Procedures Manual
Hydrogen TCP

Technical Secretariat
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1. HTCP, an overview

1.1. What is it?

• International Energy Agency’s (IEA) Technology Collaboration Programme (TCP) on hydrogen
• Established in 1977
• Pursues collaborative hydrogen research and development and information exchange among its members
• Collaboration takes the shape of different Tasks
• 23 member countries + European Commission + UNIDO + 6 sponsors
1. HTCP, an overview

1.2. What is a Task?

- Collaborative projects among parties related to hydrogen
- Each Task covers a different scope and has a specific framework
- When approved by the Executive Committee, the Task is assigned the next consecutive number and becomes part of the Hydrogen Implementing Agreement (HIA)
- There might be Subtasks within each Task
- **Annex:** each Task is outlined in an Annex to the HIA. The Annex describes the scope of work and briefly outlines the joint activities to be carried out within the framework of a particular IEA Task. When approved by the Executive Committee, an Annex is assigned the next consecutive number and becomes part of the HIA. Participation in an Annex is indicated by submittal of a Notice of Participation to IEA Headquarters.
1. HTCP, an overview

1.2.1. Current Tasks

1.2.2. Perspectives
• Strategic Plan 2020-2025 should serve as a framework for future tasks addressing 3 main areas

• Potential Tasks:
  • Market Deployment & Pathways to Scale
  • Supply Chains
  • Renewable H2 production
  • Conversion to energy and chemicals
  • Applications In Primary Sectors
  • Industrial Use of H2 in Middle Income Developing countries
  • Underground large storage...
## 1. HTCP, an overview

### 1.3. Members

<table>
<thead>
<tr>
<th>Contracting Parties</th>
<th>Spenders</th>
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<tr>
<td>Austria</td>
<td>HyChico (Argentina)</td>
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<tr>
<td>Australia</td>
<td>Hydrogen Council (International)</td>
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<tr>
<td>Belgium</td>
<td>NOW GmbH (Germany)</td>
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<tr>
<td>Canada</td>
<td>RIL (Reliance Industry Limited, India)</td>
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<tr>
<td>China</td>
<td>Shell Global Solutions (International)</td>
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<td>Denmark</td>
<td>Southern Company (USA)</td>
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<td>EC</td>
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<td>Finland</td>
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### Sponsorship

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1. HTCP, an overview

1.4. Collaboration within IEA
1. HTCP, an overview

1.5. External Collaborators

CLEAN ENERGY MINISTERIAL
Accelerating the Global Clean Energy Transition

IPHE

IRENA
International Renewable Energy Agency

International Transport Forum

Hydrogen Council

WORLD ECONOMIC FORUM

MI
1. HTCP, an overview

1.4. Why should you join?

• Get to **collaborate** with other Contracting Parties and Sponsors on cutting-edge hydrogen research and development

• Have access to an **archive** of over 30 years of research

• **Invest** now: hydrogen will have a place in the future energy market, so investing now in research will allow your country or organization to influence the advancement of hydrogen as a fuel

• **Connect** with leaders, scientists, and nation representatives who are all committed to the goal of reliable, sustainable and clean energy

Members can be assured of careful intellectual property (IP) treatment.
2. Structure

Governing Board
- main decision-making body composed of energy ministers or senior representatives from each Member country
- President: Fatih Birol

Committees and Standing Groups
- Committee on Budget and Expenditure (CBE)
  - advises the Governing Board on resource management and administration (in particular budgetary matters)
- SG on Long-Term Co-operation (SLT)
  - encourages co-operation among IEA member countries to ensure collective energy security, improve economic efficiency of their energy sector and promote environmental protection in provision of energy services
- Committee on Energy Research and Technology (CERT)
  - co-ordinates and promotes the development, demonstration and deployment of technologies to meet challenges in the energy sector.
- SG on Global Energy Dialogue (SGD)
  - responsible for work with countries and regions outside of the IEA membership, including China and India.
  - [Many SGD projects draw upon both regional and sectoral expertise and are carried out jointly with other IEA divisions]
- SG on the Oil Market (SOM)
  - monitors and analyses short- and medium-term developments in the international oil market to help member countries react promptly and effectively to market changes
- SG on Emergency Questions (SEQ)
  - responsible for all aspects of oil emergency preparedness and collective response to supply disruptions

