Response to queries received related to CCRP Projects Call May 2008

Project area 1.3 Integrated Assessment and Modelling

Is the data available? What kinds of data are there? Should we collect the data by ourselves?

- Proposal under Theme 1.3 "Integrated Assessment and Modelling" should take due regard to the data resources stored and disseminated via the SAFER data management system.

- EPA research funding policy ensures that all data collected within an EPA funded projects are submitted to the SAFER system in a timely fashion, usually during the project itself, or upon project completion.

- Researchers supply both data and detailed metadata and ancillary documentation, as required.

- Researchers can choose to restrict access to data for a specific period, usually 12 months after project completion. Thereafter, it is policy to allow open access to data for research purposes.

- Researchers are also free to upload other data to the SAFER system provided this is not in contravention of copyright or other data protection legislation.

- The metadata of existing data sets stored on the SAFER system can be queried at the following location http://erc.epa.ie/safer

Project area 3.1 Energy Modelling

1. The tender calls for projections and mechanisms to make the model capacity available to other bodies. How long do you wish the model capability to be available for and to what extent?

- The model being developed should be designed so that the EPA can continue to use the modelling framework into the future. Suitable training could be provided to the EPA to allow us to run the model independently. Some thought should be given to the on-going maintenance and update of the model.

2. To what extent is the EPA/funding group looking to develop a model framework 'from scratch' or are they looking to start from an established framework?

3. Apart from the modelling capability, what other functionality are the EPA/funding group seeking? For example, do they want to be able to update the model with latest data, extend the sectoral disaggregation and/or update the model 'code', without having to call in additional help?

- **2 & 3.** We are looking for a flexible model that draws on work already underway (in terms of economic and energy forecasting) but that will allow us to design and construct scenarios and assess policy options independently. National energy forecasts, which currently provide the basis for national emissions projections, are produced on an annual basis for SEI by ESRI. See "Energy in Ireland 1990-2006. Sustainable Energy Ireland. (2007)" for more details. In addition, a project has also recently started to develop more 'bottom-up modelling' involving the MEDEE/MEDPRO model which will complement the ESRI's 'top-down' approach. We are looking for a model that will draw on the work already underway - rather than duplicate it - but that essentially brings the various elements together, in as far as is possible, in one model to provide dedicated energy forecasts to underpin emissions projections.

4. To what extent do they want the model to accept exogenous assumptions on economic variables as Total and sectoral GVA etc - or do they want these variables as be endogenously estimated by the model?

- The feeling is that economic varibales such as Total and sectoral GVA could be entered as exogenous assumptions rather than the model estimating variables. Economic forecasting is already carried out by the ESRI so there would be little need for this model to replicate their work.

5. To what extent do they want the model to estimate the impact of policy effectiveness or do they want these to be entered as exogenous assumptions. For example the model could contain estimates of the elasticities of demand wrt price which it could use to estimate the impact of a fuel/energy/carbon price.

6. If they want the model to be able to model the impact of policies, which policies do they wish the model to handle (from the EC, as well as national initiatives)?

- **5 & 6.** The ability to model policy effectiveness would be a key requirement of the model. The question mentioned looking at the elasticities of demand wrt to price as a means of looking at the impact of fuel/energy/carbon price. Other policy options that the model will need to be able to estimate are the impact of building regulations, VRT/motor tax rebalancing, technology improvements in vehicles, for example, impact of renewables penetration.