

# Assessing Macro-economic and sector-wide impacts – Perspective of Thailand



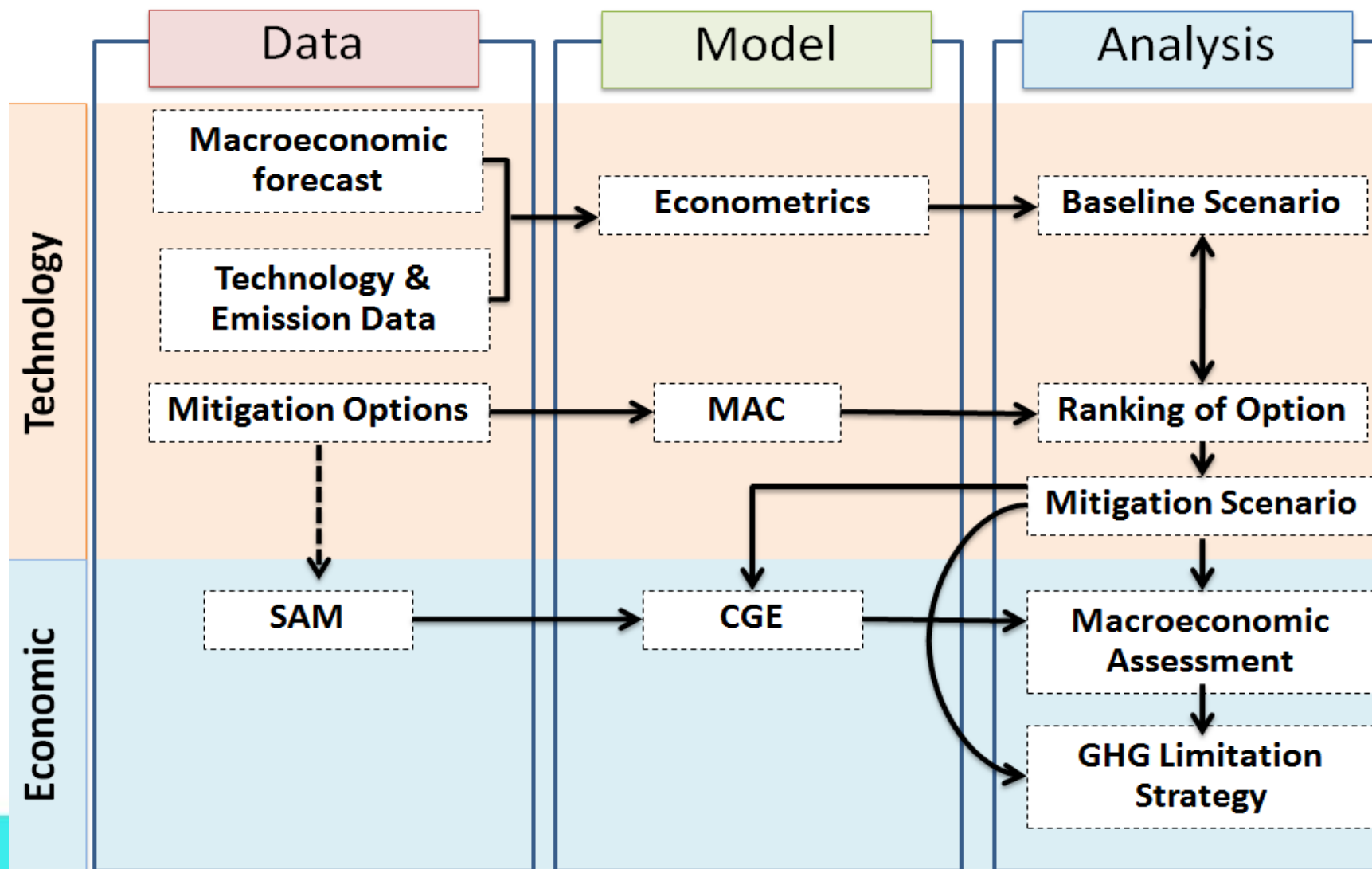
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Thailand Greenhouse Gas Management Organization (Public Organization)



# Framework



# Economics Part

## Technology Part

LEAP model structure

Scenario & mitigation options

Forecasted GHGs Emissions

Potential GHGs emissions & mitigation target

## Economics Part

**Thailand-SAM Design & Development**

- Production sectors classification

**CGE Functional Forms**

- Production, consumption & trade behaviors

**GAMS Coding & Model calibration**

**Simulations**

- Reference & scenarios run

**Analyses of macroeconomics impacts**

*Sources of data*  
IO tables, NI accounts, tax data, income &, expenditure &, household socio-economic & labor force surveys, balance of trade & payments

