

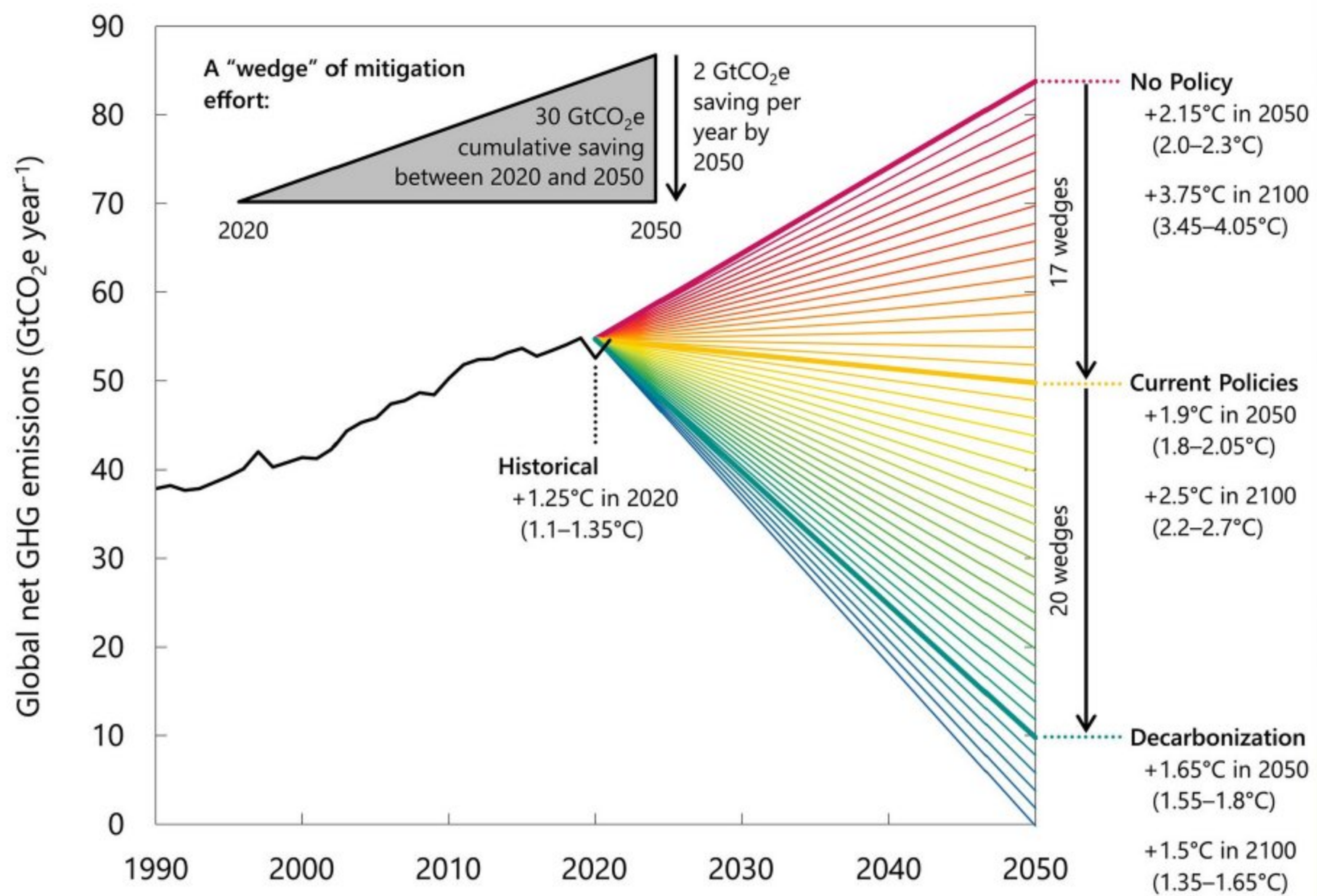
From Local Practice to International Policy - Climate Activities of the International Peatland Society

Anna-Helena Purre

IPS 2nd Vice-President, Chair of Scientific Advisory Board

IPS Provides industry stakeholders with the latest scientific research and networks, innovation in extraction and the use of peat, after-use, nature protection and climate mitigation practices.

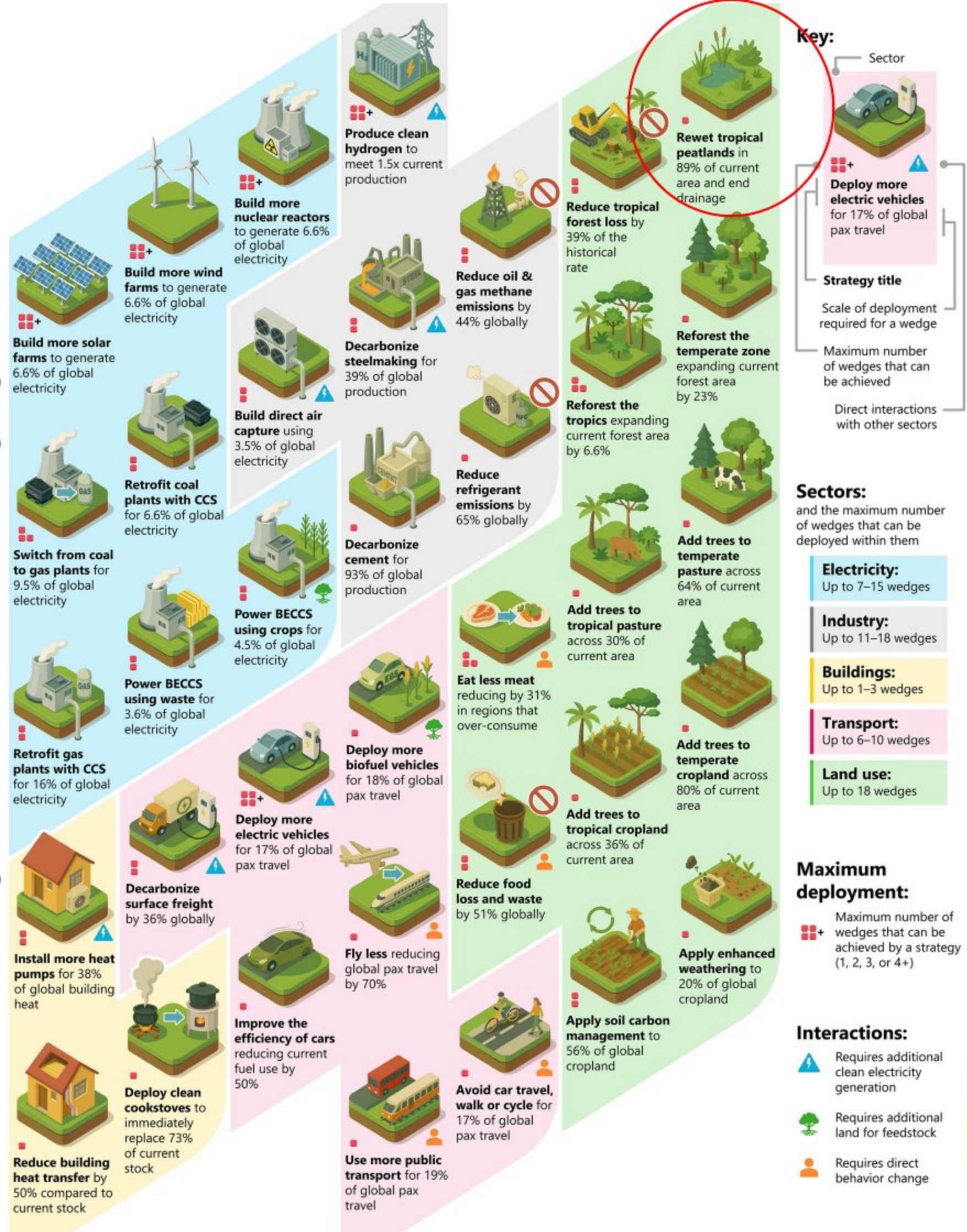
Why peatlands?



Johnson & Staffell, 2026

<https://www.science.org/doi/10.1126/science.adr21>

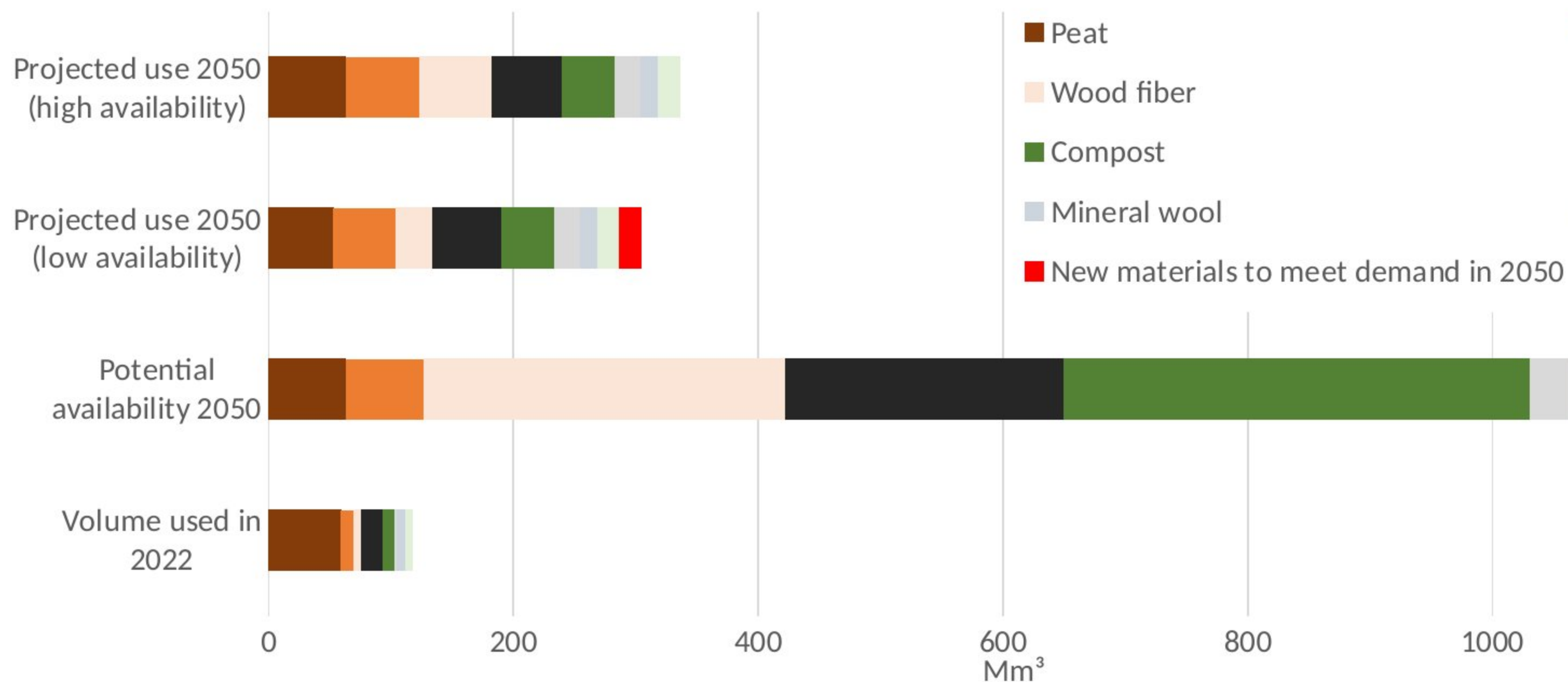
18



Climate targets for 2050– peat is needed at that time also



IPS member webinar: Soilless Growing Media 2050: Projected Demand and Raw Material Availability

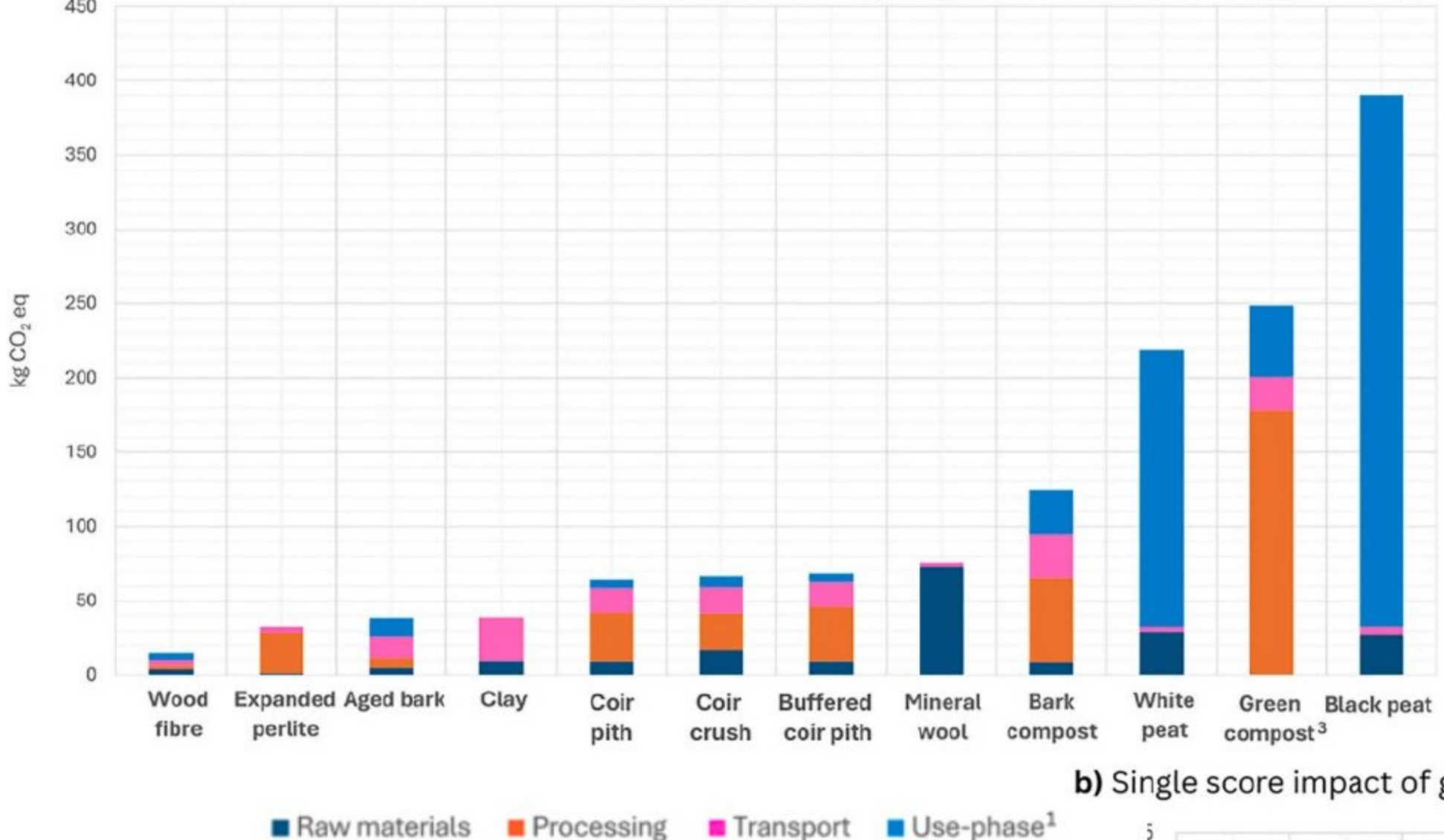


IPS member webinar: Soilless Growing Media 2050: Projected Demand and Raw Material Availability

Speaker Van Nguyen 2 June 2026, 15-16 EEST 14-16 CEST The link will be sent to IPS members by email. The global shift from traditional soil-based culture to soilless systems represents a significant advancement in horticulture. This transition enables...

Based on data from [Nguyen et al., 2026](#)

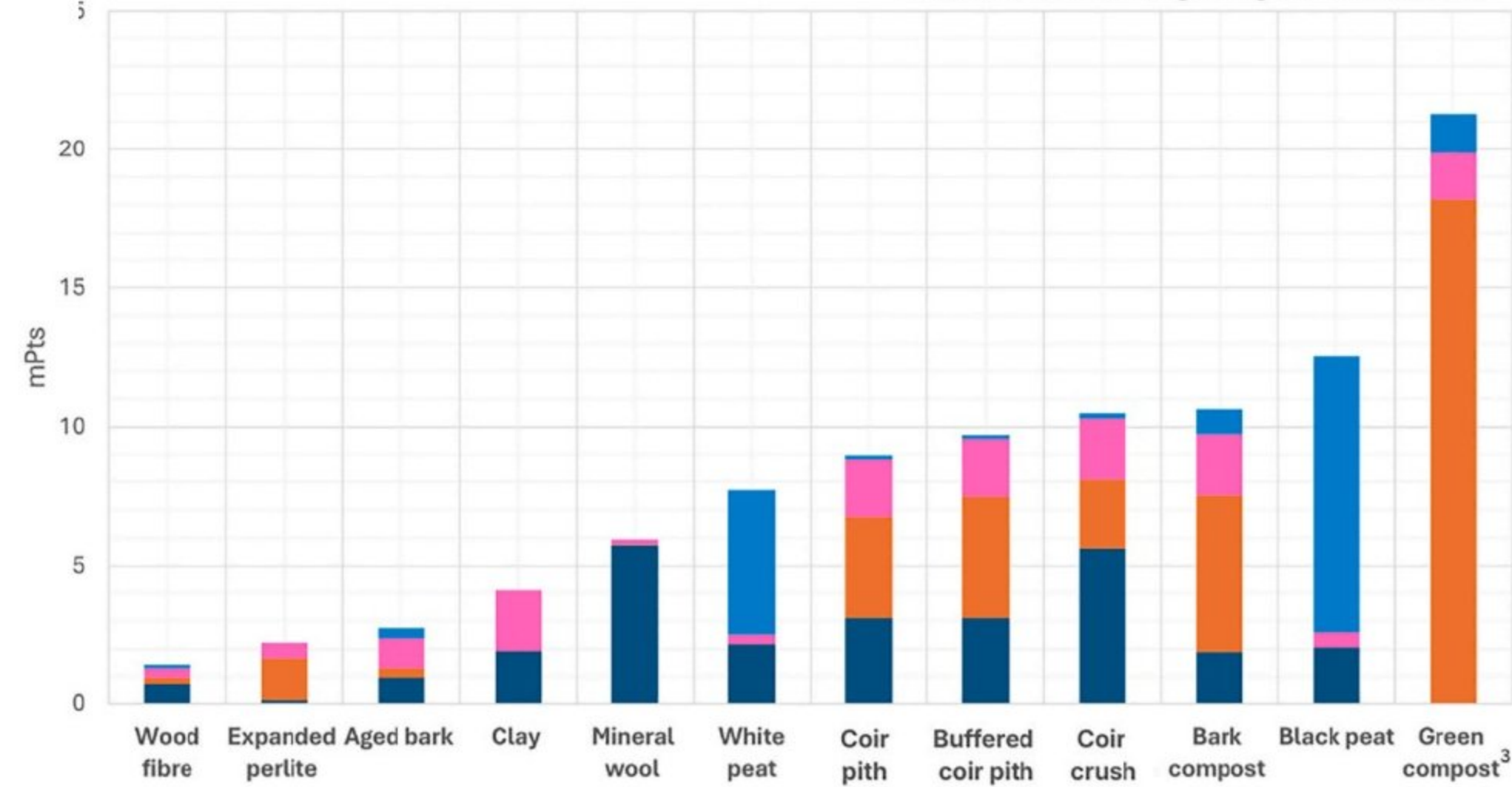
a) Climate change impact of growing media constituents
 Environmental Footprint method 3.1
 Functional unit: 1 m³ of growing media constituent, at factory gate in Europe²



Climate impact is largest impact

[Alejandre et al., 2026](#)

b) Single score impact of growing media constituents
 Environmental Footprint method 3.1
 Functional unit: 1 m³ of growing media constituent**



