Introducing GO-P2P:

The Users TCP Global Observatory on Peer-to-Peer, Community Self-Consumption & Transactive Energy Models by IEA

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Users TCP and the International Energy Agency

- The International Energy Agency (IEA) is an intergovernmental organisation that works to shape a secure and sustainable future for all.

- The IEA created the Technology Collaboration Programme (TCP). The Users TCP is one of 38 TCPs, each focused on a different topic. Together, they connect thousands of experts across government, academia and industry in 55 countries dedicated to advancing energy technology research and application.

- **The Users TCP is functionally and legally autonomous from the IEA. Views and findings of the Users TCP do not necessarily reflect those of the IEA.**

What is GO-P2P?

- ■ GO-P2P is the first international, pre-competitive, and early stage research collaboration on the whole systems implications of local energy models.

- ■ Leading institutions researching peer-to-peer energy trading (P2P), transactive energy (TE) and community self-consumption (CSC) models.

- ■ International exchange of valuable evidence on factors determining uptake of these models and their viability.

- ■ Platform for collaboration between all stakeholders in the P2P/TE/CSC fields (policymakers, businesses, NGOs, researchers).

What is GO-P2P?

- **Start:** 3 September 2019

- **Duration**: Three years + six-month reporting phase

- **GO-P2P conducts international comparison of :**
  - **Eight member countries** (Australia, Belgium, Ireland, Italy, Netherlands, Switzerland, UK and USA); and
  - **Two accession countries** (Germany and Colombia)

  Participants from eight other countries support this work through providing technical and scientific expertise.

- **The 150+ participants** are drawn from academia, industry and non-profits.
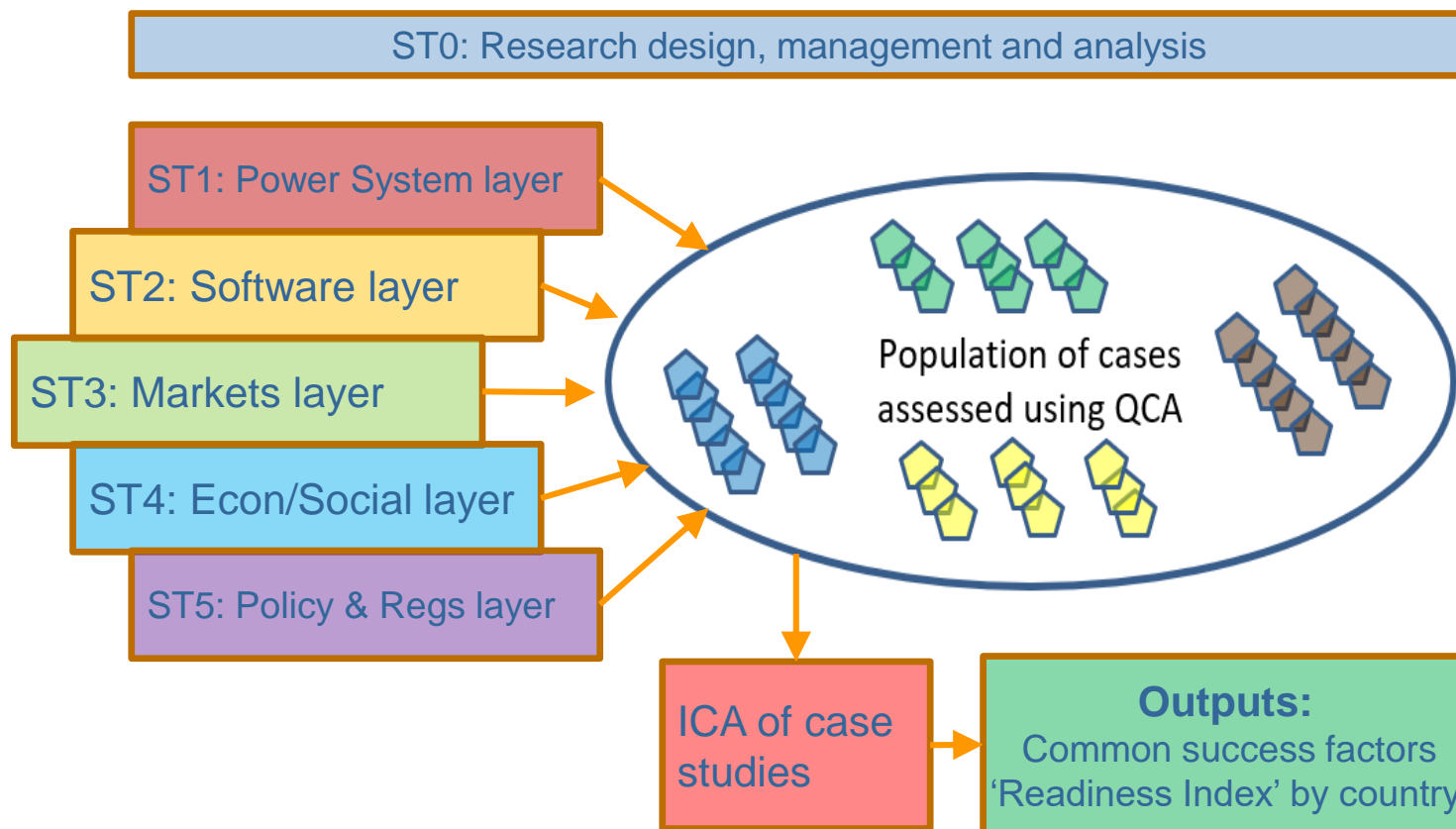
International engagement

