



Extended Snapshot Tool

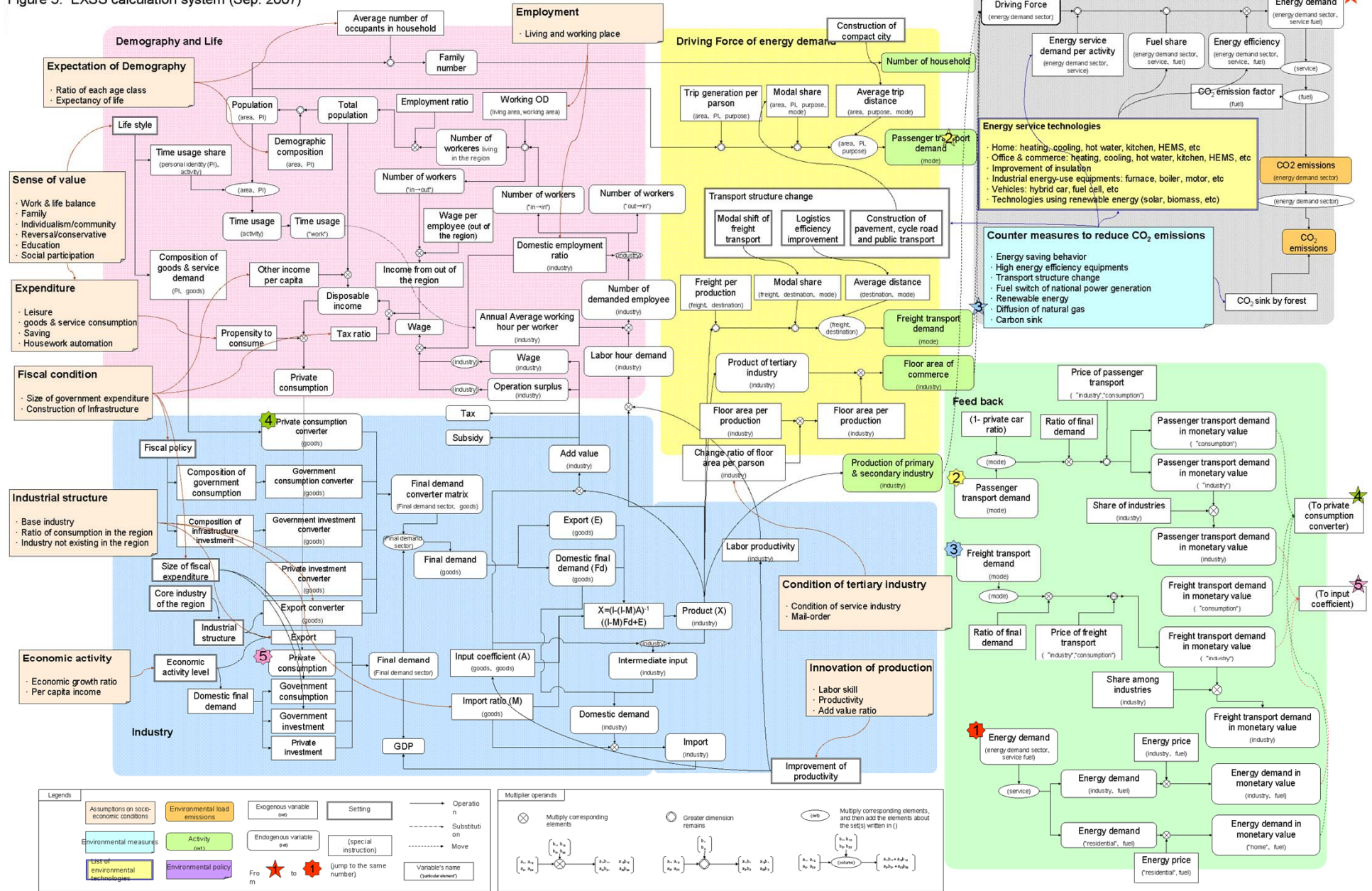
19th Nov. 2010 Bangkok, Thailand
Kei GOMI
Kyoto University



What is ExSS?

- Extended Snapshot Tool
- A static model consists of simultaneous equations with about 6000 variables
- GAMS program
- Describe Socio-economic activity, energy consumption and CO2 emissions quantitatively and consistently
- Determine introduction of Low-carbon measures required to achieve certain level of emission target
- Extendable to Agriculture, Forestry, Land-use change, Waste disposal, Air/Water Pollution, etc.