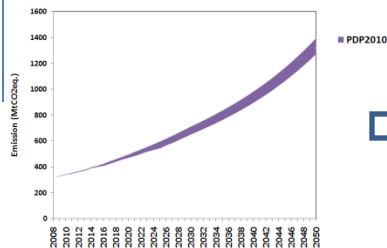
**Parameters Estimation**  
(econometric analyses & literature survey)



# Aggregate SAM

	Activity	Commodity	Labor	Capital	Land	Natural resources		Tax		Saving - Investment	Stock changes		Rest of World
Activity													
Commodity													
How many activities and commodities are needed to analyze the impacts?													
Labor													
Capital													
Land													
Natural resources													
Tax													
Saving - Investment													
Stock changes													
Rest of World													

Contribution of Emission Reduction of PDP Scenario 2009-2050



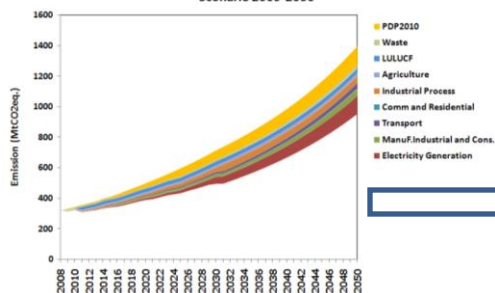
	Activity	Commodity	Labor	Capital	Land	Natural resources	Tax	Saving - Investment	Stock changes	Rest of World
Activity										
Commodity										
Labor										
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Land										
Natural resources										
Tax										
Saving - Investment										
Stock changes										
Rest of World										

SAM

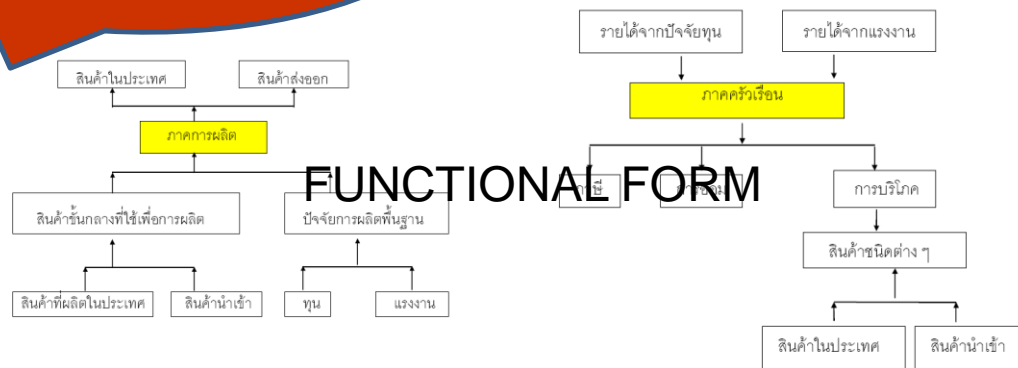


Developing nested structure for different sectors

Contribution of Emission Reduction of BAU,PDP and Climate Plan Scenario 2009-2050