Working Party on Energy Efficiency

Expert groups
- Fusion Power Co-ordinating Committee
- Working Party on Fossil Energy
- Working Party on Energy End-Use Technologies

Working Party on Renewable Energy Technologies
- Desk Officer: Kazuhiro Kurumi

IEA Secretariat = IEA Paris

OECD framework

formed by member country government officials
several meetings per year

IEA

2 meetings per year
Chair: Paul Lucchesi
Vice Chairs: Marcel Weeda & Ohira Eji

OECD

Framework

Governing Board

Committees and Standing Groups

Working Party on Energy Efficiency

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3. Terminology

- **Contracting Parties (CP):** countries (government) or their designated entities (state agency, industry member, association, etc.) that have signed an Implementing Agreement. There can be more than one Contracting Party from a country, but each country only nominates one member to the Executive Committee.

- **Sponsors:** in exceptional cases, entities from OECD member countries that are not designated by their governments as Contracting Parties and international entities that are not intergovernmental bodies may have the status of "Sponsors." There are some limitations on their participation.

- **Desk Officer (DO):** an officer of the IEA Secretariat who monitors a particular Implementing Agreement. Desk Officers assist Agreements with administrative and other matters where possible and provide a link to other IEA bodies. Currently Kazuhiro Kurumi.

- **Operating Agent (OA):** each Task is headed by an Operating Agent who has the responsibility for implementing and managing the collaborative project, and for reporting to the Executive Committee on the progress of the work. Formally speaking, an Operating Agent is a government or quasigovernment entity (e.g. U.S. Department of Energy or NUTEK). In common usage, the term Operating Agent is often used to refer to the person designated by that entity to serve as manager of the Task. The Operating Agent (both the entity and the person) must be approved by the Executive Committee.
3. Terminology

➢ **Executive Committee (ExCo):** Control of the Hydrogen TCP is vested in an Executive Committee that consists of one representative from each Country. An autonomous body, the Executive Committee has the authority to initiate and extend Tasks and to establish policies for the Hydrogen TCP. The Executive Committee is also responsible for reviewing the progress of the Tasks, approving the program of work, and sponsoring special activities. The Executive Committee meets twice per year to review progress and undertake decisions concerning the HTCP. The Executive Committee is headed by a Chairman and two Vice Chairmen, each elected to serve a three-year term.

➢ **Implementing Agreement:** in the IEA context, an Implementing Agreement is a legal document that outlines the terms of a collaborative research and development program and the rights and responsibilities of the parties to the agreement. Hydrogen Implementing Agreement (HIA).

➢ **Cost Sharing:** a programme of work in which participants contribute to a common fund for activities such as conducting an experiment or equipment purchase, operation of a single facility, or for information exchange. It is the case for HTCP
4. How to become a member of the HTCP

4.1. How to become a Contracting Party

1. Send a formal membership request to the Executive Committee of the HTCP

2. ExCo must unanimously approve the proposal → the Chair will extend a formal invitation to the country/entity

3. The country/entity chooses contracting agents to act as representative and alternate → The country/entity sends formal accepting letter cc IEA Legal Office (TCP.legal@iea.org)

4. IEA Legal Office sends the country/entity a Signature Page

5. The country/entity sends the Signature Page by email and post mail to IEA Legal Office

*All letters should be provided as electronic copies except the original signed signature page which must be sent in the post to the IEA Office of the Legal Counsel at: IEA Office of the Legal Counsel 9 Rue de la Federation 75015, PARIS, FRANCE

Participation in the TCP becomes effective from the date of signature of the Signature Page
4. How to become a member of the HTCP

4.2. How to become a CP if you are not part of the OECD

Participation to the Agreements is possible on an equitable basis in relation to the sharing of obligations, contributions, rights and benefits of OECD Members for:

