Interreg
Baltic Sea Region

EUROPEAN
REGIONAL
DEVELOPMENT
FUND
EUROPEAN UNION

Baltic ForBio

DEVELOPMENT AND TEST OF TRAINING PROGRAMME ABOUT COST-EFFECTIVE AND SUSTAINABLE HARVEST METHODS

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Latvian Rural Advisory and Training Centre –
Forest advisory service centre

Pilot program

Program: Interreg Baltic Sea Region Program
Project: Accelerating Production of Forest Bioenergy in the Baltic Sea Region

Work Package 2: Cost-Effective and Sustainable Harvest Methods

Group of Activities 2.3:
Development and Test of Training Programs about **Cost-Effective and Sustainable Harvest Methods**

* Analysis of the Current Forest Wood Energy Training by the Partner Countries

Target audience

❖ The training programs will be used mainly by organizations of private forest owners (association) and entrepreneurs, forest advisory organizations, forest agencies, and large forest companies/owners.

Reasons

❖ Today, energy wood production is being considered more and more, as it has the potential to replace fossil fuels for heating and producing energy in larger or smaller power plants.

Concept

❖ The training program is based on conclusions, innovations
and guidelines from GA 2.2.

❖ Activities ensures training of trainers, elaboration
of training methods, materials, and use of e-trainings.

❖ Contribution of each partner on
gathering regional data and information on training
already existing.

Motivation
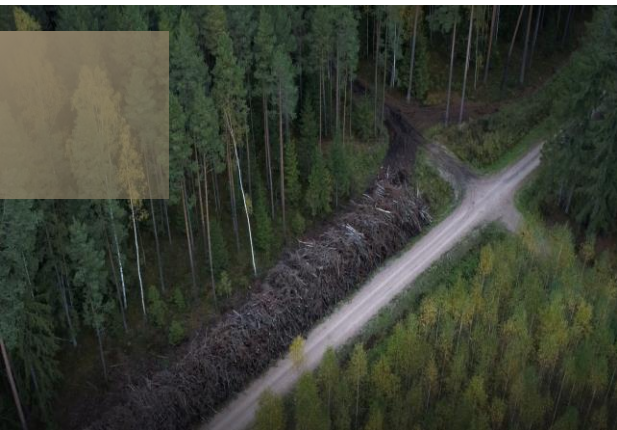
- Some formal **training programs are too long** and people are not interested in learining for a few months

- Should be **more information** about possibilities to collect bioenergy from forest management and financial evaluation of the energy wood production

- **Not enought information** about bioenergy production **from young stand cutting** in pre-commerrtial thinning or brush cutting

EVALUATION OF EXISTING TRAINING PROGRAMS

Duration and structure

E-learning	Theory – e - learning, practical – face to face	Face to face

DURATION AND STRUCTURE

Free training
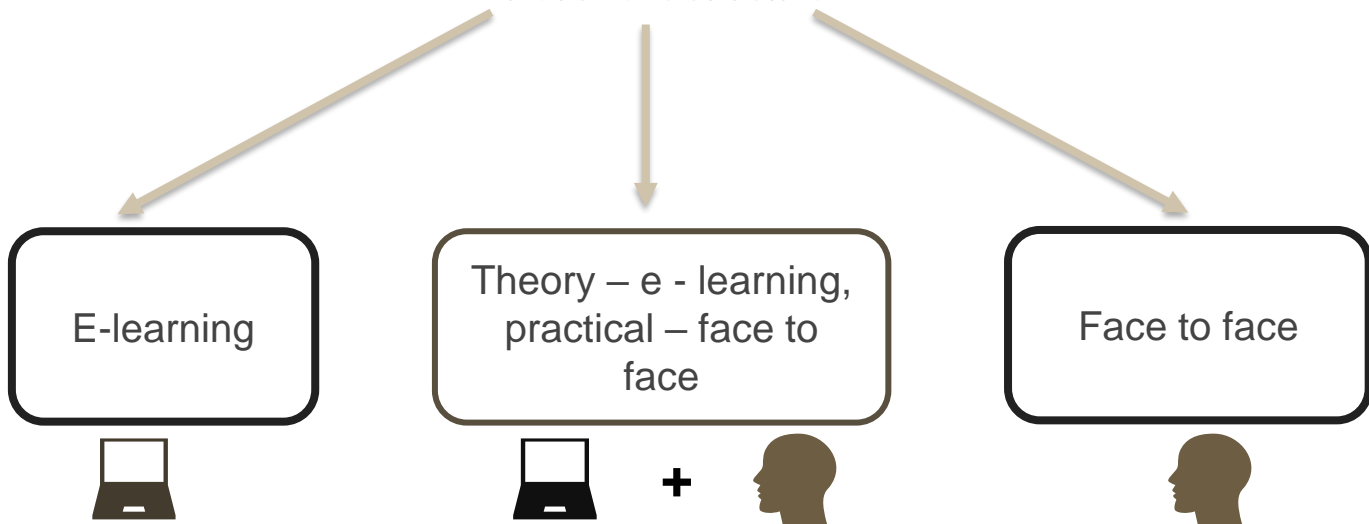
Theory

Practise

E – learning

Face to face lessons

**8 hours
Presentations
Video
Audio**

**8 hours
Outside lectures**

TEST after theory

- Random question from each presentation

Hours spent in an e-learning platform

Questionnaires and surveys

Recommendations

Feedback

Sustainable wood energy development in the Baltic Sea region – Baltic ForBio international project

Energy wood types and their availability «Forest Energy Atlas» insight

Calculation of amount of energy wood using innovative programs – «Mežvērte» and «Meža eksperts»

