

# *Climate-smart forestry in North Karelia*

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*Regional Council of*  
**NORTH KARELIA**

# *North Karelia – perfect for forest bioeconomy*

- ▶ Forerunner in smart forest bioeconomy, since the 1990s:
  - ▶ Strong and dynamic forest cluster
  - ▶ World-class knowledge hub in forest research and expertise



163 000 inhabitants • size 21 585 km<sup>2</sup> • 89% forest • 13 municipalities

**NORTH KARELIA**

# *Sustainability targets for 2030*

**100%**  
fossil oil free



Share of renewable energy  
in total consumption

**100%**

Net reduction of  
greenhouse gases

**80%**

Bioeconomy  
investments  
turnover



**2.7 BILLION €**



# *Regional Council of North Karelia*

Our objective is to make North Karelia an even better place to live, study, work, and operate as an entrepreneur.



# *Policy improvements*

## Roadmap Towards Oil-Free and Low-Carbon North Karelia by 2040<sup>?</sup>

- Bio4Eco participated in defining objectives for natural resource and bioeconomy sectors<sup>?</sup>.

## Smart Forest Bioeconomy strategy of North Karelia

- Combines objectives of RIS3 strategy and regional climate and energy programme 2020.<sup>?</sup>

# *Policy improvements*

## Scenario analysis of the impacts of increased harvesting volumes on biodiversity and carbon stocks

- Background data for further policy improvements.
- ☒ The aim to increase forest fellings by 1 million cubic meters/year decreases biodiversity and forest carbon sinks.

## ☒ North Karelia's Regional Strategic Programme for 2018-2021 and its implementation plans

- More emphasis on sustainable use of forests and low-carbon energy production.
- Estimated amount of funding influenced by the project: c. **1,700,000 €**

# *Climate-smart forestry*

We need to increase the climate benefits from forests and the forest sector, in a way that creates synergies with other needs related to forests.



# *Climate-smart forestry*

**Inspiration:** Scenario analysis produced in the project. Experiences of Lettish, Slovenian and French partners.

**Results:** Roadmap and timeline to guide development of climate-smart forestry.

- Implemented through a project managed by Natural Resources Institute Finland (LUKE)
- **Next steps:** New forest management recommendations and carbon classifications of forests in North Karelia

# Carbon classification in forests



## Minor carbon storage

Understocked, low-productivity land, non-productive land, built-up land and other areas.

- › The trees have no significance as carbon sinks or storages



## Developing carbon sink

Young growing stands and open areas. Developing into a good carbon sink.

- › Small significance as a carbon sink and storage.



## Carbon sink to be developed

Multiple-use forest where the number and/or condition of trees is not ideal.

- › Need for actions to develop carbon dioxide sequestration in the growing trees.



## Increasing carbon sink

Multiple-use forest in good condition, a sufficient number of growing trees and timely forestry actions.

- › The best sites for effective carbon dioxide sequestration.



## Increasing carbon storage

Areas with young forests where forestry use is restricted for landscape, recreation or game management reasons, such as wood grouse mating displays.

- › A good site for storing sequestered carbon in the tree stock. The trees in the area already contain a certain amount of carbon and their ability to sequester more is good in light of local conditions.



## Significant carbon storage

Areas with mature forests where forestry use is restricted for landscape, recreation or game management reasons, such as wood grouse mating displays.

- › The best site for storing sequestered carbon in trees. The trees already contain a lot of carbon. Their ability to sequester more carbon has decreased.



## Stable carbon storage

Areas completely excluded from forestry operations. Mainly various nature sites and other areas outside the scope of forestry operations.

- › A carbon storage that develops via natural processes, storage may also decrease due to rot. No forestry measures.

# *Other actions*

- **Skilled labour:** New possibilities and solutions to attract practical forest workers (harvesters, timer truck drivers, mechanics etc.)
- **Regional bioeconomy brand:** New promotional materials that emphasise our strengths and possibilities in bioeconomy:

[www.pohjois-karjala.fi/bioeconomy](http://www.pohjois-karjala.fi/bioeconomy)

## *Results in North Karelia*

- Low-carbon issues, bioeconomy and bioenergy are taken into account in planning and decision-making.
- Actions to improve climate-smart forestry have been taken.
- Awareness of key development needs of the sector has increased.

Between 2016 and 2018, the use of fossil fuels in heating has dropped by 15,25%.

Share of renewables of total energy consumption: 67%



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*Thank you!*



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