

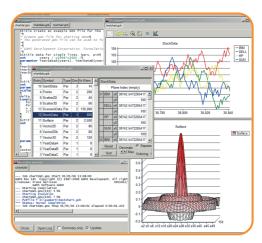
## **High-Level Modeling**

The General Algebraic Modeling System (GAMS) is a high-level modeling system for mathematical programming problems. GAMS is tailored for complex, large-scale modeling applications, and allows you to build large maintainable models that can be adapted quickly to new situations. Models are fully portable from one computer platform to another.

### Wide Range of Model Types

GAMS allows the formulation of models in **many different problem classes**, including

- Linear (LP) and Mixed Integer Linear (MIP)
- Quadratic Programming (QCP) and Mixed Integer QCP (MIQCP)
- Nonlinear (NLP) and Mixed Integer NLP (MINLP)
- Constrained Nonlinear Systems (CNS)
- Mixed Complementary (MCP)
- Programs with Equilibrium Constraints (MPEC)
- Conic Programming Problems
- Stochastic Linear Problems



GAMS Integrated Developer Environment for editing, debugging, solving models, and viewing data.

### **State-of-the-Art Solvers**

GAMS incorporates all major commercial and academic state-of-the-art solution technologies for a broad range of problem types, including global nonlinear optimization solvers.

### USA

# **GAMS Development Corporation**

1217 Potomac Street, NW Washington, DC 20007, USA

phone +1-202-342-0180 fax +1-202-342-0181 mail sales@gams.com web http://www.gams.com

#### Europe

### **GAMS Software GmbH**

Eupener Strasse 135-137 50933 Cologne, Germany

phone +49-221-949-9170 fax +49-221-949-9171 mail info@gams.de web http://www.gams.de

# **BALMOREL - A Model for Analyzing the Energy Sector in an International Perspective**



- A large partial equilibrium model
- Supports modeling and analysis of the energy sector with emphasis on the electricity, combined heat and power sectors
- Covers international and regional electricity trade with transmission constraints, costs and losses
- Handles policy measures like taxes, quotas, CO2 emission markets, targets for energy efficiency improvement and renewables.
- Applied in projects in Denmark, Norway, Estonia, Latvia, Lithuania, Poland, Germany, Austria, Ghana, Mauritius and Canada
- More information and the full model source is available at:

http://www.balmorel.com

Danish grid, recommended reinforcements