### Seednergies

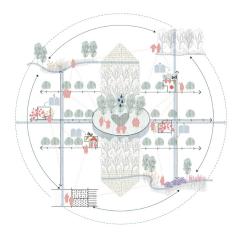
Today, contemporary cities are shifting towards circular economies that aim to reduce human impact on the environment by eliminating waste, using local resourcing of materials, and regenerating natural habitats. This innovative scheme becomes a great opportunity in newly planned cities which have the possibility to incorporate it from scratch. However, existing cities with more complex realities require seeking more complex solutions to integrate those principles into the existing urban fabric.

#### **Understanding Levanger**

Levanger town is defined by a strong symmetrical urban grain with a good variety of activities concentrated around the town centre - which makes it ideal for walkability in the eyes of urbanists but odd to understand the challenge caused by cars.

Overlaying by the theme of metabolic and inclusive vitalities, the big questions we asked ourselves – as urbanists, landscape architects and architects are: what are these changes made for, what will continue to grow with the town as it evolves?. It is the people and the community. A strategy developed for Levanger should be well-considered and fabricated to suit its characters, to acknowledge the community and the long-standing cultural heritage and nature. We understand that to achieve a viable scheme, it needs to be the people who shape their living environment, and our job is to provide a tool and a framework for the community to work with.

Without aiming to deliver a finalized product, our concept of "Seednergies" focuses on the process, driven by and for the community. It celebrates the partnership between Levanger Kommune, Nord University, and the community as a meaningful way to bring people together while researching for more sustainable and local economies.



### A strategic metabolism

Levanger town nests between Levangersundet and Levangerelva, offering abundant potential for open spaces. The town almost remains untouched since the historical town plan, with the park axis running from the sundet to the river. On the other hand, the industrial activities along the sundet and the increasing use of the private car have diminished the quality of the public space, turning some potential open spaces into areas for storage or car parking.

The unique metabolism of Levanger features a public nursery – as the heart of the process. This introduces a new concept of a meeting place that unifies the community, and further enhance the relationship with its cultures and biodiversities.

Located at the centre of the park axis, the public nursery gives this historic open space structure another value to the communities – a constant growing substance. The public nursery, supported by the new seed bank research centre located inside the new library, means to be an energy generator of the metabolism process. This energy does not limit to plants, but it is also the biodiversities, social interaction and exchange culture. This, in turn, creates a diverse scale of public spaces, eventually amplifying the quality of public life in Levanger.

### A blue-green grid - A continuous foot-connection

The scheme aims to re-connect the Sundet and Levangerrelva through the Park Axis, creating a continuous foot-connection for pedestrians and cyclists from Eidsboth to the Havn development, with equitable accesses to residential areas across the waterways.

A blue-green grid is integrated into the Levanger town and expanded to the strategic site through the Levangersundet and Levangerelva routes, connecting key open spaces. Pedestrianised streets form the bluegreen corridors diverging from the park axis. The salinity garden at the harbour front serves as a filtration system to increase the water quality.

The riverwalk is fully rejuvenated with native flora, reinstating the significance of the river to the community. Connecting to Nord University, it will become part of the student's experiences and memories. The sundet walk reminisces and expands the relationship of Levanger residents and the harbour, emphasising the cultural heritage of shipping and trading for the past thousand of years while respecting the future of a working harbour.

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This connection has the capability to expand beyond the strategic boundary. At its core, the axis park pins the two walks to the town center, defining itself as a moment of pause, and a magnet to attract people from different places. The park is defined by two urban anchors – the Museum with an extension toward Sjøgata, and a "Local Archive", which includes a Library and Research Centre, forming a precinct with Levanger Station.

A dedicated cycling network is integrated closely into the two walks, promoting the growth of a healthy community. Cycling facilities are included in the two anchored architectures, and available to all public to encourage walkability within the town centre.

