

INTERNATIONAL ENERGY AGENCY

**IMPLEMENTING AGREEMENT  
FOR A PROGRAMME OF ENERGY  
CONSERVATION AND EMISSIONS  
REDUCTION IN COMBUSTION**

(as Amended with Effect from 21 September 2005)

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# **IMPLEMENTING AGREEMENT FOR A PROGRAMME OF ENERGY CONSERVATION AND EMISSIONS REDUCTION IN COMBUSTION**

## **The Contracting Parties**

CONSIDERING that the Contracting Parties, being either governments of International Energy Agency (“Agency”) countries, governments of other countries invited by the Governing Board of the Agency to be Contracting Parties, international organizations or parties designated by their respective governments, wish to take part in the establishment and operation of a continued Programme of Research, Development and Demonstration on Energy Conservation in Combustion (the “Programme”) as provided in this Agreement;

CONSIDERING that the Contracting Parties which are governments of Agency countries and the governments of Agency countries which have designated Contracting Parties (referred to collectively as the “Governments”) have agreed in Article 41 of the Agreement on an International Energy Program (the “I.E.P. Agreement”) to undertake national programmes in the areas set out in Article 42 of the I.E.P. Agreement, including energy research and development;

CONSIDERING that in a meeting of the Governing Board of the Agency on 15th/16th March, 1977, the Governments approved the Programme as a special activity under Article 65 of the I.E.P. Agreement and that upon signature of this Agreement the first Agency Implementing Agreement for a Programme of Research, Development and Demonstration on Energy Conservation in Combustion, dated 16th March, 1977, is terminated;

CONSIDERING that the Agency has recognized the establishment of the Programme as an important component of international co-operation in the field of energy conservation in combustion;

HAVE AGREED as follows:

## Article I

### OBJECTIVES

(a) *Scope of Activity.* The Programme to be carried out by the Contracting Parties within the framework of this Agreement shall consist of co-operative research and development, and exchanges of information regarding energy conservation and emissions reduction in combustion.

(b) *Method of Implementation.* The Contracting Parties shall implement the Programme by undertaking one or more tasks (the "Task" or "Tasks") described in one or more Annexes to this Agreement. Tasks in each Annex may be carried out through specific subtasks (the "Subtasks"). Each Annex, and each Subtask, will be open to participation by two or more Contracting Parties as provided in Article 2 hereof. "Task Participant" shall mean those Contracting Parties who participate in an Annex.

(c) *Co-ordination and Co-operation.* The Contracting Parties shall co-operate in co-ordinating the work of the Annexes and various Subtasks and shall endeavor, on the basis of an appropriate sharing of burdens and benefits, to encourage co-operation among Task Participants engaged in the various Tasks and Subtasks with the objective of advancing the research and development activities of all Contracting Parties in the field of energy conservation and emissions reduction in combustion.

## Article 2

### IDENTIFICATION AND INITIATION OF TASKS

(a) *Identification.* The Tasks and Subtasks undertaken by Task Participants are established in accordance with the Annexes to this Agreement. At the time of signing this Agreement, each Contracting Party shall confirm its intention to participate in one or more Tasks by giving the Executive Director of the Agency a Notice of Participation in the relevant Annex.

(b) *Initiation of Additional Annexes.* Additional Annexes may be initiated by any Contracting Party according to the following procedure:

- (1) A Contracting Party wishing to initiate a new Annex shall present to the Executive Committee for approval a draft Annex similar in form to the Annex attached hereto, containing a description of the scope of work and conditions of the work proposed to be performed;
- (2) Each Contracting Party wishing to join a new Annex shall send a Notice of Participation in that Annex to the Executive Director of the IEA.
- (3) In carrying out the various Tasks, Task Participants shall co-ordinate their activities in order to avoid duplication of activities.

(c) *Application of Annexes.* Each Annex shall be binding only upon the Task Participants therein and upon the Operating Agent for that Annex, and shall not affect the rights or obligations of other Contracting Parties.

### Article 3

#### THE EXECUTIVE COMMITTEE

(a) *Supervisory Control.* Control of the Programme shall be vested in the Executive Committee constituted under this Article.

(b) *Membership.* The Executive Committee shall consist of one member designated by each Contracting Party; each Contracting Party shall also designate an alternate member to serve on the Executive Committee in the event that its designated member is unable to do so.

(c) *Responsibilities.* The Executive Committee shall:

- (1) Adopt for each year, upon unanimous vote, the Programme of Work and Budget for this Agreement and its Annexes, together with an indicative Programme of Work and Budget for the following two years; the Executive Committee may, as required, make adjustments within the framework of the Programme of Work and Budget;
- (2) Make such rules and regulations as may be required for the sound management of this Agreement, including financial rules as provided in Article 6 hereof;
- (3) Carry out the other functions conferred upon it by this Agreement and the Annexes hereto; and
- (4) Consider any matters submitted to it by any of the Operating Agents or by any Contracting Party.

