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Assessing Climate Targets under Uncertainty and Learning, a Cost-Risk Analysis.

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Most climate-energy-economy models use cost-effectiveness analysis (CEA) when assessing climate targets. CEA runs into inconsistencies when considering an uncertain climate together with the possibility of future learning (Schmidt et. al., 2011). To analyze climate targets under uncertainty and handle learning consistently Cost-Risk-Analysis (CRA) has been proposed by Schmidt et. al. Here we show how a degree-year-based version of this method performs by comparing different learning scenarios and the value of the learned perfect information under uncertain climate sensitivity. The example simulations are carried out numerically with a probabilistic version (Held et al., 2009) of the coupled climate-energy-economy model MIND (Edenhofer et al., 2005).

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