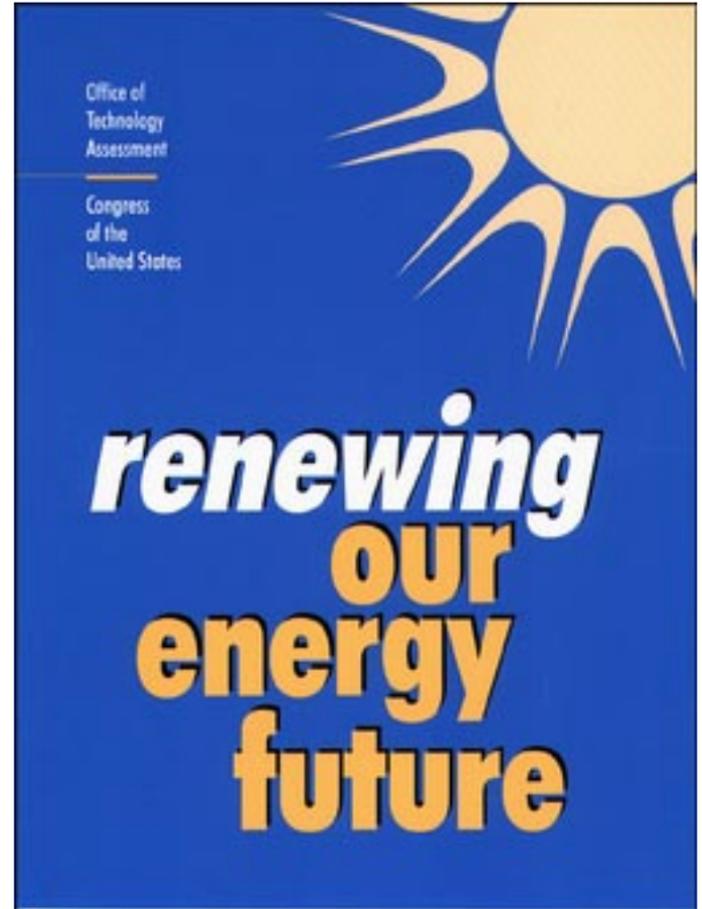


Renewing Our Energy Future

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Foreword

Various forms of renewable energy could become important contributors to the U.S. energy system early in the next century. If that happens, the United States will enjoy major economic, environmental, and national security benefits. However, expediting progress will require expanding research, development, and commercialization programs. If budget constraints mandate cuts in programs for renewable energy, some progress can still be made if efforts are focused on the most productive areas.

This study evaluates the potential for cost-effective renewable energy in the coming decades and the actions that have to be taken to achieve the potential. Some applications, especially wind and bioenergy, are already competitive with conventional technologies. Others, such as photovoltaics, have great promise, but will require significant research and development to achieve cost-competitiveness. Implementing renewable energy will also require attention to a variety of factors that inhibit potential users.

This study was requested by the House Committee on Science and its Subcommittee on Energy and Environment; Senator Charles E. Grassley; two Subcommittees of the House Committee on Agriculture—Department Operations, Nutrition and Foreign Agriculture and Resource Conservation, Research and Forestry; and the House Subcommittee on Energy and Environment of the Committee on Appropriations.

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Note: OTA appreciates and is grateful for the valuable assistance and thoughtful critiques provided by the advisory panel members. The panel does not, however, necessarily approve, disapprove, or endorse this report. OTA assumes full responsibility for the report and the accuracy of its contents.

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