Questions from participants

Question 1 (on water accounts). With regards the water PSUT, I need a clear explanation on how to treat leakages of water (returns to the environment). Are they products? Secondly, I would like to know how to treat supply of water utilities to themselves?

The leakages are shown as a supply by the water supply industry to the environment (groundwater). This amount is also shown as a use of a water product. This use is added to the other uses of water by the water supply industry (e.g. staff drinking water, toilets, and use of water in other process (e.g. cleaning).

Question 2. For the difference between the air emission accounts and statistics: why one distinguishes between “national territory” and “rest of the world” (territory criterion) and another use “residents” and “non-residents” (i.e. residence criterion)? In other words, what are the advantages of using “territory criterion” vis-a-vis the “residence criterion” in the case of discussing the issue of emission? Why cannot harmonize the two (i.e. statistics and accounts) and use the same criterion?

It is highly unlikely that emissions statistics using the territory based principle will be harmonized with the emission accounts. Greenhouse gas emissions statistics are standardized via the UNFCCC processes and unlikely to change to the residence principle. Greenhouse gas emission accounts which use the residence principle in line with the SNA and are standardized via the UN Statistical Commission are equally unlikely to change to the territory principle.

There are advantages to each approach. In practical terms, the territory concept is easier to apply and hence data collection may be simpler. In terms of estimating environmental impact of greenhouse house gas emissions it makes little difference. In terms of assessing the economic impact of policies and activities designed to reduce greenhouse gas emissions it is better to use the residence principle as it aligns with the tools national accounting (e.g. equilibrium modelling).

Question 3. Is the ratio of the flow of greenhouse gas (e.g.: compared with the value added of) from each industry (i.e. the “coefficients”) supposed to be fixed or various between countries? If not fixed, can you please give an example on how to collect the data?

The coefficients will vary between countries, depending on the production processes. Guidance on data collection can be found on the UNFCCC website. E.g. Approaches to data collection: http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/1_Volume1/V1_2_Ch2_DataCollection.pdf
Question 4 (on energy accounts). Can biomass, co-generation (CHP) be classified as timber from natural resources.

This would depend on the source of the biomass. If the timber is from a Primary forest, then it would be a natural resource input. If the timber was from a Plantation forest then it would not (plantations are within the economy). We will cover more on this in Session 7 on Timber accounts.

Question 5. Agriculture emits a CO2 equivalence of 13. How did you break it down? Into 10, 2 and 1?

In the example greenhouse gas emission account shown on slide 19 of the presentation, 10 CO2 equivalents came from carbon dioxide (CO2), 2 CO2 equivalents from methane (CH4) and 1 CO2 equivalents from nitrous oxide (N20).

Question 6. Can you explain more on the uses of emissions accounts in Modelling and Policy using some examples?

Three examples are linked in the presentation (South Africa, Sweden and New Zealand). We will be looking more at this in the later sessions on applications of the accounts (Sessions 9 and 10).

Question 7. What is the relationship between CO2 emission and GVA (Gross Value Added)

The link is variable. If you are generating electricity from coal, then the ratio of CO2 emission to GVA will be very high. If you are generating electricity from renewable sources (e.g. hydro, solar, wind) then the ratio will be low. In general if fossil fuels are used in the production process of industries (e.g. transport, electricity) then CO2 emissions per GVA will be higher than in the industries which do not use fossils fuels (e.g. finance, education, health).

Question 8. Is this formulation correct? Emission Account is equal to Emission statistics plus net emission from the rest of the world.

Yes. The adjustments that need to be done to align emission statistics to emissions accounts include: reallocating emission of international transport (air, land and water); international fishing vessels; and use by tourists (foreign tourists within national boards and national citizens in other countries).

Question 9. How do you treat emission from the environment like a volcano, do you just ignore them?

In the emission accounts they are not recorded as this is flow within the environment. However, the flow would be recorded in the Carbon Asset Accounts.
Question 10. Where there are no legal requirements in place yet to report carbon emissions, what are potentially the most reliable sources of data.

This will vary country to country. A good starting point will be energy statistics and in particular the use of fossil fuels.

Question 11. I don't think that in Africa greenhouse agriculture is available. But where is the data on greenhouse gas emission in agriculture come from. Calculated based on coefficients? Do the chemical formula or the coefficients vary from country to country? Who is responsible to provide the survey for the coefficients?

There is information available from the IPCC on the calculation of greenhouse gas emissions from agriculture. For example, see 2006 IPCC Guidelines for National Greenhouse Gas Inventories Volume 4 Agricultural, Forestry and Other Land use. http://www.ipcc-nggip.iges.or.jp/public/2006gl/vol4.html

Question 12. How do emission calculations affect the issues of sustainable GDP?

What is sustainable is a key question but sustainability is not defined by accounts. The limits – environmental, economic and social – need to be defined by the relevant experts. While the accounts do not define sustainability they can show which industries are producing the most income and employment with the least impact on the environment (including greenhouse gas emissions).