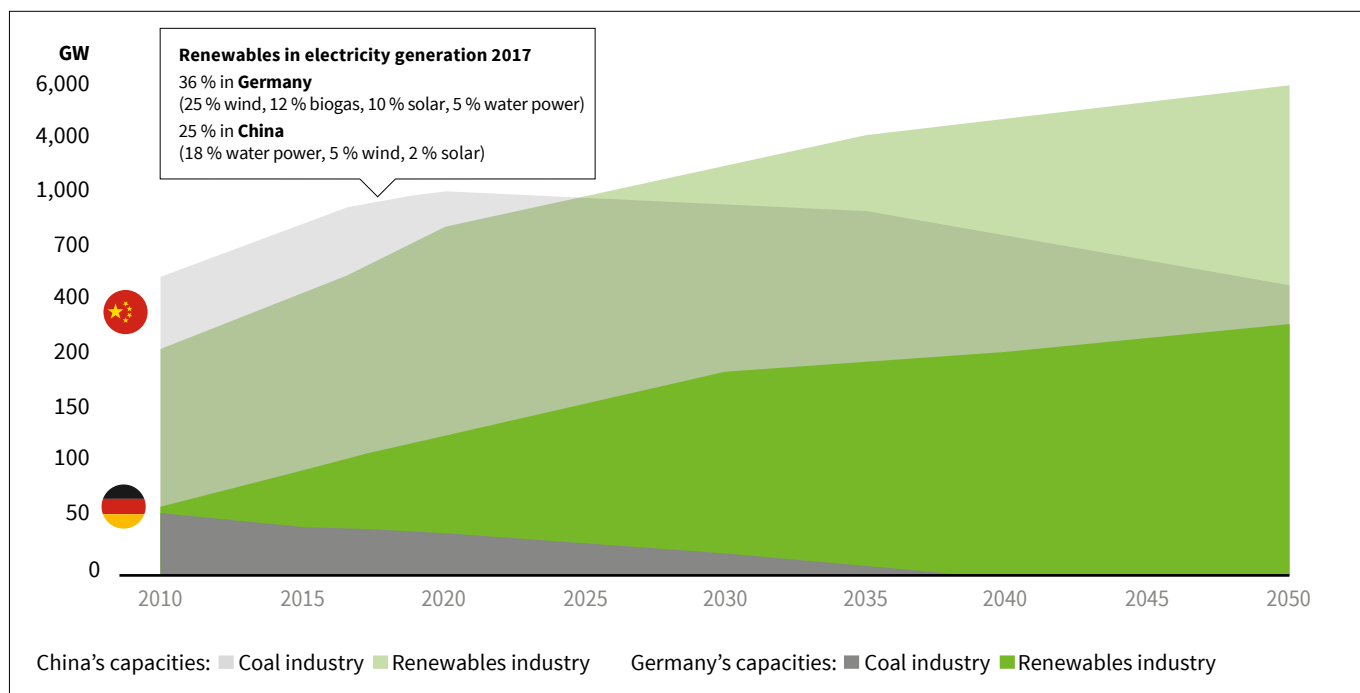


Energy transition and coal power in Germany and China

Energy generation capacities in Germany and China

Germany and China face similar challenges regarding the fulfilment of their climate protection targets: CO₂ emission-intensive lignite is the dominant domestic energy source and important heavy industries need access to reliable and affordable energy. Both countries are increasing their renewable energy capacities considerably. In contrast to Germany, coal capacities in China were further expanded in recent years due to the high level of economic growth.

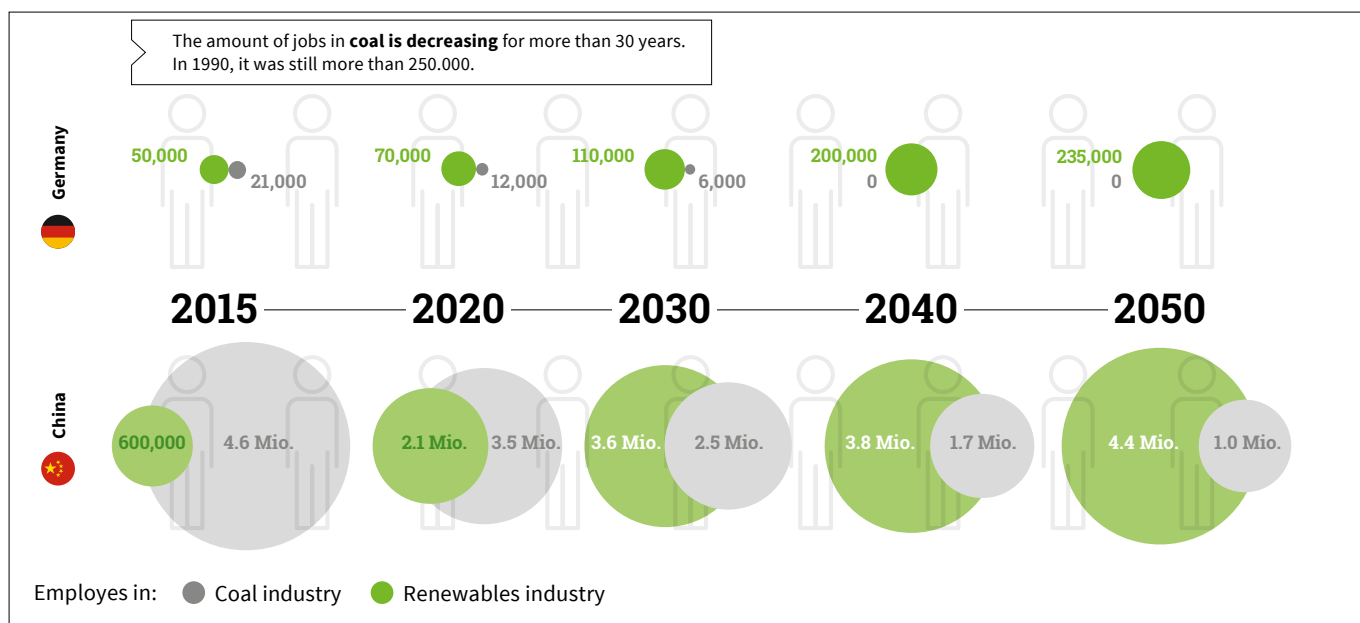
The German coal commission recommends the complete coal exit in Germany by 2038 and further extension of renewable capacities. The China Renewable Energy Outlook 2018 (CREO) shows how coal power generation in China can be significantly reduced by 2035 and be compensated by further dynamic installation of renewables.



Source: dena (2019); based on data from Federal Ministry for Economic Affairs and Energy (2018); Renewables in numbers; CNREC (2017); China Renewable Energy Outlook (CREO); CNREC (2018); dena study Integrated Energy Transition; IEA (2017); World Energy Outlook China; Commission "Growth, Structural Change and Employment" (2019); Final Report

Employees in the coal and renewables industry

The energy transition has effects on the amount of employees in the two sectors in both countries. In China, many people are employed in the coal industry, so a quick transition in order to reach climate protection goals is a challenging task. In Germany, the structural change of the coal industry has developed over several decades. In comparison with China, there are proportionately fewer jobs that are affected by the transformation. The trend of the scenarios show: There are more new jobs generated in the renewables industry than existing jobs are omitted in the coal industry provided that the right political course is set.



Source: dena (2019); based on data from CNREC (2017); China Renewable Energy Outlook; DIW et al. (2015); Employment through renewables in Germany: Expansion and operation, today and tomorrow; Commission "Growth, Structural Change and Employment" (2019); Final Report; UBA (2018); Employment development in the lignite industry: status quo and projection