

# Innovative Public Procurement (IPP)

Implications and potential for Zero-Emission Neighborhood (ZEN) projects

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# Background and problem statement

- ❑ Cities and urban areas, though 3% of the planet's surface, produce around 75% of carbon emissions (UNDP, 2018).
- ❑ The increasing trend towards using dialogue with suppliers in the public procurement process deserves attention in regards to the impact on sustainable neighbourhood projects and comparison to end-user engagement activities.
- ❑ This warrants exploring in greater depth the potential of innovative public procurement (IPP) in reducing complexity in sustainable neighbourhood (SN) and Zero-Emission Neighbourhood (ZEN) projects.

***“How can we conceptualize the potential of innovative public procurement (IPP) and in particular pre-tender market dialogue, for mitigating the added project complexity in SN (and ZEN) projects?”***

# Key concepts and relevant literature

- ❑ A complex system can be defined as “a large number of parts that interact in a nonsimple way” (Simon, 1962).
- ❑ Complexity in SN projects are conceptualized in terms of 1) structural complexity and 2) uncertainty (Williams, 1999; Davies & Mackenzie, 2014).
- ❑ Public procurement is considered a powerful tool that potentially enables national and local authorities to achieve sustainable development goals while procuring necessary products and services.
- ❑ Dialogue-based procurement, as a branch of the IPP process, empowers public institutions to procure unconventionally in order to meet unmet needs (Edquist & Zabala, 2012; Obwegeser & Müller, 2018)
- ❑ The rationales to conduct a dialogue with suppliers during the pre-tender stage in public procurement as the following: needs mapping, improving requirements and specs, supply market access, market visibility, and market link creation (Alhola & Nissinen, 2018; Torvatn & De Boer, 2017; Pelkonen & Valovirta, 2015; Edquist & Zabala, 2012; Edler & Georghiou, 2007).

# Methodology

- ❑ Literature review + illustrative case study:
  - ✓ Definition of project complexity and IPP
  - ✓ The case study was employed to further analyse the sources of complexity and assess the potential value of dialogue with suppliers.
- ❑ The case study, Ydalir project, is an ongoing pilot project in Norway, and part of The Research Centre on Zero-Emission Neighborhoods in Smart Cities (ZEN Centre). The project aims to establish a new neighborhood with high ambitions in regards to energy demand and emissions.

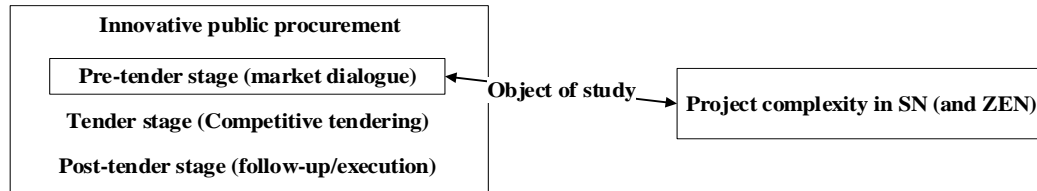


Figure 1. Analytical framework.

# Discussion

- Upfront complexity increase for overall decrease?

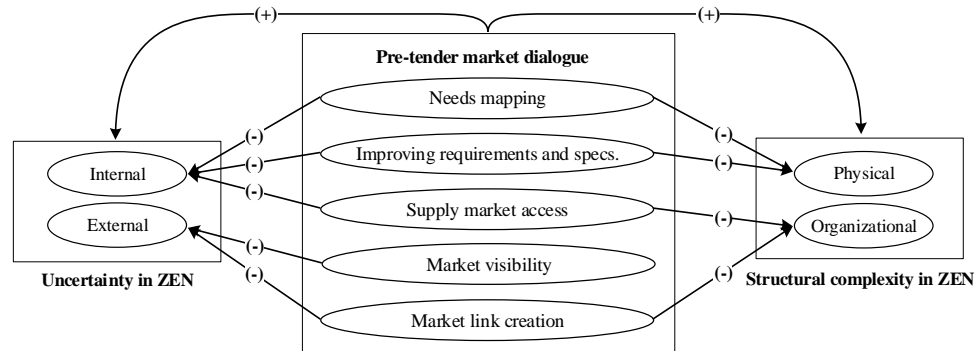


Figure 2. The impact of pre-tender market dialogue on ZEN project complexity

# Conclusions and future research

- ❑ We described four main sources of project complexity in ZEN projects: physical complexity, organizational complexity, internal uncertainty, and external uncertainty.
- ❑ Innovative public procurement (IPP) is shown to be an attractive governance tool that could potentially manage some of the project complexity in ZEN projects.
- ❑ Future research should explore in-depth case studies of IPP with dialogue practices, in order to measure the impact on complexity.
- ❑ We encourage practitioners and scholars to address the issue of complexity in the context of SN as it may assist in uncovering new challenges.