

Policy Options for Climate Change and Sustainable Development

AIM/CGE

Policy Options for Climate Change and Sustainable Development

(1) Carbon reduction

- **Carbon tax**
 - *Distributional effects (among different income group households)*
 - *Tax revenue recycling schemes (introduction of GOV)*
- **Energy tax (Btu)**
- **Fuel substitution** (towards cleaner fuels)
 - *Coal to oil to gas in power plants*
- **Emission Trading (domestic)**
 - *C and/or S trading among utilities and industries*
- **IPCC Scenarios**

(2) Energy Consumption Reduction

- **Energy Efficiency Improvement**
- **Innovative technologies**

DATABASE AND MODELS

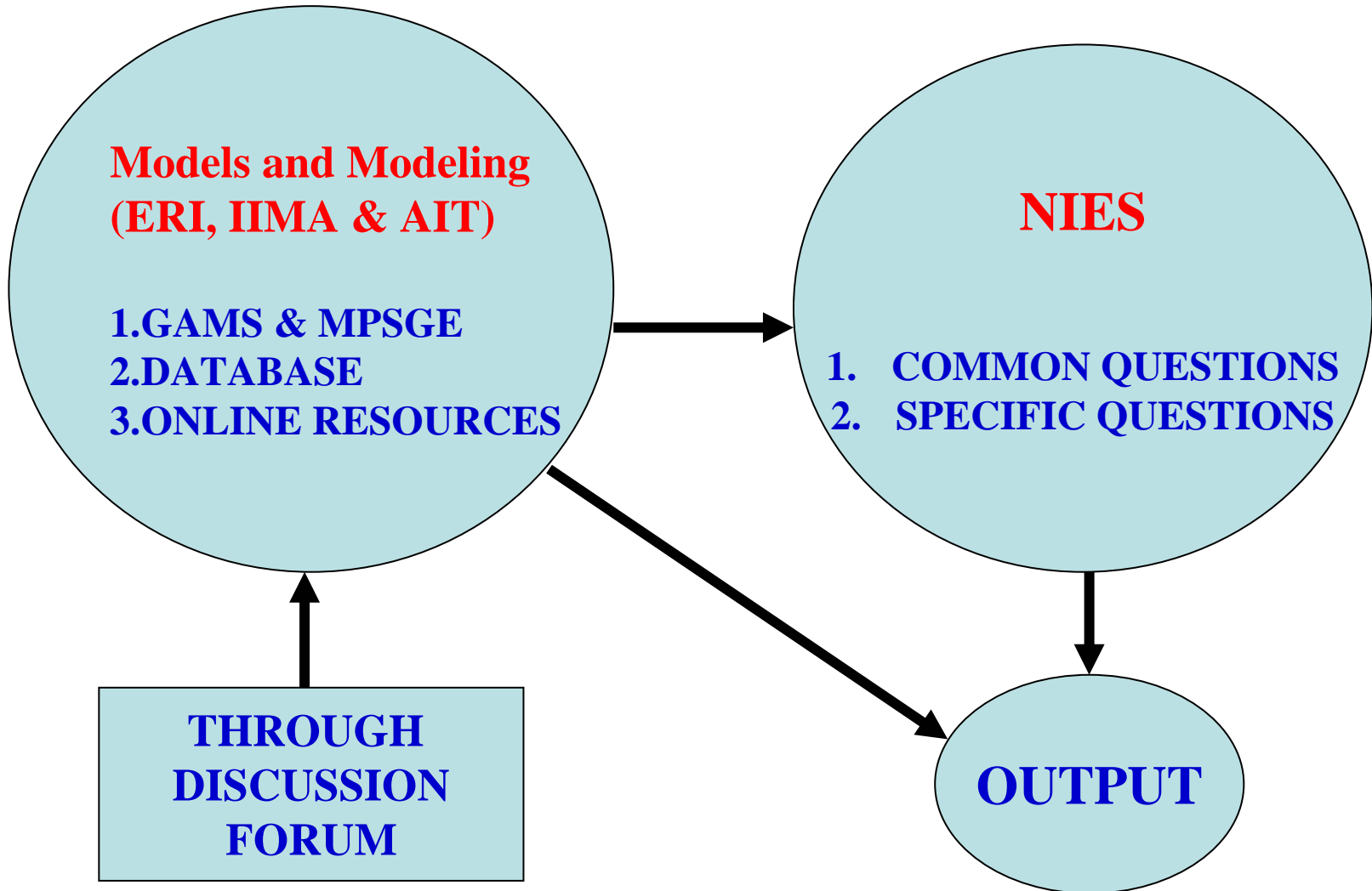
(1) DATABASE

- Linking SAM to U and V matrix and FCF
- Common classification of sectors/commodities
- Specific environmental data
- Production function (CD, Leontief and CES)

(2) ADDITIONAL CONSIDERATION

- Linkage/interface among AIM/* (model families)
- Country to Regional to Global
- Local/Regional Pollutants SO₂ and NO_x
- Waste, Water, Health and Forest

LEARNING FORWARD



AIM/CGE **Proposed Thai Policy Analysis**

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Proposed Thai Policy Analysis

(1) Energy consumption reduction

- Rebound effect - Energy Conservation Promotion Act, AD. 1992
- Through Energy Efficiency Improvement
- Through innovative technologies (SDB)

(2) Disaggregate the Electricity sector into **7 sub-sectors** particularly for energy related environmental issues



Proposed Thai Policy Analysis

(3) RPS (Renewable Portfolio Standard)

- Increase the share of biomass power plant to 5% by 2011 (Thai Policy)

(4) Natural gas import and infrastructure

(5) Energy security (ODR = 12.4% in 2003)

(6) Local pollutants (PM10, SO₂ etc)

(7) CDM (about 5 projects proposed)



Thanks you