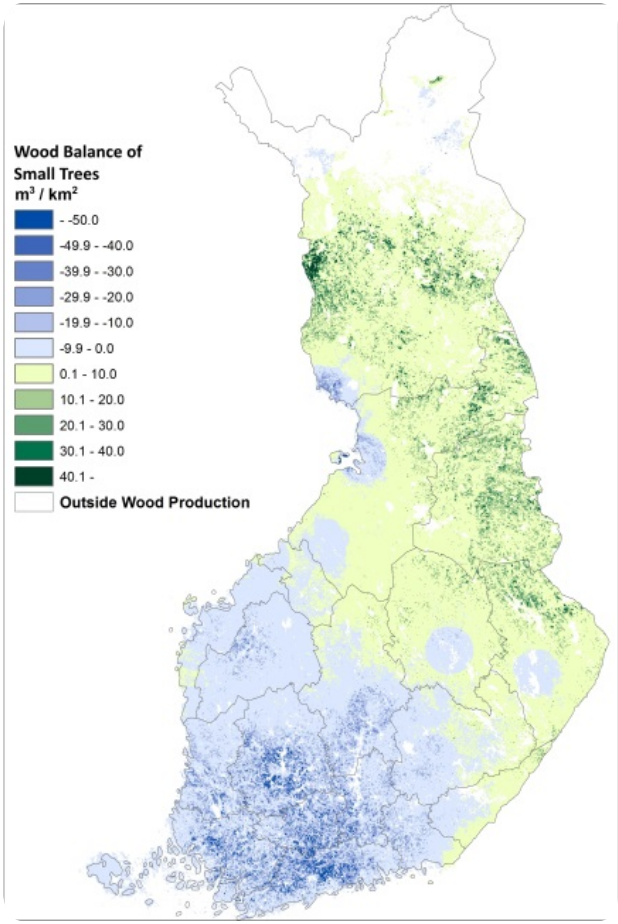
Assessment method for energy wood biomass feedstock availability and transport costs at regional level



Spatially explicit GIS-method and a collection of tools to assess the energy wood biomass availability and transport costs at regional level to any given end-use location. In the process the technical harvesting biomass potential, local competing demand and the wood resource balance are assessed. The transport costs from the grid of supply points can be viewed as a function of transport distance. Also, different future growth and demand scenarios can be included into calculations thus providing a valuable decision support to investors of energy wood industry.

Most customer projects differ from every other project in some respect. Calculation methods need more or less adjustment.

Results from the analysis: 1. Numerical (GIS) maps of biomass potential for any given timber assortment, biomass demand and wood resource balance (e.g. balance of small trees, see picture above).

2. Graphs depicting transport costs as a function of distance. 3. Spreadsheets of the result data used for graphs. 4. Summary report of the results for the customers.

For more information, see the reference.

DETALJI

PODRIJETLO DRVA

Šuma

VRSTA DRVA

Deblo

ODGOVARAJUĆA VRSTA DRVA

Above and below ground woody biomass (ex. shrubs, wood for fibres, wood for energy), Stemwood, Industry

UTJECAJ NA OKOLIŠ I BIORAZNOLIKOST

Medium (see above)

UČINAK NA PRIHOD

Not possible to assess.

POTENCIJAL ISKORISTIVOSTI

--

SREDIŠTE

Sjeverno središte

GOSPODARSKI UČINAK

Positive, helps the customers to plan their business in a more detailed way

POTREBNA POSEBNA ZNANJA

Comprehensive database, coding

POTENCIJAL ZA POVEĆANJE UPORABE DRVA

Not possible to assess.

POTENCIJAL ODRŽIVOSTI - VRIJEDNOST

--

JEDNOSTAVNOST PROVEDBE

Easy (the assessment is done by research experts, customers only need to define the basic requirements and calculation area)

JEDNOSTAVNOST PROVEDBE - EVALUACIJA

--

KLJUČNI PREDUVJETI

Available on request for the customers in Finland only at the moment.

VRSTA DOGAđAJA NA KOJEM JE PRIKAZAN OVAJ BPI

--

UČINAK NA ZAPOŠLJIVOST

Positive, helps the customers to plan their business in a more detailed way

TROŠKOVI PROVEDBE (EURO - €)

--

VIŠE DETALJA

IZAZOV

5. Unaprjeđenje učinkovitosti lanca opskrbe šumom na gospodarstvo i okoliš

DOMENA

Upravljanje šumama, uzgoj šuma, usluge ekosustava, otpornost

Sječa, infrastrutura, logistika

VRSTA RJEŠENJA

Modeliranje, sustav za podršku odlučivanju, simulacija, optimizacija

KLJUČNE RIJEČI

--

DIGITALNO RJEŠENJE

Da

INOVACIJA

Da

ZEMLJA PODRIJETLA

Finska

PODRUČJE PRIMJENE

Nacionalna

POČETAK I KRAJ GODINE

2016 -

KONTAKT PODATCI

VLASNIK ILI AUTOR

Natural Resources Institute Finland (Luke)

Perttu Anttila

perttu.anttila@luke.fi

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

IZVJESTITELJ

Natural Resources Institute Finland (Luke)

Vesa Nivala

vesa.nivala@luke.fi

REFERENCES AND RESOURCES

GLAVNA WEB STRANICA

https://efi.int/sites/default/files/files/events/2018/innovation_workshop-Nivala.pdf

IZVORI

--

WEB STRANICA PROJEKTA

--

REFERENCA PROJEKTA

--

LOGO PRIMJERA DOBRE PRAKSE

LOGO GLAVNE ORGANIZACIJE

PROJEKT U OKVIRU KOJEG JE INFORMATIVNI LIST KREIRAN

Rosewood

DATUM UNOSA

27 ruj 2019

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 862681

A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY