

CHALLENGES FOR TECHNOLOGY AND INNOVATION

Some Critical Questions

- **What Are We Actually Up Against?**
- **What Options Do We Have?**
- **How Is Decarbonizing Transport the Same or Different From Other Sectors?**
- **Can We do It?**
- **How Can We Stimulate Innovations in Transportation Related Technologies?**

Some Other Things to Think About

- Global Versus Regional Differences
 - The concept of “fitness for purpose”
- The Intersection Between Technology and Policy
 - Social Science as the integrating factor
- The Role of Experimentation and Learning in Policy Formulation and Evolution
 - R&D is based on learning from success *and* failure – what about policy?

Transportation R&D Agenda: Technology, Policy and Social Science

R&D in Three Interconnected Arenas:

Technology

- Supply Side
 - Alternative Fuels
 - Resource Development
- Demand Side
 - Vehicle Efficiency
 - VKT
 - § Consumer education
 - § Public transport
 - § Highway design & land use practices

Policy

- Taxation
- Regulation
- Mandates
- Investment
 - Public funding
 - Public / Private partnerships
 - Private funding



Social Science

- Economics
- Behavioral & Cognitive Psychology
- Sociology
- Geography
- Law & Political Science