(d) *Procedures.* The Executive Committee shall carry out its responsibilities in accordance with the following procedures:

- (1) The Executive Committee shall each year elect a Chairman and one or more Vice-Chairmen;
- (2) The Executive Committee may establish such subsidiary bodies and rules of procedure as are required for its proper functioning. A representative of the Agency and a representative of each Operating Agent (in its capacity as such) may attend meetings of the Executive Committee and its subsidiary bodies in an advisory capacity;
- (3) The Executive Committee shall meet in regular session twice each year; a special meeting shall be convened upon the request of any Contracting

Party which can demonstrate the need therefor;

- (4) Meetings of the Executive Committee shall be held at such time and in such office or offices as may be designated by the Committee;
- (5) At least twenty-eight days before each meeting of the Executive Committee, notice of the time, place and purpose of the meeting shall be given to each Contracting Party and to other persons or entities entitled to attend the meeting; notice need not be given to any person or entity otherwise entitled thereto if notice is waived before or after the meeting;
- (6) The quorum for the transaction of business in meetings of the Executive Committee shall be one half of the members plus one (less any resulting fraction) provided that any action relating to a particular Annex shall require a quorum as aforesaid of members or alternate members designated by the Task Participants in that Annex.

(e) *Voting.*

- (1) When the Executive Committee adopts a decision or recommendation the Executive Committee shall act:
  - (i) When a unanimous vote is required under this Agreement: by agreement of those members or alternate members which are present and voting;
  - (ii) When no express voting provision is made in this Agreement: by majority vote of those members or alternate members which are present and voting.
- (2) In all other cases in which this Agreement expressly requires the Executive Committee to act by unanimous vote, this shall require the agreement of each member or alternate member present and voting, and in respect of all other decisions and recommendations for which no express voting provision is made in this Agreement, the Executive Committee shall act by a majority vote of the members or alternate members present and voting. If a government has designated more than one Contracting Party to this Agreement, those Contracting Parties together may cast only one vote under this paragraph.
- (3) The decisions and recommendations referred to in sub-paragraphs (1) and (2) above may, with the agreement of each member or alternate member entitled to act thereon, be made by mail, fax or electronic mail without the necessity for calling a meeting. Such action shall be taken by a unanimous vote or majority of such members as in a meeting. The Chairman of the Executive Committee shall ensure that all members are informed of each decision or recommendation made pursuant to this sub-paragraph.

(f) *Reports.* The Executive Committee shall, by 31st January each year, provide the Agency with three copies of reports containing technically substantive, non-proprietary information on the progress of the Programme and its results.

## Article 4

### THE OPERATING AGENTS

- (a) *Designation.* Task Participants shall designate an Operating Agent for the Annex in which they participate.
- (b) *Replacement.* The Executive Committee may replace any Operating Agent by a unanimous vote.
- (c) *Resignation.* An Operating Agent shall have the right to resign at any time, by giving six months written notice to that effect to the Executive Committee. Should a replacement be appointed before the expiry of such period of notice, the current Operating Agent shall cease its functions at an earlier date, as may be determined by the Chair of the Executive Committee. Should a replacement not be appointed after the expiry of such period of notice, the current Operating Agent shall continue to perform all its functions, with the same rights and obligations, for an additional period of six (6) months.
- (d) *Accounting.* An Operating Agent which is replaced or which resigns as Operating Agent shall provide the Executive Committee with an accounting of any monies and other assets which it may have collected or acquired for the Annex in the course of carrying out its responsibilities as Operating Agent.

## Article 5

### ADMINISTRATION AND STAFF

- (a) *Administration of Tasks.* Each Operating Agent shall be responsible to the Executive Committee for implementing its designated duties in accordance with this Agreement, the relevant Annex(es), and the decisions of the Executive Committee.
- (b) *Staff.* It shall be the responsibility of the Operating Agent to retain such staff as may be required to carry out its designated duties in accordance with rules determined by the Executive Committee. The Operating Agent may also, as required, utilize the services of personnel employed by other Task Participants (or organizations or other entities designated by Contracting Parties) and made available to the Operating Agent by secondment or otherwise. Such personnel shall be remunerated by their respective employers and shall, except as provided in this Agreement, be subject to their employers' conditions of service.

## Article 6

### FINANCE

(a) *Individual Financial Obligations.* Each Contracting Party shall bear the costs it incurs in carrying out this Agreement, including the costs of formulating or transmitting reports and of reimbursing its employees for travel and other per diem expenses incurred in connection with work carried out on the respective Tasks or Subtasks, unless provision is made for such costs to be reimbursed from common funds as provided in paragraph (g) below.

(b) *Common Financial Obligations.* Task Participants wishing to share the costs of a particular Task or Subtask shall agree to do so. The apportionment of contributions to such costs (whether in the form of cash, services rendered, intellectual property or the supply of materials) and the use of such contributions shall be governed by agreement between/among the Task Participants.

## Article 7

### INFORMATION AND INTELLECTUAL PROPERTY

It is expected that for each Task agreed to pursuant to this Agreement, the relevant Annex will contain information and intellectual property provisions. Annex 1, paragraph 11, relating to information and intellectual property may be taken into account in developing such provisions.

