



Latvian Peat  
Association

# PEAT PRODUCTION IN LATVIA 2019 AND OUR CHALLENGES



# PEAT EXTRACTION IN LATVIA (on 01.01.2019)

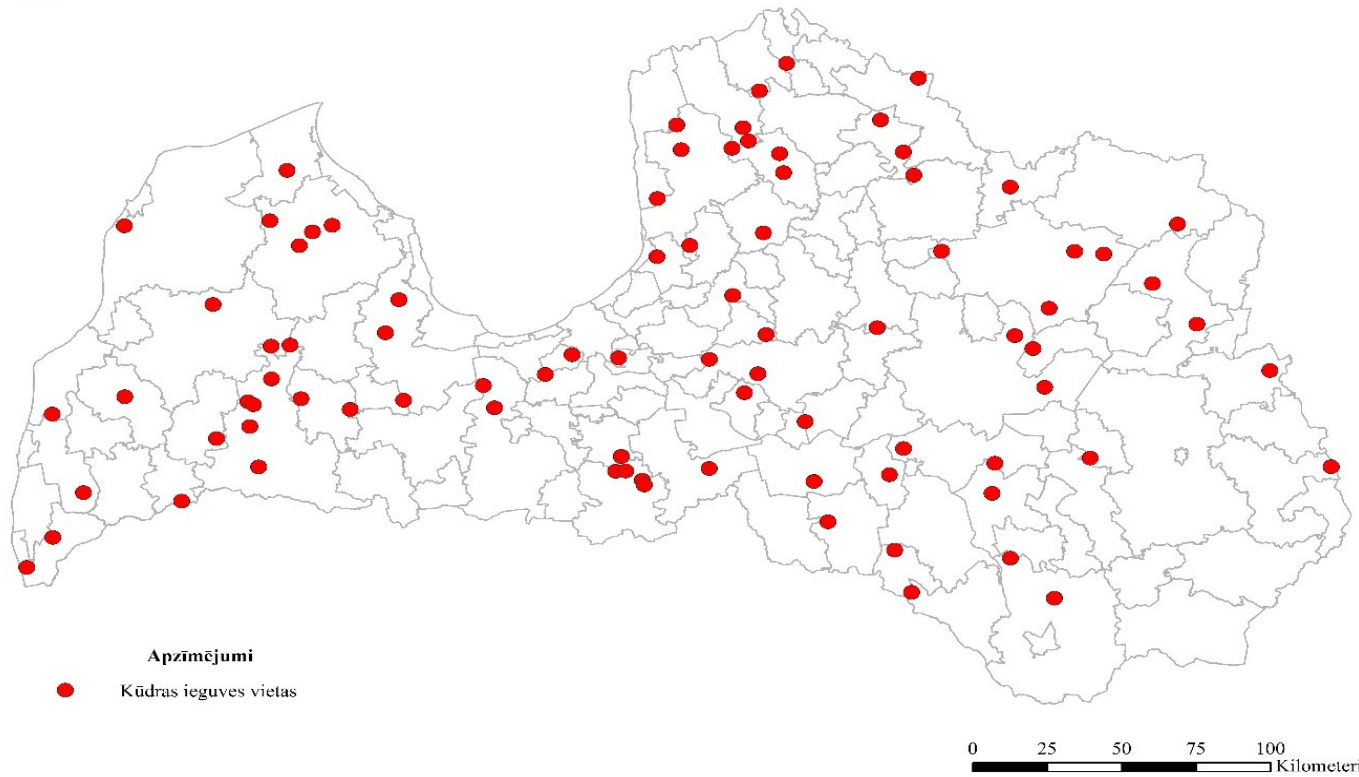
- 24 600 ha licenced areas for peat extraction
- 128 licenses
- 93 peat extraction sites
- 66 companies
- ~ 80% milled and ~20% block peat
- Over a 10-year period, an average of 0.95 million tons of peat is extracted annually

