



Nordic Superblocks as Decarbonization Catalysts

Finland aims to be the most interesting country in the world for creating something new. In support of this ambition, Finland's new government will promote sustainable development in land use, construction, housing, and transport, as well as simplify and accelerate planning, permit, and appeal processes.

The **Nordic Superblocks as Decarbonization Catalysts (NSDC)** initiative, sponsored by Business Finland through NextGenerationEU funding, shares these ambitions. NSDC, launched by Skanska, KONE, Tietoevry, Granlund, Integrio, Synocus, and Tampere University, will accelerate the transition towards zero-emission buildings and carbon neutral living. NSDC supports sustainable urban planning and development as well as building life-cycle management through breakthrough research.

The foundation of the new collaborative setting for city planning is the concept of Nordic Superblocks, a concept pioneered by Tampere University, which is intended to guide the development of future city districts and piloted in cities including Tampere. The concept will also be applied by the partner companies in other cities, both domestically and internationally, to speed up the transition to net-zero living and generate export growth. This will strengthen Finland's ambition to be carbon neutral by 2035 and be at the forefront of decarbonization in Europe.

The NSDC goals

The first phase of the NSDC collaboration will run until the end of 2025, funded by Business Finland as a co-innovation project. The NSDC initiative will have three main impacts:

The Nordic Superblocks **concept** of collaborative city planning has been institutionalized on a national level in Finland, and this has become a key success factor for the decarbonization of Finnish cities.

Through the support of Skanska, KONE, Tietoevry, and other engaged international companies, the NSDC collaboration has built an ecosystem for scalability and internationalization accelerating the **export growth** of the participating SMEs in foreign markets in Europe, North America, and Asia.

The Nordic Superblocks concept has supported the participating cities with **concrete piloting** activities that has helped them to speed up their decarbonization efforts in an innovative, cost-effective, and community-oriented way.

The NSDC initiative will collaborate with like-minded stakeholders e.g., through the World Alliance for Low Carbon Cities. Continuous updates on the progress of NSDC will be available at www.walcc.org

SKANSKA

KONE

tietoevry

Granlund

Integrio

synocus

Tampere University

WALCC
World Alliance for Low Carbon Cities

BUSINESS
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The NSDC initiators

NSDC combines city-level integration of activities supporting the transformation to carbon neutrality with engagement of residents in collaborative practices to shape new net-zero living concepts. The NSDC initiators utilize digitalization and energy transition as means to introduce new city planning and building life-cycle management solutions. This enables citizens to hold a genuine and collective stake in the places where they live.

SKANSKA

Skanska brings customer insight and business models to Nordic Superblocks. Enacting planning and implementation through projects with cities as proofs-of-concept for the new collaborative city planning concept supported by smart digital and IoT solutions developed by partners.



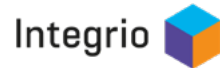
KONE integrates its 'flow of urban life' perspective with the Nordic Superblocks concept to achieve improved safety and quality, as well as higher productivity in the construction process with increased sustainability, fitness for use, and resilience in the built environment.



Tietoevry provides a platform for collaboration and integration for Superblock stakeholders to manage their energy assets. The platform allows the housing block operators to manage the block-level energy system and steer sustainable energy use through the whole life cycle of the housing block.



Granlund integrates climate change mitigation and adaptation, circularity, and well-being for both humans and environment in a comprehensive urban planning framework for Nordic Superblocks based on the Digital Property Management concept to steer sustainability throughout the life cycle.



Integrio integrates traditional automation systems, smart devices, and meters under one single system. Building ways to optimize buildings' energy consumption, indoor climate, and cost of operation. Allowing sharing data and control of the buildings'/blocks processes to external platforms.



TUNI conducts action research on the Nordic Superblock process, engaging key stakeholders and future residents throughout the process. TUNI will engage in the co-development of community-driven sustainable district developments in Finnish cases and benchmark selected European cities.

synocus

Synocus strengthens knowledge sharing and collective capability building among the partners, capitalizing on complementarities to accelerate decarbonization efforts among the consortium partners. As orchestration partner, Synocus also creates a foundation for continuing collaboration.

In addition to the initiators, the NSDC collaboration also comprises a growing number of Associate Partners that will provide additional strengths to the NSDC network. Associate partners will engage as participants in those workstreams that are of particular interest to them.

The next steps

The NSDC partners actively engage in international collaboration. The WALCC Forum (19.-21.9.2023) in Vaasa will attract leading decision makers from the EU and Nordic and Baltic states to discuss how international experience sharing should be carried out in the NSDC initiative. As the focus of EU innovation policy shifts from co-creation to co-implementation, the NSDC partners want to share their experiences with stakeholders across Europe and offer insights on superblocks to other cities. Tampere University will also engage other leading universities in an intensive research collaboration focusing on urban decarbonization.

For those interested in joining the NSDC initiative please contact NSDC project manager Jussi Hulkkonen (jussi.hulkkonen@synocus.com). We welcome new participants and further ideas on accelerating the transition to net-zero living!