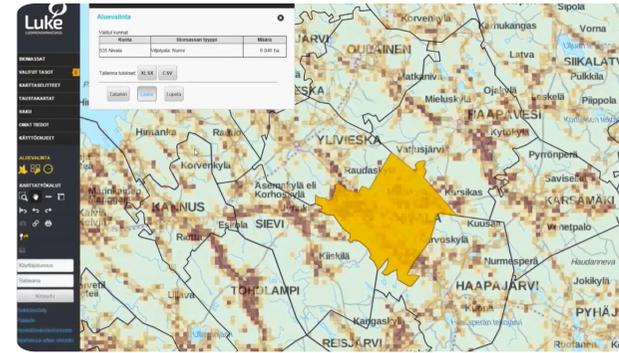# Biomass Atlas | Web-based forest resource map service

Biomass Atlas is an open service which collects the location data of biomasses under one, single user interphase. Developed by Luke together with Finnish organizations SYKE, TAPIO, UEF and UVA, and by the funding of the Finnish Ministry of Agriculture and Forestry, the service enables calculations of the amount of biomass in a given geographical area, as well as examining the opportunities and restrictions to utilise the biomass.

The map user interface is easy to use and allows user to watch, analyse and report biomasses from forestry, agriculture and biodegradable wastes from communities and industry. You will find approximately 300 map layers of different biomass types or land use categories in map user interface.

Based on Biomass Atlas, assessments of regional availability of biomass, procurement and logistical costs of biomass, procurement technology and optimization in Luke and other organizations have been successfully accomplished. Analyses of content of biomasses, their nutrients, energy potential, and the nutrient recycling have been optimized regionally using Biomass Atlas.

The potential to utilize biomass regionally can be assessed with focus in employment, regional economy or environmental impact. It is also possible to make scenarios, how these things will develop in the future.

The biomass data is planned to support investment decisions and sustainable use of natural resources, for example, and to help decision-makers to do sustainable energy politics. At the moment Biomass Atlas is available in Finnish. International version of Biomass Atlas will be built in cooperation with Baltic Forbio project, which starts at autumn 2017 and exports the Biomass Atlas concept to Sweden and Baltic sea countries. In Biomass Atlas you will find GIS data and maps of different biomass and land use types:

- multisource national forest inventory data describes biomass that is growing in forests
- forest chip potential
- field and crop areas
- crops and crop side streams
- manure of production animals

- biowaste from communities
- biodegradable waste from companies in scale that requires environmental authorization (VAHTI-database).

Field area, crops and waste data is updated yearly. Manure data is updated when needed, and forest data approximately in every five years. All the data in Biomass Atlas is described also in Finnish metadataportal for geodata, Paikkatietohakemisto.

DETAILS

ORIGIN OF WOOD

Forest

TYPE OF WOOD

Stemwood

KIND OF WOOD CONCERNED

Stemwood; Above and below ground woody biomass

IMPACT ON ENVIRONMENT & BIODIVERSITY

Medium

INCOME EFFECT

Positive, Atlas can be used in planning processes of different organizations including companies

EXPLOITATION POTENTIAL

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HUB

Northern Hub

ECONOMIC IMPACT

Positive, Atlas can be used in planning processes of different organizations including companies

MOBILIZATION POTENTIAL

Not possible to assess.

SUSTAINABILITY POTENTIAL - VALUE

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EASE OF IMPLEMENTATION

Medium, IT skills needed

EASE OF IMPLEMENTATION - EVALUATION

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KEY PREREQUISITES

Web pages, see above.

TYPE OF EVENT WHERE THIS BPI HAS BEEN FEATURED

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JOB EFFECT

Positive, Atlas can be used in planning processes of different organizations including companies

COSTS OF IMPLEMENTATION (EURO - €)

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SPECIFIC KNOWLEDGE NEEDED

IT skills

MORE DETAILS

CHALLENGE ADDRESSED

5.- Enhance economic and environmental performance of forest supply chains

KEYWORDS

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COUNTRY OF ORIGIN

Finland

DOMAIN

Forest management, ecosystem, resilience

DIGITAL SOLUTION

Yes

SCALE OF APPLICATION

National

TYPE OF SOLUTION

Data platforms, data hubs

INNOVATION

No

START AND END YEAR

2017 -

CONTACT DATA

OWNER OR AUTHOR

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https://www.luke.fi/en/

REPORTER

REFERENCES AND RESOURCES

MAIN WEBSITE

https://www.luke.fi/biomassa-atlas/en/

PROJECT WEBSITE

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PROJECT REFERENCE

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RESOURCES

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PROJECT UNDER WHICH THIS FACTSHEET HAS BEEN CREATED

Rosewood

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