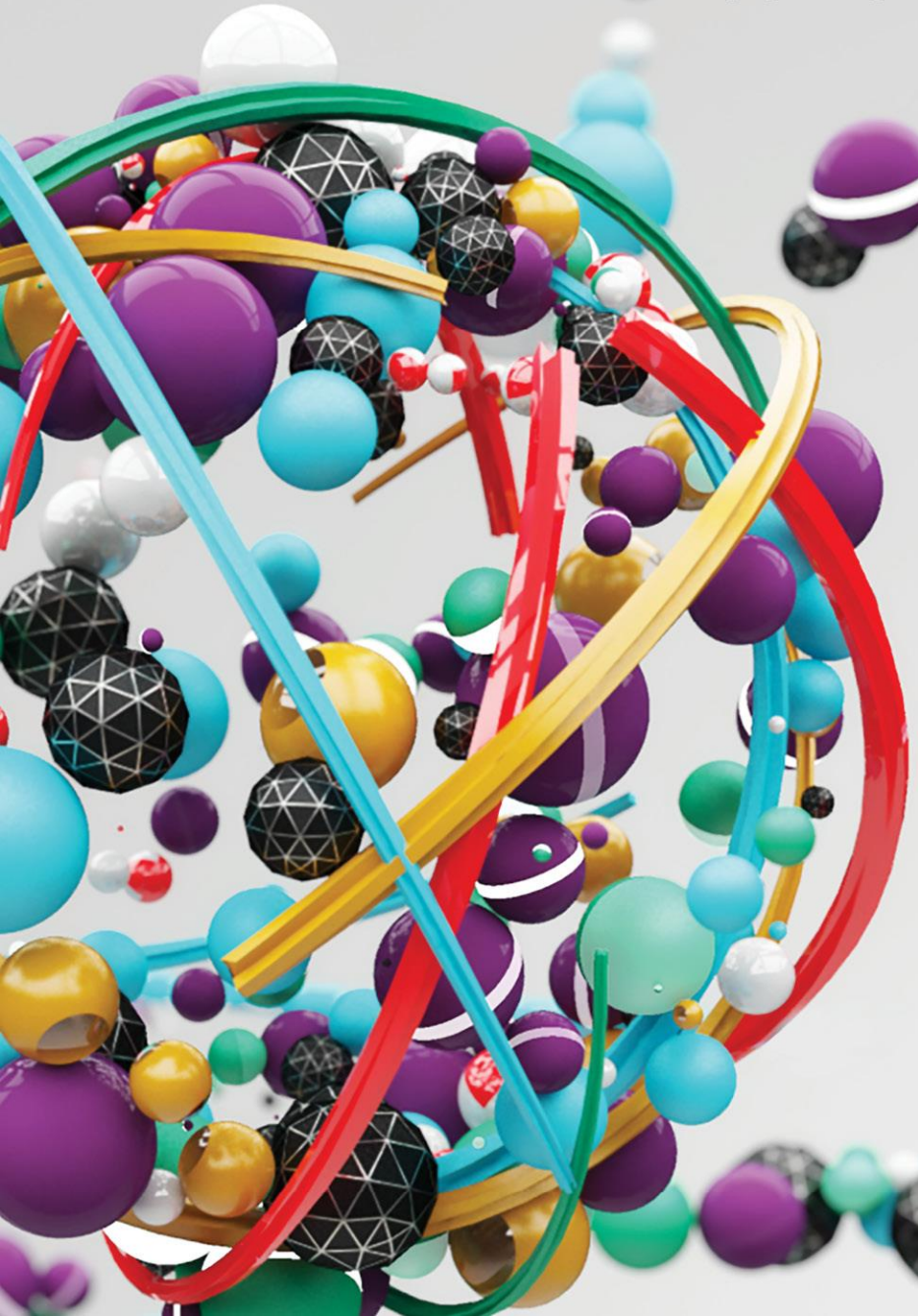
Technology Collaboration Programmes



Peer-to-Peer and Community Self-Consumption Observatory

Alexandra Schneiders (Operating Agent)

David Shipworth (DSM ExCo Sponsor)

