

# 1 INTRODUCTION

Over the last 10-15 years, increasing concern over the problem of global warming and climate change raised it to such a major political issue that world governments established the international "Framework Convention on Climate Change". This Convention seeks to limit the impact of global warming by returning carbon dioxide emissions to 1990 levels, and the International Negotiating Committee is now determining how it should be implemented.

The International Panel on Climate Change (IPCC) played a leading role in the initiation of this movement, and is now continuing its work to clarify the scientific basis for arguments that the earth's climate is changing due to the release of greenhouse gases, such as carbon dioxide (CO<sub>2</sub>), from human economic activities.

Since research began on this issue, more than 50 global CO<sub>2</sub> emission scenarios have been published. However as yet, neither they, nor the models and basic assumptions upon which they were based, have been reviewed systematically.

The IPCC's Working Group III Report Writing Team 10 (Emission Scenarios) is currently reviewing recent major Greenhouse Gas (GHG) emission scenarios and assessing all the relevant research outcomes with the objective of making recommendations for the development of consistent scenarios.

This survey was conducted to provide a database of some of the latest information on the models used to prepare baseline scenarios of future CO<sub>2</sub> emissions, that could be used to assist the assessment and formulation of these recommendations.

Baseline emission scenarios do not include any policies aimed specifically at stabilizing global CO<sub>2</sub> emissions, and so can be described generally as "Business as Usual" scenarios. They are extremely important for policy development, as they provide an indication of the potential dimensions of the global warming problem given that no preventive or remedial action is taken, and can be used as references against which to assess the implications of different policies.

This survey focuses on previously prepared baseline scenarios, so it is not intended to include comments about the adequacy of policies aimed at tackling the climate change problem.