

META

Model for Electricity
Technology Assessment

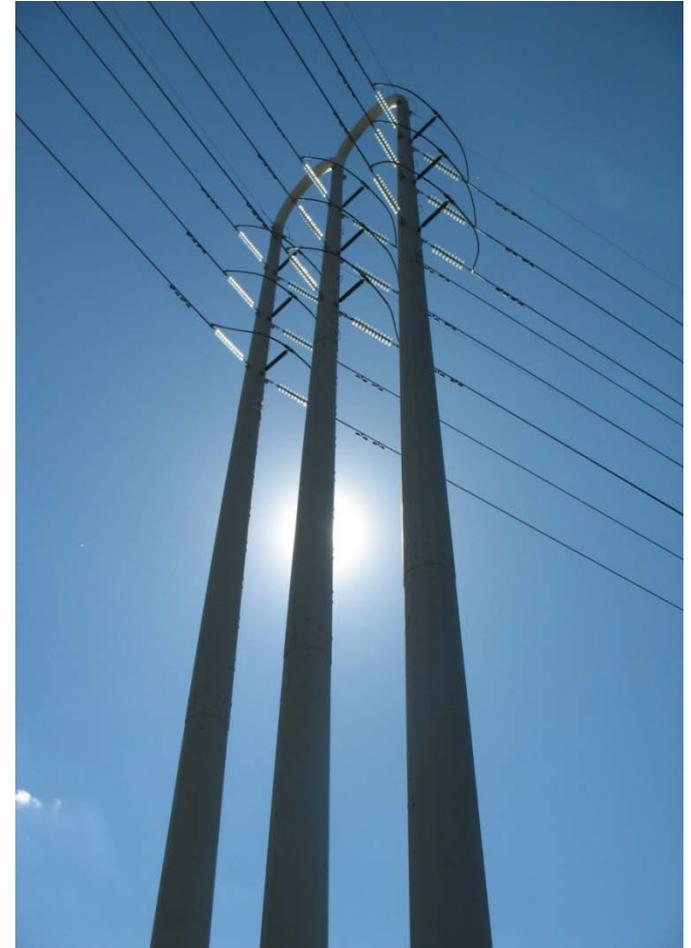
**A convenient way to assess electricity
supply technology options**



What is META?

MODEL FOR ELECTRICITY TECHNOLOGY ASSESSMENT; FORTHCOMING JUNE 2012

- Compares over 50 electricity generation technologies including renewables
- Assesses externalities, levelized, generation, and delivery costs of electricity from different options
- User-modifiable to suit local conditions
- Developed from United States, Romania and India case studies



Why META?

Strong demand from countries:

