

Technology Collaboration Programmes

TCP on Demand Side Management

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Feedback from EUWP (Rome:21/03)

- New Strategy presented in the context of the RfE. Key messages were:
- Show 'significant new activity' to demonstrate TCP viability.
- Show demand for new strategy both within DSM and across TCPs
- Show new strategy complements existing work in TCPs
 - Required to ask TCPs about existing activity in the behaviour space, and their sense of the value in DSM moving in this direction.
- Consider if the TCP should live - under the EUWP, or under CERT (cross-cutting)
 - CERT Chair think this should move to the CERT
 - EUWP members think it should say under EUWP
- EUWP views on the proposed new strategy
 - General agreement it addresses a gap in the TCP landscape.
 - ◆ Michele de Nigris was very supportive. ISGAN is doing related work – but on transitions theory.
 - ◆ HEV Chair said they were already doing some work in this area.
 - ◆ HPT Chair said she would have to take this change in direction back for consultation.
 - ◆ Portuguese EUWP delegate was very supportive and thinks it a key missing area in the TCP family.
 - ◆ German delegate was sceptical and said it didn't fit the German technology funding model.
 - ◆ IETS Chair supportive but wants follow-up discussion relevance to them.

Draft Strategic Plan



■ The TCP's Vision

- To be the world-leading international collaboration platform for policy-relevant socio-technical research on energy use.

■ The TCP's Mission

- To provide evidence from socio-technical research on energy use to inform policy making for clean energy transitions.

■ OBJECTIVES FOR 2020-2025

- To establish and develop [four] international networks of expertise to collaborate on the socio-technical aspects of clean energy use.
- To provide impartial and reliable research, guidelines and recommended practices to policy/decision makers and implementers based on international evidence.
- To work with other TCPs to provide multi-disciplinary research on key energy transition topics.

STRATEGIC CONTEXT



- The energy sector is undergoing an unprecedented period of change. Decarbonisation is driving growth of intermittent distributed generation at the grid edge, placing energy in the heart of communities and requiring unprecedented levels of user engagement and demand response. Simultaneously, digitalisation is changing wider social expectations of service, value and usability. These social and environmental forces are turning the energy system inside out, requiring redesigning the energy system around the end user. They are blurring of the boundaries between consumers and producers, across energy vectors, across utilities, and across sectors delivering services to end users.

STRATEGIC CONTEXT

- Improving energy efficiency (energy per unit service) remains critical – but the definition of service shifts to a service-economy model that includes the human dimensions of usability and satisfaction. Poorly designed technologies throughout the supply chain (hardware, software and business models) that are not used as intended, are both energy and economically inefficient. This perspective makes people (designers, intermediaries and end users) as integral as hardware and software to delivering an energy system that meets our wider social, environmental and economic goals. This ‘socio-technical’ approach sits at the core of the Demand Side Management TCP

STRATEGIC CONTEXT



- Policy makers require these changes to accelerate to improve living standards and meet environmental commitments. This in turn requires both political acceptance and social change at the societal level - as well as technologies being widely adopted and used as intended by companies and individuals. Delivering this requires understanding the ways in which people and technologies interact within society to support creation of new business models, social innovation and energy transitions to be successful. This is the aim of the Demand Side Management TCP.

Draft Strategic Plan

■ *Digitalisation and the energy–people nexus*

- Global Observatory on Community Self-Consumption and Peer-to-Peer Energy Trading
- Social Licence to Automate

■ *Behaviour / systems change analysis and application*

- Hard-to-Reach Energy Consumers
- Behavioural Insights Platform
- Potentially undertaking new work on systems change, social innovation and energy transitions

■ *Business models*

- Business Model Strategies
- Potentially undertaking new work with policy makers and Energy Service Company (ESCO) associations to encourage ESCO market development
- Potentially undertaking new work to better understand the conditions for energy efficiency interventions to be rewarded in future energy markets in which performance can be more accurately measured

■ *Socio-technical aspects of energy transitions*

- Potentially undertaking new work on the consumer-related aspects of low-carbon heating and the transition away from natural gas, either as a new Task or integrated into other work
- Potentially undertaking new work on energy technology interface design and usability metrics for key end user technologies such as heating and cooling

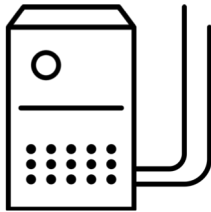
Strategy

Energy Demand =

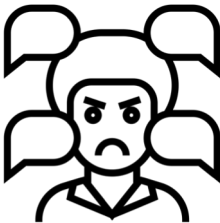
Energy Intensity



Energy input



Technology



Behaviour

x

Consumption Intensity



Created by Pierre-Luc Auliclar from Noun Project

Societal structure

Physical

Temporal

Psychological

Legal

Economic

Education

x

Population size

We need a diagram

■ ISGAN examples

International Smart Grid Action Network is the only global government-to-government forum on smart grids.



Value proposition

Strategic partnerships

IEA, CEM, GSGF,
Mission Innovation, etc.

Broad international
expert network

Global, regional &
national policy support

Knowledge sharing,
technical assistance,
project coordination

