

NEAR TERM TECHNOLOGY POLICIES FOR LONG TERM CLIMATE TARGETS

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The aim of this presentation is to offer suggestions when it comes to near-term technology policies for long-term climate targets based on some insights into the nature of technical change. It is important to make a distinction between economy wide and technology specific policy instruments. The following observations can be made:

(i) Near-term carbon targets such as the Kyoto protocol can be met by economy wide price instruments (carbon taxes, or a cap-and-trade system) changing the technologies we pick from the shelf (higher energy efficiency in cars, buildings and industry, wind, biomass for heat and electricity, natural gas instead of coal, solar thermal, etc.)

(ii) Technology specific policies are needed to bring new technologies to the shelf. Without these new technologies, stricter emission reduction targets may be considered impossible to meet by the government, industry and the general public, and therefore not adopted. The policies required to bring these more advanced technologies to the shelf are more complex and include increased public research and development, demonstration, niche market creation, support for networks within the new industries, standard settings and infrastructure policies (e.g., when it comes to hydrogen distribution).