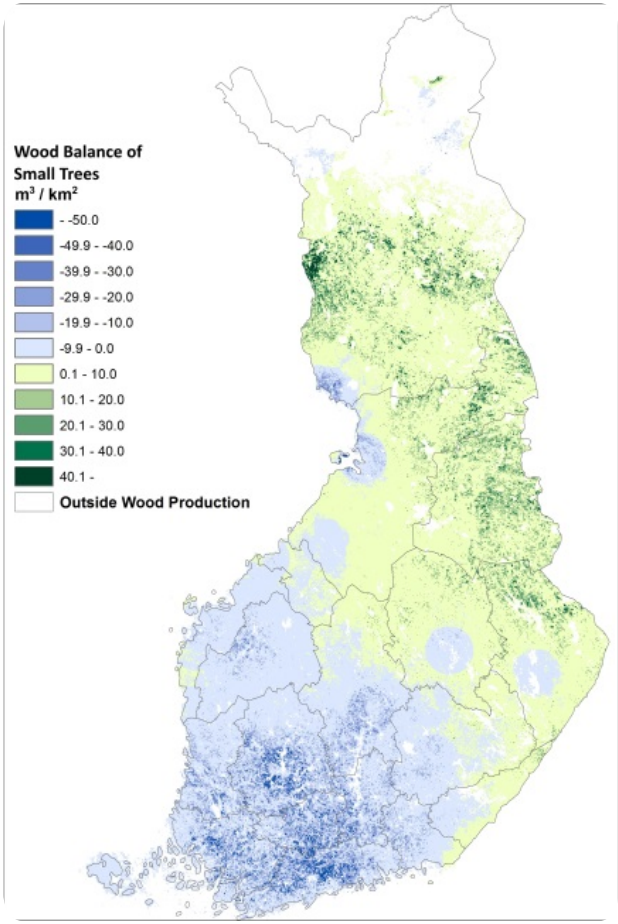
Assessment method for energy wood biomass feedstock availability and transport costs at regional level



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.

DéTAILS

ORIGINE DU BOIS
Forêt

TYPE DE BOIS
Grume

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

IMPACT SUR L'ENVIRONNEMENT ET LA BIODIVERSITé
Medium (see above)

EFFET SUR LE REVENU
Not possible to assess.

POTENTIEL D'EXPLOITATION
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HUB
Pôle Nord

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

CONNAISSANCES SPéCIFIQUES REQUISES
Comprehensive database, coding

POTENTIEL DE MOBILISATION
Not possible to assess.

POTENTIEL DE DURABILITé - VALEUR
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FACILITé D'IMPLéMENTATION
Easy (the assessment is done by research experts, customers only need to define the basic requirements and calculation area)

FACILITé D'IMPLéMENTATION - ÉVALUATION
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PRéREQUIS CLéS
Available on request for the customers in Finland only at the moment.

TYPE D'éVéNEMENT Où CETTE ICPE A éTé PRéSENTéE
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EFFET SUR L'EMPLOI
Positive, helps the customers to plan their business in a more detailed way

COûTS D'IMPLéMENTATION (EURO - €)
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PLUS DE DéTAILS

DéFI CONCERNé

5. Accroître les performances économiques et environnementales de la chaîne logistique forestière

DOMAINE

Getsion forestière, sylviculture, services écosystémiques, résilience

Récolte, infrastructure, logistique

TYPE DE SOLUTION

Modélisation, DSS, simulation, optimisation

MOTS-CLéS

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SOLUTION DIGITALE

Oui

INNOVATION

Oui

PAYS D'ORIGINE

Finlande

ECHELLE D'APPLICATION

Nationale

DéBUT ET FIN D'ANNéE

2016 -

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REFERENCES AND RESOURCES

SITE WEB PRINCIPAL

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

SITE WEB DU PROJET

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RéFéRENCE DU PROJET

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RESSOURCES

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LOGO DE LA BONNE PRATIQUE

LOGO DE L'ORGANISATION PRINCIPALE

Luke
NATURAL RESOURCES INSTITUTE FINLAND

PROJET SOUS LEQUEL CETTE FICHE D'INFORMATION A éTé CRééE

Rosewood

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