# PEAT EXTRACTION SITES 2018



LATVIJAS VIDES, ĢEOLOĢIJAS  
UN METEOROLOĢIJAS CENTRS

## KŪDRAS IEGUVES VIETAS 2018.GADĀ



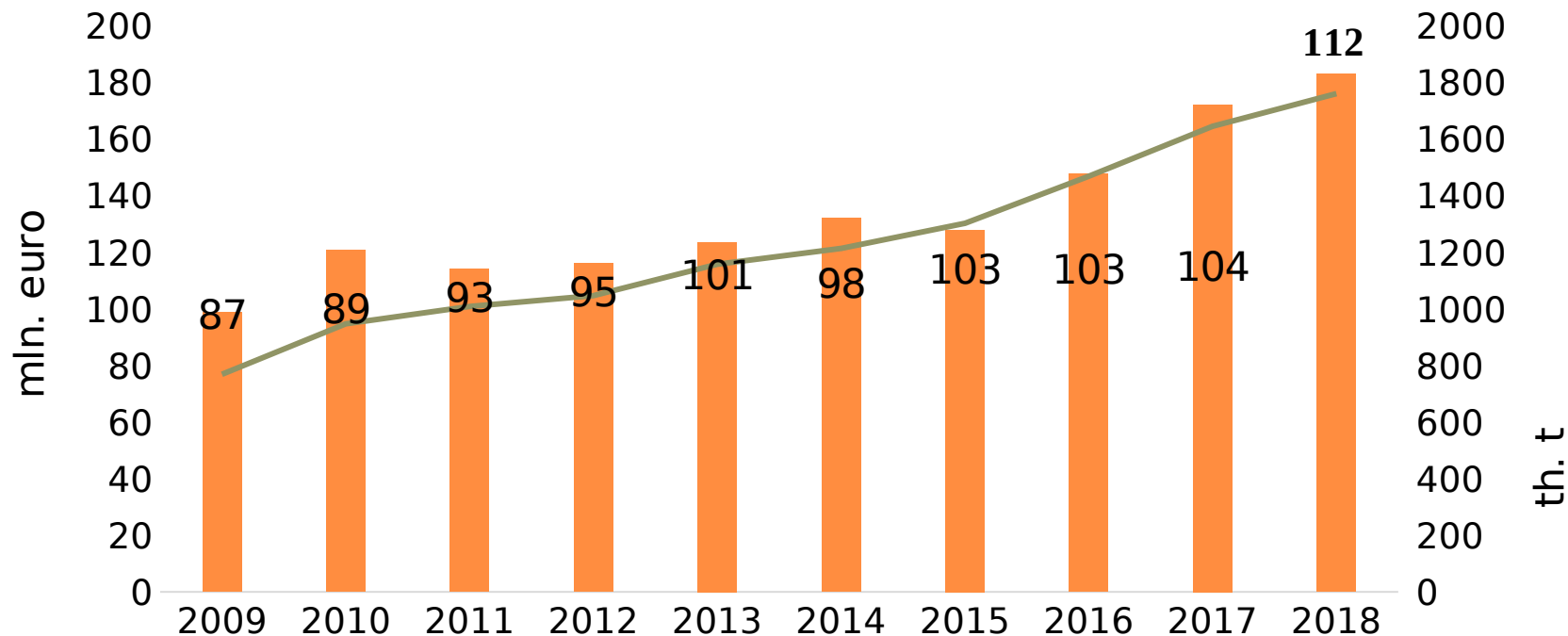
# PEAT USE

- 🌱 95% horticulture
- 🌱 4% energy (private households, small heating centrals)
- 🌱 1% other
- 🌱 90% export

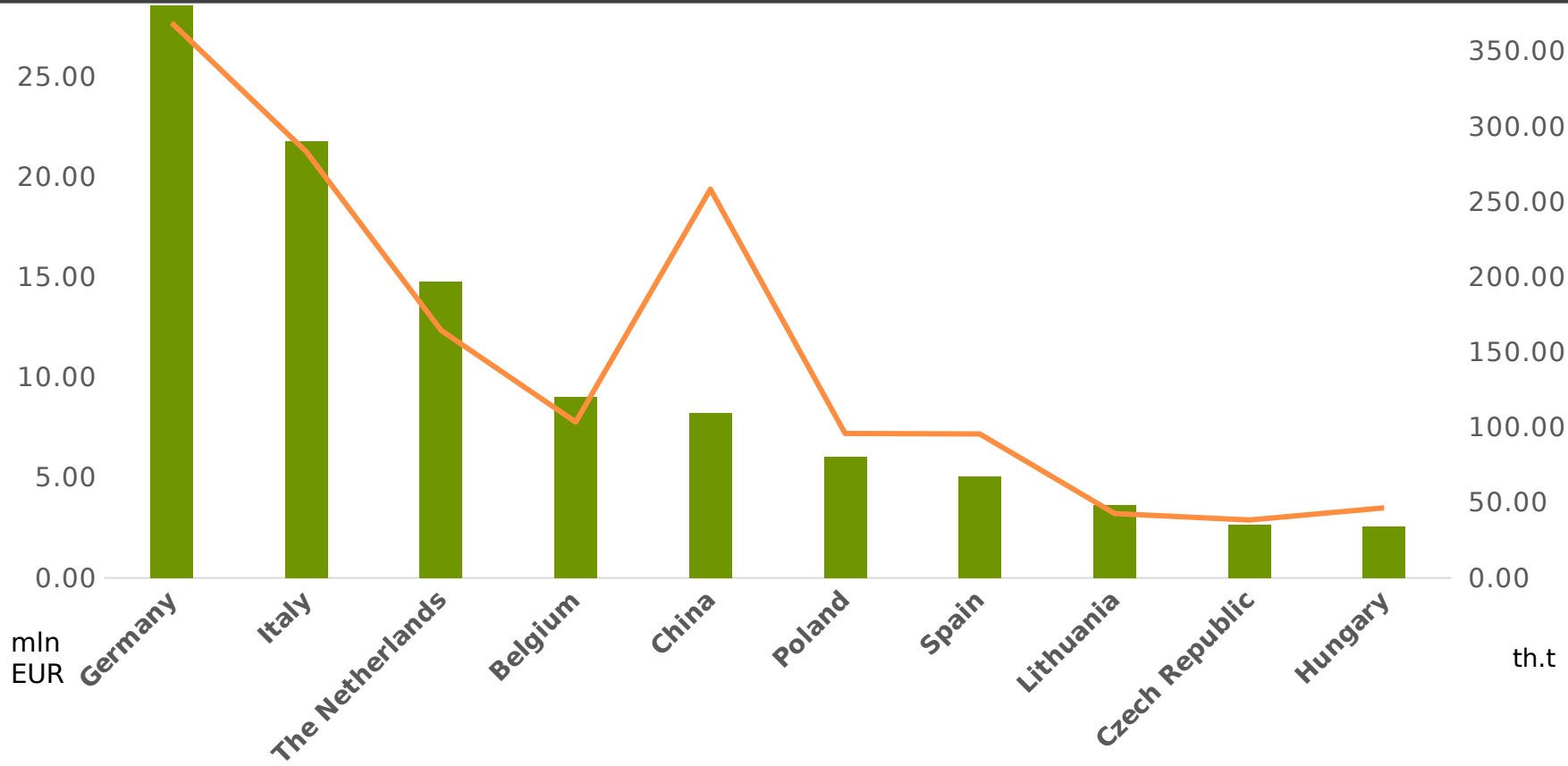
30% of  
professional  
peat in  
Europe