## Article 8

### LEGISLATIVE PROVISIONS

(a) *Accomplishment of Formalities.* Each Task Participant shall request the appropriate authorities of its country (or its Member States in the case of an international organization) to use their best endeavours, within the framework of applicable legislation, to facilitate the accomplishment of formalities involved in the movement of persons, the importation of materials and equipment and the transfer of currency which shall be required to conduct the Task in which it is engaged.

(b) *Appropriation of Funds and Applicable Laws.* In carrying out this Agreement and its Annexes, the Contracting Parties shall be subject to the appropriation of funds by the appropriate governmental authority, where necessary, and to the constitution, laws and regulations applicable to the respective Contracting Parties, including, but not limited to, laws establishing prohibitions upon the payment of commissions, percentages, brokerage or contingent fees to persons retained to solicit governmental contracts and upon any share of such contracts accruing to governmental officials.

(c) *Decisions of Agency Governing Board.* The IEA Framework for International Energy Technology Co-operation, adopted by the IEA Governing Board on 3 April 2003, shall apply to all Contracting Parties and Sponsors (as defined in the Framework) which have signed or acceded to, and not withdrawn from, this Agreement. A copy of the Framework is attached as Exhibit A to this Implementing Agreement and shall be an integral part thereof.



(d) *Settlement of Disputes.* Any dispute among the Contracting Parties concerning the interpretation or the application of this Agreement which is not settled by negotiation or other agreed mode of settlement shall be referred to a tribunal of three arbitrators to be chosen by the Contracting Parties concerned who shall also choose the Chairman of the tribunal. Should the Contracting Parties concerned fail to agree upon the composition of the tribunal or the selection of its Chairman, the President of the International Court of Justice shall, at the request of any of the Contracting Parties concerned, exercise those responsibilities. The tribunal shall decide any such dispute by reference to the terms of this Agreement and any applicable laws and regulations, and its decision on a question of fact shall be final and binding on the Contracting Parties concerned. Operating Agents which are not Contracting Parties shall be regarded as Contracting Parties for the purpose of this paragraph.

## Article 9

### ADMISSION AND WITHDRAWAL OF CONTRACTING PARTIES

(a) *Admission of New Contracting Parties. OECD member countries.* Upon the invitation of the Executive Committee, acting by unanimity, admission to this Agreement shall be open to the government of any OECD member country (or a national agency, public organization, private corporation, company or other entity designated by such government), which signs or accedes to this Agreement, accepts the rights and obligations of a Contracting Party, and is accepted for participation in at least one Annex by the Task Participants in that Annex, acting by unanimous vote. Such admission of a Contracting Party shall become effective upon the signature of this Agreement by the new Contracting Party or its accession thereto and its giving Notice of Participation in one or more Annexes and the adoption of any consequential amendments thereto.

(b) *Admission of New Contracting Parties: OECD non-member countries.* The government of any country which is not a member of the OECD, international organisations in which the governments of OECD member countries and / or OECD non-member countries participate, may, on the approval of the Executive Committee, acting by unanimous vote and, where required, with the approval of the Committee for Energy Research and Technology, be invited to participate as a Contracting Party in this Agreement (or to designate a national agency, public organisation, private corporation or other entity to do so) under the conditions stated in paragraph (a) above.

(c) *Participation by the European Communities.* The European Communities may participate in this Agreement in accordance with arrangements to be made by the Executive Committee, acting by unanimous vote.

(d) *Admission of New Task Participants in an Annex.* Any Contracting Party may, with the agreement of the Task Participants in an Annex, acting by unanimous vote, become a Task Participant in that Annex. Such participation shall become effective upon the Contracting Party's giving the Executive Director of the Agency a Notice of Participation in the appropriate Annex and the adoption of consequential amendments thereto.

(e) *Contributions.* The Executive Committee may require, as a condition to admission to participation, that the new Contracting Party or new Task Participant shall contribute (in the form of cash, services, materials or intellectual property) an appropriate proportion of the prior budget expenditure of any Annex in which it participates.

(f) *Replacement of Contracting Parties.* With the agreement by unanimous vote of the Executive Committee, and upon the request of a government, a Contracting Party designated by that government may be replaced by another party. In the event of such replacement, the replacement party shall assume the rights and obligations of a Contracting Party as provided in paragraph (a) above and in accordance with the procedure provided therein.

(g) *Withdrawal.* Any Contracting Party may withdraw from this Agreement or from any Annex either by giving twelve months written Notice of Withdrawal to the Executive Director of the Agency, such Notice to be given not less than one year after the date hereof, or, at an earlier date, with the agreement of the Executive Committee, by unanimous vote. The withdrawal of a Contracting Party under this paragraph shall not affect the rights and obligations of the other Contracting Parties; except that, where the other Contracting Parties have contributed to common funds for a Task, their proportionate shares in the Task Budget shall be adjusted to take account of such withdrawal. Notwithstanding the foregoing the continuance of an Annex by a Contracting Party shall be conditional on the appropriation of funds by the appropriate governmental authority where necessary.

