

Net Additional Coal Generation Capacity Since the Paris Agreement

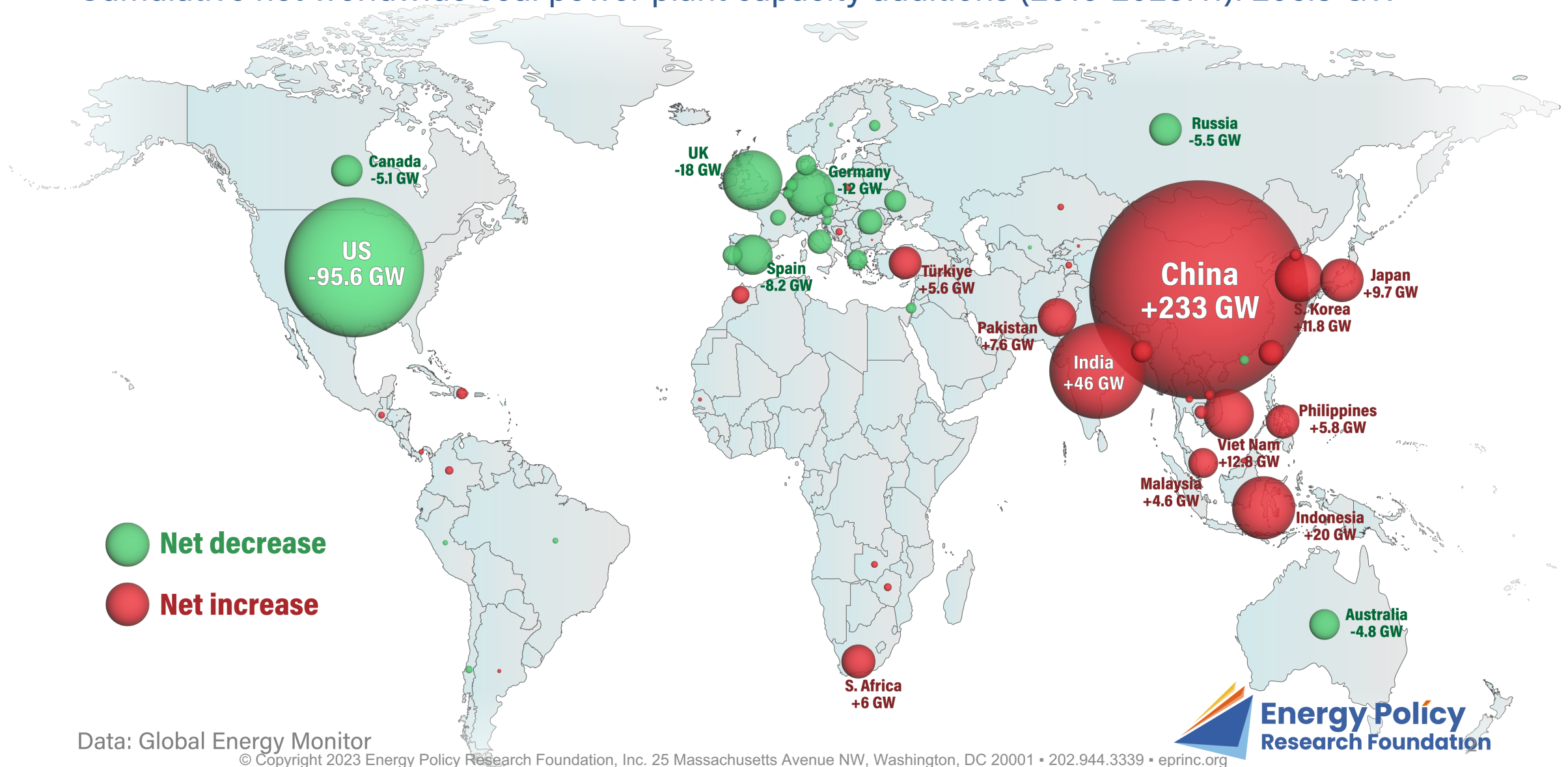
Chart of the Week series: #44-2023

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NET ADDITIONAL COAL PLANT CAPACITY SINCE 2015 PARIS AGREEMENT

Cumulative net worldwide coal power plant capacity additions (2016-2023H1): 206.3 GW



Global Net Coal Power Plant Capacity Since Paris Agreement



- The Paris Accords were adopted in December 2015 and ratified by 195 countries. The goal of the Accords has been to achieve high-level reductions in CO2 emissions from hydrocarbon fuel usage. The Treaty stipulated that all coal-fired power plants in OECD/Developed countries need to be retired by 2030; in non-OECD/Developing countries, the agreement required that the shutdowns be by 2040.
- Since the Treaty's ratification, there has been a significant divergence between Developed and Developing countries (especially Asian ones). According to the Global Energy Monitor's Global Coal Plant Tracker, coal generation capacity decreased by 164.4 GWs (gigawatts) in Developed countries. In contrast in Developing Countries, the net change has been an increase of 360 GWs.
- In Asia in particular, China has accounted for almost two-thirds of the total coal generation additions since the Accords; coal-fired generation capacity has reached 1,108 GWs. Furthermore, China has 136 GWs of coal generation under construction and another 255.5 GWs that have been permitted.
- In contrast, the U.S. has retired a total of 95.6 GWs of coal-fired power plants since the Treaty, while at the same time, adding 63 GW of natural gas-fired generation. Current U.S. coal-fired and natural-gas capacity stands at 205 and 566 GWs, respectively.
- The changes in mitigating global coal power plant capacity since the 2015 Paris Agreement reflect varying energy security challenges, economic conditions, and alternative fuel options around the world. The U.S.'s shift away from coal has been helped by increased U.S. natural gas production, coupled with key state and municipal regulations mandating the reduction of coal usage.