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CLIMATE PLANNING

Climate Compatible Development Tools: A guide for national planning

MARKAL/TIMES

Software-based computer tool for scenario analysis to assess impacts of energy and mitigation policies

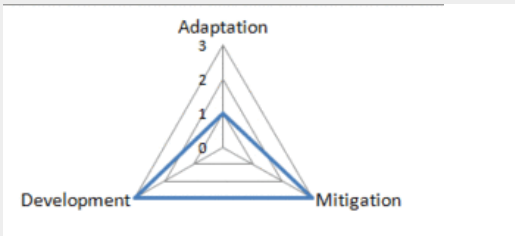
POLICY STAGES: 3. Identification of options, 4. Policy selection, 5. Implementation of policies, 6. Evaluation of policies

MARKAL and TIMES generate technical-economic models of global, regional, national and local energy systems. TIMES is the recent evolution of MARKAL. Users define the Reference Energy System, from primary energy resources to demand for energy services. TIMES models represent the partial equilibrium evolution of the system over a user defined time horizon, with variable time intervals. Based upon the characterisation of hundreds of energy technologies and demand devices, MARKAL and TIMES models calculate the optimal mix of technologies and commodities. These models enable you to evaluate energy plans, environmental policies, climate mitigation scenarios and new technologies in trade-off modes. Scenario dependent energy balances and inventories of GHG emissions can be projected. Several variants are available, including stochastic for calculating hedging strategies, general equilibrium versions, lumpy investments, energy security risk. Global TIMES models, such as the TIMES Integrated Assessment Model (TIAM), include a full representation of the climate equations and build scenario constraints to a predefined global atmosphere temperature increase.

GHG emissions and energy models

Computer-based models which calculate greenhouse gas emissions and energy supply and demand.

AREA OF FOCUS



Requirements

Training:

Optional, but recommended. 3-5 days training course
No costs

Costs:

Using the tool: Range between $0 and $9600 per added part. For the costs of specific categories, see: http://www.iea-etsap.org/web/TOOLS/ETSAP_SW_Guidelines.pdf

Time needed:

0-2 weeks if model already available, two or more months to build a model from scratch.

Accessing the tool

Availablility:

Online: *Online only*

Languages:

English

Contact:

GianCarlo Tosato, IEA-ETSAP Project head (+39 335 5377675) or George Giannakidis, IEA-ETSAP Operating Agent (ggian@cres.gr, +30 210 6603324)

+39 335 5377675

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support@etsap.org
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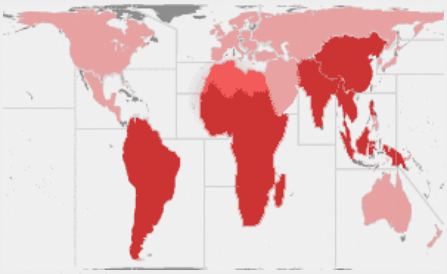

For global use

http://www.iea-etsap.org/

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