

# natureOUTLOOK

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The transition from fossil fuels is well under way. Each year sees an increase in the amount of electricity generated from renewable sources, including solar, wind and biomass. Changing where we get our energy from has numerous impacts on society, affecting job opportunities, infrastructure and the quality of our air and water resources. But this is not humanity's first energy transition — society has experienced profound change time and again as new energy sources have risen to dominance (see page S134).

The driving forces behind our present energy transition are diverse. Although many view low-carbon energy as a way to mitigate climate change, individuals and communities will often move for reasons of business and self-determination (S138). Some people — such as those with no connection to the electrical grid — see little option but renewables (S148). And there are economic benefits: it is likely that we have been grossly underestimating the real cost of fossil fuels (S145).

Will the latest energy transition be a success? It might depend on whether green electricity can make itself indispensable to the growing knowledge economy (S141). Inequalities in energy use between the wealthiest and poorest members of society must also be addressed (S142), and difficult decisions on power-plant placement taken (S150).

The current energy transition should not be viewed through just one lens. It is not merely an issue of technology, or resource availability. It is about history, democracy, economics and society.

We thank the editors of *Nature Energy* for their help with this Outlook.

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**Michelle Grayson**

*Senior editor, supplements*

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