

Discussant notes from Session 11: Energy balances of Oslo Group 4

- Ilaria DiMatteo opened the session referring to the brief outline of Chapter 8: Energy balances
- Ilaria described the concept and format of the energy balance, noting the difference between commodity and energy balances and the “top-down” and “bottom approaches”
- Ilaria outlined the principles of energy balance compilation and the role of primary energy in energy balances.
- Karen Treanton followed with a presentation on the principles of energy balances
- Karen discussed why calculate energy balances and described the range of measurement units used.
- Karen advocated the use of Net Calorific Values, but a consensus of OG\$ was not reached as many countries use and are likely to retain gross calorific values
- Karen discussed the primary energy form (advocating “first energy form downstream for multiple energy uses are practical)
- The partial energy content and partial substitution methods were outlined, with partial energy content method preferred
- A very useful energy balance flowchart was presented, along with a range of presentational formats
- Three presentational issues were highlighted:
 - Treatment of international marine and aviation bunkers (this is a significant issue)
 - Treatment of transformation sector
 - Whether to transfer nuclear, hydro, wind and solar to the electricity column
- Wolfgang Bitterman completed the session presentations by reminding the meeting that energy balances depend on adequate resources and data sources, and the situation in individual countries will vary
- New surveys are expensive, and often innovative solutions need to be identified
- Walter concluded by noting the importance of documentation of unique solutions