

15.031

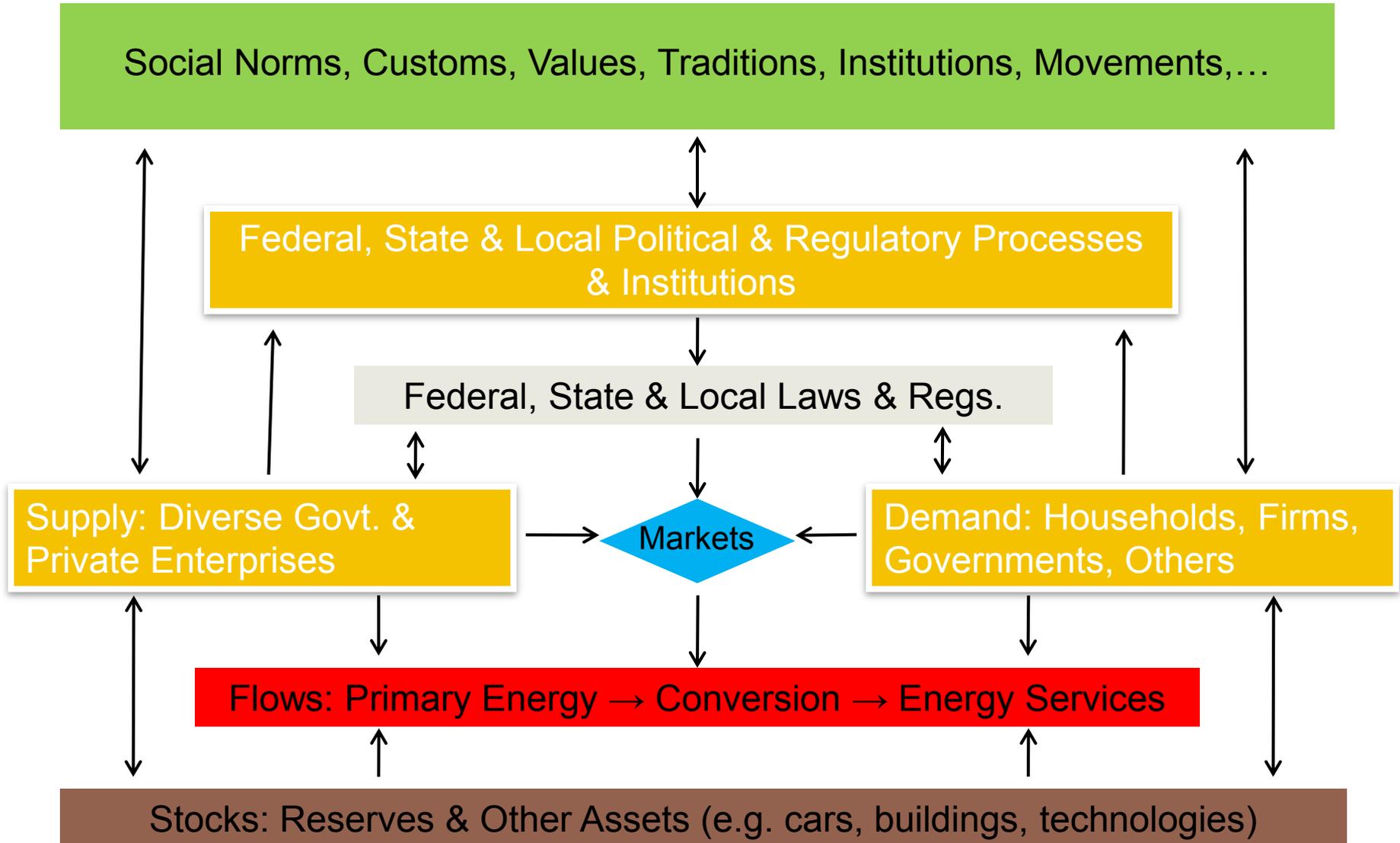
RECITATION

REVIEW FOR QUIZ 1

COURSE OBJECTIVES

- **Social science is useful for analyzing *systems with humans*, and as a source of tools to devise strategies for changing such systems**
- **Course objective: to prepare you to use the tools of the social sciences to understand and shape real energy decisions, markets, and policies**
 - Tools: economics, management, sociology, & political science
 - Applied in the energy context to individuals, households, organizations, social movements, and governmental entities
- **We won't try to predict your energy future; we will try to make you better able to shape it!**

THE U.S. ENERGY SYSTEM – A SOCIAL SCIENCE VIEW



CONCEPTS DISCUSSED-1

Weeks 1 and 2

- Comparative Energy Systems
 - Difference in Fuel Origin/Difficulty in Changing
 - Effective Shape of System
- Viscusi et al (Coase Theorem and Externalities)
 - Property Rights—Will They Work?
 - Cost-Benefit Analysis

Week 3 Markets and The State (Role of the State)

- Carter vs. Carter Coal
- Sutherland vs. Cardozo
- Path Dependence (Disruptive Change as Rare)
 - Gawande-Difference in National Health Systems & Unruh
 - QWERTY/Swiss Watch-Making

CONCEPTS DISCUSSED-2

Week 4 Climate Negotiations

- What Worked and What Didn't?
 - Economic Growth, Political Realities, Enforcement, Technological Solutions—What Else?

Week 5 Energy Demand

- Derived Demand
 - Short-Run vs. Long Run
 - Elasticity of Demand/Rebound Effect
 - Should You Buy a Prius
- Social and Behavioral Choices
 - Economics vs. Social/Behavioral
 - Prius Revisited
 - How do People Make Decisions?
 - Rational (ends, absolute value)/Emotion/ Tradition
 - Role of Norms

CONCEPTS DISCUSSED-3

Week 6 and 7 Organizational Decision Making

- Normative Frameworks
 - Role of Business in Society
 - Friedman vs. Handy
- Hexion
 - Present Value
 - How To Present Case to The Decision Maker
- Biodiesel@MIT--Monday

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