### Vehicular traffic

The proposal's mobility scheme aims to be accessible across the whole town. Supported by a fixed-schedule bus system composed of two major routes (N-S, E-W), it will connect a series of landmarks and loop around the interchange at Coop-Mega block at 9 Håkon den Godes Gate. All stops provide 5-minutes walk coverage to homes, workplaces, services, and 2-minutes walk stops are located at the town centre to provide the most flexibility. The foot-perimeter, framed by Levangersundet, the rail, Sundagata, and Holbergs Gate, creates a slow mobility town: limiting vehicle movement to 40km/h on all streets, giving access to service vehicles, and strictly excluding private car access.

- Sjogata reclaims itself to the character of the Allmenningen that was once alive with the sundet history. Strongly related to portuary industry and trading, the street is reserved as the permanent address for markets and events.
- Kirkegata remains itself as a key traffic corridor, with 2 travel lanes and side parking for loading during set hours, however, flexibly transform into a vibrant and friendly street with pop-up kiosks and street dining.
- Jernbanegata becomes the key bus corridor across the town centre, forming an exchangeable public transport system the closed-by Levanger Station.
- Håkon den Godes gate, Sverres gate, Holbergs gate, Tollbugata and Torgata are fully pedestrianised, allowing community life to thrive on the most original and civic platform of pubic space.

### **The Local Archive**

Located at the southern edge of the park axis, the library and research center aims to be a new urban landmark for the city of Levanger. A square box with large structural spans hosting both programs allows for flexibility of uses in the future.

The ground floor becomes a multipurpose space that could be occupied for public events and community activities such as exhibitions, talks, book presentations, etc. A service core, containing the staircase, lifts, and public toilets, gives access to the upper floor levels. The end-of-trip facilities facing the street will be used by commuters arriving by bicycle, therefore embracing the use of the building as an intermodal station.

The first floor contains the seed bank research center, which includes new laboratory premises for the study and analysis of seeds, and also a series of box rooms with the required mechanical systems for the growing and

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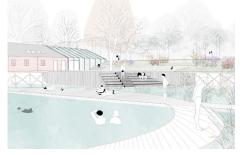
archival of these seeds. The seed bank is operated in partnership with Nord University, incorporating academic research and knowledge into the metabolism process.

The main climatized library space is located in the second storey. A double-height space, bringing natural light to the interior of the library, contains the main depository of books, as well as working areas, group meeting rooms, and a mezzanine level with a study area.

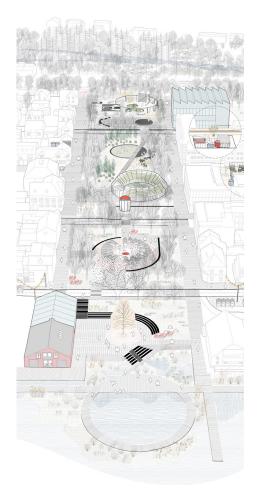
The program of the library is extended to the rooftop, where a greenhouse-like space allows for spaces of casual reading and a play area for kids in more direct contact with the exterior. The greenhouse skeleton around the southern facade and roof provides a natural climatic control of the building across the year. This space acts as a passive solar heater, allowing nature to colonize its interiors through a vertical indoor garden facing the station square.

The proposal acknowledges the crucial role that contemporary libraries play in the cultural life of a city: originally used as a space for archival and consultation of books, today this public equipment has been hybridized with other types of programs in order to provide a broader service to the community.

#### The City Museum & Performative Space



The Park Axis



### The City Museum and Performative Space

A similar approach is used at the opposite edge of the park axis.

The extension of the existing Museum is made with a lightweight structure that doubles the area of the existing timber shed and connects the end of the boulevard with the lower height of the waterfront. Keeping the traditional pitch-roof logic of the buildings facing the water, this new urban room is understood as an entry for the heritage building but also as a container of temporary bigger programs such as cinema, theatre, or other performative arts.

The extension also incorporates a service core integrated with the terrain, which provides the space with storage areas and other services rooms, in order to facilitate the different types of uses across the year. On the other side, the heritage timber shed contains a new museum program that will explain the history of Levanger, reinforcing the relevance of its harbor industry and relationship with Levangersundet from its origins until today.

