IRES provides useful definitions of flows/products. But...

- How do these recommendations relate to MY country?
- How should I compile metadata, or handle confidentiality?
- What data sources can I use for renewables?
- Can I see some examples of other countries’ practices?
The need for a Compilers Manual

- During the preparation of IRES, the need for more explanation of practical energy statistics was recognised.
- A Compilers Manual should be a more hands-on, example-heavy document, to complement IRES.
- It is NOT a set of recommendations or “best” practices, but a set of voluntary guidance and examples for countries to use if they want to.
- Finalisation expected this year.
IRES is about definitions of flows/products: THEORETICAL

ESCM is about practical guidance and country examples: PRACTICAL
Some country practices already published (ESCM will have many more)

http://unstats.un.org/unsd/energy/template.htm
ESCM Chapters

- Introduction
- Legal Framework & Institutions
- Classifications
- Generic Statistical Business Process Model
- Data sources (surveys and administrative data sources, estimation, modelling)
- Energy balances
- Data quality and metadata
- Data dissemination
### Highlights: Balances Examples

Presentation of primary and secondary oil products in energy statistics versus energy balances

<table>
<thead>
<tr>
<th>Commodity Balance</th>
<th>Crude oil (kt)</th>
<th>Motor Gasoline (kt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>100</td>
<td>30</td>
</tr>
<tr>
<td>Import</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Export</td>
<td>10</td>
<td>24</td>
</tr>
<tr>
<td>Supply</td>
<td>90</td>
<td>6</td>
</tr>
<tr>
<td>Oil Refineries</td>
<td>88</td>
<td></td>
</tr>
<tr>
<td>Final Consumption</td>
<td>2</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Energy Balance</th>
<th>Crude oil (TJ)</th>
<th>Motor Gasoline (TJ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>4230</td>
<td></td>
</tr>
<tr>
<td>Import</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Export</td>
<td>423</td>
<td>1063</td>
</tr>
<tr>
<td>Supply</td>
<td>3807</td>
<td>-1063</td>
</tr>
<tr>
<td>Oil Refineries</td>
<td>-3722</td>
<td>1329</td>
</tr>
<tr>
<td>Final Consumption</td>
<td>85</td>
<td>266</td>
</tr>
</tbody>
</table>

Secondary production zero by definition

Motor gasoline in kt x 44.3 TJ/kt = Motor gasoline in TJ
Crude oil in kt x 42.3 TJ/kt = Crude oil in TJ
Country Example: Netherlands’ Use of Administrative Data

- Successfully matched >96% of electricity and gas consumers with an address taken from the business or client register
- Allowed government to target efficiency or education campaigns on the worst areas, or even specific buildings
Other Examples

Austria: Adding an energy module to Labor Force Survey increased the response rate and reduced costs

Bulgaria: NSO’s metadata policy

Norway: lessons from publishing preliminary monthly statistics and balances

UK: Energy Efficiency Data framework measures the result of energy efficiency policies

South Africa: experience with social media and dissemination in a developing country

Azerbaijan: producing full commodity balances for all products

FAO guidance on fuelwood surveys

Confidentiality practices for many countries

Legal frameworks for many countries

And many more!
Data Quality in Energy Statistics

- IRES and ESCM data quality is based on the National Quality Assurance Framework
- Developed by UNSD and has links to pre-existing quality frameworks of IMF, Latin America, Canada, UNECE
- All templates provide a structure that countries can use for their own quality assurance systems
NQAF Structure

- Why is quality management needed?
- Consider existing frameworks
- Quality assurance guidelines
- Quality assessment and reporting
- N.B. not a linear model, it can be adapted to country-specific needs
Other frameworks exist, e.g. Generic Statistical Business Process Model
Energy Data Quality in Practice

- Constructing national energy balances are one of the best data quality checks.
  - Transformation efficiency checks
  - Check overall energy use over time
  - Check trade data across countries (possibly)
  - Statistical differences can be identified and pursued
  - Efforts can be concentrated on key data points
Metadata for Energy Statistics

- ESCM gives a country practice (Indonesia) on their energy metadata structure, and many other examples relating to metadata
- Metadata allow meaningful assessments of how countries’ data follow international standards: they improve international comparability
Dissemination

- Keep to a dissemination schedule
- Respect confidentiality
- Have a transparent revision policy (example of USA natural gas revisions)
- Dissemination format is key: online computer-readable files? CDs? (South Africa example)
- Are we meeting user needs? Conduct a user survey (UK example)
Conclusion

• IRES provides energy statistics methodology and guidelines on improving data quality and disseminating the finished product
• Country-specific quality assessments and dissemination strategies are possible within the overall framework
• The ESCM shows how other countries do this

• We’re here to help: Energy_Stat@un.org