

# Technology Collaboration Programmes

*TCP Universal Meeting - 9 October 2017*  
*SESSION 1 - Enhanced TCP – IEA collaboration*

## TCP ETSAP - Energy Systems Modelling

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# [ETSAP TCP]: About Us

## ■ Mission and scope

- assist **policy makers** to model future **energy pathways**

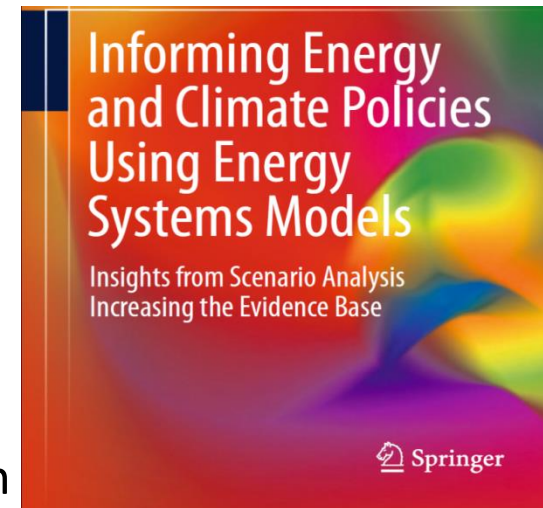
## ■ Activities

- build **tools** and **capacity** in energy systems modelling
- **collaborative** energy modelling **research** and **analysis**
- biannual **workshops** and **training**
- **100** publications (incl **40 journal papers**) p.a.

## ■ Current high-priority themes

- role of **technology** in meeting **well below 2D** ambition
- **quantifying impacts** of R&D investment (MI)
- interactions between **energy** system and
  - ◆ **economy** (winners and losers in energy transition)
  - ◆ **society** (behaviour and societal change)

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## PARTICIPANTS

	IEA members	Partner countries	Intergovernmental
Contracting Parties	19	2	
Sponsors	2		

# Enhanced TCPs – IEA Collaboration

## ■ State of play

- TCP ETSAP **collaborates** with IEA Secretariat on
  - ◆ participation at **IEA events**, e.g. @ COP-21, IEA-NEET Workshop, IEA-RES-E integration
  - ◆ **PhD internships** e.g. with ETP team on MoMo,
  - ◆ **joint publications** e.g. freight, behavioural economics,
  - ◆ **reviewing** IEA publications (e.g. Energy Technology Perspectives)

## ■ Ideas for new or enhanced collaboration

- **Joint events** in **IEA partner** countries
- TCP **secondments** to IEA (incl. more PhD internships)
- **Joint TCP-IEA-TCP workshops** (e.g. DoE / IEA-GHG / IEA-ETSAP workshop CCS)

## ■ Further ideas on:

- **strength** of TCPs (people) - **weakness** of TCPs (little TCP-TCP interaction)
- TCPs articulate their value proposition through **outputs** and **outcomes**
- better align TCP and IEA programmes via **more joint events**
- **shared** IEA-TCPs energy **data**, **workshops** and **Annexes**

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## Energy Efficient End-Use Equipment (4E TCP)

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# 4E TCP: About Us

## ■ Mission and scope

- Promote government actions that encourage the use of energy efficient end-use equipment and systems.

## ■ Activities

- International benchmarking of product performance between countries/regions and examination of performance trends globally
- Examining opportunities for international alignment of policy approaches and technical standards
- Capacity enhancement

## ■ Current high-priority themes

- Solid State Lighting
- Motor Systems
- Connected Devices and Networks
- Monitoring, Verification & Enforcement

**Website:** [www.iea-4e.org](http://www.iea-4e.org)

## PARTICIPANTS

	IEA members	Partner countries	Intergovernmental
Contracting Parties	12	0	1
Sponsors	0	0	0

# Enhanced TCPs – IEA Collaboration

## ■ State of play

- Energy Efficiency Market Report
- Digitalization Report
- World Energy Outlook (Motor systems)

