

# Peer-to-Peer and Community Self-Consumption Observatory

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### What?



# Why?

- Draft EU Renewable Energy Directive (2016/0382(COD))
  - At the European level, community self-consumption is a right now being enshrined in European law. Article 21 states:
    - "Member States shall ensure that renewable self-consumers...are entitled to...generate renewable energy, including for their own consumption, store and sell their excess production of renewable electricity, including through...peer-to-peer trading arrangements..."
    - Agreement reached on 14 June. Awaiting formal approval by European Parliament and Council.
    - Ref: <u>https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CONSIL:ST\_10308\_2018\_INIT&from=EN</u>
- Bloomberg reports China is planning for peer-to-peer trading within regions.
- Australia and New Zealand are deploying large scale trials
- USA has many transactive grid trials varying by state



### Who & Where: Expressions of interest to participate

#### Research Organisations

- UK: UKR&I EnergyRev Consortium (funding outcome pending)
- US: SLAC Lab at Stanford University (US DOE National Laboratory); Purdue
- University Research Centre in Economics
- Germany: European School of Management and Technology Berlin
- Colombia: Universidad EIA Envigado; Externado University of Colombia, Bogotá
- Australia: Monash University; UNSW; Victoria University
- Israel: Interdisciplinary Center (IDC) Herzliya
- Italy: European University Institute

Expressions of interest in France: Université Paris 1 Panthéon-Sorbonne; Université Bretagne Sud

- DSM ExCo Member countries
  - Australia; Ireland; Netherlands; Sweden; Switzerland; UK and USA
  - Organisations
    - World Economic Forum; Energy Web Foundation

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## What?:

### Aim and objectives:

- Establish a pre-competitive framework and global community for collaborative working with government, regulators, industry and consumers
- Elicit policy makers' evidence needs for regulatory change
- Study the relationship between the design of CSC & P2P market structures and energy policy outcomes.
- Identify factors leading to uptake of CSC & P2P models in different contexts and construct a 'Readiness Index' feeding into the IEA & CEM
- Bring new countries and companies into the DSM TCP
- Produce outputs for the IEA Global Exchange Platform



### When?

#### • Preparatory Phase: 2018-10 to 2019-04

- Obs. Prep. Phase Mtg 2018-Q4
- DSM ExCo 2019-04

#### • Working Phase: 2019-04 to 2022-04

- 2019
  - CSC Obs Kickoff Mtg 2019-05
  - DSM ExCo 2019-10; CSC Obs Mtg 2019-11
- 2020
  - DSM ExCo 2020-04; CSC Obs Mtg 2020-05
  - DSM ExCo 2020-10; CSC Obs Mtg 2020-10
- 2021
  - DSM ExCo 2021-04; CSC Obs Mtg 2021-05
  - DSM ExCo 2021-10; CSC Obs Mtg 2021-11
- 2022
  - DSM ExCo 2022-04; CSC Obs Mtg 2022-04

#### • Reporting Phase: 2022-04 to 2022-10

• DSM ExCo - 2022-10 Final report.



### How?

#### • Theory:

- Theory-driven systematic review (Pawson & Tilley 1997) plus Expert elicitation (O'Hagan 1998) generates:
  - Defining criteria of CSC & P2P projects
  - Develop case-study screening criteria
  - Develop common case-study analysis framework.
  - Understanding of varying 'policy epistemologies' (Cooper 2018)

#### Data:

- Global case-study selection and analysis
  - Selection of cases against screening criteria
  - Application of common analysis framework

#### Analysis:

- Qualitative Comparative Analysis (Ragin 2014)
  - Identification of comparative importance of common contextual factors in policy, regulatory, technical or social environments.

#### • Outputs:

- Country level reports
- Common success factors reports by context
  - Policy and regulation; Technical environment; Social environment
- CSC and P2P 'readiness index' (Parasuraman 2000)

#### • Detailed workplan to be developed in Preparatory Phase.



# Any Questions?

