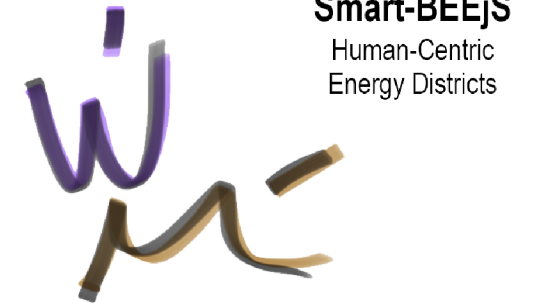


WP6 – Business Models and Consumers' Value Proposition for PEDs



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Aims of Work Package 6

Aim: Understand what is currently going on and what could happen for business models in the energy system of the future, as exhibited through PEDs

Tasks	Deliverable
Task 6.1 – Codifying the existing value generation system at district level	D6.2 <i>Value Generation by PEDs, Best Practice Case Studies Book</i>
Task 6.2 – Triggering Behavioural Informed Business Model Archetypes	D6.5 Smart-BEEjs online User-Based New Venture Business Model Development Tool
Task 6.3 – Disruptive Agent: Planning of disruptive business model pathways for bringing PEDs into the mainstream	D6.3 Scenario-Based Foresight regional workshop D6.4 <i>Value Generation Systems for PEDs: Archetypes for a Networked Europe, 2040: Foresight Report</i> D6.6 <i>Future Images: pathways to exploit future desire scenarios, disruption points and long-term interventions with innovative business models</i>



Summary of findings

1

The development of Positive Energy Districts (PEDs) requires an inclusive and just user-driven market – and, also, targeted subsidies

- Social dimension important, as well as economic and environmental
- Immense regulatory changes needed to include in PED development
- Financial incentives and subsidies remain important for vulnerable populations

2

Human-centric business model development means being responsive to cultural configurations as well

- The roles different business model actors play and their importance may be reflected in culture

3

PED developers: you can look to existing PED or PED-like cases for inspiration, but be conscious of contextual factors that led to the pathway – don't seek exact replicability

- PED development is reactive to contextual factors, people's needs

What do we mean by business model?

- the basis “of how an organization creates, delivers, and captures value”

Cooperative
Deltawind

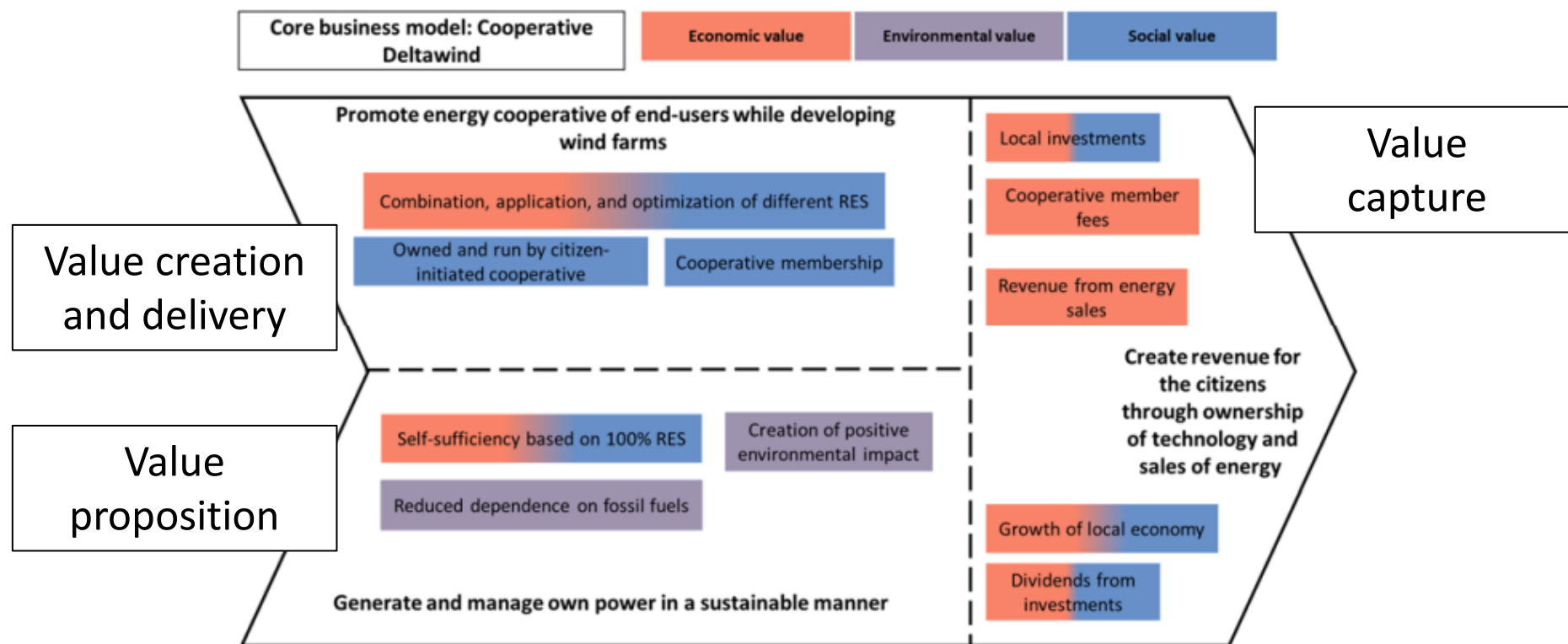
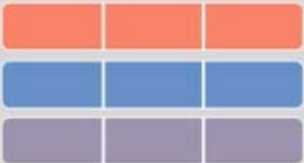
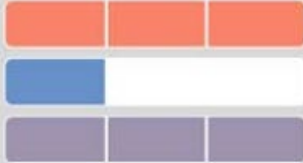
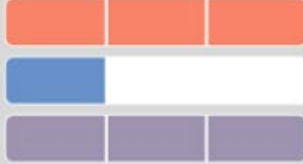
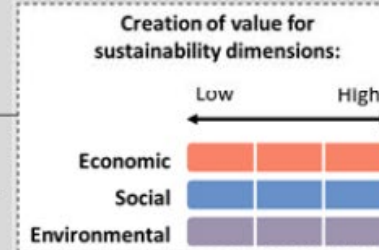