### A metabolism starts at the heart

The historic park axis is unified to create a robust public space structure, holding numerous meeting spaces for the community to bring diverse experiences for the public. Torgata and Tollbugata are closed for traffic, enabling transparency to the park axis and providing potential for facade activation on either side.

Torvet and Nerde park are merged to become the new social heart of Levanger. Here lies the new nursery, a satellite growing platform of the seed bank. With a circular-shaped structure, the indoor nursery is the new house of local flora species and exotic plants, ranging from native flowers and sedges to ornamental and edible plants. A community courtyard at its core offers all-season gathering opportunities in contact with greenery. The canopy storey of the Southern Boreal Lowland Forest and urban trees like birch and maples are planted on a dedicated forest carpet within the park area. More than a nursery, this is a new paradigm of meeting place, where the community comes along, grow and exchange, and use this living resource to build their own living environment, together. The music pavilion remains a historic feature of the park, support by a plaza adjacent to the public nursery. A nature play area is subtly integrated under the thick canopy of birch trees in Nedre Park.

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The Sjøparken amphitheatre will be re-configured to centre around the existing Norway Maple and orientating to the museum and its extension. A public bath is a reference to an ice-free harbour that was once shared between the ships and the people, celebrating the connection between Levanger and the fjord. Salinity tolerated sedges are planted along the man-made harbour edge to improve the water quality.

Sejersteds Park will revert to a functional square that it was originally built for, to host larger events in conjunction with the adjacent Sjøgata. The charming lush and green of an English garden is protected, with a generous circular plaza offsetting from the fountain pool at the centre.

As an entry point to the town via the river walk, Nedre Torv is transformed into a vibrant plaza- a place young people express themselves, bringing a new energy that one day will become part of the town characters. A new play structure with a sensory garden to stimulate the active social interaction between generations. As a play platform for all ages where everyone can inspire each other, this truly suits as the front face of the new library.

### The expanding culture

The pedestrianised Håkon den Godes gate, Sverres gate, Holbergs gate will be redefined as cultural corridors. A series of lightweight structures that can be flexibly adaptive (food kiosk, community workshop, tea garden and plant exchange station) act as activators that intensify urban life. A consistent palette of edible plants including berries, flowers, herbs and veggies are brought to the street not only to serve the residents, but also to attract native bees.

Empty lots and backyards are re-configured following a hierarchical system as part of the overall metabolism.

- Public Backyards- New local urban farm/winter garden, a meeting place at smaller scale and closer proximity. Supported by light structure and kiosk, the space is flexible for multiple uses and activation.
- Semi-public Backyards Commercial parking spaces, own by restaurants and shops to be shared with the community as an ideal location for tool storage. As a potential collection point for rainwater tank and greywater treatment that can irrigate community gardens and street planting, these spaces present themselves as an integral part of the metabolism process.
- Private Backyards Resident living spaces as part of an urban ecosystem. Whist products are mainly brought home for private use, a sense of community is gently slid through the process, encourage privately grown seeds to be taken back and shared with the community.

The integral part of this plan is to ensure the intervention reaches every corner of Levanger town, encourages social interaction at different scales to build a strong sense of community.



### **Implementation Process**

The project will be realised in 3 stages:

- **Stage 1** will focus on enhancing the characters of public spaces and public amenity of Levanger, starting with the park axis and the 2 anchor buildings The local archive & the city museum. The foot-perimeter and the framework of 3 backyard spaces as community initiatives will be rolled out. The first stage aims to change the community impression of public space provision, re-initiating the engagement with outdoor spaces and enhancing the sense of community.
- **Stage 2** will realise the construction of the two walks along Levangersundet and Levangerelva and expand the civic connection between the park axis and Levanger station. Establishing the strategic connection is the key outcome.
- **Stage 3** will intensify Levanger town with pedestrianisation strategy and private car restriction and launch the public bus system. As the last stage, this will allow sufficient transition from private to public mobility, completing the ground set up of "Seednergies" urban infrastructure.