THE POST CARBON LOHJA GAME

A dynamic platform to steer Lohja towards a sustainable future by increasing the participation and engagement of the community

The current project was completed for Urban Transitions and Futures, a joint Aalto University/Helsinki University course led by Professor Idil Gaziulusoy in spring 2020.
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KEY CHALLENGES

Car dependency

The biggest challenge of Lohja in the transition towards a post-carbon town is its car-dependency. Transportation causes a major part of the CO2 emissions. Central Lohja is filled with parking lots, which is inevitable as the public transportation network is not sufficient (90% of public transport in Lohja is organized by the private, profitable sector). Over a quarter of Lohja's residents in employment commute to work in Espoo, Vantaa and Helsinki. Without a train connection, commuters rely on the private car.

Lack of green spaces

Poor quality and quantity of green spaces in the Lohja central area. Many of the streets are without any greenery, some have just street trees or narrow strips of lawn. This does not contribute to biodiversity, microclimate or storm-water management locally as well as regionally (central Lohja disconnects the surrounding natural areas). Lack of green doesn't create a pleasant urban public space for walking and spending time.

Behaviour Barrier

Lohja faces a behaviour-related challenge. In order to transit towards a more sustainable future individuals have to change their behavioural patterns and contribute to the community. In order to empower the people of Lohja both to act in their own lives and as a community, the municipality has to engage more with the locals and move towards a more participatory governance model. Next to physical infrastructure the challenge relies in working with the social and civic one.

POTENTIALS

Sustainable Mobility

Significant number of the journeys made by car in Lohja are relatively short (less than 5km) - could be replaced by biking!

Local food production

Great climate for food cultivation and a long history as an agricultural area and practice of gardening - could lead to self-sufficiency in food production!

Closeness to nature

Lohja lake and the surrounding natural landscape form a strong local identity - could lead to strong community feeling, changes in behaviour and implementation of nature based technologies and materials!

INTERVENTION

The post-carbon Lohja game

It's a dynamic platform that aims to increase the participation and engagement of the community in the transition process, leading to behavioral changes on individual and group levels.

Initiating behavioural change

The game format increases motivation and involvement easing the individual and group level behavioural changes. Participating and interacting in a playful manner increases social influence and understanding that "I can do it".

Designing the transition by learning

The game is a participatory tool that leads to co-creation of the design for the transition. It is also an experimental "learning-by-doing" format - various events and pilot actions work as learning and evaluating milestones.

Allowing the involvement of various stakeholders and empowering the citizens

The game is a light way to involve different parties to discuss serious themes in an atmosphere of enjoyment. Through its different formats (actual games, digital apps, workshop sessions etc) it offers possibilities to be involved and communicate ideas to a wider circle of locals (various interests, age groups etc).

Facilitating the governmental innovation

The game is an efficient tool to move towards a more participatory governance model. It could involve strategic, civic as well as grassroots approaches and initiated events. Meaning that more parties would be involved in the management of the transition process itself.

Enabling backcasting in the transition process

The game is a dynamic platform that can be used for participatory activities in a playful manner (workshops, meetings, public discussions, daily behavioural contributions etc) it offers the time and place for communication as well as social interactions. Therefore it is closely connected to feedback loops and evaluation of the transition.

VISION

COMMUNITY AROUND THE LAKE

In 2050, Lohja is a strong, family-oriented community that is tied to its natural landscape. Sustainable lifestyle, self-sufficient food production and the city's green image are key elements of Lohja's identity.
Lohja 2050 resembles an old village community where sharing and cooperation were core practices.

