



Interreg
North Sea Region
ACCESS

European Regional Development Fund



EUROPEAN UNION

North Sea Conference
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Stina Rydberg, Johanneberg Science Park

Johanneberg Science Park

- Public private partnership - owned by City of Gothenburg and Chalmers' University of Technology
- About 15 private partners, mainly from real estate industry
- Sweden's leading co-working arena for urban development - focus on urban planning and development, energy and materials
- Together with our partners we develop and manage innovation and demonstration projects
- Our role is to contribute with competence and network





Advancing Communities towards low-Carbon Energy Smart System

The energy transition will take place in cities. ACCESS empowers cities to coordinate local stakeholders for supporting and investing in the transition of Europe's energy system.

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The NSR energy system transition

The NSR is leading the way in the uptake of sustainable energy, moving towards decentralised energy grids.

Systems integration and coordination of high number of different stakeholders is necessary to improve resilience and flexibility of the current energy system and infrastructures.

ACCESS objective

ACCESS aims to advance the coordination of future low-carbon energy grids development in cities by increasing the capacity of governments to scale up and plan investments in sustainable energy systems.

The ACCESS partners will develop a systematic approach for smart grid upscaling connected with the wider urban energy ecosystem and considering different axes and various stakeholders simultaneously

ACCESS pilots for a whole system change

MALMÖ

Energy neutral by 2020, 100% RES by 2030

Local energy hub integrating renewable generation, EV charging infrastructure and storage in an efficient DC grid to **cut power peaks** and losses locally.

WEST SUFFOLK COUNCILS

60% CO₂ reduction by 2025*

Multi-sector energy hub including public, commercial and industrial organisations to **solve current grid constraints**.

*compared to 2004 baseline

AMERSFOORT

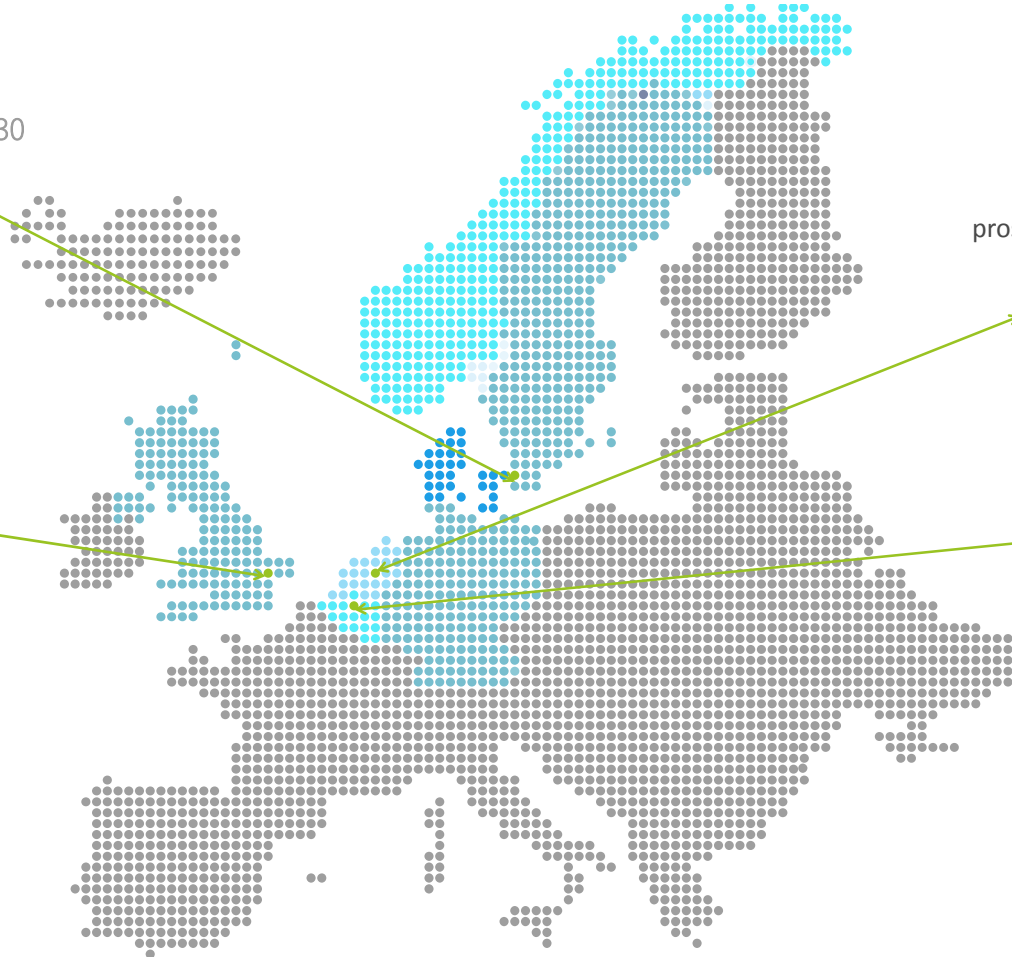
Energy neutral by 2030

Local energy trading community where prosumers and consumers are connected into a unique energy market place.

