

The forest in the emerging bioeconomy in northern Europe

Lead author: PhD Camilla Widmark

Introduction

What is bioeconomy?

What is circularity?

Sustainability

What is the role of the forest in bio-based societies?

What is at stake? (ecologically, economically, and socially)

Young people's perspectives of future

Chapter 1: The forest in the North

Purpose of chapter: Setting the scene developing understanding about the forest and the use in the region.

- Forest based sector in Sweden, Norway, Finland and Russia (which parts of Russia to include?)
 - o Composition of forests
 - o Pre-requisites for forest growth
 - Distribution of forest and potential forest biomass
 - Harvest potential
 - o Ownership structure
 - o People in the forest (indigenous peoples, local peoples, local cultures dependent on forests)
- Forest-based industry
 - o What goods and segments, and how is the industry structured
 - o Import/export of forest-related goods
- Overview of regulations and policy regulating forest use
 - o Forestry Act
 - o Environmental regulations
 - o Energy regulations
 - o Building regulations
- Challenges and opportunities of forests in the north
 - o Ecological challenges and opportunities of forest
 - o Social challenges and opportunities in/of forest
- Discussion on the similarities and differences between the countries

Chapter 2: Forestry programs

Purpose of the chapter: outline the existence of forestry programs as a tool to regulate forest use and forest sector use of forest resources.

- What is the purpose and definition of a forestry program? (general if possible discussion)
- What programs exist in the region?
 - o What are the main purposes of the program?
 - Regional
 - National
 - o What are the main
- The recent development of forestry programs (brief historical outline of the programs)
- Comparison between the countries

Chapter 3: Bioeconomy strategies

Purpose of chapter: outline the bioeconomic strategies and main purpose of these.

- The European Union bioeconomy strategy
- The Nordic Council of Ministers bioeconomy strategy
- Bioeconomy strategy for Finland
- Bioeconomy strategy for Norway
- Bioeconomy strategy for Russia
- Bioeconomy strategy for Sweden
- Main gaps of national bioeconomy strategies
- Common challenges and opportunities listed in the region's bioeconomy strategy

Chapter 4: Renewable goods from the forest

Purpose of the chapter: discuss the opportunities and challenges of goods and services (especially focusing on new goods) from the forest in the region. Also to pinpoint the global trends that effect the development of new products, and the changes in the market.

- Bio-products – emerging products and technologies
 - o Opportunities
 - o Challenges
 - o Regulations
- The forest as a contributor to energy
- The forest as a contributor to fuel
- Building with wood – high-rise
 - o Opportunities
 - o Challenges
 - o Regulations
- Markets for bio-based products
 - o Demand for bio-based products
 - o Hinder for market development
- Hidden potential of forest-based products
 - o Common opportunities and challenges
 - o Difference between the countries.

Chapter 5 Forest ecosystem services, the environment and sustainability

Purpose of the chapter: to highlight the ecosystem services found in forests and how the forest ecosystem services are affected by the bioeconomy transformation linked to sustainability.

- Defining the concept of ecosystem services (ES) (in this report)
- What happens in the forest?
- What about social sustainability connected to forests?
- Challenges and opportunities of:
 - o Supporting ES
 - o Regulating ES
 - o Providing ES
 - o Cultural ES
- Synergies and tradeoffs
- Regulations concerning ES
- Climate mitigation and adaptation and the forest
- Similarities and difference between the countries in the region

Chapter 6: Policy implications and policy recommendations

(to be written up after the workshop)

Purpose of chapter: discuss the forest as a contributor to sustainability and bioeconomy in the region - based on the report finds as well as discussion during a workshop.

- Emerging issues of bioeconomy
- Bioeconomy and sustainability – the same thing?
- Governance, ownership structure and economic regulations
- Potential of the forest in a bioeconomy
- Policy recommendations

Timeline:

October 16 Barents Forest Forum, Umeå. Discussion outline during workshop of report

October 18 – December 15 – Finalizing the report.

No later than December 30 – Presenting final report

January 2020 - translation to Russian if budget permitting