Join IPS member webinar by Alexander Sentinella 07.10 15.00 (Finnish time)

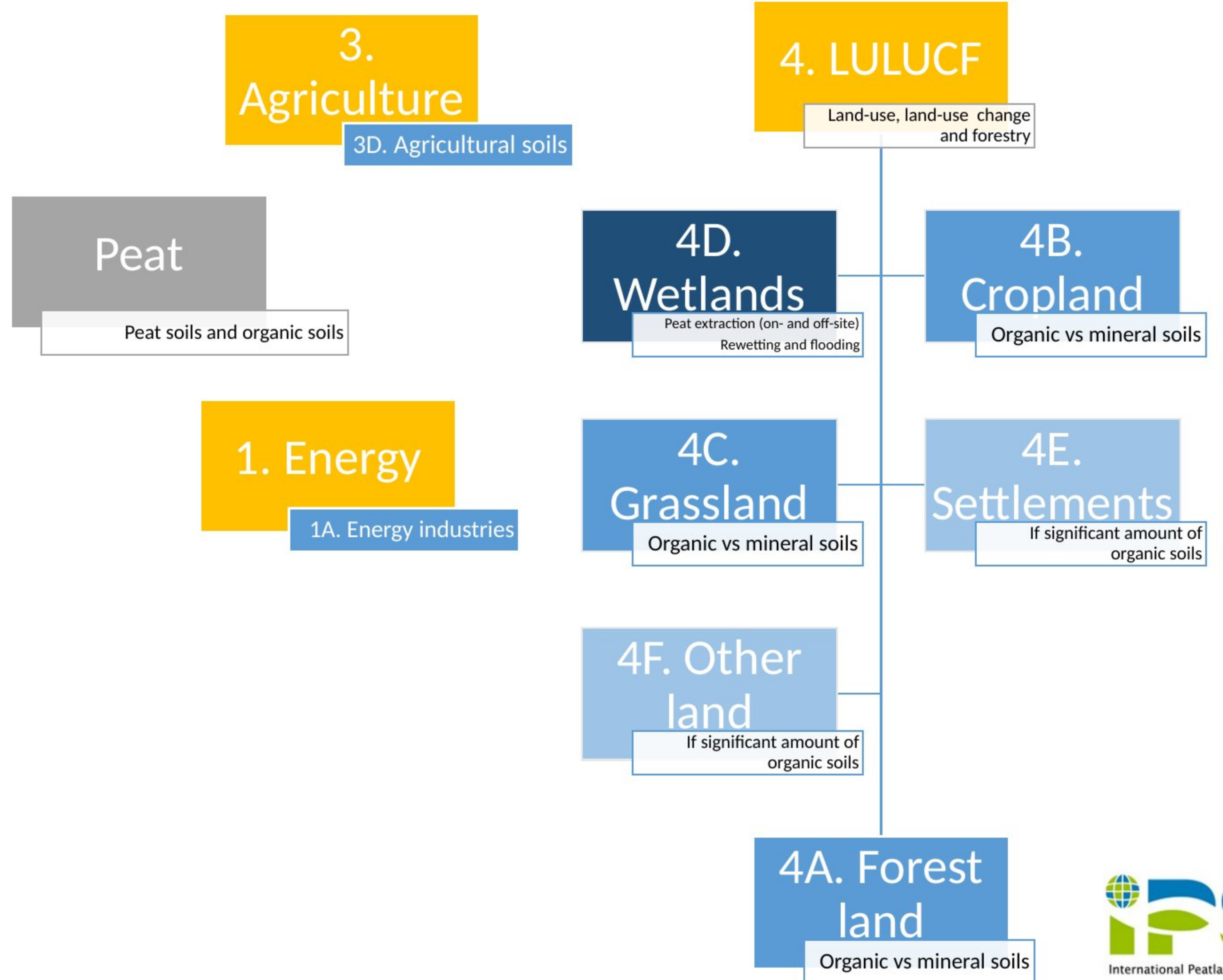


Who are reporting wetlands?