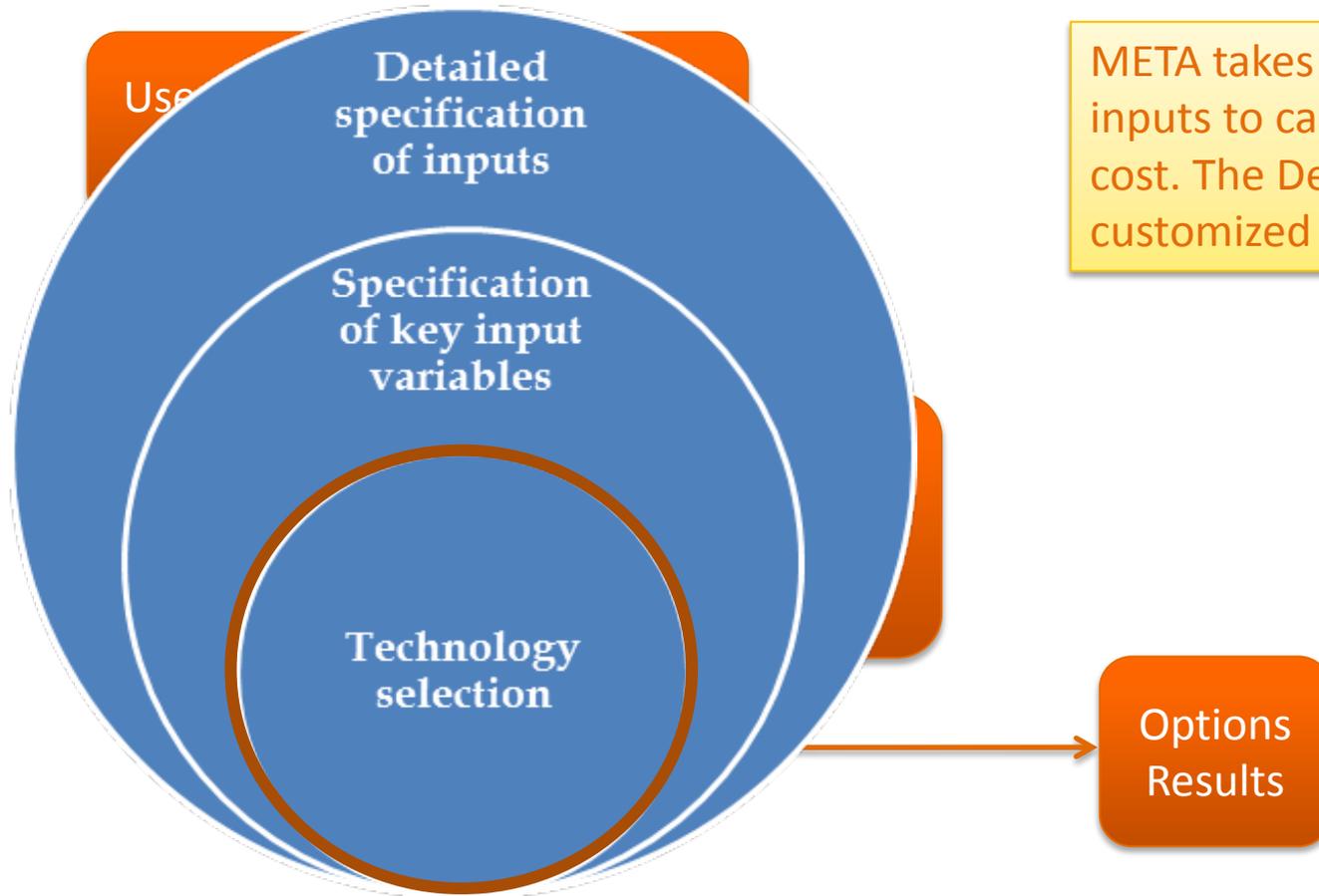
- To screen electricity supply options
- To assess electricity supply environmental externalities

Key advantages of META

- Focuses on particular projects, unlike other tools which look more at system-wide options for meeting a given level of demand
- Helps client countries evaluate various technology options at early stages of planning
- Factors in environmental externalities while calculating levelized costs



META | How it works



META takes user input and default inputs to calculate delivered energy cost. The Default Inputs can be customized for a specific country

