Foreword

Effective policy requires sound data and a careful interpretation of that data. This book provides an example of research that achieves both these objectives. It reports on work that has estimated both the external (environmental) and the direct costs of electricity generation and that has used these estimates to evaluate policy options for the internalization of the external costs. It also provides some projections of what future power generation systems would look like if they did indeed internalize the environmental costs. The very detailed assessment of different technologies and their respective costs will provide a useful basis for researchers working on the design of power systems from a social perspective.

The study the results of which are presented in this book was carried out under an EC grant and has the acronym CASES. It was coordinated by FEEM from Italy under the direction of Professor Markandya and involved 30 partners from 13 EU member states as well as Switzerland and Norway, and Brazil, China, India and Turkey. The centres involved in the project included some of the leading research institutions in this area across the world.

The contribution of the non-EU countries is particularly useful, as it shows their concern with the design of good policy in power generation, as well as the gaps that have to be filled in terms of data for the external costs to be validated as fully as they have been for most of the EU countries.

Of course there are gaps and the picture is not static. In particular, the estimates of the costs associated with climate change through emissions of greenhouse gases have large uncertainties and are bound to be revised in the years to come. Nevertheless, this book does give a state of the art, based on the best studies that are available, and is at pains to point out the uncertainties that exist in these studies. The editors and the chapter authors have done a service to the research community, which I am sure will be of value for some time to come.

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