

Session 9

Application of Material Stock and Flow Model_demand/Country to Japan

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<Progress in 2013>

- Develop material account matrix for Input-Output Module

Material account matrix has 3 parallel tables with a different unit; monetary term, physical term, specific term for goods. Both flow and stock accounts are described in one table. Material account matrix is estimated in the periods of 1971-2005 for 35 regions in the world by using various statistics. This dataset is used for developing Input-Output Module which describes a material flow under a framework of the input-output table.

- Develop Material Stock and Flow Model(MSFM)_demand/country

Material Stock and Flow Model(MSFM)_demand/country was separated from MSFM_demand/global to analyze country by country. To make possible to introduce more various countermeasures, the formulation was modified, especially in the service demand part. And the model was modified as an user friendly tool; the input data was controlled by Excel file, and so on. User can easily change values of many coefficients and variables in the future and analyze material demand and stocks under scenarios.

I will show what analyses could be possible by using MSFM_demand/country, by the results of application to Japan.

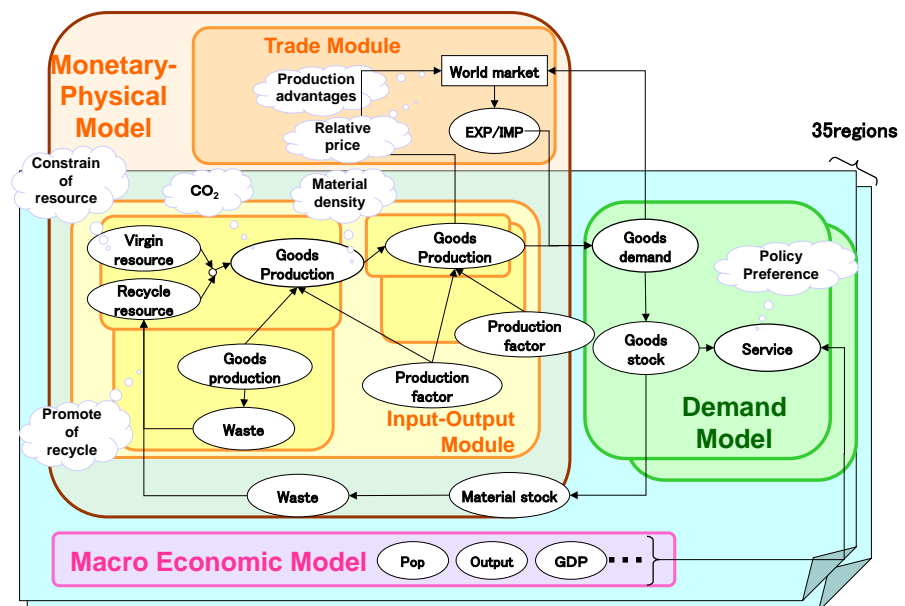


Fig. Structure of Material Stock and Flow Model