(h) *Changes of Status of Contracting Party.* A Contracting Party other than a government or an international organization shall forthwith notify the Executive Committee of any significant change in its status or ownership, or of its becoming bankrupt or entering into liquidation. The Executive Committee shall determine whether any such change in status of a Contracting Party significantly affects the interests of the other Contracting Parties; if the Executive Committee so determines, then, unless the Executive Committee, acting upon the unanimous decision of the other Contracting Parties, otherwise agrees:

- (1) That Contracting Party shall be deemed to have withdrawn from the Agreement under paragraph (g) above on a date to be fixed by the Executive Committee; and
- (2) The Executive Committee shall invite the government which designated that Contracting Party to designate, within a period of three months of the withdrawal of that Contracting Party, a different entity to become a Contracting Party; if approved by the unanimous vote of the Executive Committee, such entity shall become a Contracting Party with effect from the date on which it signs or accedes to this Agreement and gives the Executive Director of the Agency a Notice of Participation in one or more Annexes.

(i) *Failure to Fulfil Contractual Obligations.* Any Contracting Party which fails to fulfil its obligations under this Agreement within sixty days after its receipt of notice specifying the nature of such failure and invoking this paragraph, may be deemed by the Executive Committee, acting by unanimous vote, to have withdrawn from this Agreement.

## Article 10

### FINAL PROVISIONS

(a) *Term of Agreement.* This Agreement shall enter into force upon signature of at least two Contracting Parties and shall remain in force for an initial period of three years. Subject to the approval of the Committee on Energy Research and Technology, this Agreement may be extended for additional periods of up to five years, as may be determined by the Executive Committee, acting by unanimous vote. Notwithstanding the provision set forth in this Paragraph, the Executive Committee may, acting by unanimous vote, terminate this Agreement at any time.

(b) *Legal Relationship of Contracting Parties.* Nothing in this Agreement shall be regarded as constituting a partnership between any of the Contracting Parties.

(c) *Amendment.* This Agreement may be amended at any time by the Executive Committee, acting by unanimous vote, and any Annex to this Agreement may be amended at any time by the Executive Committee, acting by the unanimous vote of the Task Participants in the Task to which the Annex refers. Such amendments shall come into force in a manner determined by the Executive Committee, acting under the voting rule applicable to the decision to adopt the amendment.

(d) *Deposit.* The original of this Agreement shall be deposited with the Executive Director of the Agency and a certified copy thereof shall be furnished to each Contracting Party and to the Operating Agents. An electronic version of this Agreement and its Annexes, and all amendments thereof, shall be furnished to the Office of the Legal Counsel of the IEA acting on behalf of the Executive Director of the IEA.

Done in Paris, this day of 1983.

As amended upon approval of the ExCo at its meeting on 21 September 2005, in Copenhagen.

Belgium – MINISTRY OF ECONOMIC AFFAIRS

Canada – NATIONAL RESEARCH COUNCIL CANADA

Finland – TEKES NATIONAL TECHNOLOGY AGENCY OF FINLAND

Germany – FEDERAL DEPARTMENT OF EDUCATION AND RESEARCH

Italy – CONSIGLIO NAZIONALE DELLE RICERCHE (CNR)

Japan – The JAPAN INSTITUTE OF ENERGY (JIE)

Norway – THE RESEARCH COUNCIL OF NORWAY

Sweden – THE SWEDISH ENERGY AGENCY (STEM)

Switzerland – SWISS FEDERAL OFFICE OF ENERGY (SFOE)

United States – U.S. DEPARTMENT OF ENERGY

United Kingdom – CRANFIELD UNIVERSITY



## **EXHIBIT A**

### **IEA FRAMEWORK FOR INTERNATIONAL ENERGY TECHNOLOGY CO-OPERATION**

#### **I. General Principles**

##### ***Article 1***

##### ***Mandate***

- 1.1 In fulfilment of Chapter VII of the Agreement on an International Energy Program and in light of the Shared Goals of the IEA, the IEA operates Implementing Agreements to enable IEA Member countries to carry out programmes and projects on energy technology research, development and deployment.
- 1.2 An Implementing Agreement is a contractual relationship established by at least two IEA Member countries, and approved by the Governing Board, for the purpose set out in Article 1.1.
- 1.3 Participants in an Implementing Agreement shall contribute as fully as possible to the achievement of its objectives and shall endeavour to secure, through public and private support, the necessary scientific, technical and financial resources for the programmes and projects carried out under such an Implementing Agreement.
- 1.4 Each Implementing Agreement shall have an Executive Committee composed of representatives of all participants.

##### ***Article 2***

##### ***Nature of Implementing Agreements***

- 2.1 The activities of an Implementing Agreement may include, *inter alia*:
  - (a) co-ordination and planning of specific energy technology research, development and deployment studies, works or experiments carried out at a national or international level, with subsequent exchange, joint evaluation and pooling of the scientific and technical results acquired through such activities;
  - (b) participation in the operation of special research or pilot facilities and equipment provided by a participant, or the joint design, construction and operation of such facilities and equipment;
  - (c) exchange of information on (i) national programmes and policies, (ii) scientific and technological developments and (iii) energy legislation, regulations and practices;
  - (d) exchanges of scientists, technicians or other experts;
  - (e) joint development of energy related technologies; and
  - (f) any other energy technology related activity.

