



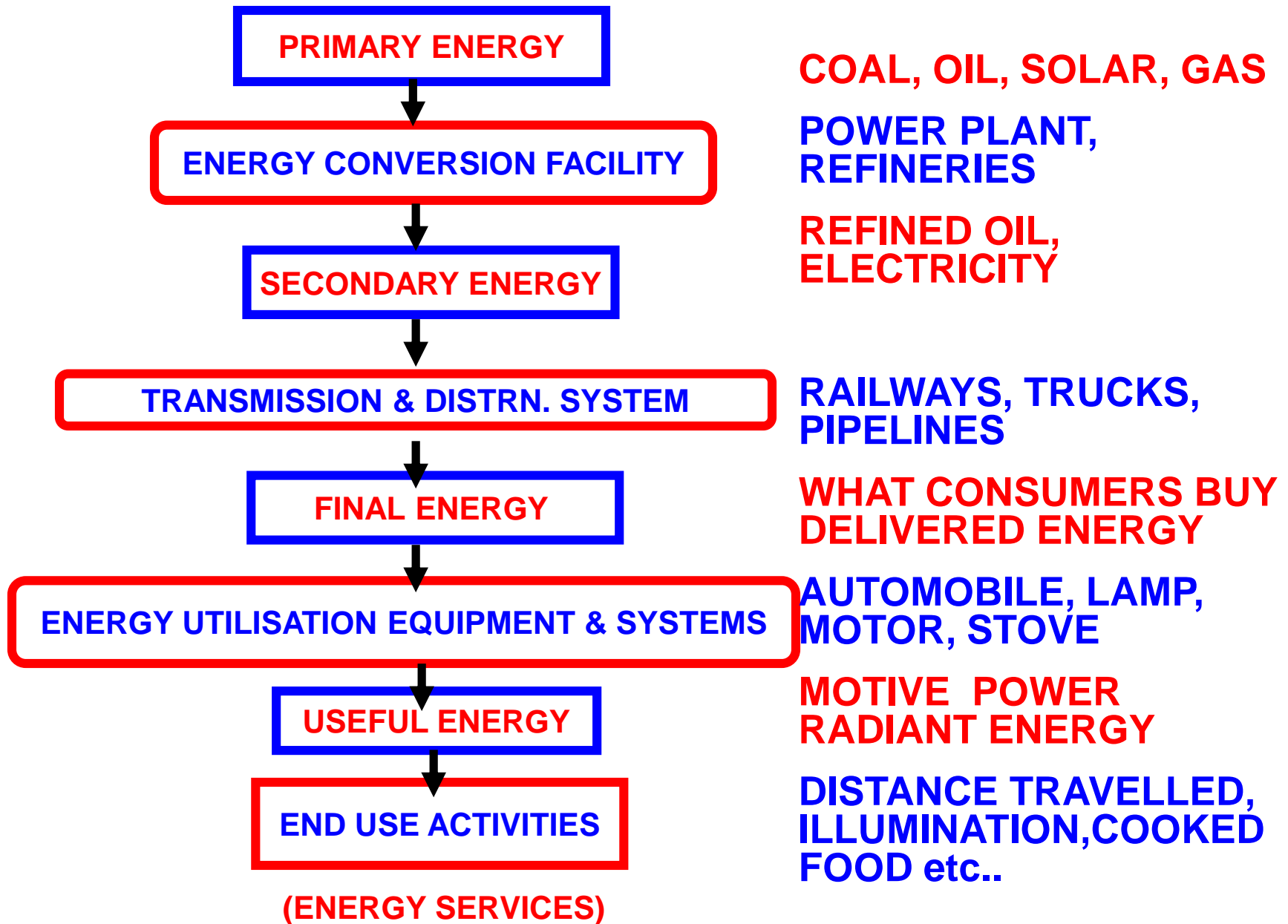
# **EN 653/PS 611**

## **Energy Policy Analysis**

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**Introduction**  
**L2 (7<sup>th</sup> January 2019)**

# ENERGY FLOW DIAGRAM



What is an energy policy?

# What is a policy?

A **policy** is a principle or protocol to guide decisions and achieve rational outcomes(Wiki)



# Framework

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



# Energy Goals

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- Increase Energy Access
- Develop capacities for energy transitions
- Enhance Energy Security
- Manage Energy Related Market Power
- Manage Energy Resource Endowments
- Reduce Environmental and Human Health Impacts
- Accelerate Energy related Technological change
- Co-ordinate and implement international energy related policies



# Deciding Energy Policies

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## **Scope**

- IIT Campus
- Powai
- Village
- Block
- Mumbai
- Maharashtra
- India
- Global

## **Elements**

- Decide Goals
- List out Policy instruments
- List out challenges
- Existing Institutions and roles
- Time Horizon
- Analytical framework