Preparation of energy wood and application of different technologies

Heat produced by plant running energy wood

Sustainable Forest Management (SFM)

The Sustainable Biomass Program (SBP)

Energy wood market in the country and Europe

📌 Assessment of energy wood resources by applying the pre-commercial and commercial thinning, final felling

📌 Survey of logging residues, small trees and shrub storage in roadside landing

**Practical part
(for forest owners)**

Sustainable wood energy development in the Baltic Sea region – Baltic ForBio international project

Energy wood types and their availability «Forest Energy Atlas» insight

Calculation of amount of energy wood using innovative programs – «Mežvērte» and «Meža eksperts»

Logistic management

Heat produced by plant running energy wood

Sustainable Forest Management (SFM)

The Sustainable Biomass Program (SBP)

Energy wood market in the country and Europe

Innovative harvesting methods for producing energy wood

Theoretical part (entrepreneurs related in forestry)

📌 Assessment of energy wood resources by applying the pre-commercial and commercial thinning, final felling

📌 Survey of logging residues, small trees and shrub storage in roadside landing

📌 Visiting energy plants, for example, Fortum and local government small plants. Also visiting «Forest and Wood Products Research and Development Institute»

Theoretical part (entrepreneurs related in forestry)

E-learning technical solution

Apmācību programma meža īpašniekiem

Ilgtspējīga koksnes enerģijas attīstība Baltijas jūras reģionā – Baltic ForBio starptautiskais projekts

Ilgtspējīga koksnes enerģijas attīstība Baltijas jūras reģionā - Baltic ForBio starptautiskais projekts

Papildu materiāli:

Esošā apmācību pieredze projekta dalībvalstīs līdz šim

Enerģētiskās koksnes veidi un to pieejamība - "Forest energy Atlas" ieskats

Enerģētiskās koksnes veidi un to pieejamība - "Forest energy Atlas" ieskats

Forest energy Atlas lietošanas video pamācība

Enerģētiskās koksnes apjoma aprēķināšana pielietojot inovatīvas datorprogrammas – "Mežvērte" un "Meža eksperts"

Enerģētiskās koksnes apjoma aprēķināšana pielietojot inovatīvas datorprogrammas – "Mežvērte" un "Meža eksperts"

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E-learning technical solution

❖ **Moodle 3.8** - open-source learning management system
❖ Moodle is **used for** <u>blended learning, distance education, flipped classroom and other e-learning projects in schools, universities, workplaces and other sectors</u>
❖ With customizable management features, it is used to create private websites with online courses for educators and trainers to achieve learning goals. Moodle allows for extending and tailoring learning environments using community-sourced plugins

Innovation – program «Mežvērte»

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CIRSMAS NOVĒRTĒJUMS

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Saimniecība:	xxxxxx	Īpašnieks:	Uzmērīja:
Novads:	Madonas novads	Kadastrs: 12345678901	Uzmērīšanas datums: 18.12.2020.
Pagasts:	Aronas pag.	Kvartāls: 3	Platība: 1.30 ha
Virsmežniecība:	Centrālvidzemes	Nogabals: 04	Pievešanas attālums: m
Mežniecība:	Madonas	A.Nogabals: 0	Koku skaits: 769 gab. nogabalā

Sugas	Koku skaits	Stumbra krāja	Apjomi (m3)									Vidējais koks (m3)	Saglabājamie koki							
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Egle	218	60.40	50.49	0.00	19.74	11.67	11.29	7.79	1.9	7.92	52.48	0.28								
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Cirsmas krāja, m3:	250.87
Cirsmas vērtība, €:	7 652.46
Biomasas apjoms, ber.m3:	212.27
Biomasas vērtība, €:	1 061.33
Vērtība kopā, €:	8 713.79

Uzmērīja: ....
(paraksts)

Novērtēja: ....
(paraksts)

Koksnes apjomi noteikti ar LLU MF 2015g algoritmu.

Meža biomasas aprēķins izstrādāts Interreg Baltijas jūras reģiona transnacionālās sadarbības projekta Baltic ForBio nr. #R058 ietvaros.

Piezīme: Lai uzsāktu koku ciršanu, nepieciešams saņemt apliecinājumu **Centrālvidzemes** virsmežniecības **Madonas** birojā. 18.12.2020.

Mežvērte: 12.6

Practical part – in field

*Forest stand **before** late pre-commercial thinning*

*Forest stand **after** late pre-commercial thinning*

Practical part – in field
Technical solution

Knowledge to take with you

❖   It is important to remember that the profitability of wood chips preparation is affected by market demand and the prices charged, varying from region to region. The delivery distance and the amount of chipping material are important enough to evaluate this process' cost – effectiveness.

❖   Renewable energy is and will be in demand, which has potential in the long run.
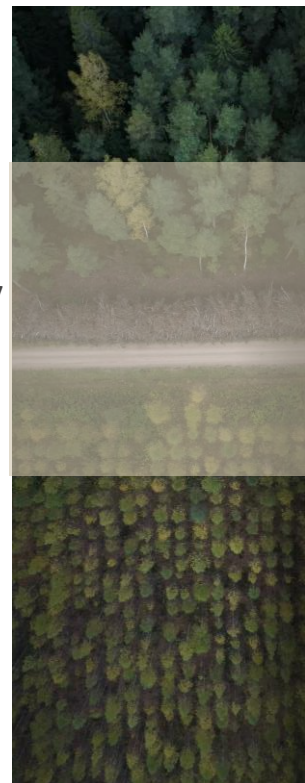
Thank you for your attention!

Latvian Rural Advisory and Training Centre
Forest Advisory Service Centre

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