- 2.2 Participation in an Implementing Agreement shall be based on equitable sharing of obligations, contributions, rights and benefits. Participants in an Implementing Agreement shall undertake to make constructive contributions, whether technical, financial or otherwise, as may be agreed by the Executive Committee.
- 2.3 Some or all of the participants in an Implementing Agreement may choose to execute specific projects and/or programmes through Annexes to the Implementing Agreement.

## **II. Rules Applicable to IEA Implementing Agreements**

### ***Article 3***

#### ***Participation, Admission and Withdrawal***

- 3.1 An Implementing Agreement can be established by two or more IEA Member countries subject to approval of the Committee on Energy Research and Technology (CERT) and of the Governing Board. There are two possible categories of participants in Implementing Agreements: Contracting Parties and Sponsors.
- 3.2 Contracting Parties may be
- (a) the governments of both OECD member or OECD non-member countries;
  - (b) the European Communities;
  - (c) international organisations in which the governments of OECD member countries and/or OECD non-member countries participate; and
  - (d) any national agency, public organisation, private corporation or other entity designated by the government of an OECD member country or an OECD non-member country, or by the European Communities.
- 3.2.1 Participation in any Implementing Agreement for OECD non-member countries or for international organisations requires prior approval by the CERT. However, should the CERT consider a first time application by an OECD non-member country or an international organisation to be sensitive, it may refer the decision to the Governing Board as it deems appropriate.
- 3.2.2 Prior to CERT approval of participation of OECD non-member countries or international organisations in any Implementing Agreement, the Executive Committee shall:
- (a) have voted in favour of the applicant to join the Implementing Agreement and provide evidence of the same to the CERT;
  - (b) provide the CERT with a copy of the terms and conditions of the applicant's participation in the Implementing Agreement; and
  - (c) provide the CERT with a letter from the applicant expressing the applicant's desire to join the Implementing Agreement and specifying which Annexes it wishes to join; its acceptance of the terms and conditions of the Implementing

Agreement; the name of its designated entity if it is not the applicant itself; and the name of the entity that will sign the Implementing Agreement.

3.2.3 The terms and conditions for the admission, participation and withdrawal of Contracting Parties, including their rights and obligations, in Implementing Agreements and their Annexes, if any, shall be established by the Executive Committee of each Implementing Agreement.

3.2.4 Notwithstanding Article 3.2.3, no Contracting Party from an OECD non-member country or international organisation shall have greater rights or benefits than Contracting Parties from OECD member countries.

3.3 Sponsors may be

(a) entities of OECD member countries or OECD non-member countries who are not designated by the governments of their respective countries to participate in a particular Implementing Agreement; and

(b) non-intergovernmental international entities in which one or more entities of OECD member countries or OECD non-member countries participate.

3.3.1 Participation of Sponsors in Implementing Agreements requires prior approval by the CERT.

3.3.2 Prior to CERT approval of Sponsor participation in any Implementing Agreement, the Executive Committee shall:

(a) have voted in favour of the applicant to join the Implementing Agreement and provide evidence of the same to the CERT;

(b) provide the CERT with a copy of the terms and conditions of the applicant's participation in the Implementing Agreement; and

(c) provide the CERT with a letter from the applicant expressing the applicant's desire to join the Implementing Agreement and specifying which Annexes it wishes to join; its acceptance of the terms and conditions of the Implementing Agreement; and the name of the entity that will sign the Implementing Agreement.

3.3.3 The terms and conditions for the admission, participation and withdrawal of Sponsors, including rights and obligations, in Implementing Agreements and their Annexes, if any, shall be established by the Executive Committee of each Implementing Agreement.

3.3.4 Notwithstanding Article 3.3.3, no Sponsor shall have greater rights or benefits than Contracting Parties from OECD non-member countries and no Sponsor shall be designated Chair or Vice-chair of an Implementing Agreement.

3.3.5 The CERT shall have the right to not approve participation of a Sponsor if the terms and conditions of such participation do not comply with this Framework, any Decisions of the CERT or the Governing Board and the Shared Goals of the IEA.

## ***Article 4***

### ***Specific Provisions***

- 4.1 Unless the CERT otherwise agrees, based on exceptional circumstance and sufficient justification, Implementing Agreements shall be for an initial term of up to, but no more than, five years.
- 4.2 An Implementing Agreement may be extended for such additional periods as may be determined by its Executive Committee, subject to approval of the CERT. Any single extension period shall not be greater than five years unless the CERT otherwise decides, based on exceptional circumstances and sufficient justification.
- 4.3 Notwithstanding Paragraph 4.2, should the duration of the programme of work of an Annex exceed the term of the Implementing Agreement to which it relates, the CERT shall not unreasonably withhold approval to extend the Implementing Agreement for such additional period to permit the conclusion of the work then being conducted under the Annex.
- 4.4 Either the Contracting Parties or the Executive Committee of each Implementing Agreement shall:
  - 4.4.1 approve the programme activities and the annual programme of work and budget for the relevant Implementing Agreement;
  - 4.4.2 establish the terms of the contribution for scientific and technical information, know-how and studies, manpower, capital investment or other forms of financing to be provided by each participant in the Implementing Agreement;
  - 4.4.3 establish the necessary provisions on information and intellectual property and ensure the protection of IEA copyrights, logos and other intellectual property rights as established by the IEA;
  - 4.4.4 assign the responsibility for the operational management of the programme or project to an entity accountable to the Executive Committee of the relevant Implementing Agreement;
  - 4.4.5 establish the initial term of the Implementing Agreement and its Annexes;
  - 4.4.6 approve amendments to the text of the Implementing Agreement and Annexes; and
  - 4.4.7 invite a representative of the IEA Secretariat to its Executive Committee meetings in an advisory capacity and, sufficiently in advance of the meeting, provide the Secretariat with all documentation made available to the Executive Committee members for purposes of the meeting.

