



Aude POMMERET (USMB, IREGE),

Abatement capital accumulation and the shadow price of carbon

Using a theoretical model calibrated for France, we study the consequences for the shadow price of carbon when accounting for abatement capital accumulation and target uncertainty. We find that the shadow price of the abatement capacity exhibits a non-monotonic path, which differs from the classical Hotelling rule that is followed by the carbon price. However, even if the growth rate of the latter only depends on the discount rate -and the hazard rate when the target is uncertain, its initial value is affected by the characteristics of the investment technology. In the numerical application, we find that the optimal date of carbon neutrality lies between 2045 and 2053, regardless of the type of abatement technology -clean-up or decoupling- and parameter values in likely ranges (including the discount rate or the size of the carbon budget). Finally we show that decoupling technologies would be largely less costly than clean-up technologies.

Keywords: carbon value, abatement capital, adjustment costs, carbon budget risk

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12h30

DISTANCIEL

Participer à la réunion Zoom :

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Agenda

14/01/2021, Richard CALVI (USMB, IREGE),
Gisèle MENDYBILEK (CREG, Université de
Pau), Coordination et Coopération des
acteurs de la chaîne Logistique pour un
transport durable

Calendrier des séminaires

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