10th conference - Integrated Assessment Modelling Consortium

The conferences focused mainly on SR 1.5 C. This includes the climate policies; the analysis of climate changes, impacts and adaptations; the transformation pathways (either national or regional); the role of non CO2 emissions; the review of the methodologies and an approach to the sustainable development analysis.

There is currently a temptation to consider only the scenarios where energy consumption is reduced and where so called renewables are producing most of the energy requirement by 2050 or 2100. There is also a consideration made on the carbon capture at levels 1000 times larger than the current technology values.

Our findings are 1/ The energy consumption may actually increase to up to threefold what it currently is – mainly in the form of electricity; 2/ The renewable may not be raised so far as they induce a comprehensive grid with gas/coal power plants. Alternatives include nuclear power for which the reserves of depleted uranium allow fast breeder to produce most of the energy requirements for up to 1000 years or more; 3/ The combination of renewables and nuclear allows avoiding most of the burden linked to carbon capture.

I believe that the mainstream scenarios are slightly biased, which is rather common when the same attendance is building the models. There are ways to correct this bias by re-opening considerations on the population evolution as well as on the energy demand and response from the various stakeholders. This should occur soon as current publications already change their "decreasing" focus to a more dynamic one. Modelling should always include "best" scenarios as "not as good" ones and should not frame the analysis. I think that the next models will take care of this and should be followed with great care, particularly when generated for decision makers.

The conference was excellent. I could meet several key persons including some from the IPCC itself and the exchanges were of very high level and relevance.

A particular attention must be given to the future evolution of the global IAMC conclusion. The slight bias which has been observed, particularly on the second day, needs to be addressed in order to avoid the possibility of ignoring unwished developments. We simply cannot fail on the climate issues by looking through a too small angle lens.

"Nuclear energy and Bio Energy Carbon Capture and Storage, keys for obtaining 1.5 °C mean surface temperature limit poster" from GISOC/SLC was presented. GISOC is an international collaboration to enhance our capabilities to limit the climate excursion. It provides input for IPCC and the climate community at large. <u>http://gisoc.srweb.biz/gisoc/gisoc.html</u>