



### Workshop Results

#### WP 3 ACTIVITY 11. SUSTAINABLE SPATIAL DEVELOPMENT SCENARIO AND BACKCASTING

### Envisioning the future

**Kostomuksha urban district**



**Kalevala national district**



Place: NorTech, Oulu, Finland

Date: 22nd of August 2013

### **Participants:**

- **NorTech Oulu team: Eva Pongracz, Niko Hänninen, Elena Fedorova, Victor Pavlov, Jutta Petäjäjärvi**
- **KarRC Karelia: Evgeniy Zirnel**

# Workshop Goals

The main goal of the workshop was ***The Envisioning the Future*** for GreenSettle project pilot territories: Kostomuksha city and Kalevala district. The **NorTech** team and **Evgeniy Zirnel** the expert from KarRC were discussing the current state of pilot territories and drawing future scenarios. Those scenarios are intended to be used in creating of a roadmap for sustainable spatial planning and development, which can be used for future improvement of pilot territories.

To create a joint understanding the following questions were on the table:

- *What are the key aspects for spatial development in Kostomuksha and Kalevala?*
- *What ecological, cultural, social, economic and business administration aspects affect future scenarios?*
- *What are the pessimistic, realistic and optimistic scenarios for these two cities?*

# Workshop structure

The Workshop was structured in 4 phases:

## ***Phase 1***

NorTech team introduction of ***Backcasting concept*** for developing strategies towards sustainable spatial development.

## ***Phase 2***

Joint presentation of findings on current state of Kostomuksha urban district. Local situation analysis. Followed by the exercise of ***Envisioning the Future of Kostomuksha urban*** district and drawing the pessimistic, realistic and optimistic scenarios for city development.

## ***Phase 3***

Joint presentation of findings on current state of Kalevala national district. Local situation analysis. Followed by the exercise of ***Envisioning the Future of Kalevala national district*** and drawing the pessimistic, realistic and optimistic scenarios for the district development.

## ***Phase 4***

Final discussion and sketching of mutual functional vision of a desirable future (by 2050) for both pilot territories.

# Phase 1

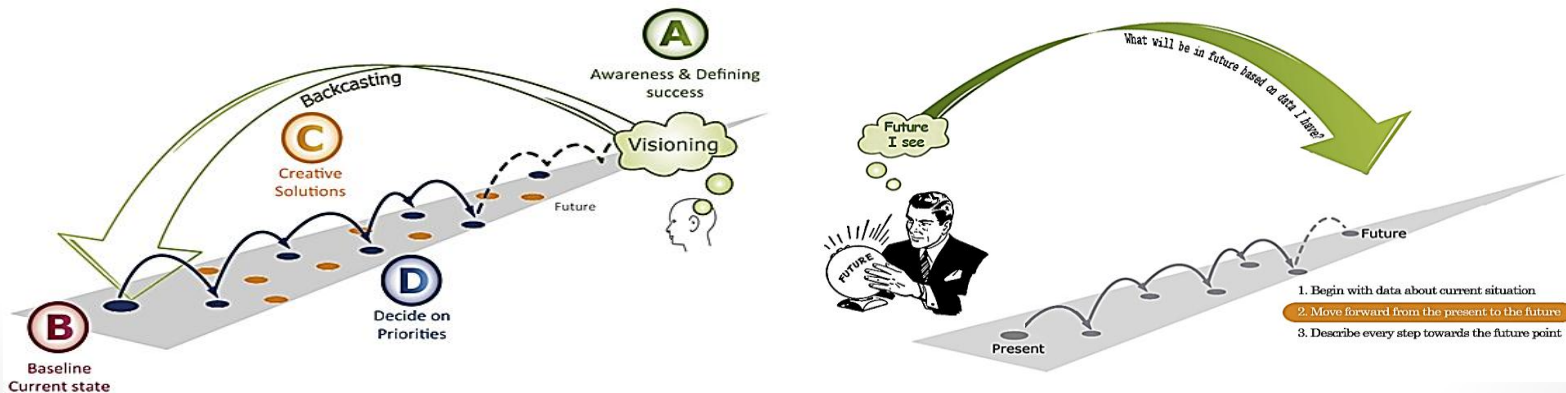
During the first phase Victor Pavlov from NorTech team presented the new approach to the Russian expert of how to apply scenario methodologies like *Backcasting* to develop strategies towards more sustainable spatial development.