# PEAT EXPORT 2008 -2018, TH.T., MLN.EURO, COUNTRIES



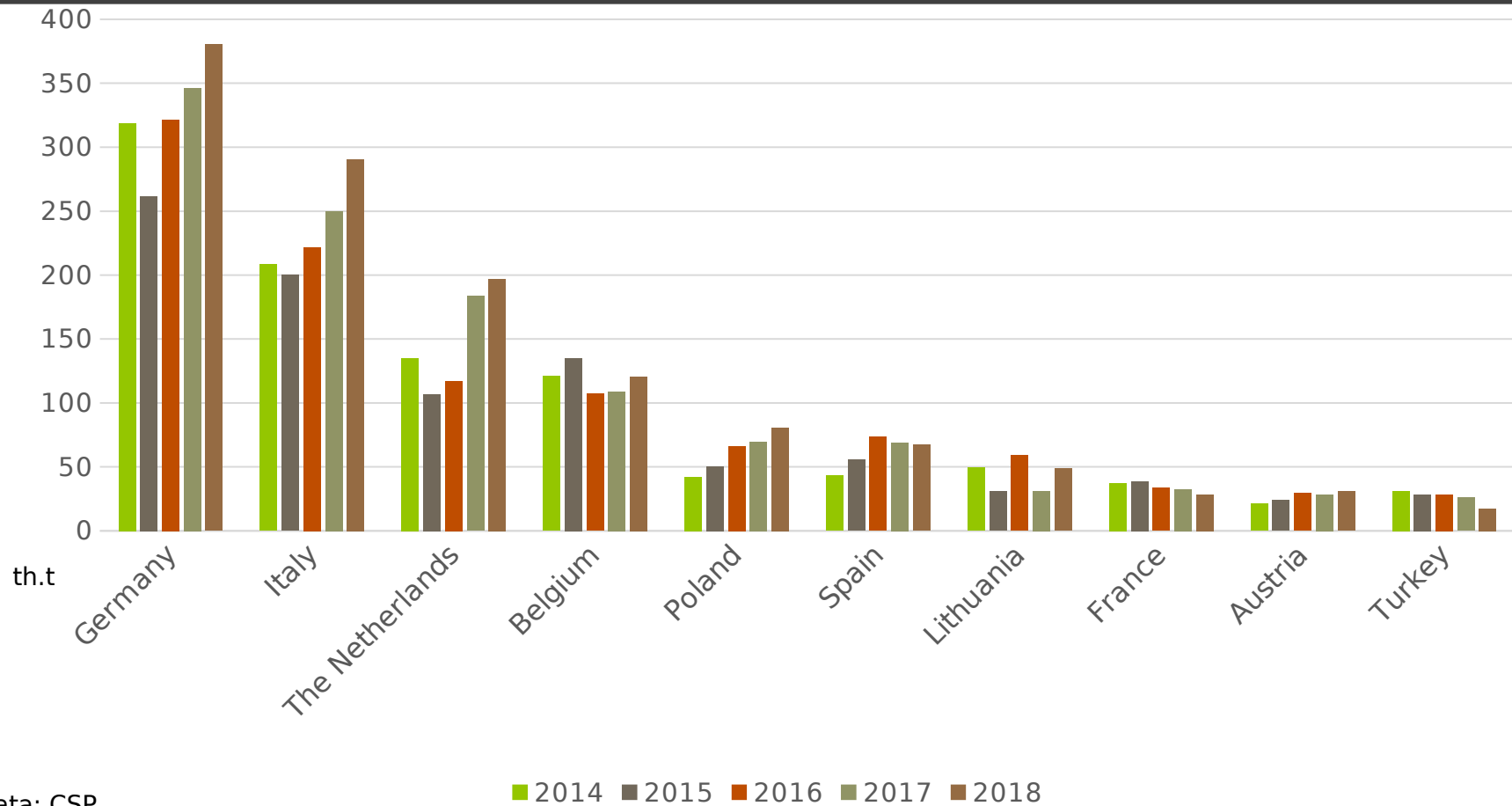
# PEAT EXPORT 2018 TOP10, th.t/mIn EUR



Data: CSP

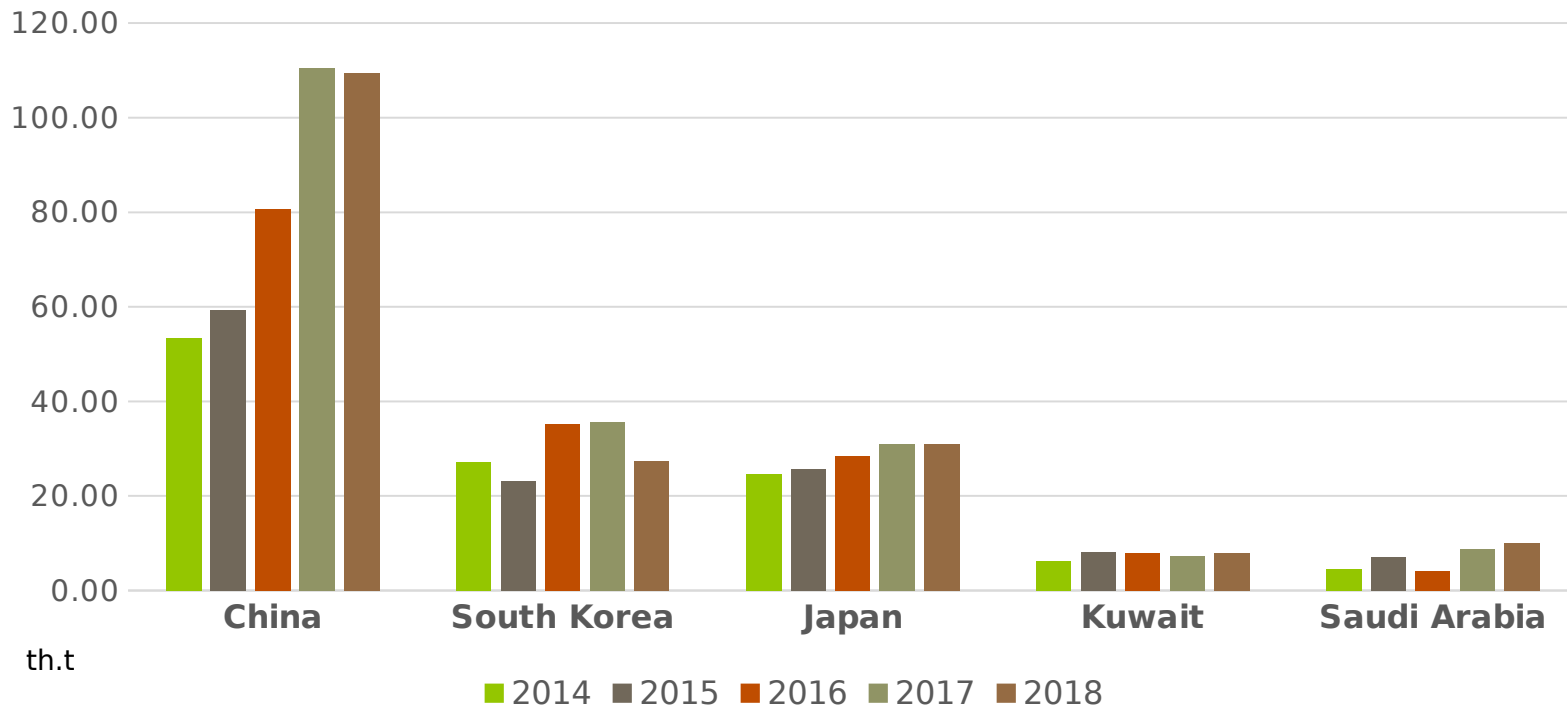
Export to 112 countries

# PEAT EXPORT 2014-2018 TOP10 EUROPE, th.t



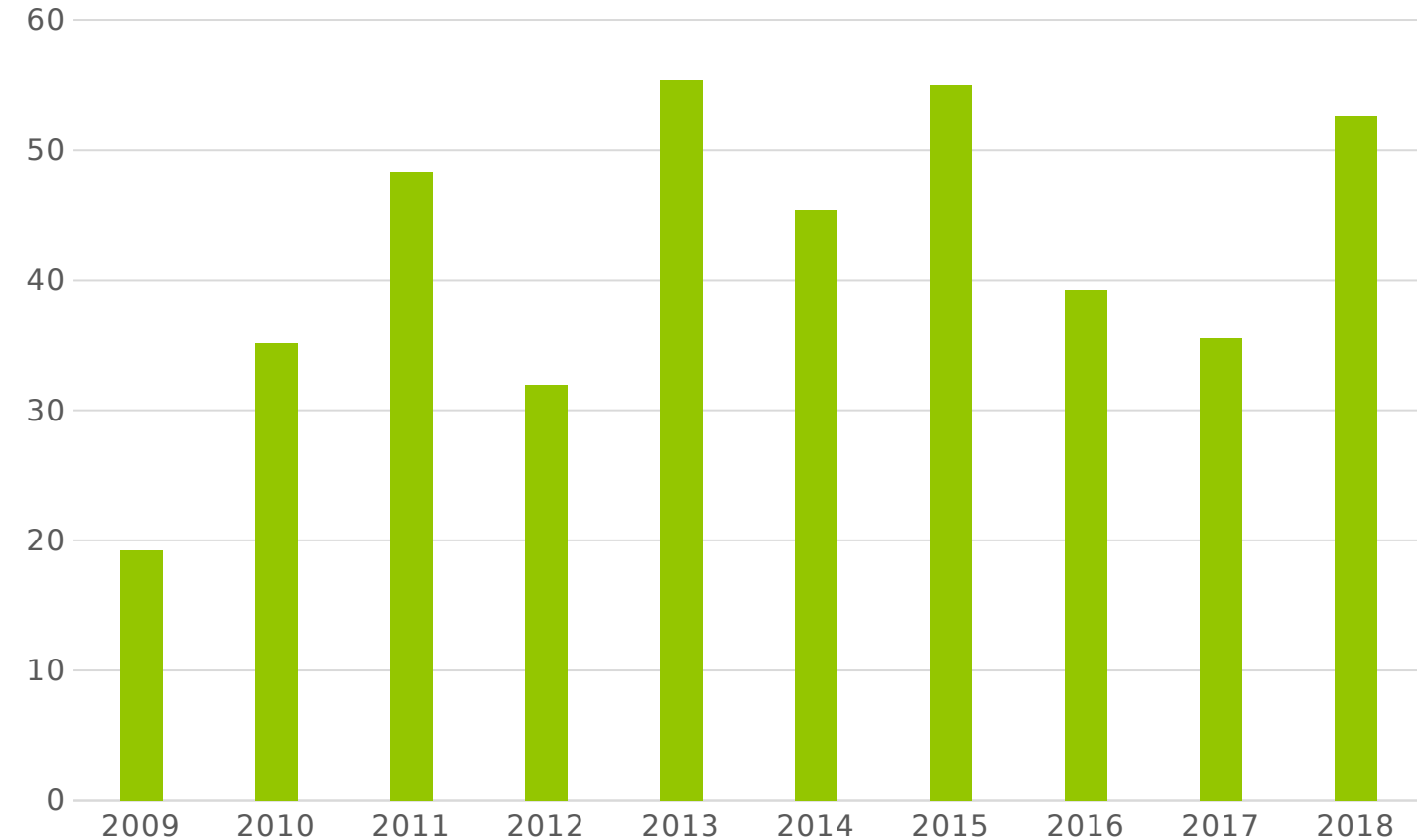
# PEAT EXPORT 2014-2018 TOP5 ASIA, th.t

Chart Title



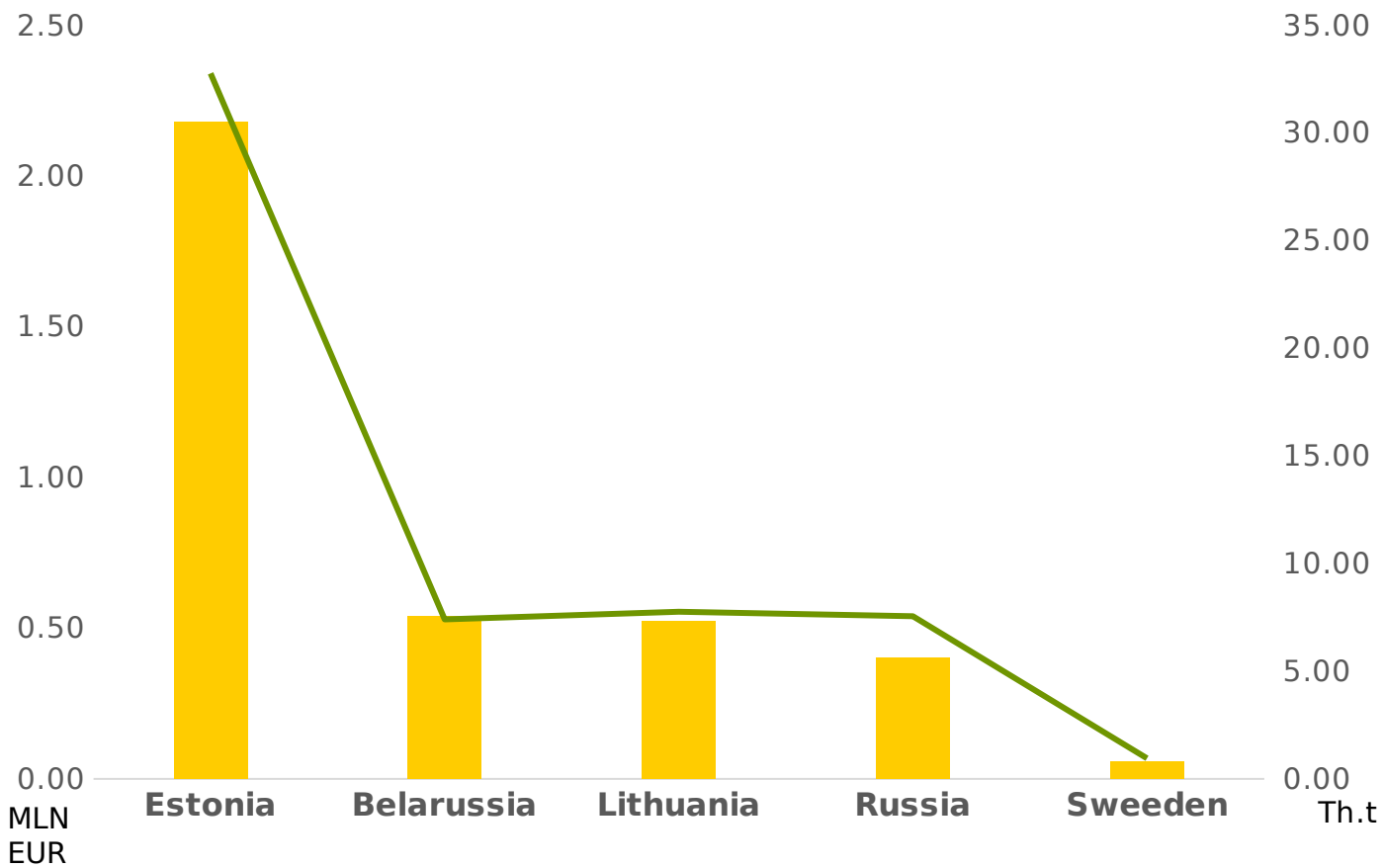


# PEAT IMPORT 2008-2018, TH.T

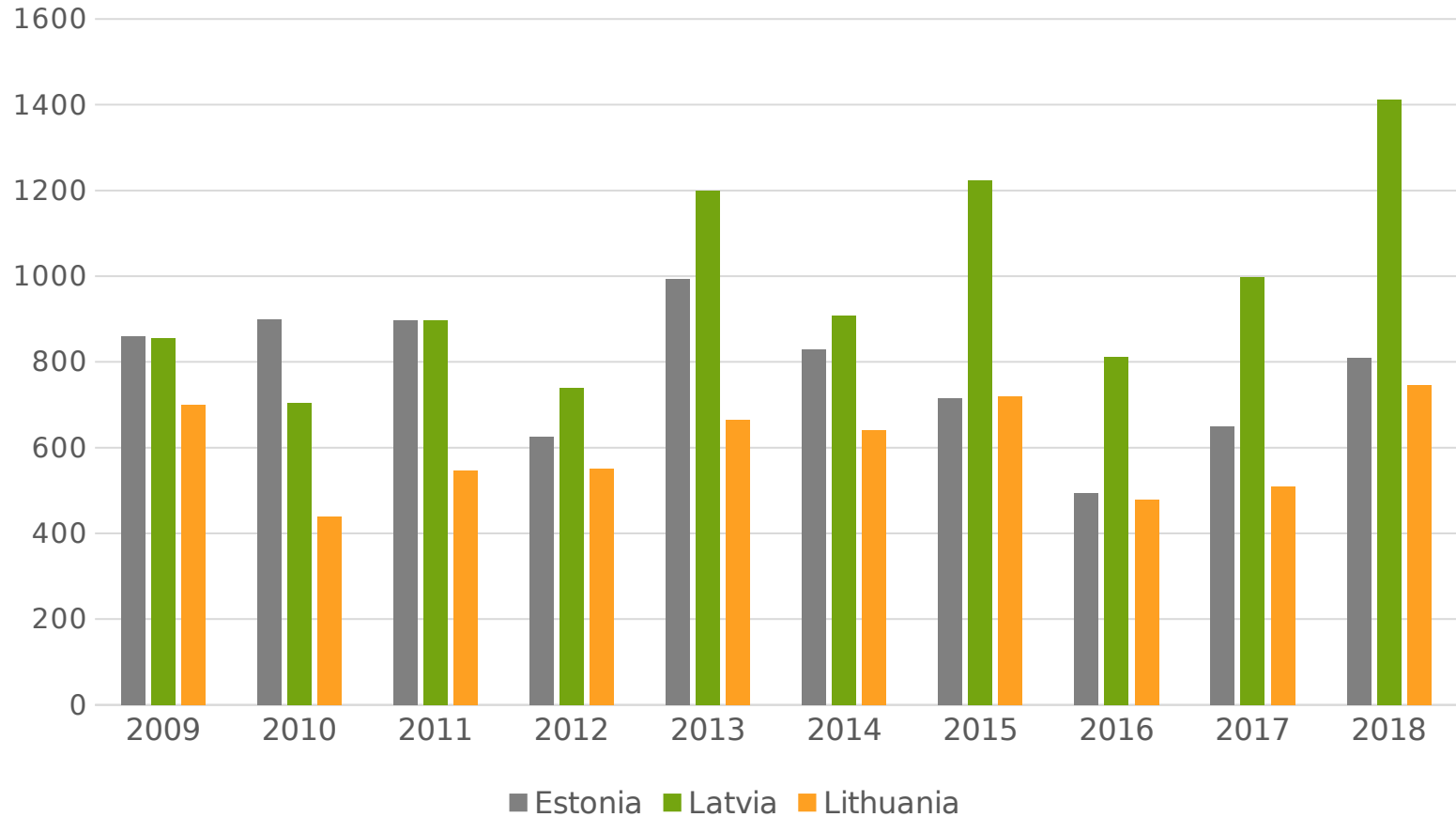


Data: CSP

# PEAT IMPORT TOP 5 2018, TH.T., MLN.EURO



# PEAT EXTRACTION IN THE BALTICS 2008 -2018, T





# RAINFALL MAY-AUGUST 2dec2019

**May 50,9 mm = 4% above the norm (48.8mm)**

**June 49,1 mm = 33% below the norm (73,3 mm)**

**July 87,3 mm = 15% above the norm (75,7 mm)**

**August 2 dec 36,2 mm = 33% below the norm**

**August 3 dec ?