Figure 3. EXSS calculation system (Sep. 2007)



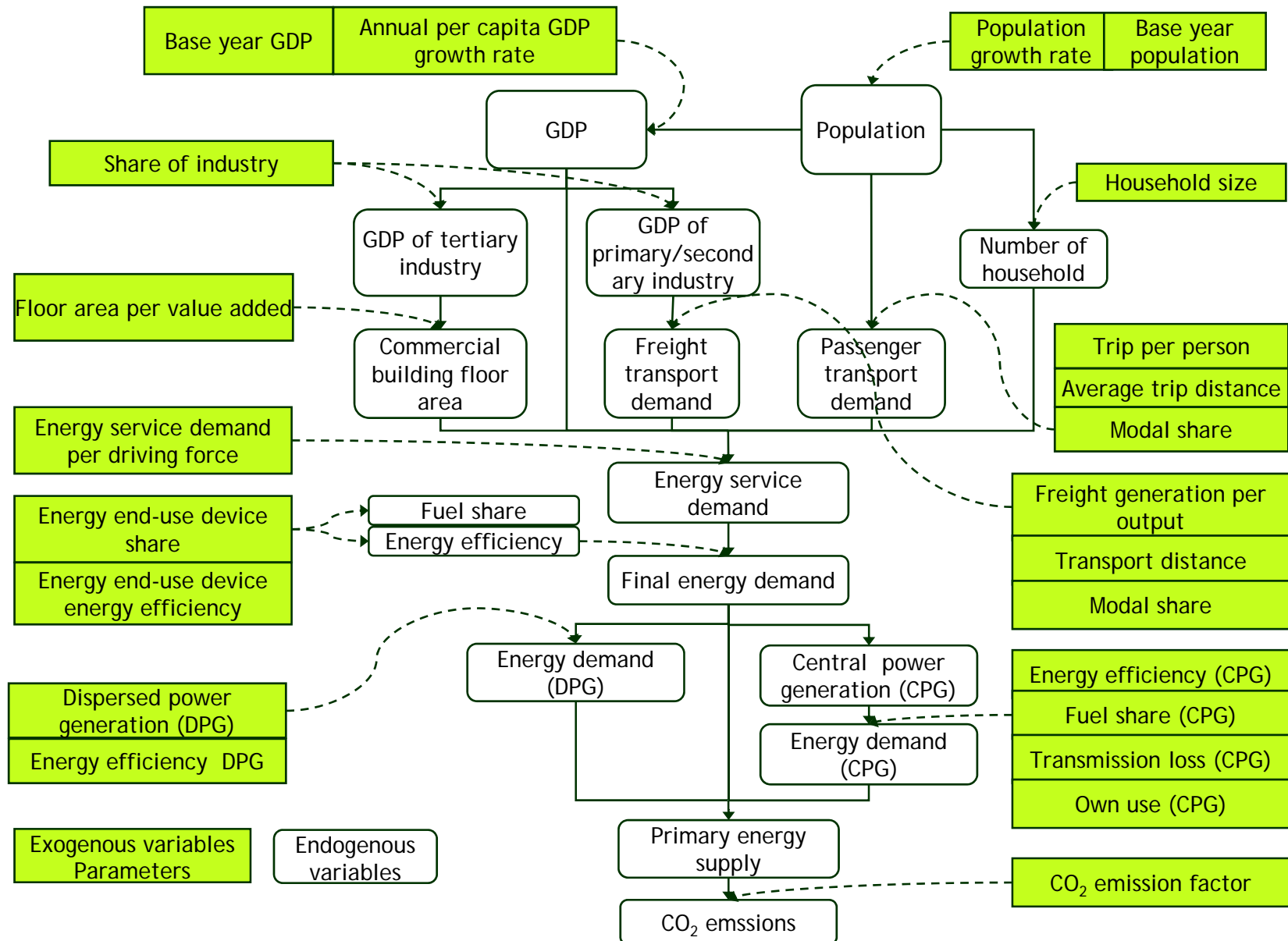
Necessary information

- Base year data
 - Population and Household
 - Input Output table (or, regional economic accounting)
 - Transport demand (Passenger & Freight)
 - Building
 - Energy demand
 - Energy supply
 - etc
- Reference for future scenario
 - Population projection
 - Economic projection / planning
 - Transport planning
 - Energy strategy
 - Potential of renewable energy
 - etc