Lifestyle & governance

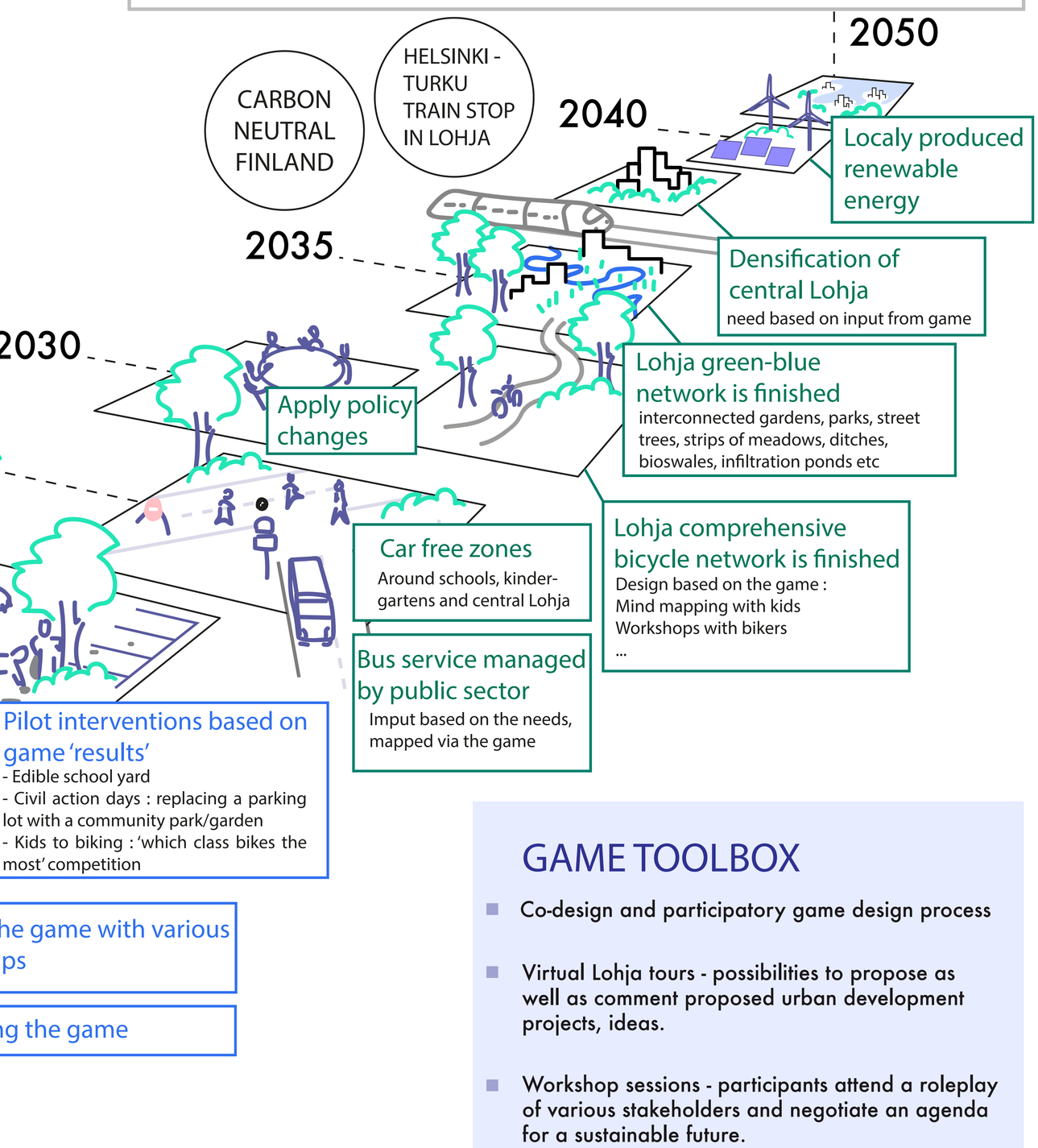
Residents can choose either a more urban or a rural lifestyle. Governance is based on participatory bottom-up initiatives and collaborative decision-making. Self-sufficiency and sustainability in food production is a major part of Lohja's identity.

Built and natural environement

Central Lohja has been turned from a sea of car parks into a green-blue oasis. The balance of densification and greening is achieved through the integration of built structures and nature-based solutions (for example for stormwater management). New typologies of shared living spaces have been introduced. Buildings take inspiration by the heritage of Lohja by using local and sustainable building material – wood.

Mobility

Lohja has established a user-and nature-friendly mobility system that is based on combined means of mobility, shared and automated transportation. Cross-lake ferry, improved biking, walking, scooting infrastructure and service buses to distant locations are accompanied by electric automated buses and shared self-driving cars.



GAME TOOLBOX

- Co-design and participatory game design process
- Virtual Lohja tours - possibilities to propose as well as comment proposed urban development projects, ideas.
- Workshop sessions - participants attend a roleplay of various stakeholders and negotiate an agenda for a sustainable future.
- Sustainable urban planning game for kids - educational purpose of introducing themes of sustainable mobility, energy, benefits of vegetation, densification etc
- App-based game where players measure their daily ecological footprints and compete with each other.
- Lohja landscape orientation game - introduces the qualities and challenges of Lohja's natural and built environment.
- Digital as well as physical space - project meetings, running surveys, evaluating projects, collecting information etc in a playful manner.

STAKEHOLDERS

- FINNISH GOVERNMENT
  NEIGHBOUR MUNICIPALITIES
- LOHJA MUNICIPALITY
- INHABITANTS OF LOHJA
- EDUCATION INSTITUTIONS
- LOCAL EXPERTS & KNOW-HOW
  designers, architects, environmentalists
- LOCAL ASSOCIATIONS & COLLECTIVES
  incl. housing associations
  e.g. Chiliveikot ry,
  Helsingin Seudun Mehiläshoitajat ry,
  Apuomena ry,
  Etelä-Lohjan Aluetoimikunta,
  Hiidensalmen asukasyhdistys ry,
  Kaupunkikeskustan aluetoimikunta,
  Enäjärven suojeluyhdistys ry
  ...
- LOCAL INDUSTRIES & BUSINESSES
  incl. developers

GAME AS DYNAMIC PLATFORM