

What we do, and something LUMS SSE might do

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We—Economist George Tolley and I—teach together

- The course: Energy and Energy Policy
- The students: 4th-year undergraduates and graduate students, roughly *half from the natural sciences and half from economics, public policy and business*
- The requirements: One paper, by a team that must be interdisciplinary, *of professional quality*

What happens in classes?

- The basics: how energy is used, how it is supplied, where and how we get it
- What problems do or might exist as consequences of the amounts and kinds of energy and the ways we use it, including impacts on all sorts of things
- How can we begin to think about addressing those problems?

Can we get good, expert advice?

- There are people with specific expertise, so we invite some of them to talk with the class
- Example: A nuclear engineer
- Example: A materials scientist concerned with batteries
- Example: A venture capitalist involved in innovative energy technology
- Example: Someone from a power company

What do the students study and write about in their papers?

- Recycling nuclear fuel
- Supplying renewable energy with local sources in underdeveloped countries
- Barriers to expanded use of solar photovoltaic energy in American cities
- Increasing incentives for efficient energy technologies in buildings
- Combined heat and power: economic barriers

What else have they done?

- Read or download all the papers done to date at the website; there are now four years' archived there
- <http://humanities.uchicago.edu/orgs/institute/bigproblems/bp-energy.html>

What happens to the papers?

- So far, six are scheduled for publication in a scientific journal and will be available on line
- Others may be published later

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What happens to the students?

- Some find that they really like working on policy issues and seek careers, for example, as staff members of policy-oriented organizations or even as Congressional staff
- Some see and respond to policy implications of work they do in otherwise standard professional careers

Could something like this happen at LUMS?

- Certainly! But it would mean “No boundaries” *between SSE and the Social Sciences*
- Can they learn to talk the same language? Let’s hope so; that’s what we try to create with the interdisciplinary teams.
- LUMS, including SSE, could work on a variety of issues such as energy, water, climate, resource limits and such—integrating the scientific and societal aspects!

Thank you!
and do great
things!