the next 30 years.

Figure 1: Total Net Employment Creation Across Different Future Scenarios (2020-2050)

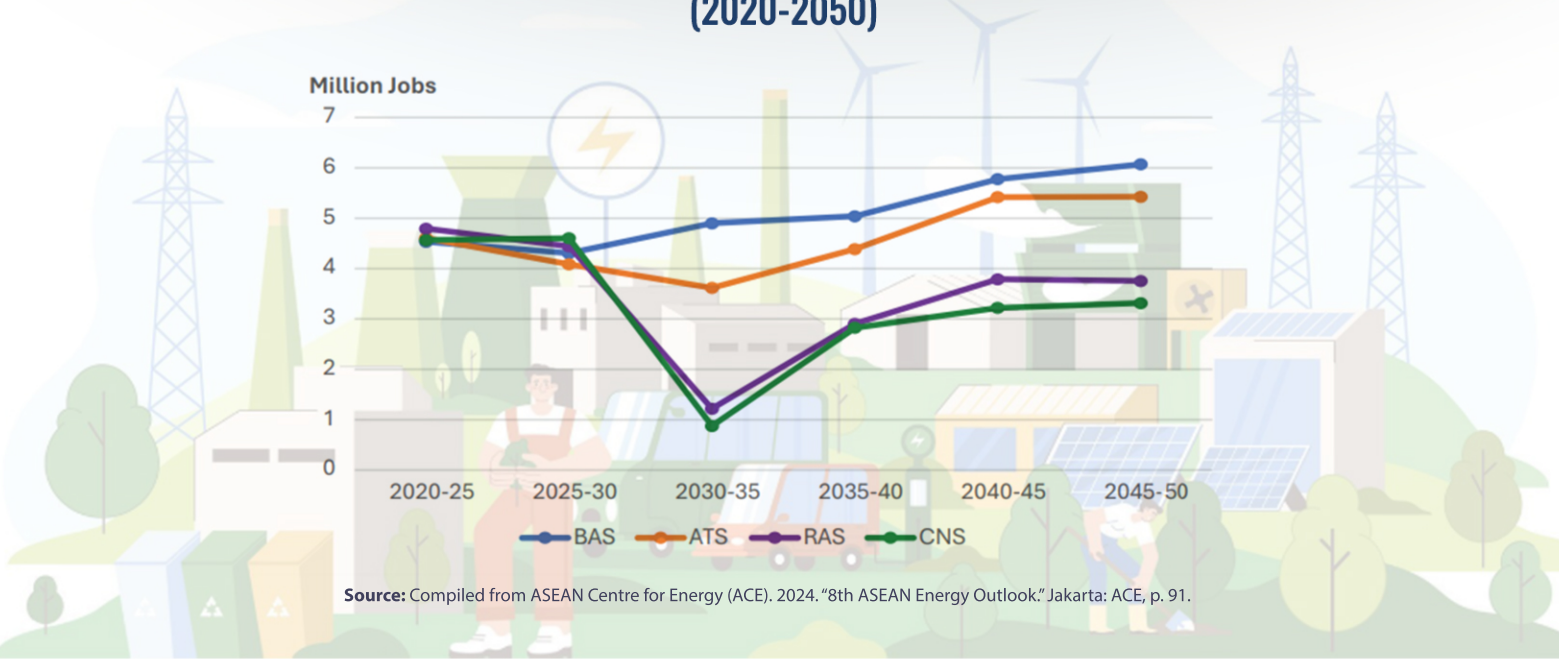


Figure 2: Land Utilisation for ASEAN Wind and Solar Projects in 2023 and 2050, Regional Aspiration Scenario (RAS)

