# Session F: How do regulations need to change?

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#### A few issues:

- 1. Innovation in the energy system requires either:
  - An attractive market environment (i.e. potentially profitable markets and no serious barriers to entry from incumbent players or others);

#### OR

 Environmental or other regulation that induces change and adoption.

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New regulation can help with both. For example DG with CHP in micro-grids can use input energy much more efficiently than central station power plus separate HVAC -but are banned in most states by laws granting "exclusive service territories."

CCS offers a cost-effective way to control CO<sub>2</sub> emissions but nobody will adopt it if those emissions are not controlled in some way.

## Issues...(Cont.)

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  - We have a federal system so regulation at the state level is often preferable. More innovative states can be first movers. In addition, states provide us with 50 laboratories in which to experiment, with a greater chance that one will "get it right."
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In the case of controlling CO<sub>2</sub> emissions, a few states, especially California, have allowed us to get started while the nation as a whole is still not ready to act.

However, in cases such as CO<sub>2</sub> pipelines for large-scale deployment of CCS, a state-by-state approach simply does not scale.

# Issues...(Cont.)

- 3. Many advocate "market-based" mechanisms as a more efficient alternative to conventional regulation. In many cases these advocates are correct. BUT...how can one implement such strategies in the face of powerful private interests?
- 4. Are performance standards a politically more viable strategy in many contexts (e.g. a "carbon portfolio standard" rather than a CO<sub>2</sub> emission tax or cap and trade regime)?
- 5. A common problem with command and control regulation is that can readily become inflexible. Is possible to develop regulatory strategies in which it is easier to learn from experience and be adaptive?

## Two help us think...

...about these and other challenges, we are fortunate of the have three distinguished panelists:

Edward A. (Ted) Parson, Professor of Law and Professor of Natural Resources and Environment, University of Michigan

Robert R. Nordhaus, Member, Van Ness Feldman

Jonathan Cannon, Professor of Law, University of Virginia