



Nanyang Technological University  
**DIVISION OF ECONOMICS**  
Seminar Series

The Division of Economics invites you to a seminar by Larry Karp

---

- Speaker** : **Larry Karp**  
*Professor of Agricultural and Resource Economics at the University of California, Berkeley*
- Topic** : **"Smart Cap "**
- Chairperson** : **Assistant Professor HONG Fuhai**  
*Division of Economics  
School of Humanities & Social Sciences*
- Date** : **14th March 2016 (Monday)**
- Time** : **3.00pm to 4.00pm**
- Venue** : **Meeting Room 6 (HSS-04-91)**  
*Nanyang Technological University  
School of Humanities and Social Sciences  
14, Nanyang Drive  
Singapore 637332*

**About the Speaker:**

Larry Karp is a professor of Agricultural and Resource Economics at the University of California, Berkeley. His research and teaching interests include environmental policy, applied game theory, dynamic analysis, and trade policy. He is a fellow of the Agricultural & Applied Economics Association (AAEA), an associate editor of Journal of Economic Dynamics and Control, and a former Co-Editor of Journal of Environmental Economics and Management

**Abstract:**

We introduce a "smart" cap and trade system that eliminates the welfare costs of asymmetric information ("uncertainty"). This cap increases or decreases in response to technology or macroeconomic shocks. It relies on the market price of certificates to aggregate the relevant information. In the static setting, Weitzman (1974) shows that a tax is more efficient than a (standard) cap if marginal damages are flatter than marginal benefits. In a dynamic setting, the shadow value of the polluting stock measures marginal damage. In the climate change context, it is the social cost of carbon, which is relatively flat in current emissions. The widely used analog of the static argument therefore suggests that taxes are more efficient than (standard) cap and trade systems for addressing climate change. In practice, cap and trade is the dominant market-based climate policy. The smart cap allows policy makers to use these institutions to employ an efficient climate policy. The analysis also shows why the static criterion for ranking taxes versus quantities fails in the dynamic setting and that even a standard cap can be almost first best under an almost flat marginal damage curve

**Reservation:**

Admission is free. Please reply to [h-dae@ntu.edu.sg](mailto:h-dae@ntu.edu.sg) to confirm your attendance.