Figure 3-2. Deltawind business model through the lenses of the conceptual framework representing value and sustainability dimensions

D6.2 - Case Study Book (20 PED-like cases)

Archetypes	Sub-archetypes		
People-oriented renewable energy communities that encourage self-sufficiency	Driven by citizen ownership and management	Enables environmentally-friendly lifestyles in human-centric communities	Creates path toward self-sufficiency through synergy of social efforts and technological solutions
			
Large-scale infrastructural environmentally-friendly solutions	Develops smart grid/technology test platform comprising multiple solutions	Provides environmentally friendly district heating	
			
Product service systems that facilitate the energy transition	Expands the deployment of PV	Utilises data-driven technologies to manage and optimise energy demand-supply	
			



- **Diversity of applications:** PEDs are evolving through different approaches
- Cases represent a **paradigm shift:** from a traditional centralised to a decentralised, human-centric energy system

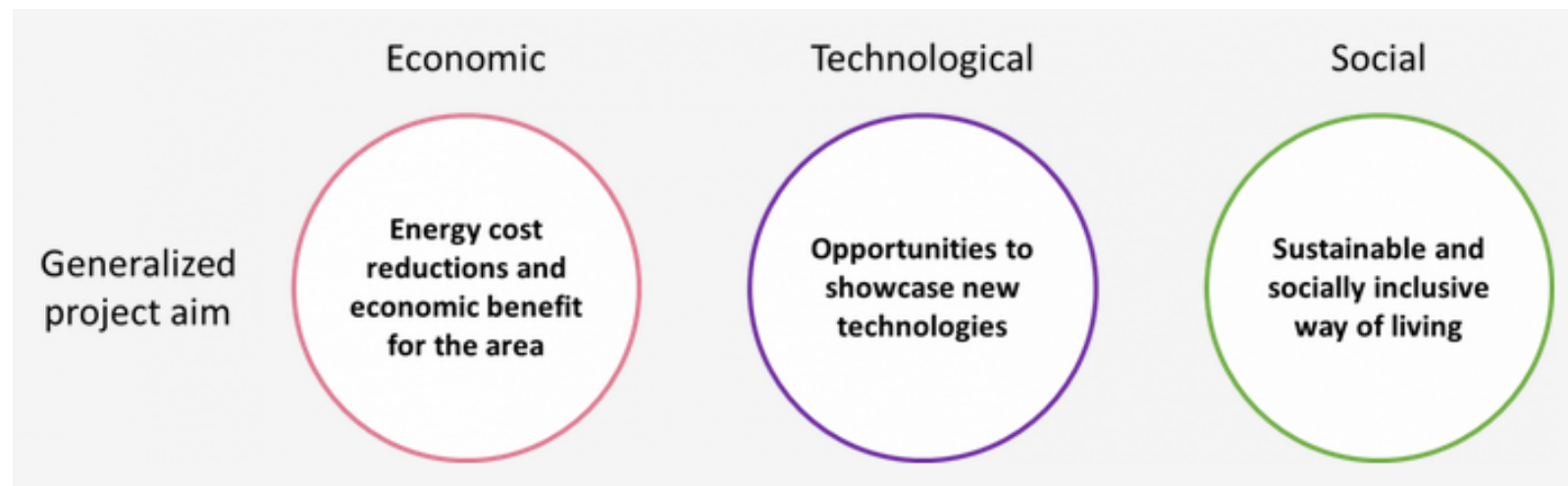
D6.5 - Webtool: PED Case Study Library



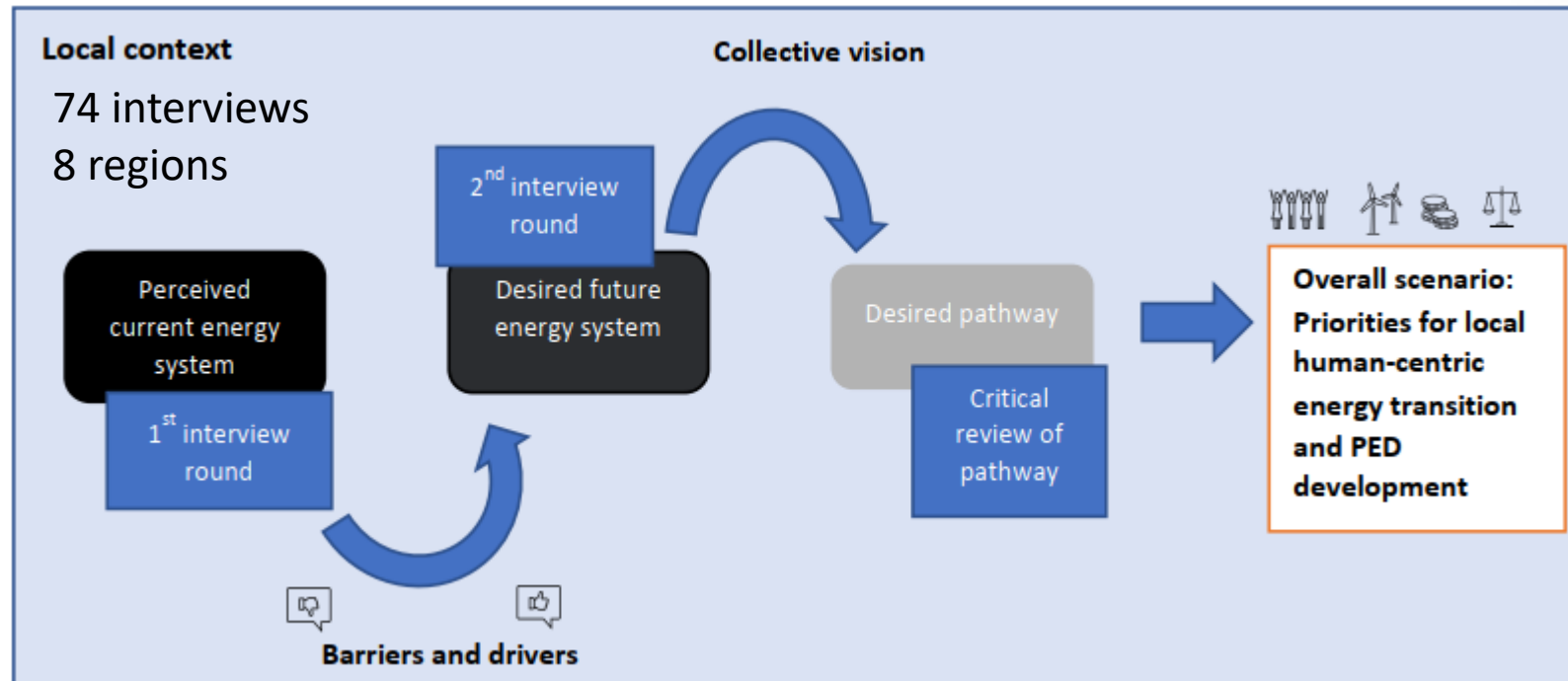
14 case study 'snap shots' with main aim and key information on:

- Stakeholders involved in the project
- Financial streams for financing the project
- Technologies used in the project
- Project achievements

➤ inspire future PED developments at different scales



D6.4 - Foresight Report: place-based transitions



Themes:

- Participation and collaboration
- Techno-economic development
- Business models
- Equity and energy poverty
- Studied regions have similar visions for their future energy systems

- Findings:**
1. Vision enables to achieve requirements for PEDs
 2. Current regulations remain the main barriers
 3. Desire for citizen participation from the 'beginning'
 4. Contextual features influence the transition pathway

D6.6 -PEDs in Europe: one size does not fit all

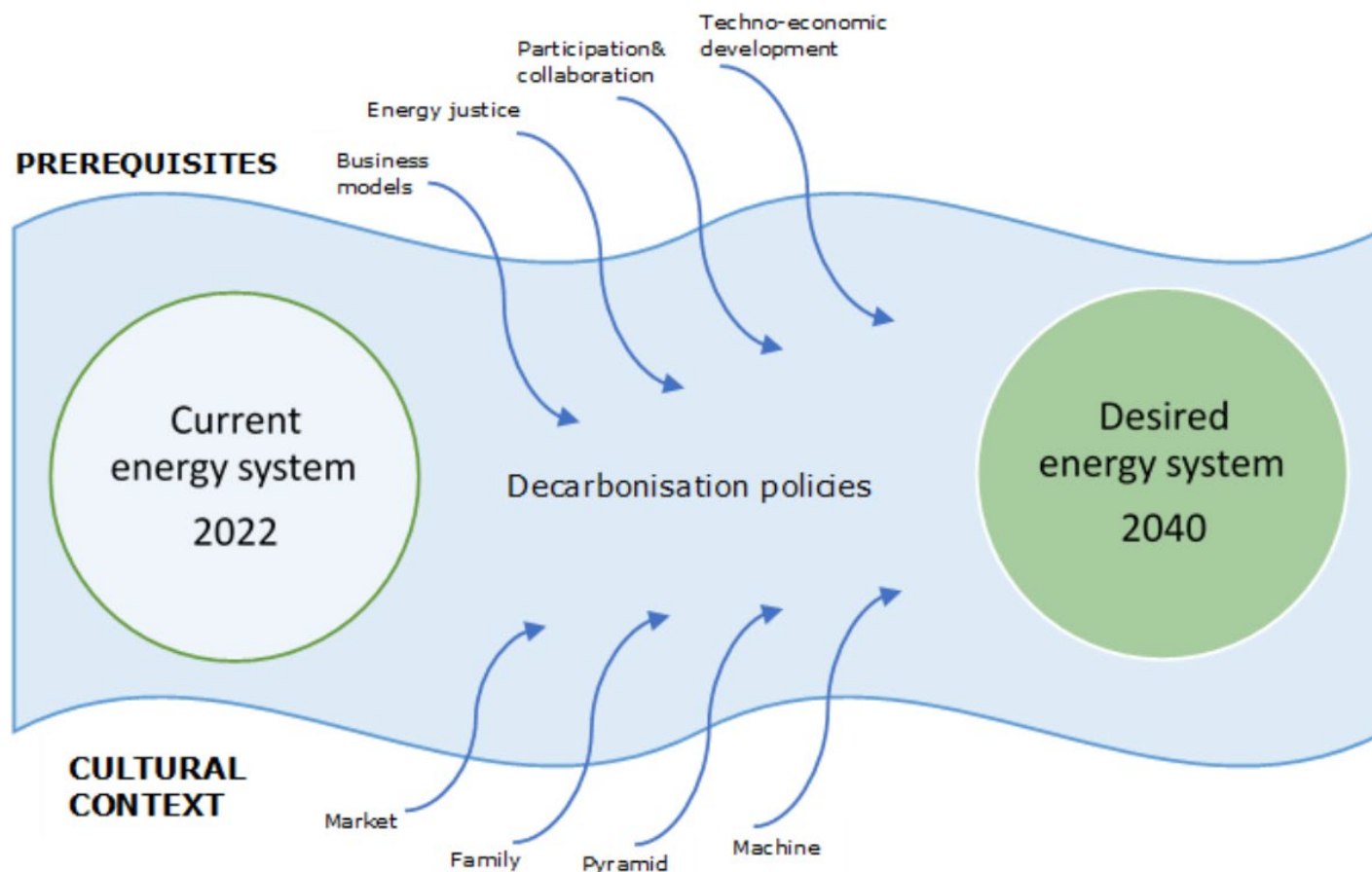


Distinct approaches in energy transition needed for effective formation of PEDs

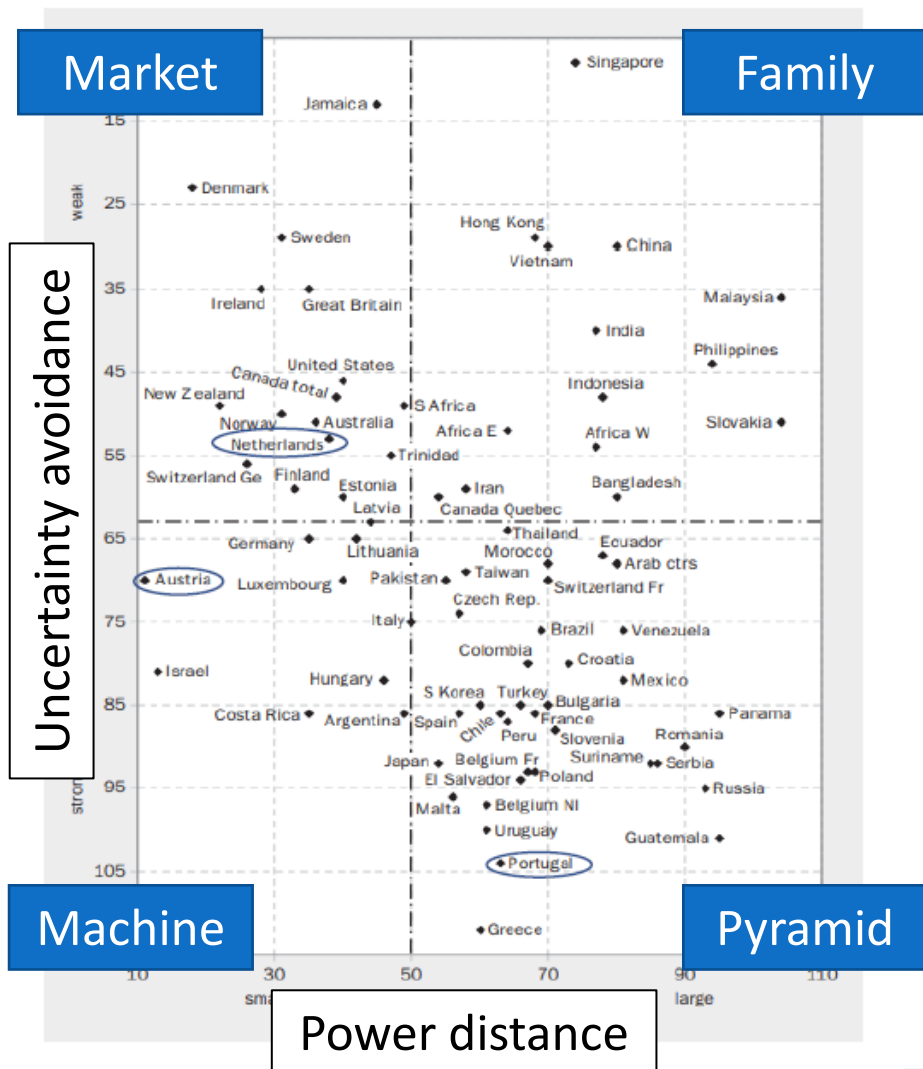
Application of cultural perspective for policy design



Incorporate contextual differences



Example 1: Policies to improve collaboration between stakeholders



Amsterdam ("market")

In market-type culture, energy consumers derive value from their role in initiating of and participating in energy projects. Business models that are initiated **bottom-up and supported financially by the government** (i.e., national or local (regional/the municipality)) are the ones that will appeal to energy consumers.

Vienna ("machine")

Business models are expected to serve as an evidence-based guidance for decarbonisation...in a machine-type culture, business models are expected to be designed based on the **expertise of professionals (industry)** and led by the partnership of public-private entities.

Lisbon ("pyramid")

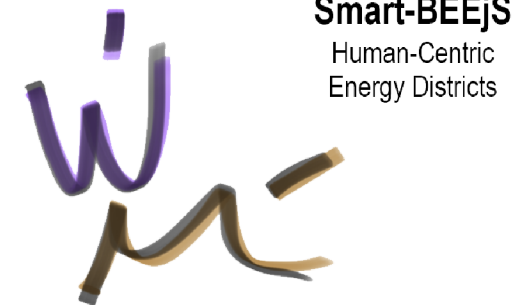
In pyramid-type culture, the **government** is expected to take a leading role in creating attractive energy business models and make it mandatory for citizens to participate.

Fig. 1. *Countries by cultural configurations* [8]

Conclusion

- ➔ Business Models and Consumers' Value Proposition for PEDs differ depending on **aim, scale, and context**
- ➔ Environmental purpose always present; Motivational priorities differ with regards to **economic, technological, and social purpose**

Thank you for your attention!



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