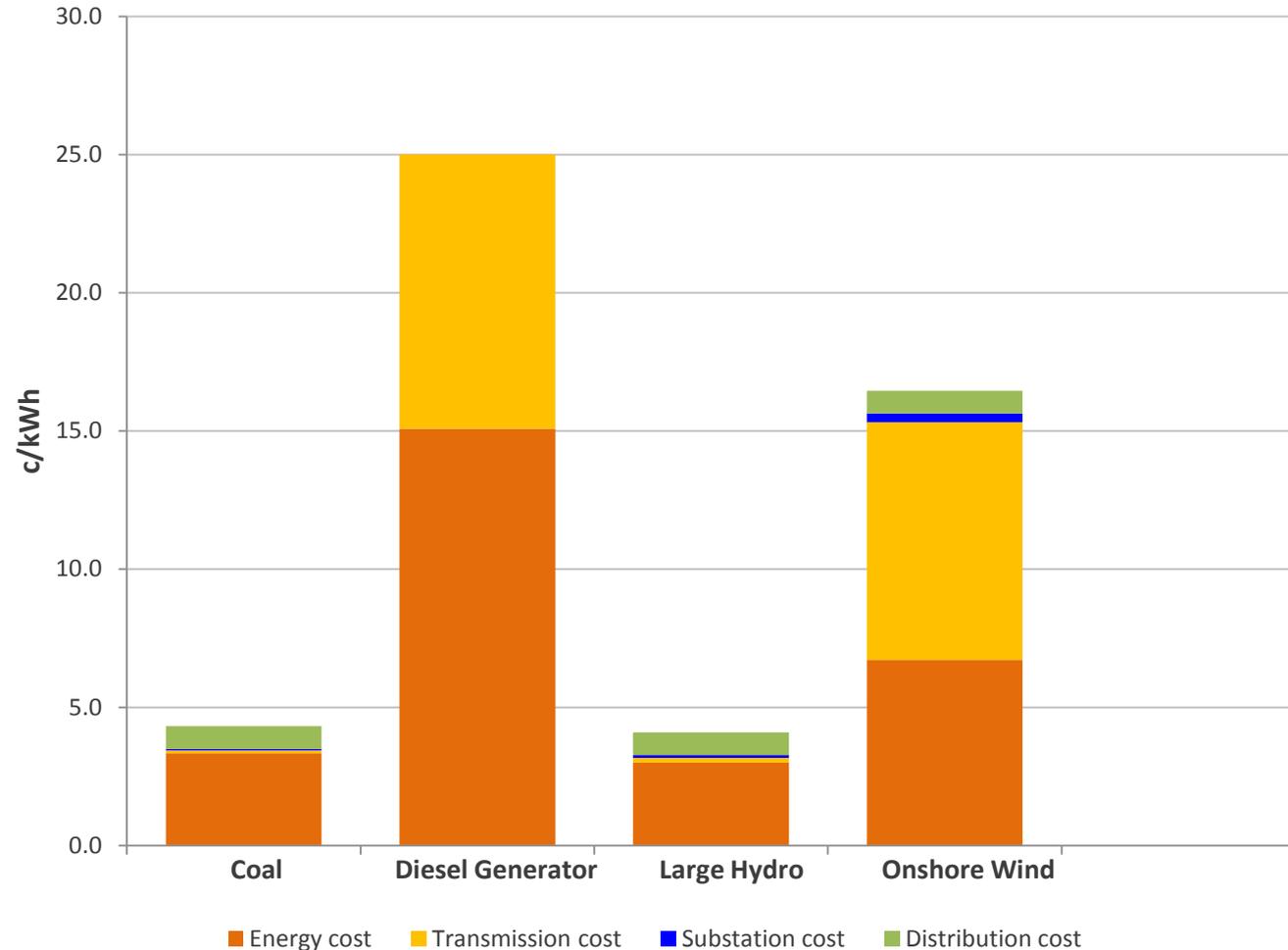
Different Levels of Use

Results | Delivered Energy Costs

META provides:

- Energy cost
- Transmission cost
- Substation cost
- Environment cost

Comparison of delivered energy costs



Using META



META is Customizable by Country

Default values are derived from the following countries:

- US - default values for developed countries
- Romania - default values for middle-income countries
- India - default values for developing countries

Default values can be changed easily to match local conditions: E.G.

- Unit capital and O&M cost
- Interest during construction
- Fuel heating value
- Emission factors
- Projected fuel prices
- Transmission losses
- Transmission peak load
- Distribution losses
- Operation and maintenance



TO GET MODEL or TRAINING | Contact:
Pedzi Makumbe: pmakumbe@worldbank.org
Sameer Shukla: Sshukla@worldbank.org

SUPPORT | User guides available in software & from ESMAP Staff

FOR ADDITIONAL SUPPORT, CONTACT:
PEDZI MAKUMBE, ENERGY SPECIALIST
202.473.9371

PMAKUMBE@WORLDBANK.ORG

Thank You.

The World Bank | 1818 H Street, NW | Washington DC, USA
www.esmap.com | esmap@worldbank.org