Scenario 2



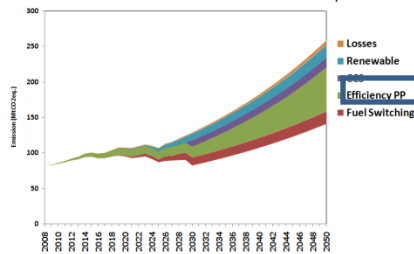
Production

Demand



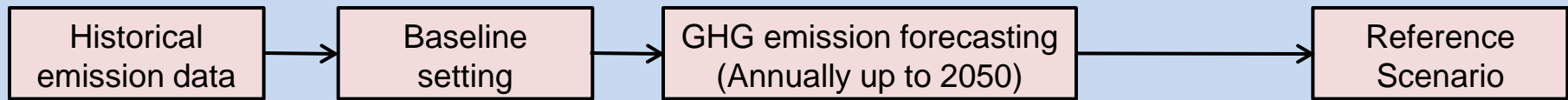
OUTPUT/OUTCOME

Contribution of Emission Reduction :Power Generation option

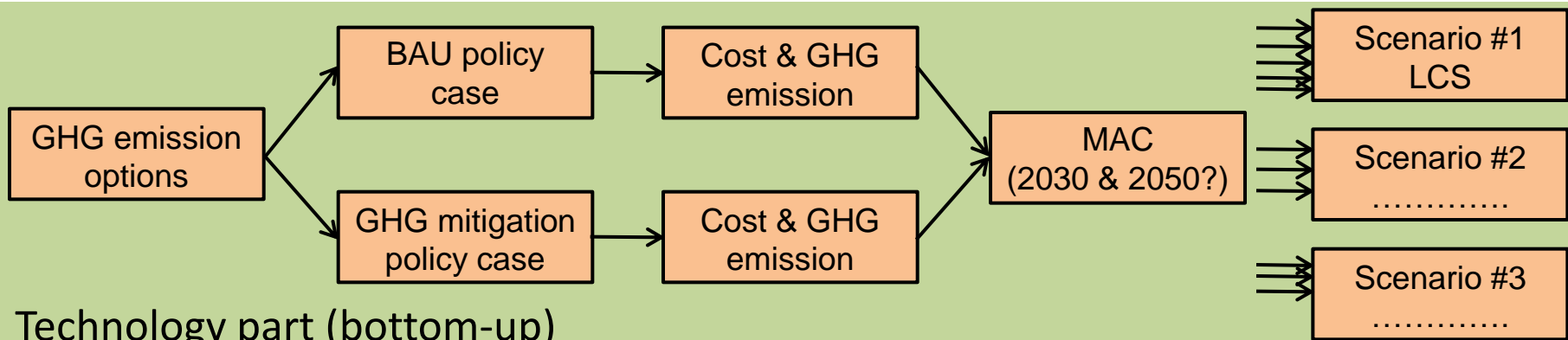


Scenario 3

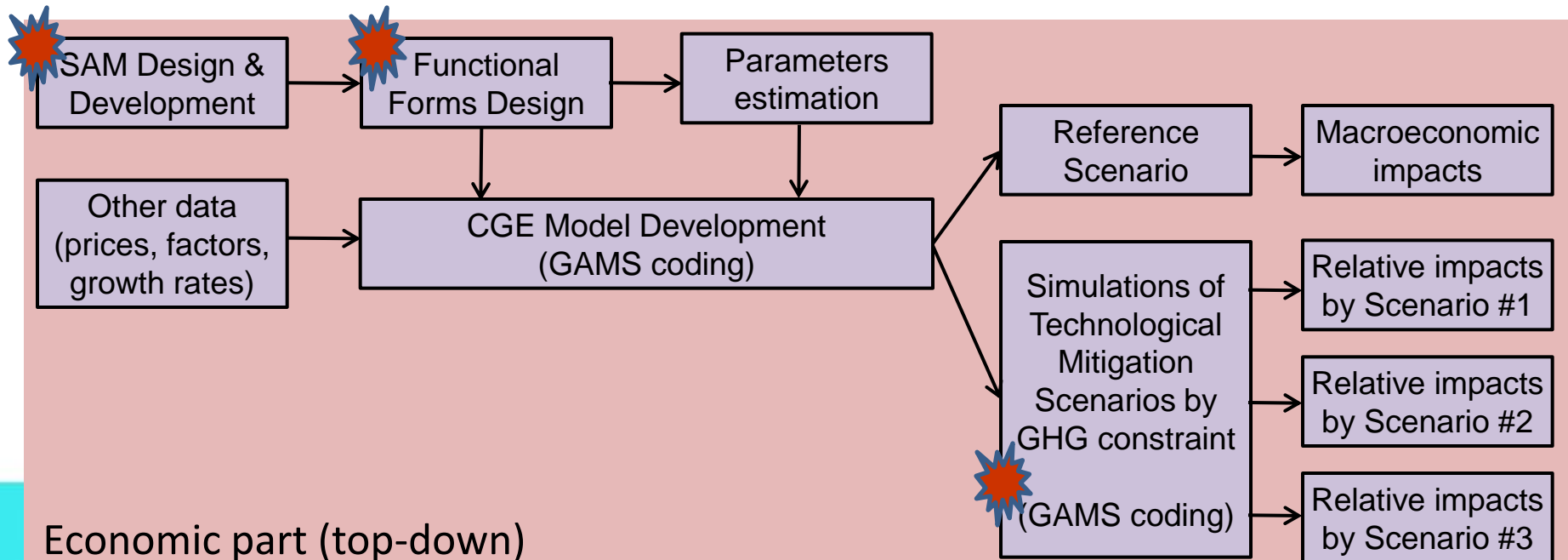




## GHG emission baseline (top-down)



## Technology part (bottom-up)



## Economic part (top-down)



Thank you for your kind attention

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