- countries that are non-Members of the OECD
- international organisations in which countries that are not Members of the OECD participate

- If they have not been previously approved by the ExCo, a request must be reviewed by the CERT, which will later report its views to the ExCo for decision
- The Secretariat shall inform the Committee on non-Member Countries of all such requests.
- Unless the ExCo decides otherwise in a specific case,
  - non-member Participants shall not serve as ExCo Chair
  - in a case where a decision be taken by unanimity, non-member Participants may not block an otherwise unanimous decision by the OECD Member country
Responsibilities

• The incorporation must appear in the record (either in the ExCo Minutes or by fax)

• New members, both contracting parties (countries) and sponsors (entities), must join at least one Task, and actively participate in ExCo meetings and planning sessions

• For each Task they join, members must commit to follow its scope of work and to ensure appropriate expert participation (as well as expert funding)

• All members make a 11350 € contribution to the IEA Hydrogen TCP Common Fund on an annual basis

*Generally, only one Contracting Party is designated per country although it is legal for more than one to be designated (with responsibility for different tasks). However, in the case of multiple Contracting Parties, each country has only one vote.
4. How to become a member of the HTCP

4.3. How to become a Sponsor

1. Unanimous approval of sponsorship by the ExCo (recorded in the ExCo meeting Minutes)
   Sponsor participation is open only to entities of OECD countries (and international organizations that they participate in)

2. Approval by the CERT after consultation and approval of the CERT country delegates of those countries in which the potential sponsor is based
   Formal procedure: HIA sends a letter to the DO reporting consultation with the country delegates, including approval, and requesting CERT approval → the DO will then process the request

3. Deposit by the Sponsor with the IEA of a written acceptance of the terms and conditions for participation in the HIA
• Sponsors will not sign the HIA, but the terms and conditions of participation and financial contributions will be the subject of a **contractual arrangement** with the Sponsor.

• Situations where Sponsorship could be envisaged include:
  - Participation by entities from industry, professional bodies, or user associations from OECD countries where the Member government is not currently participating in the HIA. This category of Sponsorship would normally be regarded as transitional towards full Contracting Party status and contributions.
  - Participation by such entities where their involvement in the Implementing Agreement is in addition to that of any entities formally designated by their governments to become CP.
  - Participation by international organizations, which are not intergovernmental bodies, and in which one or more entities from OECD countries are members.

*Same formal procedure as for Contracting Parties. See previous slides.*
Distinction between Contracting Party Members and Sponsor Members

• As Contracting Parties represent governments of countries and the EU, the constituents of these entities are eligible to participate in all IEA HIA tasks. In contrast, a Sponsor Member represents itself, so the Sponsor Member may participate in all IEA HIA tasks on its own behalf.

• Unlike Contracting Parties, Sponsor Members are unable to serve as Chair or Vice-Chair. Sponsor Members are also unable to veto an otherwise unanimous ExCo vote that requires unanimity.
Ways of becoming part of the HTCP for non-Ministries entities

Your country

**IS** a member
- Contact your country's representative
- Once you have its approval, you can start participating in the Tasks

**IS NOT** a member
- Become a Sponsor
- You will automatically become part of the HTCP

*If you want your country to be a member, you can contact the Technical Secretariat and together look for ways to include it.*
5. How to start a Task

5.1. Preliminary Proposal

- Initial proposal
- Preliminary proposal → approval of the ExCo
- Task Organizer identified
- Authorization to proceed + guidance to Task Organizer on scope
5.2. Project Definition Phase (PDP) 9-12 months

- First Project Definition Workshop*
- Preliminary studies, surveys, etc.
- Second/Third Workshop (as needed)**
- Operating Agent and Subtask Leaders identified
- Annex approved by ExCo
- Decision on participation
- Funding process for experts initiated
- Official Start
First Project Definition Workshop*

