

**INTERNATIONAL ENERGY AGENCY
Programme of Research and Development
on Wind Energy Conversion Systems
(IEA R&D WECS)**

ANNUAL REPORT 1985

A report by the IEA R&D WECS Executive Committee

January 1986

INTERNATIONAL ENERGY AGENCY

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FOREWORD

This is the eighth Annual Report of the IEA Programme for Research and Development on Wind Energy Conversion Systems (IEA R&D WECS) reviewing the progress during 1985. It is submitted to the IEA in accordance with the recommendations of the IEA Committee on Research and Development. The report is edited by the Secretary of the Executive Committee with contributions from the Operating Agents.

B Maribo Pedersen
Chairman of the
Executive Committee

B Pershagen
Secretary of the
Executive Committee

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EXECUTIVE SUMMARY

The IEA Programme for Research and Development on Wind Energy Conversion Systems (IEA R&D WECS) started in 1977. Thirteen parties from twelve countries (Austria, Canada, Denmark, Germany, Ireland, Japan, the Netherlands, New Zealand, Norway, Sweden, United Kingdom and United States) are participating.

During 1985 Spain and Switzerland have declared their intention of signing the Implementing Agreement. Interest of joining the Programme has been expressed from Belgium and Italy. Observers from these countries as well as from the Commission of European Communities participated as observers in IEA R&D WECS Executive Committee meetings. Formal notice of withdrawal was given from the Canadian and one of the UK Contracting Parties.

The IEA R&D WECS programme comprises nine Tasks, six of which have been completed. Current Tasks include Task VII Study of Offshore Wind Energy Conversion Systems, Task VIII Study of Decentralized Applications for the Use of Wind Energy, and Task IX Intensified Study of Wake Effects behind Single Turbines and in Wind Turbine Parks. All current projects are task-sharing, i.e. the participating parties are committed to in-kind contributions to an agreed programme co-ordinated by an Operating Agent. The Central Electricity Generating Board (UK) is acting as Operating Agent for Task VII and Task IX, and the UK National Engineering Laboratory for Task VIII.