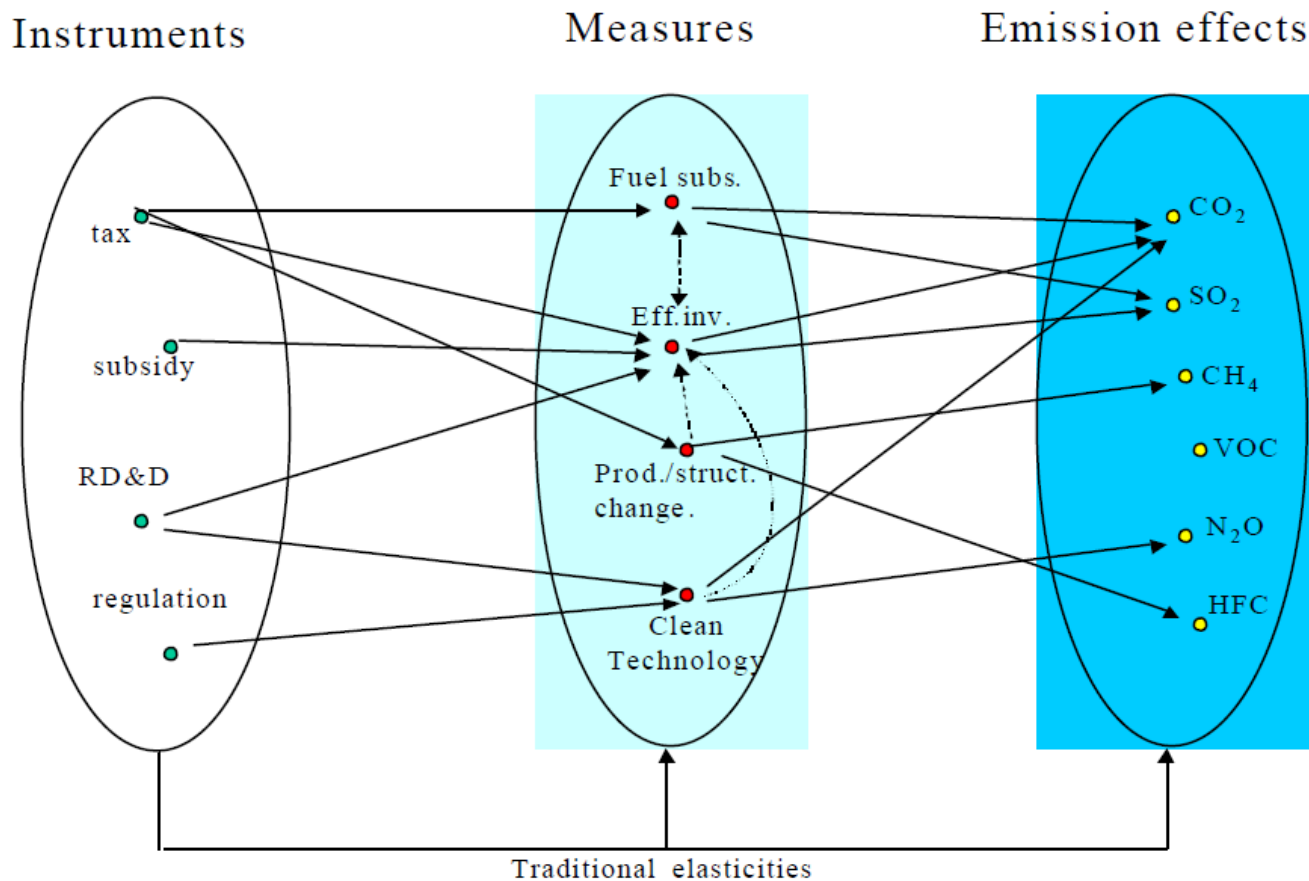
# Classification of policy Instruments

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- 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



# Impact of Policy Instruments





# India -Policy Documents

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- Five Year Plans
- Integrated Energy Policy, 2008
- National Action Plan on Climate Change – JNNSM and NMEEE
- Electricity Regulation Commission Act 1998
- Electricity Act 2003
- UMPP 2005
- Rural Electrification Policy 2006
- INDC 2015



# Policy options

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- Market or Government (Mandate/ Legislate)
- Regulation
  - Energy Access
  - Renewable Energy
  - Energy Efficiency
  - Nuclear Energy
  - Pricing/ Taxes/Subsidies



# Criteria to Analyse Policy

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- Effectiveness
- Economic efficiency
- Administrative feasibility
- Equity
- Political acceptability
- Policy robustness
- Policy consistency

(Source GEA Chapter 22)



# Typical Energy Decisions

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- World- International agreements – GHG, CFC
- Nation- Energy policy, pricing, technology development
- State – Taxes/Incentives, fund allocation to districts
- District – Fund Allocation to blocks, Mouza electrification, Industrial devpt., Coal – elect., fuel / ration shops Sanctions.
- Block– Fund Allocation to GPs, Kerosene allocation, industry promotion, marketing support.
- Gram Panchayat – Agriculture / irrigation schemes, Co-op industry, request for fuel/ration shop, electricity.
- Household – Fuel choice, Device choice.



# Tutorial 1- Framework for policy

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In each of the following examples from your IIT life – describe a framework for policy formulation, analysis. Specify the stakeholders, policy goals, criteria, institutions, type of analysis. Comment on the existing policies vis-à-vis different stakeholders (Be as specific as possible)



# IITB Themes/ topics

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- Mood Indigo/ Techfest
- Student Technical Teams for International Competitions at IIT Bombay
- Student Exchanges at IIT Bombay
- Mess operation in the hostel
- Seminar/ Project Allotment
- Campus Placement for Jobs/ Internships
- New student admission, accommodation, orientation
- Course Policies

Additionally please feel free to add new topics related to your life at IIT Bombay



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