This series of assessments uses scenarios developed by the Intergovernmental Panel on Climate Change (IPCC) to characterise a range of different global development pathways. These have come to be called the SRES scenarios, after the IPCC’s Special Report on Emissions Scenarios (IPCC, 2000). Although primarily developed to ascertain how different development pathways would affect emissions and climate change, probably more important an outcome from the SRES (at least for impact and adaptation assessment) has been the insight into the differing levels of vulnerability and resilience to climate change implied by different levels of future population and income. What emerges from the papers in this issue is that these differences, flowing from different pathways of development, are frequently more important than climate change itself in influencing the scale and distribution of global and regional impacts.

This is the first global assessment of impacts under SRES scenarios, but many regional impact assessments are now underway, and will be published within the next 2 years. They will form a valuable background for the Fourth Assessment Report of the IPCC, due to be completed in 2007. The population and income data used in many of these assessments may be found on the IPCCs Data Distribution Centre (DDC) and a linked site at the Center for International Earth Science Information Network. Established in 1998, the DDC contains and makes available up-to-date quality-controlled climate change and socio-economic data for climate impact assessment (see: http://ipcc-ddc.cru.uea.ac.uk; and http://sres.ciesin.columbia.edu/tgcia/hm.html). Both the DDC and the study published in this journal issue have been supported by the UK’s Department for the Environment, Food and Rural Affairs (DEFRA).

Prior to the publication of the SRES report, most impact studies assumed ‘Business-as-Usual’ or IS92a or 1% forcing scenarios. These studies broadly characterised the IPCC Third Assessment. Global impact assessments based on 1 per cent forcing using broadly the same impacts models as in this issue were published in 1999 (Parry and Livermore, 1999). And comparable work using stabilisation scenarios can be found in Arnell et al. (2001).

References

