Data Base Issues: Energy

Robert McDougall



History

- Release 4: energy production targets
- GTAP-E: usage targets
- Release 5:
 - feasibility checking
 - bug fixes
- Release 6:
 - new volume data back end
 - bug fixes

Volume Data

- Initial implementation: 1995
- **GTAP 5: update to 1997**
- GTAP 6: update to 2001

Price Data

- Initial implementation: 1995 or earlier
- GTAP 5: index-adjusted from original to 1997
- GTAP 6: index-adjusted from original to 2001

Index Adjustment

- Update to GTAP reference year using IEA energy price indices.
- Money price indices for four commodities:
 - oil products
 - electricity
 - natural gas
 - coal
- For crude oil, we have a real price index but we pretend it is a money price index.

Why?

- No single data source is very good: so multiple data sources:
 - across countries
 - across price concepts
- Back end code convoluted, closely tied to initial data collections.
- Since departure of original author (Gerard Malcolm), system is poorly understood.

To do

- Revise back end code to decouple from initial collections.
- Trim source data collection set?
- Update source data collections.
- Miscellaneous code cleanups.

Crude Oil Prices (USD/TOE)

new	GTAP 6	
165	174	usa
187	123	jpn
180	96	deu
210	108	aus

Usage by Refineries (USD B)

new	GTAP 6	
132.1	128.0	usa
34.8	33.9	jpn
18.1	17.2	deu
5.6	4.0	aus

Release Strategy

- Informational release to members?
- 6.x release to members?
- Public release?