

White Certificates In MARKAL Models of Italy and Europe: Case Studies to Analyze Energy Efficiency Improvement Policies

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The transition to long term new energy systems may be more effective if supplemented by short term cost reduction and climate mitigation market driven policies. Instruments such as green and white certificates have been proposed to harness renewable energy sources and to use more efficient end use devices, which are competitive or nearly so. This paper evaluates some medium term energy environment and economic impacts of the recent Italian regulation that sets to the local gas and electricity distribution companies energy efficiency improvement targets steadily increasing over time. The analysis is extended to different ways of enforcing these policies in Italy and in EU as a whole.

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