**Backcasting** is a scientific approach to develop a path towards a realistic desirable future for a given theme. In our case the theme is Sustainable spatial development of pilot territories.

It consists of the following **ABCD** steps:

- **A** – Gain **awareness** of the ecological and social systems the GreenSettle project operates within, based on an understanding of the principles for sustainability. From this understanding, **create a vision** of what Envisioned future for pilot territories would look like if it operated within these principles;
- **B** – Undertake a **baseline assessment** of today's current reality. Note where violations of the principles for sustainability occur and identify project's, in our case pilot territories' assets;
- **C** – **Create solutions** to the issues discovered in the B step without technological, political (local administration and Russian federal laws) or other constraints – this is brainstorming part. If all project partners can think of measures to achieve these.
- **D** – **Decide on priorities**. Prioritize the actions developed during 'C' by asking: 1) Does this action move us in the right direction (toward development of sustainability principles)? 2) Can those actions and solutions be built upon in future? 3) Does this action bring an acceptable financial, ecological and/or social return on investment?

In the discussion after Victor's presentation it was define that the biggest challenge for using this approach in Russia will be the possibility of connecting the experts, researchers, local administration and policy-makers on real topics and joint goals. Even more important that the long-term commitment is needed in order to fulfill sustainability requirements on project territories.



## Phase 2

NorTech presented the findings which were made by the team based on the analysis of all reports which were published by Finnish and Russian sides since the project had started in 2011.

*All the available resources and potentials were evaluated for Kostomuksha city but the most important ones such as Land use, Infrastructure, Waste management, Recourses management, Energy sector and Individual and Community well-being have been discussed and evaluated more detailed.*

*SWOT analysis of the spatial development for Kostomuksha urban district was present by Victor Pavlov by the end of discussion.*

The last part of phase two was devoted to the exercise **of *Envisioning the Future of Kostomuksha urban district*** and drawing the pessimistic, realistic and optimistic scenarios for city development.



## Kostomuksha urban district Future Scenarios

Aspects	Pessimistic	Realistic	Optimistic
<b>Land Use</b>	Legal restrictions remain working. Thus, the city cannot utilize its land use potential	Land market is developed. The restrictions partially remain. Some parts of the areas are open for exploitation. Rural settlements potential is utilized: i.e. recreational objects	No land use restrictions. Land market is well-developed. Housing construction and lease are common practice. The city plan is changed functionally: i.e. parkland is free and available for public. Plural sidewalks, court games, nature conservation areas with vegetation, shaded picnic areas and resting points, waste bins system and illumination are developed well and implemented. Bicycle lanes are well-thought and function
<b>Infrastructure</b>	The state of the roads remains the same and deteriorated. The ore dressing and processing enterprise changed its policy and does not help to improve the infrastructure. The financial problem exists. No funding is provided to reconstruct/repair the motor roads. The deterioration and failures are wide spread	The ore dressing and processing enterprise declares it is aimed to support reconstruction. But in fact it does it partially. The interest of the stakeholders are discussed in constant dialogue to find some balance. Railway road infrastructure between Finland and Russia is built. Airport is modernized and air connection is organized. New motor road are build.	The ore dressing and processing enterprise invests in infrastructure renewal. Tax potential of the territory facilitates the infrastructure development. The infrastructure functions well. The energy self-sufficiency is achieved. The individual housing construction is coupled with infrastructure development. ICT is applied. Rest areas and public parking territories are organized. Logistics Centre is in operation
<b>Waste and Resource Management</b>	The pilot projects did not go well. The waste management system remains almost the same. Only some fractions are separated: e.g. mercury lamps  Only some of the local resources are in use: e.g. timber waste, energy waste	The waste management is gradually improving. The related Finnish experience contributes well. Basic waste utilization knowledge is provided to the city public. L&T company is present in Kostomuksha.  The local resources (especially, forest and recreational resources) are more in use. Apart from mercury and forestry waste utilization, biofuel potential is realized.	All the factions are sent for recycling facilities. The Kostomuksha city is used as pilot territory for Republic of Karelia waste management and resource efficiency improvement. The population has adapted easily to new habits related to waste separation Local resources usage is well-developed. All of the local resources are used properly and benefit city community. Touristic potential is fully realized.



