



Energy R&D Programme
of the
Commission of the European Communities

Energy Conservation in Industry — Applications and Techniques

*Proceedings of the Contractors' Meetings held in Brussels on
10 May, 17 June, 1, 7 and 22 October 1982*

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Edited by

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*Directorate-General for Science, Research and Development,
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Energy Conservation in Industry – Applications and Techniques

P R E F A C E

The main objectives of the Community's Energy policy consist of securing a sufficient energy supply for the present and future demand of its Member States and in reducing the Community's dependence on imported energy through the more rational use of energy and a broader diversification of supply. This requires a full set of common efforts at all levels, including energy research and development.

In the framework of its strategy for scientific and technological research the Commission of the European Communities has launched several R+D programmes in the field of energy. These programmes are implemented either directly in its Joint Research Centre or by concluding contracts with research institutions in the EC Member countries.

One of the most important short and medium term objectives of the present four-year Energy R+D Programme (1979 - 1983) approved by the Council of Ministers on 13.IX.1979 aims at fostering energy conservation technologies in the three main energy consuming sectors : domestic, industry and transport.

In the European Community more than 35 % of the energy is consumed in Industry. About 23 % of the imported oil is used in this sector. Two thirds of this energy are used for heating purposes. Consequently, there is a high potential for residuary heat recovery.

In order to enhance rational use of energy and energy conservation in the Member States of the European Community, it is necessary, among other things, to promote the development of applications and techniques in industry, in particular as regards energy intensive branches.

The Commission has therefore concluded with industries, public organisations and universities of the EC Member States a number of R+D contracts dealing with the application of energy saving techniques in industry. The progress of work achieved in these contracts was reported in contractors meetings, which took place respectively on 10 May, 17 June, 1, 7 and 22 October 1982 in Brussels.

The papers presented at these meetings and the conclusion of the discussions are collected in the present book, which is intended to inform the Member States, research bodies and other interested parties about existing R + D work in this area.

I should like to address my sincere thanks to all the authors of papers and speakers of these meetings. I should also thank the chairmen of these meetings, Dr. J. CARRASSE, Dr. G. LIMIDO, Mr. J.A. KNOBBOUT and Mr. D.A. REAY, who animated the discussion with comments and questions. Last but not least, I extend my thanks to the editors of the proceedings, who summarized the content of the meetings and the discussions.

May I express the hope that the work reported will contribute to rapid progress in the development and practical application of energy saving techniques in industry, thereby contributing to rational use of energy throughout the European Community.

Dr. A. STRUB
Director
Head of the Energy R + D Programme

ATTENDANCE LIST

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M. MICHEL	R.N.U. RENAULT
E. FELDER	ARMINES
J.M. SCHISSLER	INSTITUT NATIONAL POLY- TECHNIQUE DE LORRAINE
C. BAK	CENTRE DE RECHERCHES PONT A MOUSSON
T.J. DENNIS	BRITISH ALUMINIUM CO. LTD.
D . P. MCGEEHIN	AERE HARWELL

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P. COROMPT	CEA. GRENOBLE
B. GAILLARD	CEA. GRENOBLE
J. GROSJEAN	IRSID
E.P. SORRENTINO	IRSID
C. PAILHES	LAFARGE COPPEE RECHERCHE
R. MARGRITA	LAFARGE COPPEE
D . P.S. ROGERS	IMPERIAL COLLEGE OF SCIENCE AND TECHNOLOGY

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R.B.M. HOLWEG
M. GLASTRA
J.G. ROBERTS

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T.N.O. FIBRE RESEARCH INST.
SHIRLEY INSTITUTE

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L.W.B.M. DE VRIES
D . A.H. BLOKSMA
T.L. ONG

TNO
TNO
TNO Div. for Nutrition
and Food Research

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M. SPOTO
L. GAZZI
C. RESCALLI
Prof. A.C.C. TSEUNG
Dr. A. ANTONIAN
F. AUDIBERT
D.F. GIBBS
V.J. PATER

MONTEDIPE SPA.
SNAM PROGETTI
SNAM PROGETTI
THE CITY UNIVERSITY
THE CITY UNIVERSITY
I.F.P.
I.R.D.
THE BRITISH CARBONIZATION
RESEARCH ASSOCIATION

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J. DRAPIER	UNIVERSITE DE LIEGE
Prof. A.J. HUBERT	UNIVERSITE DE LIEGE
P. JACOBS	KATHOLIEKE UNIVERSITEIT LEUVEN
P. STRUIFF	KATHOLIEKE UNIVERSITEIT LEUVEN
Prof. J. UYTTERHOEVEN	KATHOLIEKE UNIVERSITEIT LEUVEN
J. GROSMANGIN	CIE FRANÇAISE DE RAFFINAGE
C. MARTY	CIE FRANÇAISE DE RAFFINAGE
P. CHICHE	CERCHAR
J. GAGET	CERCHAR
Y. JACQUIN	IFP

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J.F. COURTOY	EUROFLOOR
L. HAAG	EUROFLOOR
W. VAN LOOCK	UNIVERSITEIT GHENT
M. DE POURCQ	UNIVERSITEIT GHENT
Prof. P.J. LUYPAERT	KATHOLIEKE UNIVERSITEIT LEUVEN

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P. BERGER	ACEC
Dr. P. KIRSCH	ACEC
J.F. DE GREEF	SCK/CEN

2. Commission

Dr. H. EHRINGER	DG XII
G. HOYAUX	DG XII
Dr. P.A. PILAVACHI	DG XII
P. ZEGERS	DG XII

3. Chairmen

Dr. J. CARRASSE	expert	SYNTEC-INGENIERIE FRANCE
Prof. Dr. J.A.A. KETELAAR	expert	UNIVERSITY OF AMSTERDAM
J.A. KNOBBOUT	expert	TNO - The Netherlands
Dr. J. LIMIDO	expert	I.F.P. - ENSPM FRANCE
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by

Hermann EHRINGER

Commission of the European Communities

Industry consumes 35% of the final energy in the European Community. About 23% of the imported oil are used in this area. Two thirds of this energy are intended for heating purposes. In spite of intensive rationalization efforts undertaken by industry in the last decade, there is still an important energy saving potential in all industry branches, in particular in the energy intensive ones. Therefore, the European Community supports R & D work on energy saving techniques for application in metallurgy, chemical, cement, food and textile industry.

The purpose of the contractors meetings is to give the project leaders the opportunity to report on the progress of their work and on the results achieved. Moreover, these meetings serve to establish a link between contractors working in the same area and to strengthen cooperation on a European level.

The papers presented at these meetings and the discussion will be recorded in proceedings which will be published in order to meet the provisions laid down in the Council regulation EEC/2380/74 of 17 September 1974.

