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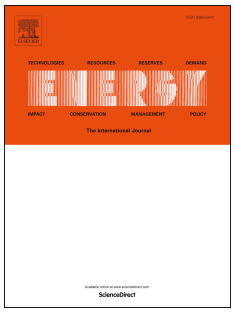

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Faster market growth of wind and PV in late adopters due to global experience build-up

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Abstract

Different perspectives on the diffusion of technologies have suggested that market growth of technologies in late adopter countries may be either slower (because the technology is adopted later in areas where the technology has poorer economic performance) or faster (because global experience has resulted in maturation and improved performance of the technology). We compare the pace of market growth of wind and PV power in early and late adopters. We use panel data analysis on a database spanning all countries of the world, and years 1980-2014. We find that late adopters manage to access the global experience with these technologies, and utilize it to accelerate domestic market growth. Despite their lower GDP, late adopter countries have managed market growth for wind power that was up to 4.7 times faster than it was in early adopters, and up to 16 times faster for PV. These results suggest increased development efforts of novel clean-tech may kick-start rapid global deployment. Beneficial effects are less for very late adopters and less developed economies, signalling attention is needed for these in global climate change mitigation efforts.

Key words

Market growth; Technological diffusion; Wind power; PV; late adopters