➢ State-of-the-Art Review
➢ Technology priorities identified
➢ Discussion on scope and possible specific Task activities
➢ Potential national contributions discussed
➢ Task description drafted
➢ Estimation of resource requirements

Second/Third Workshop (as needed)**

➢ Consensus on objectives, scope, activities...
➢ Draft, refine annex
➢ Finalize resource requirements
➢ Task work plan and information plan drafted
➢ National contributions discussed
5.3. Task implementation

- Task Work Plan* finalized and approved within 2 months of start (if not done earlier)
- National Participation Letter** submitted
- First Experts meeting
- Research initiated
Task Work Plan*
Live document, revised and updated on a regular basis

➢ Objectives, activities and results
➢ Who is responsible for what
➢ Required resources for each activity: experts, time, funds, facilities → when are they required
➢ Milestones
➢ Task schedule and major outcomes

➢ Information plan → for each major info product:
  ➢ Title (preliminary or final)
  ➢ Subtask connection
  ➢ Report Number (if known)
  ➢ Category: To be published or internal working document
  ➢ Purpose of report (or other product)
  ➢ Outline of contents
  ➢ Intended audience
  ➢ Production Schedule (4 important dates: expected date of review and approval from Task Experts / ExCo)
  ➢ Names and countries of those responsible for writing, editing, production, printing & distribution
  ➢ How production and dissemination costs will be shared
  ➢ Dissemination & publicity plans
  ➢ Plan to assess impact of products

Semi-annual status report to ExCo includes 6-month Work Plan + status of milestones
National Participation Letter**

- Must be submitted to the OA within 3 months from the official start of the Task (or if substantial new work is added)
- It is signed by the ExCo member
- Its goals are to:
  - Provide OA with written commitment from each country
  - Allow OA to determine whether they have all the necessary resources to carry out the Task
  - Document each country's involvement in terms of participation and funding
- It includes:
  - Minimum participation requirements
  - Reference to the Task Work Plan and the requirement to abide by that document
  - Info from national experts that will participate: name, address, level of effort, other resources/contribution, when funding will be available etc.
  - Any other information required by the OA
6. How to join a task

- Any Contracting Party to the Implementing Agreement may join a task at the time of the approval of the Annex by indicating its intention to participate.

- The name of the original Contracting Parties should be listed in the Annex at the time of its approval.

- At a later date, any other Contracting Party to the Implementing Agreement may, with the unanimous agreement of the existing Task Participants, become a Participant in a Task.

However, after work has been ongoing in a Task for some time, the experts may choose to establish some restrictions regarding admission of new Participants, for example:

- Setting the date after which no additional Participants will be admitted to the Task.
- Establishing requirements for joining a Task after substantial work has been completed (i.e., the work or input which may be required of latecomers to be accepted into the Task).
7. How to change the country’s representation

- There are no specific requirements to be an ExCo **Representative**
- Members can select any individual they choose to be its Representative. Although recommended, there is no requirement that a Contracting Party’s representatives be nationals of or located within the Contracting Party’s country
- The Representative is the key contact person for a Participant in the ExCo
  - The **Alternate** ExCo Representative is the secondary contact person who supports the primary ExCo representative, and acts as the key contact person if they are unavailable.
  - Together, the primary and alternate representatives exercise a single vote. If there is a disagreement between the two representatives with respect to a vote, it is the primary Representative who has the authority to vote.

→To change an ExCo Representative/Alternate:

send a signed electronic copy of the template letter '**Change of ExCo Representation**' to the TCP Chair (paul.lucchese@cea.fr) and Technical Secretariat (marina.holgado@ieahydrogen.org) with TCP.legal@iea.org on copy.

Please do not mail the original signed letter
7. How to change the country’s representation

7.1. Current Representation

You can find the list with all Representatives and Alternates in the [IEA Hydrogen TCP website](https://www.iea.org/).
Contact

If you have any doubt or comment, or you would like more information about a specific procedure, please contact the Technical Secretariat, Marina Holgado (ARIEMA):

marina.holgado@ieahydrogen.org /
technicalsecretariat@ieahydrogen.org