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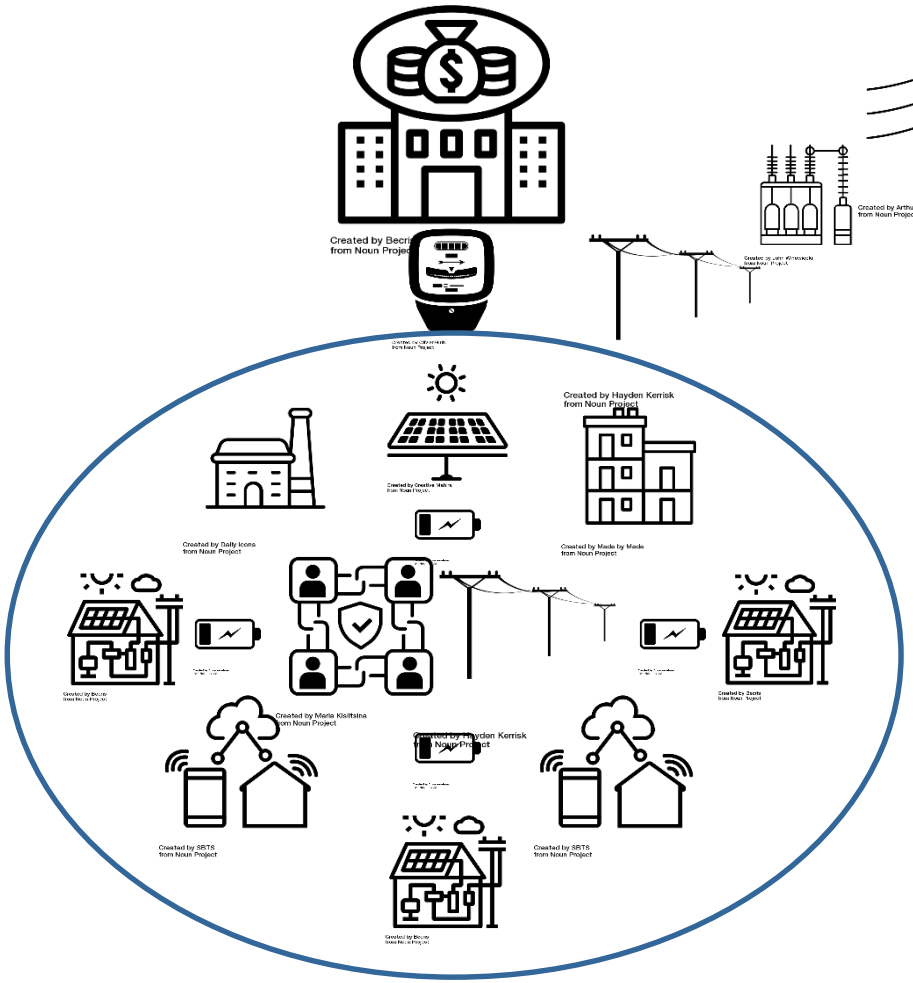
Technology Collaboration Programmes

Background



- **Decentralisation** of energy system
- Energy self-consumption through P2P/TE & CSC: solution to **grid management challenges**.
- Facilitated by **technologies** such as DLTs (e.g. blockchain).
- Roll-out of pilots in China, US, Europe etc.
- New laws **recognising right** to P2P.

The Observatory

- The first **international pre-competitive** and early stage research collaboration on the **whole systems implications** of local energy models.
- **Leading institutions** researching P2P/TE & CSC models.
- International exchange of **valuable evidence** on factors determining uptake of models and their viability.
- Platform for collaboration between **all stakeholders** in the P2P/TE & CSC fields (policymakers, businesses, NGOs, researchers).

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

Participants

- **DSM Participants**
  - **UK:** UKR&I EnergyRev Consortium; University College London
  - **US:** SLAC Lab at Stanford University (US DOE National Laboratory); Purdue University Research Centre in Economics
  - **Australia:** Monash University; UNSW; Victoria University (TBC)
  - **Netherlands:** T.U. Delft
  - **Switzerland:** EPFL Lausanne; ETH Zurich (TBC)
  - **Italy:** European University Institute
- **Non-DSM interested Organisations**
  - **Colombia:** Universidad EIA – Envigado; Externado University of Colombia, Bogotá
  - **France:** Université Paris 1 Panthéon-Sorbonne; Université Bretagne Sud
  - **Germany:** European School of Management and Technology – Berlin; KIT
  - **Israel:** Interdisciplinary Center (IDC) Herzliya
- **Interested organisations**
  - World Economic Forum; Energy Web Foundation; World Energy Council

Deliverables

1. Reports on the '**Key factors determining the uptake of P2P/TE & CSC business models**' in participating countries.

2. **National Readiness Index** on the readiness of participating countries to adopt P2P/TE & CSC business models.

- **In parallel**, participants will be collaborating together by hosting side events at conferences, as well as authoring books, journal papers and reports.

Sub-tasks

- Sub-tasks in line with functional stack of P2P/TE & CSC:

1. **The power system integration layer**
2. **The hardware, software and data layer**
3. **The transactions and markets layer**
4. **The economic and social value layer**
5. **The policy and regulatory layer**

+ Sub-tasks for management and analysis of findings.

Task Structure

ST0: Research Design and Management

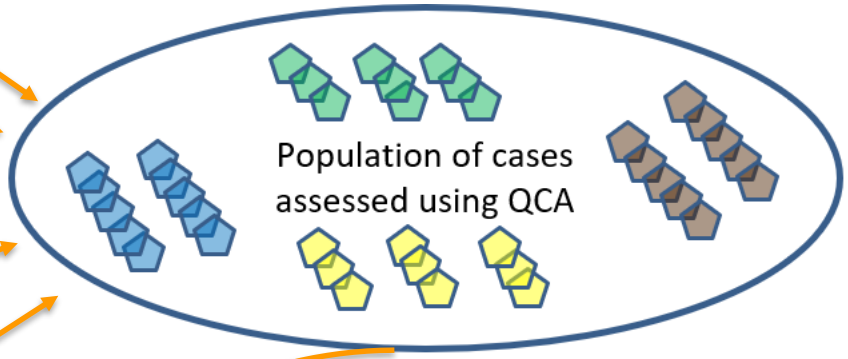
ST1: Power System layer

ST2: Software layer

ST3: Markets layer

ST4: Econ/Social layer

ST5: Policy & Regs layer



ST6: International comparative analysis of case studies using QCA

Outputs:

- Common success factors for uptake
- 'Readiness Index' by country

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Summary

- **International forum** for understanding the policy, regulatory, social and technological conditions necessary to support the **wider deployment** of P2P/TE & CSC.
- Leading research institutions contributing.
- **Valuable** for all stakeholders: policymakers, businesses, non-profits, researchers.
- Once we get final approval from DSM TCP ExCo, we **welcome new participants**!

Thank you for your attention

Any questions?