**

**Norm in August 76,7 mm**

**September ?**

**Norm 66,1 mm**



# THE AVERAGE TEMPERATURE MAY - AUGUST 2dec 2019

**MAY = 11,7 C°**



0,3 C°  
above

**JUNE = 18,6 C°**



3,8 C°  
above

**JULY = 16,2 C°**



1,2 C°  
below

**AUGUST 2dec = 18,7 C°**

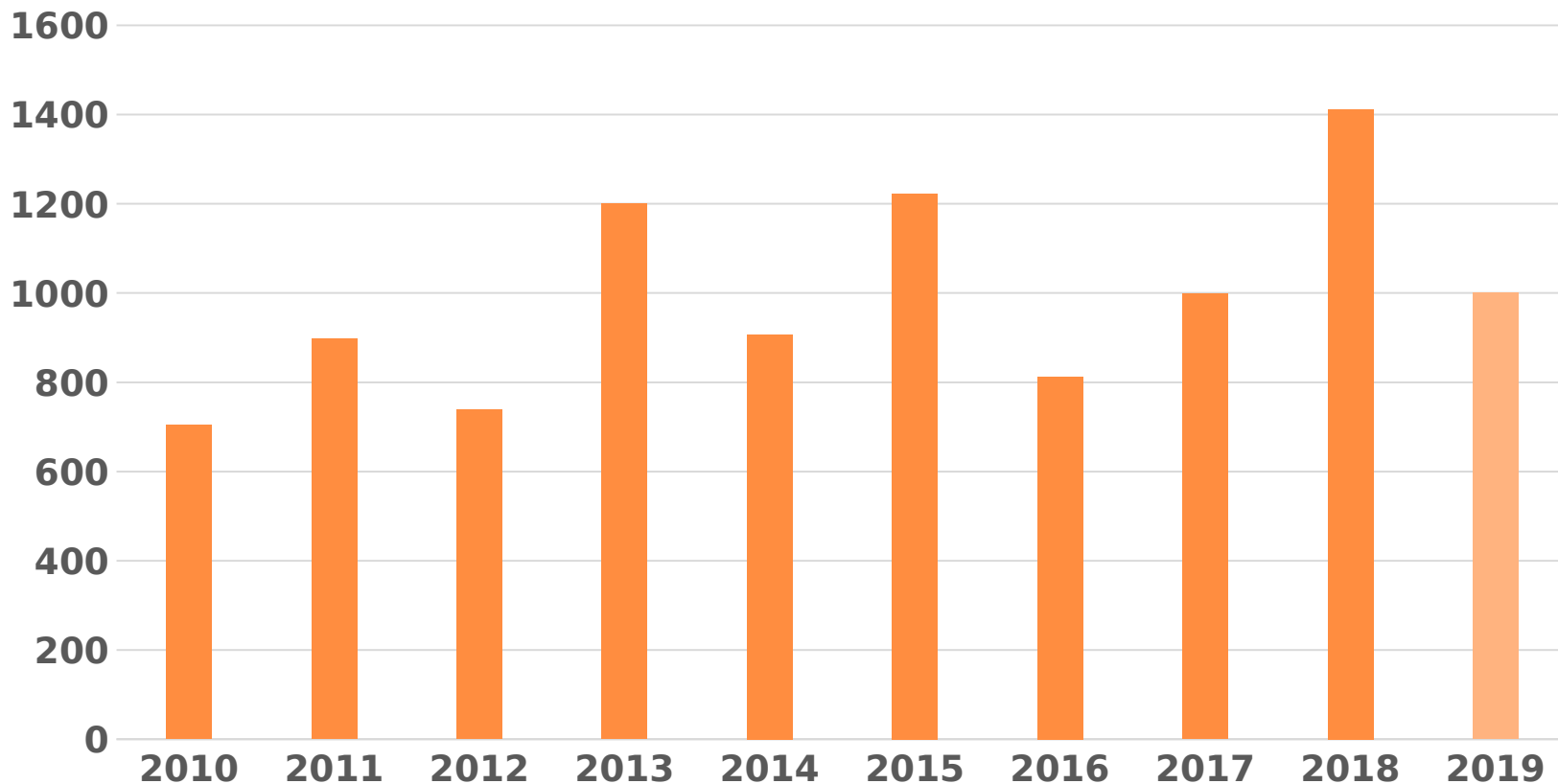


2.2 C°  
above

sunshine 266h    sunshine 351h



# PEAT PRODUCTION IN LATVIA 2010 - 2019 TH.T





Administration of  
Latvian Environmental  
Protection Fund



Nature  
Conservation Agency  
Republic of Latvia



Latvijas  
Kūdras  
asociācija

Apvienība Baltijas jūras krastu atjaunošanai  
BALTIJAS KRĀSTI



# Sustainable and responsible management and re-use of degraded peatlands in Latvia

Inventory of  
degraded  
peatlands