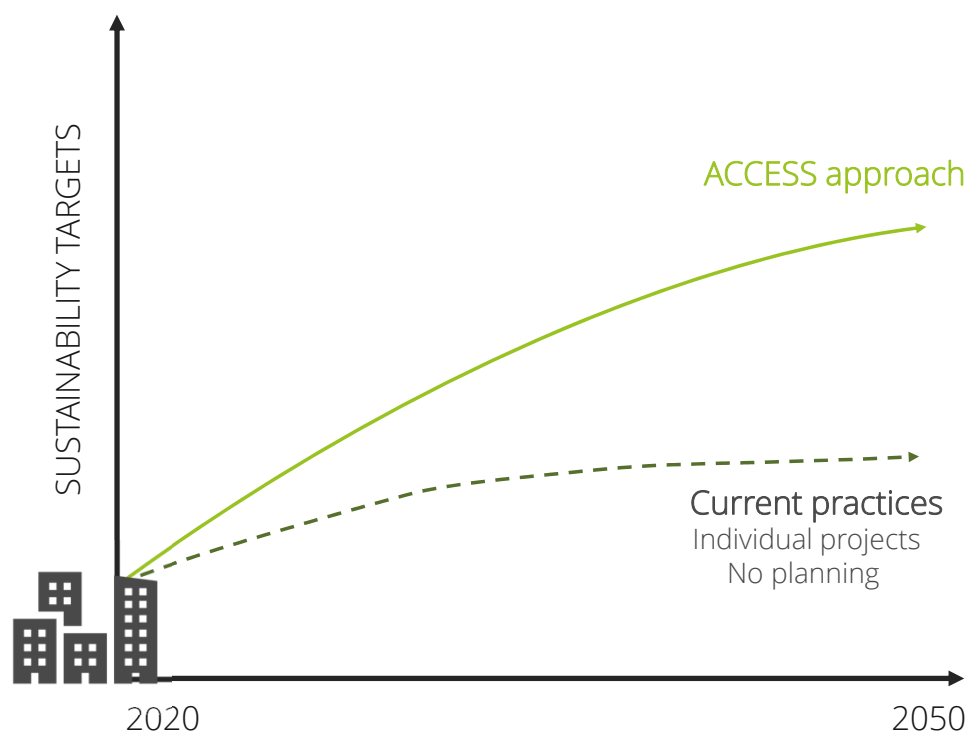
MECHELEN

Covenant of Mayors signatory

Local energy community whose core is a **smart energy/CO₂ neutral mobility hub** whose renewable energy and V2G chargers will be used to balance the local grid and provide flexibility services.



A system-based approach for effective transition strategies



Today's smart grid innovations lack of systematic planning, well-integrated in the city ecosystem and in line with long-term cities' sustainability targets. Projects runs independently and there is no vision how they could build the future energy ecosystem.



Financial

The energy transition requires high investment capacity. Long-term investment planning is needed to unlock innovative business models that fits scale including higher involvement of communities.



Governance

Lack of standardised processes leads to ineffective project development and high risks. Proven governance models are needed to steer innovation and coordinate/involve different actors through overarching planning,



Technical

Current energy projects are often focus on single-technologies and are not well connected with the wider city ecosystem. Integration of systems and interaction between energy vectors is necessary for achieving cities' sustainable ambitions.

A systemic approach for effective transition strategies

Reaching city energy targets

25% CO₂ reduction



ACCESS pilots will facilitate the uptake of resource-efficient low-carbon technologies enabling improved efficiency and more renewable energy sources.

30% reduction in project development time



ACCESS upscaling framework will support cities in systematically implement and scale up their smart energy projects.

20% reduction of project development costs



ACCESS approach will reduce the energy transition costs through improved planning and coordination of local stakeholders and projects.



Urban energy transition planning with ACCESS approach to:

- investment strategies
- Implementation & action plans

4 pilots
low-carbon technologies &
services tested
citizens engagement



ACCESS upscaling
framework



Supporting cities' decision-making process

ACCESS will develop a transnational Upscaling Framework and toolbox to be used by European cities to address their upscaling challenges and develop effective and realistic urban energy transition pathways. This, in turn, enables the large-scale adoption of low-carbon technologies, services and processes.

ACCESS best practices

Roll-out and replication

Local roll-out and integration in governance structures

ACCESS cities will be the frontrunner of NSR energy transition, by integrating in their decision-making process ACCESS' approach to urban energy and investment planning. Pilots project will be rolled-out and upscaled locally and integrated with other running or future smart energy projects.

City support groups

ACCESS cities will inform and coach 2-4 peer cities on energy transition and investment planning, facilitating the adoption of ACCESS best practices and approach.

Engagement with key stakeholder groups and decision-makers

ACCESS partners will disseminate the project results and raise awareness on its innovative approach to urban energy planning through their networks, providing to NSR and beyond with the right tools and approaches to embrace the energy transition.

Replication at regional level

ACCESS partners will collaborate with regional entities and look at areas within their region where pilots could be replicated for contributing to the wider energy transition.

ACCESS cities and expert partners

Upscaling the energy transition together



Knowledge partners



Local authorities





Thanks for your attention!

Please contact me if you have any questions:
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