## ***Article 5***

### ***Copyright***



- 5.1 Notwithstanding the use of the IEA name in the title of Implementing Agreements, the Implementing Agreements, the Executive Committee or the entity responsible for the operational management of the programme or project may use the name, acronym and emblem of the IEA as notified to the World Intellectual Property Organisation (WIPO) only upon prior written authorisation of the IEA and solely for the purposes of executing the Implementing Agreements.
- 5.2 The IEA shall retain the copyright to all IEA deliverables and published or unpublished IEA material. Implementing Agreements wishing to use, copy or print such IEA deliverables and/or material shall submit a prior written request of authorisation to the IEA.

## ***Article 6***

### ***Reports to the IEA***

- 6.1 Each Executive Committee shall submit to the IEA:
- 6.1.1 as soon as such events occur, notifications of any admissions and withdrawals of Contracting Parties and Sponsors, any changes in the names or status of Contracting Parties or Sponsors, any changes in the Members of the Executive Committee or of the entity responsible for the operational management of the programme or project, or any amendments to an Implementing Agreement and Annex thereto;
  - 6.1.2 annual reports on the progress of programmes and projects of the Implementing Agreement and any Annex;
  - 6.1.3 notwithstanding Article 6.1.1, in addition to and with the Annual Report, annually provide the IEA with the following information:
    - (a) the names and contact details of all current Contracting Parties and Sponsors;
    - (b) the names and contact details of all Contracting Parties and Sponsors who may have withdrawn from the Implementing Agreement or any Annex in the year covered by the Annual Report;
    - (c) the names and contact details of all new Contracting Parties and Sponsors who may have joined the Implementing Agreement or any Annex in the year covered by the Annual Report;
    - (d) any changes in the names or status of any Contracting Parties or Sponsors;
    - (e) the names and contact details of the Executive Committee members and the entity responsible for the operational management of the programme or project; and
    - (f) any amendments to the text of an Implementing Agreement and any Annex thereto.
  - 6.1.4 End of Term Reports, which shall include all the information and documentation required by Decisions of the CERT then in effect and relating thereto; and

- 6.1.5 at the request of the IEA, any other non-proprietary information as may be requested by the IEA in connection with the IEA's mandate.

### *Article 7*

#### *Effective Date*

This Framework shall take effect and become binding on all participants in the Implementing Agreements and Annexes from the date of its approval as a decision by the Governing Board.

## *Annex I*

### A PROGRAM OF ENERGY CONSERVATION AND EMISSIONS REDUCTION IN COMBUSTION

#### 1. *Background*

The purpose of the Programme is to improve fundamental and applied combustion technology which is developed to provide predictive design capabilities for internal combustion engines, furnaces and gas turbines. During the past twenty-five years IEA co-operative research in this area has focused on developing tools, both experimental and computational, for achieving these goals.

#### 2. *Objectives*

- (a) *General Objective.* This Annex (hereinafter called Annex I) has been planned to improve the modelling and simulation processes and information and instrumentation for their application by the designers, users and manufacturers of combustion equipment. The resultant codes, together with supporting data bases, will assist the designer in the development of advanced combustion devices. The objectives of this Annex I will be effected through the exchange of information, personnel and equipment.
- (b) *Specific Objectives.* Each Task Participant will carry out applied research in one or more of the following areas:
  - (i) Future piston engine technology;
  - (ii) Furnaces and boilers; and
  - (iii) Fundamentals
  - (iv) Advanced gas turbine technology
  - (v) Supporting Activities

##### *Area (i): Future Piston Engine Technology*

The objective of the co-operative work in this area is the development of combustion technology, both analytical and experimental, which would provide improved models for advanced internal combustion piston engines, namely lean homogeneous charge, stratified charge, and diesel engines. The research will contribute primarily to technology common to these engine concepts and provide data bases and descriptive and predictive system codes.

#### *Area (ii): Furnaces and Boilers*

The objective of the co-operative work in this area is the development of combustion technology, both analytical and experimental, which will provide models for furnaces and boilers. The research will provide a data base and both descriptive and predictive system codes for system utilizing gaseous, liquid and solid fuels.

#### *Area (iii): Fundamentals*

The objective of the co-operative work in this area is to provide such instrumentation, analytical and administrative support as is called for by the co-operative work in the other areas (i) and (ii) above, and to support investigations of new techniques for application in the future.

#### *Area (iv): Advanced Gas Turbine Technology*

The objective of this Area is to identify work related to the development of combustor and gas turbine modeling and verification, to the study of emissions formation and control mechanisms, and to practical studies in fuel injection and fuel / air mixing.

#### *Area (v): Supporting Activities*

This Area provides administrative support and services as called for by the cooperative work in the Areas above.

### *3. Responsibilities of the Task Participants*

- (a) Each Task Participant will conduct its own research activities in the areas of co-operation described in paragraph 2 above, as defined by the Executive Committee, acting by unanimity, in accordance with paragraph 4 below and within the scale of contributions anticipated in paragraph 10 below.
- (b) Each Task Participant will submit to the Operating Agent work plans for each Subtask as provided in paragraph 4(a) below.
- (c) Each Task Participant will submit to the Operating Agent information, other than proprietary information, from its own research activities.
- (d) Personnel and equipment may be exchanged by the Task Participants in accordance with paragraphs 7 and 8 below.

### *4. Responsibilities of the Executive Committee*

- (a) The Executive Committee will arrange for the research conducted by the Task Participants pursuant to this Annex I to be structured into sets of Subtasks by the Operating Agent for the development of data, other than

proprietary information.

- (b) The Executive Committee will annually review and adopt, acting by unanimity, detailed Subtasks within each area in the work plan.

## 5. *Operating Agent*

Dr. Jay O. Keller or his designee, Hydrogen Energy and Combustion Technologies, Combustion Research Facility, Sandia National Laboratories Livermore, CA

## 6. *Responsibilities of the Operating Agent*

Co-ordination of Subtasks undertaken by each of the Task Participants within each area of investigation and overall co-ordination of work between the four areas of investigation will be facilitated by the Operating Agent. The Operating Agent shall be responsible for:

- (a) Co-ordinating the exchange of information through publications, reports, meetings and conferences;
- (b) Reporting the progress of the work under this Annex 1 to the Executive Committee;
- (c) Co-ordinating regular and special meetings of the Executive Committee and preparing and distributing to the Contracting Parties minutes of these meetings;
- (d) Preparing draft amendments to this Annex I as required to:
  - (1) Admit additional Task Participants;
  - (2) Initiate additional Subtasks or research areas; and
  - (3) When necessary, extend the duration of this Annex I;
- (e) Ensuring that duplication of effort is minimized and encouraging additional effort in areas not presently covered;
- (f) Conducting other duties assigned by the Executive Committee. Parts of the Operating Agent's responsibilities may be delegated to other Task Participants with the agreement of the Operating Agent and the Executive Committee.

## 7. *Assignments and Exchanges of Personnel*

- (a) Whenever an exchange of staff is contemplated under this Annex I, each Task Participant shall ensure that qualified staff are selected for that purpose.
- (b) The Task Participants concerned will prepare such agreements as may be necessary for work assignments under this Annex I. Unless the Task Participants concerned otherwise agree, sub-paragraphs (c) to (g) below shall be applicable.
- (c) Each Task Participant shall be responsible for the salaries, insurance and allowances to be paid to its staff.
- (d) Each Task Participant shall pay for the travel and living expenses of its staff while assigned to the host Task Participant.
- (e) The host Task Participant shall arrange for comparable accommodations for the assigned staff (and their families) on a mutually agreeable reciprocal basis.
- (f) The host Task Participant shall provide all necessary assistance to the assigned staff (and their families) as regards administrative formalities, such as travel and other arrangements.
- (g) The assigned staff will be required to conform to the general and special rules of work and safety regulations in force at the host establishment.

## 8. *Supply of Equipment*

The exchange or supply of equipment among Task Participants shall be carried out as set forth below unless the Task Participants concerned otherwise agree:

- (a) The sending Task Participant shall supply to the receiving Task Participant as soon as possible a detailed list of the equipment to be provided together with the available, associated specifications and technical and informational documentation.
- (b) The equipment, remaining spare parts and documentation supplied by the sending Task Participant shall remain its property and shall be returned to the sending Task Participant upon completion of the agreed activity.
- (c) The receiving Task Participant shall ensure that the host establishment provides the necessary premises and shelter for the equipment, as well as such electric power, water, gas and other facilities in accordance with technical requirements as may be mutually agreed.
- (d) The equipment shall be considered to be scientific and not commercial in character.
- (e) The sending Task Participant shall be responsible for expenses, safekeeping and insurance during the transport of equipment to an authorized port of entry in the country of the receiving Task Participant convenient to the

ultimate destination, and upon return from the port of entry in the country of the sending Task Participant.

## 9. *Legal Responsibility*

Damages incurred during the implementation of this Annex I shall be compensated in accordance with the applicable laws of the countries of the Task Participants.

