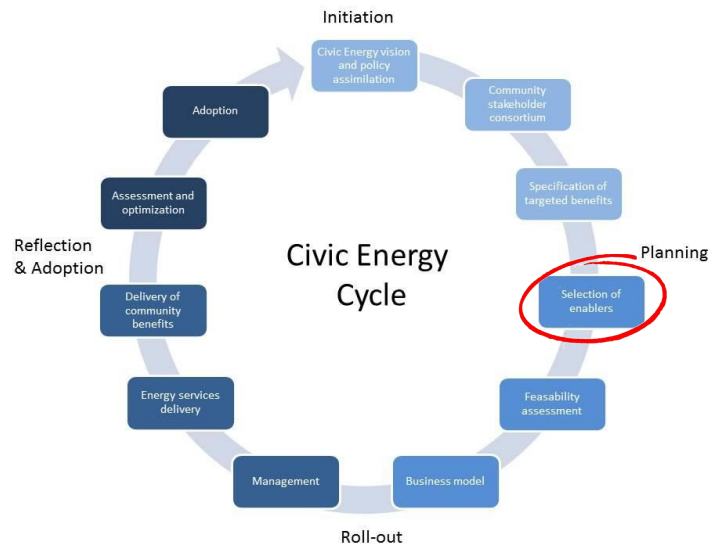


Capacity constraints

Region: Uppsala

One of the main challenges for Uppsala is capacity constraints on the local electrical grid. This is a consequence of the rapid electrification of several sectors and Uppsala's massive growth, to a level where the electrical transmission grid cannot deliver the electricity needed.

Other projects as 'Coordinet' and 'Live-in Smartgrid' are dealing with the issue in the local electrical grid and raise the flexibility of power use as an important resource. Realizing the potential of flexibility is crucial for the transition to a climate positive city. Together with the stakeholder forum of these projects the COBEN project will increase the knowledge on power flexibility and provide solutions that help cut power peaks among the energy users. A reliable electrical transmission net with less power deficit and grid congestion issues has several benefits for the public with power flexibility, local energy production and potential community participation and contribution.



Current stage of pilot with respect to Civic Energy Cycle

The phase 'selection of enablers' will be handled through workshops and cooperation with the involved stakeholders. Later an feasibility study with approaches to reach out to the stakeholders and the public are investigated and activities to enable a understanding the problem in the electrical net and possible solutions and how they can contribute to a reliable local electrical grid.

Targeted benefits

- Increased potential of task connected to implementation of aggregation strategies related to electrical power production and flexibility and utilize establish local stakeholder forums in this initiative.
- Increased knowledge about the situation in the distribution system grid in Uppsala.
- Increased possibility for energy users to participate in and influence the energy system.
- Using flexibility alleviates grid congestion, making it possible for new inhabitants and businesses to grow.
- A more efficiently use of the electrical grid reduces the need for overcapacity in the grid, which in turn is a financial saving.

Delivered benefits

- none delivered yet

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Stakeholders involved

- CoordiNet, 170 MEUR EU project creates regional capacity market for electrical grid (2019-2022).
- Live-in Smartgrid creates test beds for electrical power flexibility (2019-2023)
- Uppsala County's Climate and Energy forum (ULKE) - a local network where public and private sectors work together to reduce Uppsala's climate emissions
- Uppsala Climate Protocol's
- Energy and climate advisors in Uppsala county
- Inhabitants of Uppsala county

Capacities for improvement

- not defined yet

Risks and barriers

- not defined yet