- ■ Engagement with key stakeholders including:
- • International Energy Agency (IEA)
- • International Association for Trusted Blockchain Applications (INATBA):
  - • New GO-P2P/INATBA Task Force launched in September 2020.
- • International Renewable Energy Agency (IRENA)
- • OECD

Structure (sub-tasks)

- **ST 0: Research design, management and analysis**
  University College London (United Kingdom)

- **ST 1: Power system integration**
  Lucerne University of Applied Sciences and Arts (Switzerland)

- **ST 2: Hardware, software & data**
  International Energy Research Centre (Ireland)

- **ST 3: Transactions and markets**
  Carnegie Mellon University (United States)

- **ST 4: Economic and social value**
  University of New South Wales (Australia)

- **ST 5: Policy and regulatory**
  Florence School of Regulation/European University Institute (Italy)

Structure

ST0: Research design, management and analysis

ST1: Power System layer

ST2: Software layer

ST3: Markets layer

ST4: Econ/Social layer

ST5: Policy & Regs layer

Population of cases assessed using QCA

ICA of case studies

Outputs:
Common success factors 'Readiness Index' by country

National experts will gather data on case studies in member countries and conduct international comparative analysis (ICA) using Qualitative Comparative Analysis (QCA) to determine success factors in different social, technical and policy contexts.

Key Deliverables

- Sub-task reports on state of art and key challenges.
- Country reports on key factors determining uptake of P2P/TE/CSC business models.
- Searchable case-study database by region & technology.
- National Readiness Index for participating countries to adopt P2P/TE/CSC models.
- Spin-off initiatives and collaboration opportunities through conferences, journal special issues, and contributing to IEA and CEM reports where appropriate.

Why should I participate?

- **■** *Policymakers*
  - International comparative evidence base for policymaking.
  - Early identification of policy challenges from other countries.
  - Early access to the latest research from leading research institutions.

- **■** *Businesses/non-profits*
  - Market knowledge on case-studies and national readiness.
  - Work in a pre-competitive environment with all stakeholders.
  - Engage with leading researchers and research students.

- **■** *Experts*
  - Join a global community of leading researchers in the field.
  - Maximise your impact through informing global bodies like International Energy Agency (IEA) & Clean Energy Ministerial (CEM).
  - Work collaboratively to define and grow the field.

How can I participate?
- Policymakers and regulators

■ High-level Observatory findings are primarily targeted at policymakers and regulators.

■ Policymakers & regulators can engage in three ways:

● As nationally designated delegates of the Users TCP;

● As designated 'policy contact points' working directly in the P2P/TE/CSC area;

● By notifying us that you would like to be kept informed of outputs and the work of the Observatory.

How can I participate? – Business/non-profits

■ Observatory findings support policymakers at national & international levels, as well as companies and non-profits working with P2P/TE/CSC models.

■ Businesses/non-profits can participate in two ways:

1) Become a TCP Sponsor (~€10k/annum). This allows you to:

- ● Join the Annex Steering Committee;

- ● Attend TCP ExCo meetings with all member country delegates;

- ● Participate directly or indirectly in other TCP Annexes;

2) Become a GO-P2P expert participant – see next slide.

How can I participate? – Experts

- Experts are the driving force of the Observatory, collectively shaping its deliverables.

- As a participating expert you will:

  - Join one or more sub-tasks aligning with your expertise;

  - Contribute to sub-task and country specific deliverables;

  - Contribute to conferences, special issues, etc as desired;

  - Contribute case-studies of P2P/TE/CSC pilot projects in your country;

  - Attend Observatory meetings whenever possible.

How can I participate? – Experts

- Experts from any sector can participate as National Experts in the Observatory.

- All participants cover their own costs
  - Many government provide funding either directly, or through funding agencies, to support participants.

- TCP Annexes provide global leverage and impact for your research. Participants should ensure their Observatory work aligns with existing research.

Summary

- GO-P2P is an international forum for understanding the policy, regulatory, social and technological conditions necessary to support the wider deployment of P2P/TE/CSC models.

- Leading research institutions contributing.

- Valuable for all stakeholders: policymakers, businesses, non-profits, researchers.

- More information on our website: https://userstcp.org/annex/peer-to-peer-energy-trading/

- We welcome new participants!

For more information on GO-P2P, please don't hesitate to get in touch:

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