

Supplementary information

Comment: Six principles for energy innovation

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Table: UK and US energy innovation institutes

Country	Selection of new institutions funding and enabling energy innovation	Use-inspired basic research	Applied R&D	Demonstration	Market formation and deployment
United Kingdom	UK Carbon Trust (2001-)				\$
	UK Energy Research Center (2004-)	Non-technology, social science research			
	Energy Technologies Institute (2007-)		\$		
	Env. Transf. Fund/International Climate Fund (2008/2011-)				\$
	Technology Strategy Board/Innovate UK (2008/2014) ¹		\$		
	Catapults ² (2011-)		\$		
United States	Energy Frontier Research Centers (2008-)	\$			
	ARPA-E (2009-)		\$		
	Energy Innovation Hubs ³ (2009-)	\$			
	Cyclotron Road (2015-)		\$		

A range of large and novel institutions have been set up to fund and enable energy innovation in the UK and the US since 2000. They each have a different focus, from basic research to market formation and information provision.

Symbols denote the main features of the institutions: \$= provision of funds; circles= direct private-sector involvement in decision-making; house= creation of new entity during the funding; person= provision of expertise in the form of business or technical advice.

Notes: ¹The Catapults are a part of Innovate UK; ²There are ten Catapults, three of which cover energy (energy systems, offshore wind, and transport) and two that do so indirectly (future cities and high value manufacturing); ³Of the five Hubs that were initially created, one (on buildings) was cancelled, with the four Hubs remaining on fuels from sunlight, storage, critical materials and light water reactor modelling.

Updated and adapted from: Anadon, L. D. 'Missions-oriented RD&D institutions in energy: a comparative analysis of China, the United Kingdom, and the United States.' *Research Policy* **41**, 1742–1756 (2012).