## 10. *Funding*

- (a) Each Task Participant shall be responsible for providing the financial resources necessary to carry out its research responsibilities under this Annex I.
- (b) The Executive Committee, acting by unanimity, may adjust the figures referred to in this paragraph at yearly intervals to take account of changing price levels in the country of each Task Participant to ensure that the necessary real resources will continue to be available to conduct the work called for.
- (c) Each Task Participant shall also bear all other costs it incurs in carrying out its responsibilities under this Annex I, including the costs of formulating or transmitting reports and of reimbursing its employees for travel and other per diem expenses incurred in connection with work carried out on the respective Subtasks.

## 11. *Information and Intellectual Property*

- (a) *Executive Committee's Powers.* The publication, distribution, handling, protection and ownership of information and intellectual property arising from activities conducted under this Annex I shall be determined by the Executive Committee, acting by unanimity, in conformity with this Annex I.
- (b) *Right to Publish.* Subject only to the restrictions applying to patents and copyrights, the Task Participants shall have the right to publish all information provided to or arising from Annex I.
- (c) *Production of Relevant Information.* The Operating Agent and the Task Participants should encourage the governments of all Agency Participating Countries to make available or to identify to the Task Participants and the Operating Agent all published or otherwise freely available information known to them that is relevant to the Subtasks in this Annex 1. The Task Participants should notify the Operating Agent and the other Task Participants of all pre-existing information, and information developed independently of the Subtasks known to them which is relevant to the Subtasks and which can be made available for the Subtasks without contractual or legal limitations.
- (d) *Reports on Programme Work.* Reports containing arising information and

pre-existing information necessary for and used in each Subtask, including proprietary information in accordance with paragraph (d) hereof, shall be provided to the Operating Agent by the Task Participant performing the Subtask and the Operating Agent shall provide computer programmes containing such information to each Task Participant. The Operating Agent shall provide summary reports of work performed under this Annex I and the results thereof (arising information), excluding proprietary information, to the Executive Committee.

- (e) *Information Use and Application.* Information transmitted by one Task Participant to another Task Participant under this Annex I shall be accurate to the best knowledge and belief of the transmitting Task Participant, but the transmitting Task Participant does not warrant the suitability of the information transmitted for any particular use or application.
- (f) *Arising Inventions.* Inventions made or conceived in the course of or under any Subtask in Annex I (arising inventions) shall be owned in all countries by the inventing Task Participant. Each such inventing Task Participant agrees to license royalty-free all such arising inventions to the other Task Participants, their governments and their nationals designated by them. However, in the instances where the inventing Task Participant is personnel assigned to the facility of another Task Participant, the assigned inventing Task Participant shall own arising inventions in its own country subject to a royalty-free licence in its country to the other Task Participants, their governments and their nationals designated by them. The recipient Task Participant shall own such arising inventions in all other countries subject to a royalty-free licence to the other Task Participants, their governments and their nationals designated by them.

Information regarding inventions on which patent protection is to be obtained by a Task Participant shall not be published or publicly disclosed by the other Task Participants until a patent application has been filed, provided, however, that this restriction on publication or disclosure shall not extend beyond six months from the date of receipt of such information. It shall be the responsibility of the inventing Task Participant or recipient Task Participant, as the case may be, to appropriately mark reports which disclose inventions that have not been appropriately protected by the filing of a patent application.

- (g) *Copyright.* The Operating Agent or each Task Participant for its own Subtasks' results may take appropriate measures necessary to protect copyrightable material generated under any Subtask. Copyrights obtained shall be the property of that Task Participant or the Operating Agent, for the benefit of the Task Participants, provided, however, that Task Participants may reproduce and distribute such material, but shall not publish it with a view to profit.
- (h) *Inventors and Authors.* Each Task Participant will, without prejudice to any rights of inventors or authors under its national laws, take all necessary steps to provide the co-operation from its inventors and authors required to carry out the provisions of this Article. Each Task Participant will assume the responsibility to pay awards or compensation required to be paid to its



employees according to the laws of its country.

- (i) *Determination of “National”*. The Executive Committee may establish guidelines to determine what constitutes a “national” of a Task Participant.

## 12. *Time Schedule*

This Annex shall remain in force for an initial period of three years from the signature of this Agreement. Within the limits of the term of the Agreement, this Annex may be extended by agreement of the two or more Task Participants acting in the Executive Committee. Any other Task Participant in the Agreement may join this Annex at any time by sending a Notice of Participation to the Executive Director of the IEA.

## 13. *Task Participants*

The Contracting Parties which are Task Participants in this Annex are the following:

Belgium – MINISTRY OF ECONOMIC AFFAIRS  
Canada – NATIONAL RESEARCH COUNCIL CANADA  
Finland – TEKES NATIONAL TECHNOLOGY AGENCY OF FINLAND  
Germany – FEDERAL DEPARTMENT OF EDUCATION AND RESEARCH  
Italy – CONSIGLIO NAZIONALE DELLE RICERCHE (CNR)  
Japan – The JAPAN INSTITUTE OF ENERGY (JIE)  
Norway – THE RESEARCH COUNCIL OF NORWAY  
Sweden – THE SWEDISH ENERGY AGENCY (STEM)  
Switzerland – SWISS FEDERAL OFFICE OF ENERGY (SFOE)  
United States – U.S. DEPARTMENT OF ENERGY  
United Kingdom – CRANFIELD UNIVERSITY