GHG emissions  
measurements

Assessment  
of ecosystem  
services

Recommendations  
for reclamation

Demo-sites for  
reclamation  
scenarios

Land use  
optimization  
model

The activities are implemented with the financial support of the EU LIFE program within the project "Sustainable and responsible management and re-use of degraded peatlands in Latvia" (LIFE REstore, LIFE14 CCM/LV/001103) from September 1, 2015 to August 31, 2019.



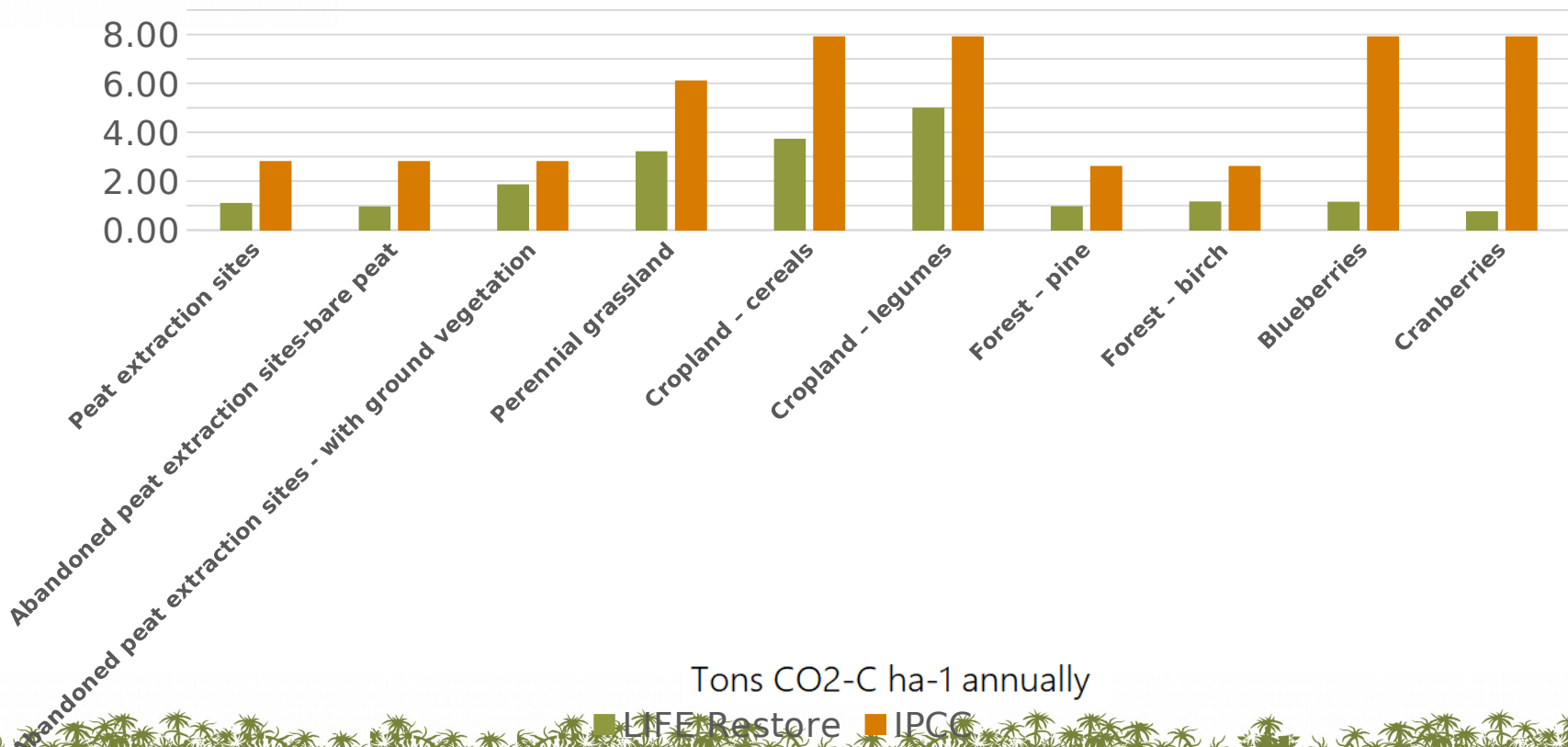
**Project is finished**

**Latvia is the first in the  
Baltics having its own  
emission factors**





## LIFE REstore CO<sub>2</sub> emission factors vs. default IPCC CO<sub>2</sub> emission factors



## GHG emissions factors - lower than considered

- Approbation of methodology of GHG emissions accounting for organic soils and development of national GHG emission factors
