



SNF Project

Discussion Class on P1



System Goals

SNF


- Create storage system
- Reduce risk of exposure
- Increase security to prevent any attack
- Reduce time and cost of transportation
- Moving SNF away from populous centers
- Explore possibilities of SNF reprocessing
- Explore alternative storage options
- Maintain sustainable and reliable energy system/source
- Reduce excessive SNF build-up at reactors



System Goals

US ENERGY

- Maintain sustainable and reliable energy system
- Minimize economic cost to industry and public
- Educate public about nuclear energy
- Decrease US energy demand
- Reduce greenhouse gas emissions
- Prevent nuclear proliferation
- Safe disposal of any byproduct
- Increase energy efficiency
- Increase system robustness and reliability
- Reduce environmental impacts



Subsystems for SNF CLIOS

First Set


Transportation
Environment
Security
Social

Second Set

Nuclear Energy Production
Transportation
Long-Term Storage

Third Set

Transportation
Storage
Nuclear Reactors



Subsystems for US Energy CLIOS

First Set

Environmental Subsystem
Technological Subsystem
Production and Distribution Subsystem
Economic Subsystem
Social Subsystem

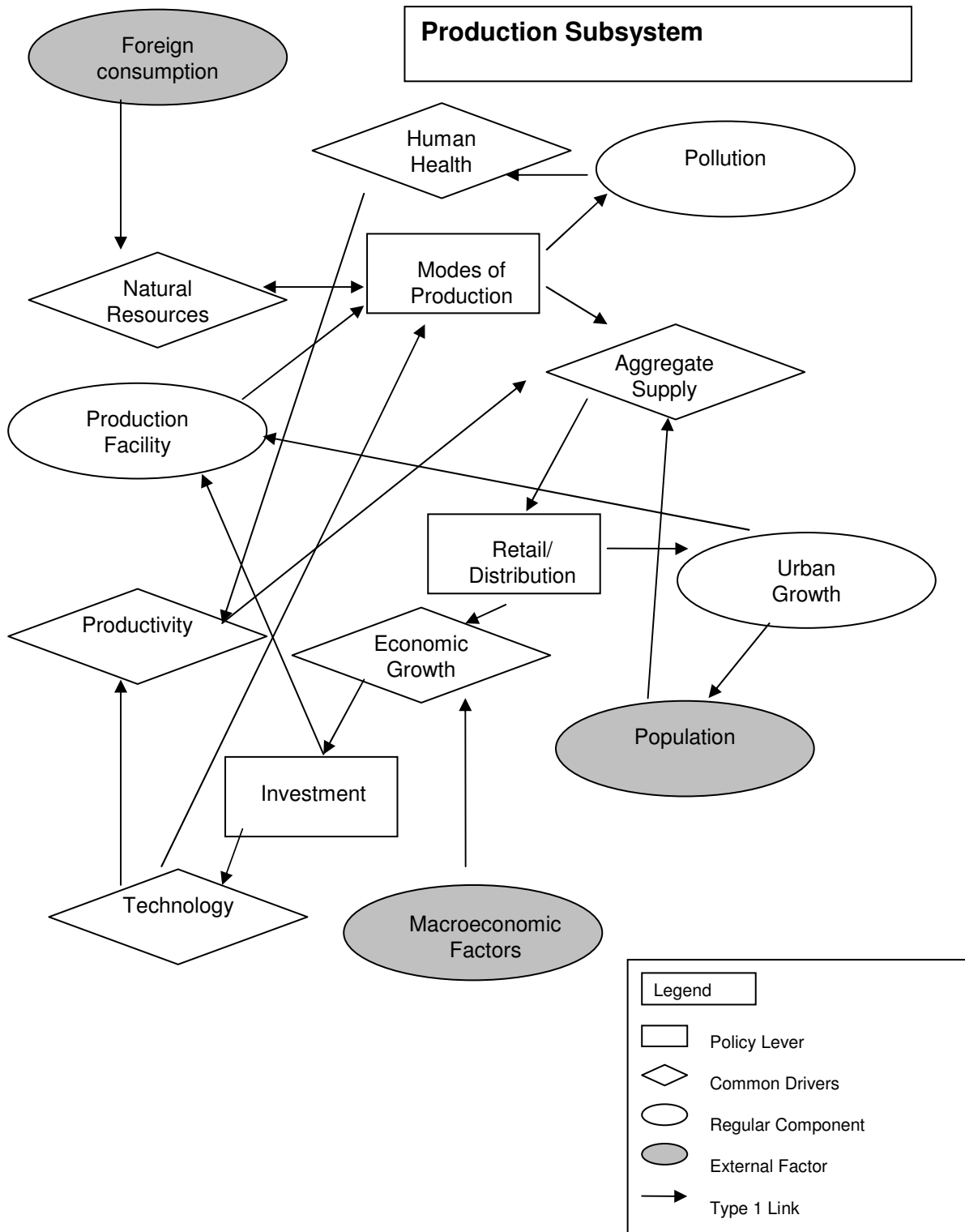
Second Set

Energy Production
Environment
Economic Activity

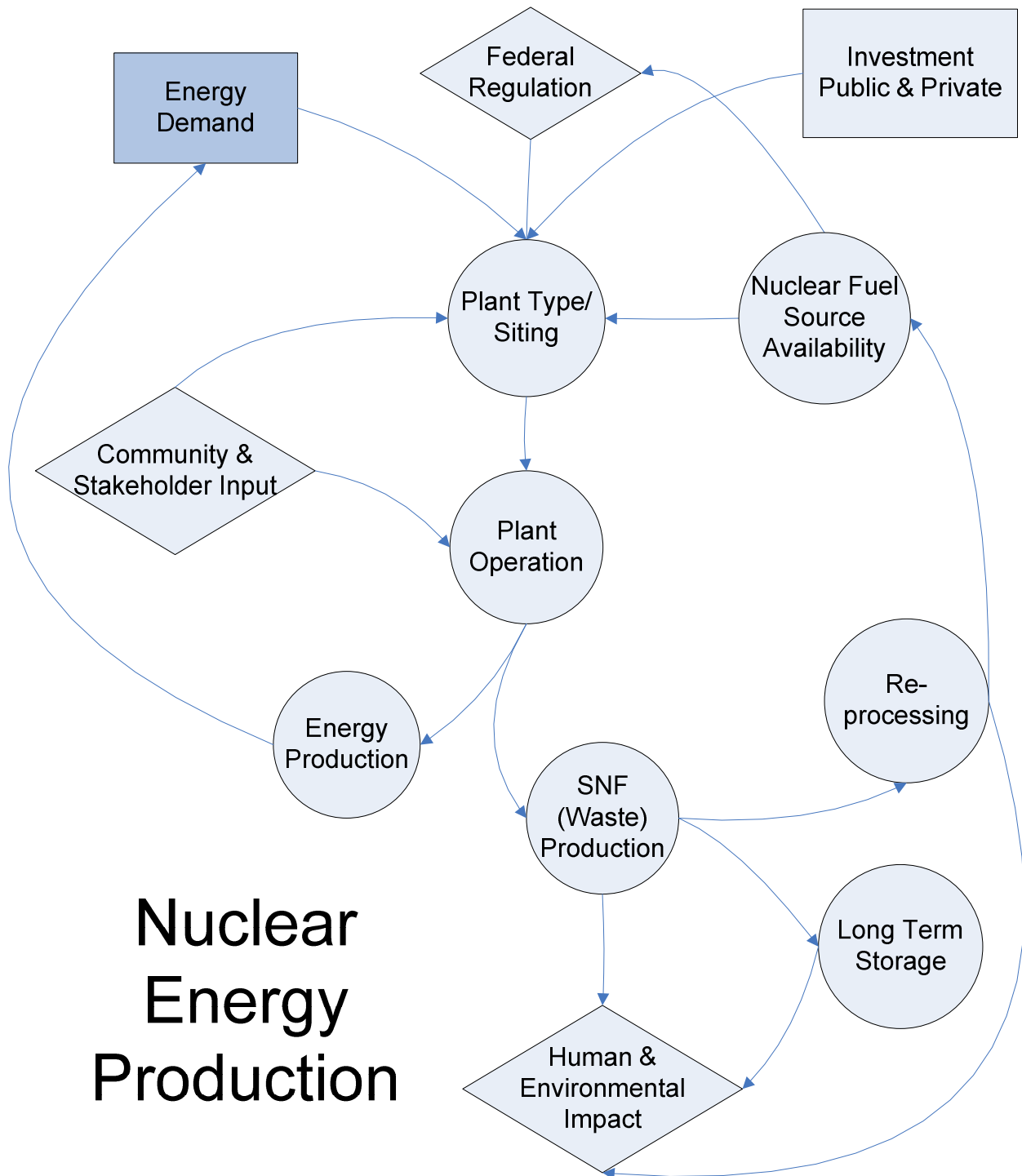
Third Set

Energy Sources
Development
Transformations
Energy Carriers
Distribution
Users

Sample Subsystem 1



Sample Subsystem 2



Nuclear Energy Production

Sample Subsystem 3

Transportation Subsystem

