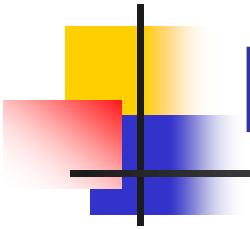
EN 653/PS 611
Energy Policy Analysis

L8 (21st January 2019)



Framework

- Decisions
- Stakeholders
- Policies
- Goals
- Criteria
- Analysis

Quiz 1

- Primary- Coal, Biomass, Wind
- Secondary- Hydrogen Energy, Electricity

Quiz 1 – Electric shuttle service

- Goal- Provision of Clean, Affordable, Safe transport service (within campus)

  Reduce Pollution, Land Use, Increase convenience, Reduce transit time

- Stakeholders – IIT campus residents – students, faculty, staff, employee families, visitors, Institute administration, service providers, drivers, Technology suppliers

Classification of policy Instruments

- Regulating instruments
  - Rationing – emission quotas, mandatory technology
  - Performance standards, benchmarks
- Implied Deregulation-
  - Emission Permit Trading, Green Certificates
  - Voluntary Agreements
- Fiscal and Financial Instruments- Taxes, subsidies or grants
- Supportive Actions
  - Improvement knowledge, market transparency
  - Dissemination
  - Reduce Transaction costs

Perrels, IPCC, 2001

Decisions

- Form of ownership and operation
- Technology choice, Number, Size of bus
- Operating strategy- Frequency, Route
- Method of cost recovery
- Rules and regulations
- Number, location of Bus stops
- Number, location of charging stations

What is a policy instrument?

Policy instruments-tools used by governments to pursue a desired outcome. Examples

include economic tools (taxes,spending,

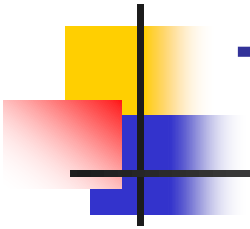
incentives), and regulations (voluntary, legal).

Policy instruments

- Regulations-Walkable campus- Ban IC engines on campus, No autos in campus
- Regulations for cost recovery – Tariff approvals, clauses for default of contract
- Pricing instruments – subsidise? Grant? Monthly passes? Daily tickets?
- Information – Apps, Real time tracking

Institutions

- IIT Bombay – Security Section
- RTO
- IITB management/ Transport committee
- Electrical Maintenance Division, IITB
- Student bodies, Dean SA



Trade-offs

- Affordability vs Flexibility(Redundancy)
- Safety vs Cost
- Cost vs Transition Time
- Emissions vs cost