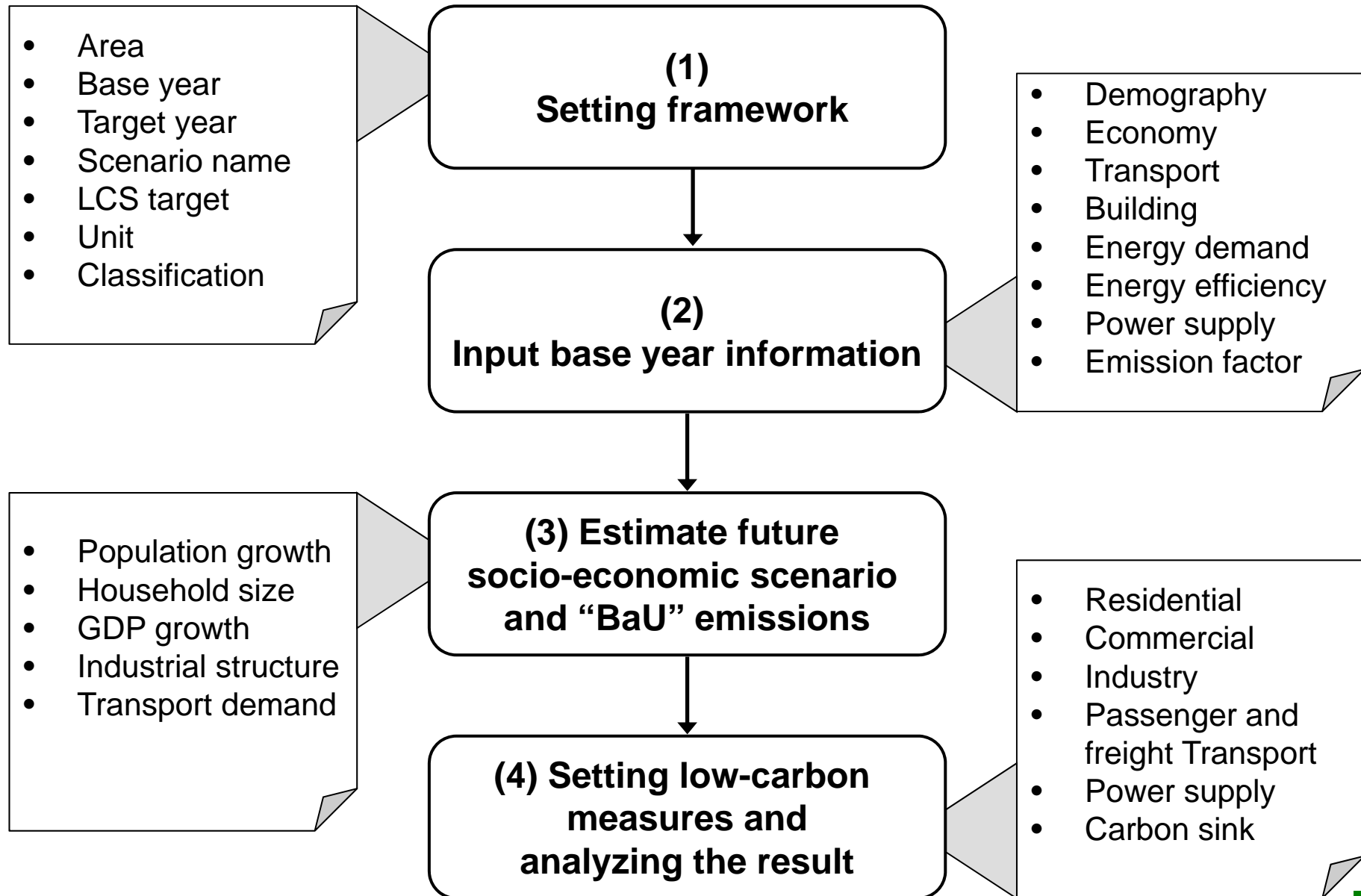
ExSS Demo Version

- Simplified version of ExSS
- Similar structure with full version
- An Excel file
- For demonstration and training

Structure of ExSS Demo Version



Four Steps



Today,

- Using ExSS Demo Version
- With Thailand data
- Input parameters based on socio-economic assumptions
- Estimate BaU (business as usual) emissions
- Try to achieve an emission target
- Q&A