## Energy

The deterioration and failure level of the networks and capacities is increased. Lack of funding for the reconstruction is common. The "Severstal" holding stops heat supply. The city is dependent on world oil market and oil deliveries

The fuel used in energy has become more renewable. CHP unit based on biofuel is in operation. The appropriate energy equipment is partially changed. Energy supply operates in more environment friendly manner. City has become energy independent on the ore dressing and processing enterprise

All the networks are changed, some new parts are constructed. Renewable fuel is a common practice. Energy efficient and saving technologies are implemented

## Individual and Community Well-being

Differentiation of society is increased. The offices of university representatives are closed

Training of needed specialists is partially carried out. Collaboration with Russian and Finnish universities did step forward. New mall is constructed. The city now has Centre area that is youth-friendly. New educational institutions and hobby and leisure centres are available

Higher quality of life is achieved. New educational Centre is created. Training of specialists according to the city demand is conducted. Distant training is organized. Collaboration projects with Russian and Finnish universities are well-developed. Knowledge-based technology center (based on the industrial know-how and arranged in old factory buildings), where educational and training exercises and research is carried out, is organized. Youth stays in the city due to job opportunities and many free time activities presence. The Kostomuksha city has converted into eco-city. ICT is applied at information points in the city. Science Museum of regional importance to attract tourists is built



**GOOD ENVIRONMENT**  
(Natural Resources)



**SMART LIVING**  
(Quality of Life)



**GOOD ADMINISTRATION**  
(Participation)



**DEVELOPED ECONOMY**  
(Competitiveness)



**TRAINED STAFF**  
(Human Capital)



**ECO-TRANSPORTATION**  
(Transport & ICT)



## Phase 3

This phase concentrated its attention on analysis of the spatial development of the Kalevala national district. It had been structured in the same format as phase 2.

All the available resources and potentials were evaluated for Kalevala National District but the most important ones such as *Land use, Infrastructure, Waste management, Recourses management, Energy sector and Individual and Community well-being* have been discussed and evaluated more detailed.

SWOT analysis of the spatial development for Kalevala national district was present by Victor Pavlov by the end of discussion.

The last part of phase 3 was devoted to the exercise **of *Envisioning the Future of Kalevala national district*** and drawing the pessimistic, realistic and optimistic scenarios for district development



## Kalevala national district *Future Scenarios*

Aspects	Pessimistic	Realistic	Optimistic
<b>Land Use</b>	Legal restrictions still exist	Land market is developed. The restrictions partially remain. Some parts of the areas are open for exploitation. Rural settlements potential is utilized: i.e. recreational objects	There are no restrictions. Developed land market exists. There is construction and land lease developed
<b>Infrastructure</b>	The motor roads are not improved. No new roads are built	At least gravel roads are built in the district. More projects of improvement appear. Small aviation is developed	Well-organized structure of asphalt roads function. The roads include rest areas, additional information signs and guideboards for drivers in two languages (Russian and English). All the settlements of the district are connected via good motor road network
<b>Waste and Resource Management</b>	The situation is kept the same. There is still low level of development	Simple waste management system is organized. Local waste recycling facilities are created  Wild and clean environment, as touristic product, is realized on bigger scale among Russian tourists from megalopolises and European tourists	Waste utilization facilities are placed in between the four bigger places (i.e. Kostomuksha, Segezha, Kem, Belomorsk)  Fish farming development takes place. Forest resources are better utilized. Organic farming is organized. The recreational potential of the territory is fully realized

<p><b>Energy</b></p>	<p>The situation is kept the same. There is still low level of development</p>	<p>Community energy self-sufficiency is partially developed. Private households use local resources, especially solid biofuels</p>	<p>Electricity supply works reliable. Local energy resources are used. Energy self-sufficiency of the district is fully developed. Energy efficient and saving technologies are implemented</p>
<p><b>Individual and Community Well-being</b></p>	<p>The situation is kept the same. There is still low level of development</p>	<p>Gradual improvement of the situation. New hobby clubs are created. New kindergartens, schools are built. Community people have access to basic education of high level. Distance learning, international experience exchange is organized</p>	<p>All the settlements of the Kalevala district are converted into eco- and ethno-communities. New jobs are offered. There is well-developed education, health and social infrastructure. Local identity and culture are maintained</p>



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## Phase 4

The final phase was devoted to joint discussion and to envisioning the future of 2050 for Kostomuksha urban district and Kalevala national district

*To achieve mutual functional vision of a desirable future (by 2050), climate-neutral economy, which includes efficient and clean resource use, preserving aesthetics, respecting cultural heritage, maximizing the wellbeing and prosperity of the people in pilot territories*



The team after the workshop had been completed...



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# Thank you all!



Greensettle

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