

Climate Change and Security of Energy Supply: Long-term Synergies and Trade-offs

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Security of energy supply and climate change are central concerns for policy makers and important dimensions of the long-term quest for a sustainable global energy system. In this analysis we use the multi-regional energy-systems and technology model ERIS to examine the role of several policy instruments in managing security and climate risks and stimulating technological change towards a more sustainable global energy system in the long-term future. Our analysis provides some policy insights and identifies synergies and trade-offs relating to the potential for security of supply policies to reduce the cost of pursuing climate change mitigation policies, promote the uptake of new technologies, and facilitate a possible transition to a hydrogen economy.

Keywords:

climate change, security of supply, technological change