- 42 sites - different land use types of organic soils - 24 months - 19 000 GHG samples
- Results of 2 GHG emissions accounting years - emissions are considerably overestimated, Emissions are lower than considered/ than IPCC default emission factors
- Highest CO<sub>2</sub> emissions from cropland, lowest - from forest
- Berry plantations in abandoned peatlands can reduce CO<sub>2</sub> emissions significantly
- Largest CH<sub>4</sub> emissions from natural bogs

The main conclusions regarding the differences between LIFE REstore GHG emission factors and the IPCC emission factors are:

National GHG emission factors are on average two times smaller than international IPCC emission factors;

The difference between CO<sub>2</sub> emissions in peat extraction fields is 60%, in cropland and grasslands – 40-55%, in forest – 50-60% and in berry plantations (accounted as cropland) – 80%;



The largest difference between the national and IPCC CO<sub>2</sub> emission factors are for grassland, forest land, blueberry and cranberry plantations;

The largest CO<sub>2</sub> emissions in managed organic soils are from cropland and grassland;

Re-calculating of GHG emissions in Latvia using LIFE REstore results in GHG emissions' reduction by approximately 1,8 million tons of CO<sub>2</sub> equivalent per year that is approximately 17% of the total national GHG emissions annually. The total GHG emissions of Latvia in 2016 is 10 363 420 tons CO<sub>2</sub> equivalent (with LULUCF).