## ■ Ideas for new or enhanced collaboration

- Current collaboration between the IEA and 4E is great

## ■ Further ideas on:

- 4E activities are driven by the policy priorities of contracting parties
- 4E has to juggle priorities from contracting parties with those of external stakeholders (IEA, other TCPs, external stakeholders)
- Collaboration between TCPs has been challenging – collaboration with the IEA Sec has been more successful

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## TCP on Bioenergy (IEA Bioenergy TCP)

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# IEA Bioenergy TCP: About Us

## ■ Mission and scope

- Increase knowledge and understanding of bioenergy systems => facilitate commercialisation and market deployment of **environmentally sound, socially acceptable and cost-competitive bioenergy systems** and technologies and to advise policy and industrial decision makers

## ■ Activities

- International collaboration and information exchange on bioenergy research, technology development, demonstration, and policy analysis => focus on overcoming barriers to the near- and long-term deployment of bioenergy technologies.
- 10 Tasks & strategic projects, cover the full value chain from biomass feedstocks to final energy product. => reports/publications, workshops, webinars; increased focus on outreach & communication!

## ■ Current high-priority themes

- Sustainability and Communication
- Biomass resources and mobilisation
- Market deployment
- Integration into the energy system (with other renewables) & the biobased economy

## PARTICIPANTS

	IEA members	Partner countries	Intergovernmental
Contracting Parties	20	3	1
Sponsors	-	-	-



# Enhanced TCPs – IEA Collaboration

## ■ State of play

- collaboration with the IEA Secretariat on IEA How2Guides, Technology Assessment, joint efforts in Bioenergy Technology Roadmap, approach potential new Members for the TCP

## ■ Ideas for new or enhanced collaboration

- Linking multi-lateral efforts on bioenergy/biofuels (CEM, Mission Innovation, BioFuture Platform, IRENA, GBEP)
- Higher visibility of IEA Bioenergy in common work (e.g. in Roadmap) **LOGO on report**

## ■ Improvement by alignment:

### Vision:

- IEA Bioenergy TCP : → **working horse**

### Supported by:

*Mission Innovation Biofuel Challenge* for R&D strat.

*Biofuture Platform*: Vision and political support

*GBEP*: sustainability

*FAO: Food and Agriculture (MoU)*

*IRENA & SEforALL: global outreach*

### Needed:

- **Joint Approach of IEA and IEA Bioenergy** based on strengths: **IEA Bioenergy TCP** : knowledge, involvement of countries; **IEA**: Communication and Dissemination
- **Opportunities**: ‘Key Actions’ of Joint Roadmap are guidance for the TCP work programme

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## Greenhouse Gas R&D Programme TCP (GHG TCP)

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# GHG TCP: About Us

## ■ Mission and scope

- Assess the role that technology can play in reducing greenhouse gas emissions from fossil fuel use.

## ■ Activities

- To evaluate technology options for greenhouse gas mitigation from, power and industrial systems
- To facilitate implementation of potential mitigation options,
- To facilitate international collaborative activities,
- To widely disseminate our results.

## ■ Current high-priority themes

- Négative Emission Technologies
- Flexible Opération
- Cost and value of CCS

## PARTICIPANTS

	IEA members	Partner countries	Intergovernmental
Contracting Parties	14	1	1
Sponsors	11	1	2

# Enhanced TCPs – IEA Collaboration

## ■ State of play

- The GHG TCP collaborates with the IEA Secretariat on WEO/ETP, Relevant road maps and briefs on CCS status to WPFF etc.
  - ◆ Presentation of 20 years of CCS report at GHGT-13
  - ◆ Joint study report on Industry CCS underway with IEA CCS unit

## ● Ideas for new or enhanced collaboration

- ◆ Further joint study reports: Negative Emissions and CCS Value

## ■ Further ideas on:

- TCP's a good collaborative mechanism – model 40 years old and could be overhauled, streamlined and made more fit for 21<sup>st</sup> century
- Often difficult to articulate TCP value to Association countries and need for membership fees in cost shared model
- GHG TCP members set work programme based on collective needs – not always easy to align with IEA programmes of work
- Air pollution, electric vehicles transition from coal to gas offer opportunities but difficult for TCP's to engage – IEA introductions/support needed.