# 7 recultivation scenarios with implementation criteria and methods

## 1. Renaturalization

**(natural, purposeful)** LIFE REstore also provides better

## 2. Afforestation

understanding of possibilities

**(natural, purposeful)** to reduce GHG emissions

## 3. Berry growing

from organic soils by

## 4. Water bodies

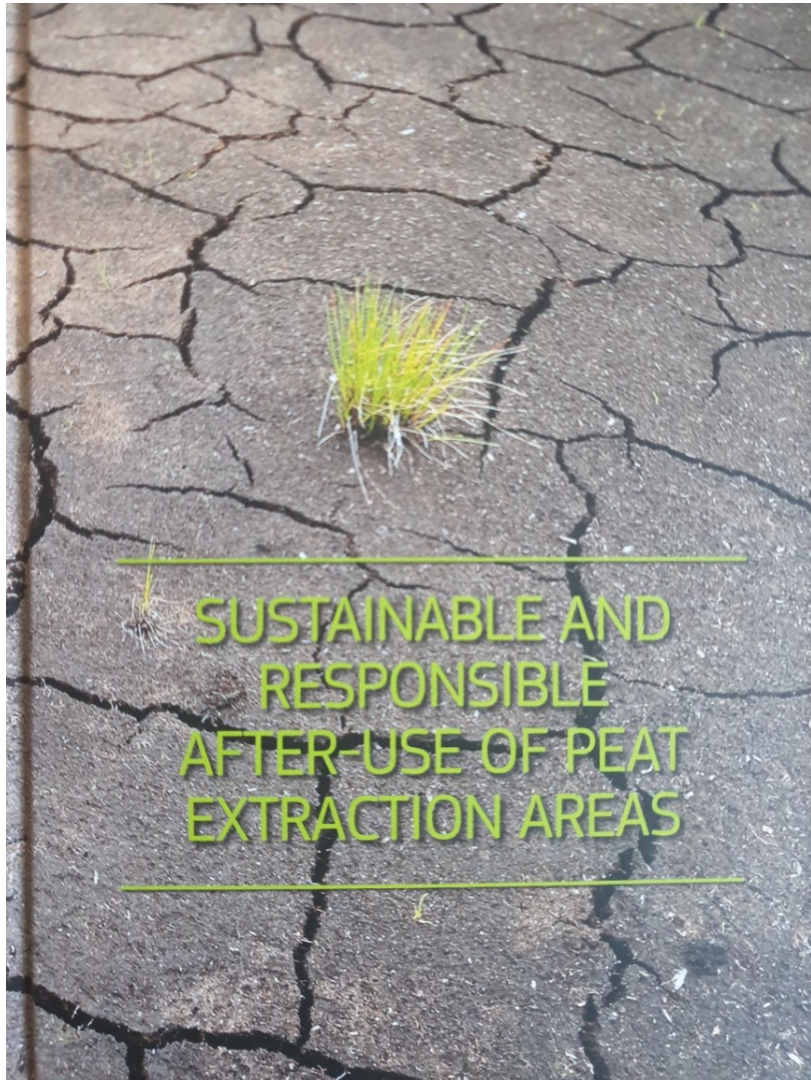
afforestation and establishment

## 5. Cultivating crops

of horticultures.

## 6. Grasslands

## 7. Paludiculture



SUSTAINABLE AND  
RESPONSIBLE  
AFTER-USE OF PEAT  
EXTRACTION AREAS

Results of LIFE Restore

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[peat@peat.lv](mailto:peat@peat.lv)

## Next steps in GHG emissions field

- **we have to work on national factors - to confirm according to IPCC rules**
- **to exchange our knowledges/data between experts**
- **CO<sub>2</sub> emissions compensation question (users, growers)**

# Postpone accounting GHG emission from wetlands from 2026 to 2030 (6 EU MS)

**Regulation (EU) 2018/841 of the European Parliament and of the Council of 30 May 2018**

**On the inclusion of greenhouse gas emissions and removals from land use, land use change and forestry (LULUCF) in the 2030 climate and energy framework, and amending Regulation (EU) No 525/2013 and Decision No 529/2013/EU**

Article 2 Point 4

- If necessary in light of experience gained with the application of the IPCC Refinement to the IPCC Guidelines, the Commission may make a proposal to postpone the mandatory accounting for managed wetland for an additional period of five years.





# Communication

To educate officials – peat is used for growing media (food, forest, ornamental greenery)

Peat is part of the circular economy (growing media – improve soil, zero waste )

To compare peat based growing media with other growing media



# OUTCOME OF 1T OF PEAT

35 000  
vegetable  
seedlings  
80t cucumbers  
160t thomatos

1t peat  
30 000 tree  
seedlings

1t peat  
35 000  
vegetable  
seedlings

15 000 000 ha/y


30 000 tree  
seedlings  
15ha forest

1ha forest in 50  
years  
370 t CO<sub>2</sub>





**Latvian Peat  
Association**

A large, complex piece of machinery, likely a peat harrow or similar agricultural equipment, is shown in operation. It consists of a series of metal frames and blades, some of which are tilted upwards, causing a large amount of brown peat to be thrown into the air. The background shows a clear blue sky with some light clouds and a line of trees in the distance.

**INGRIDA KRIGERE**  
member of the board

**THANK YOU**