- Submitted NIR in 2026 (no emissions/removals in wetlands category)
- Wetlands category and peat production in 2026
- Wetlands category without (or not significant) peat production in 2026

Peatland related emission reporting





Small-scale – it all starts from measurements

Site measurements as basis for everything



Eddy
covariance
tower and
control room



Peat layer as carbon storage

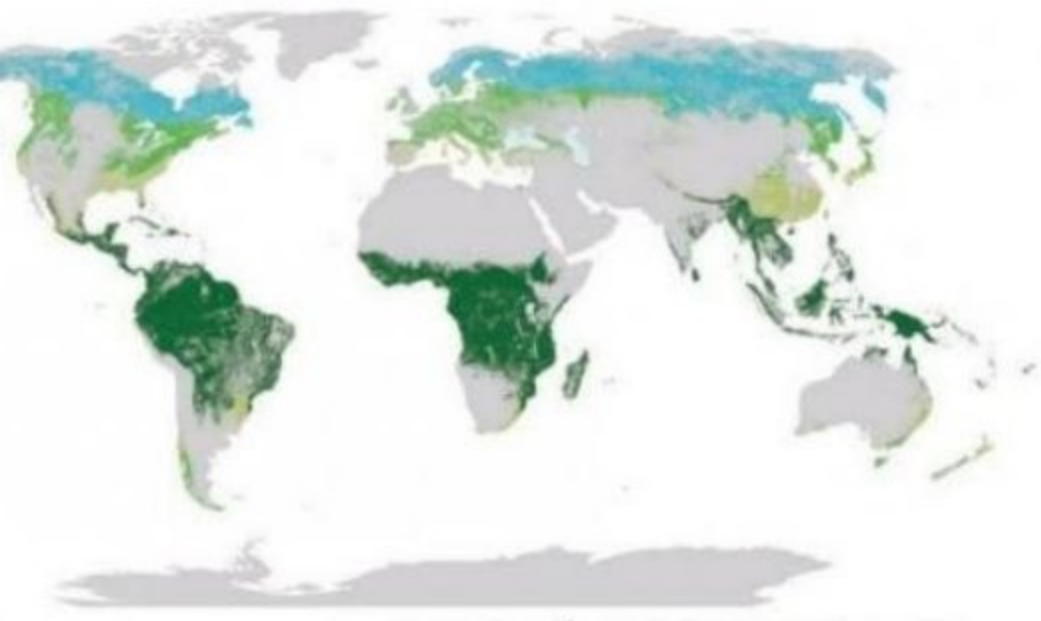


Chamber measurements

... which ends up in reporting

Tier 1

Land-use category	Climate / vegetation zone	Emission factor ^d (tonnes CO ₂ -C ha ⁻¹ yr ⁻¹)	95% Confidence interval ^b		No. of sites	Citations/comments
Grassland, shallow-drained, nutrient-rich	Temperate	3.6	1.8	5.4	13	Drösler <i>et al.</i> , 2013; Jacobs <i>et al.</i> , 2003; Lloyd, 2006
Grassland, drained	Tropical	9.6	4.5	17	n.a.	Updated from Table 6.3, Chapter 6, Volume 4, 2006 IPCC Guidelines ^b
Peatland Managed for Extraction ^c	Boreal and Temperate	2.8	1.1	4.2	20	Ahlholm & Silvola, 1990; Glatzel <i>et al.</i> , 2003; McNeil & Waddington, 2003; Shurpali <i>et al.</i> , 2008; Strack & Zuback, 2013; Sundh <i>et al.</i> , 2000; Tuittila & Komulainen, 1995; Tuittila <i>et al.</i> , 2000, 2004; Waddington <i>et al.</i> , 2010
				7.0	n.a.	Table 7.4, Chapter 7, Volume 4, 2006 IPCC Guidelines



Hiraishi et al., 2014 ([Wetlands supplement](#))

Table 6.27. Comparison of country-specific (Salm et al. 2012) and IPCC default emission factors for peatlands managed for peat extraction

EF (kg ha ⁻¹ yr ⁻¹)	CO ₂ -C
country-specific	1741
IPCC default	1100 ... 4200 ³³²

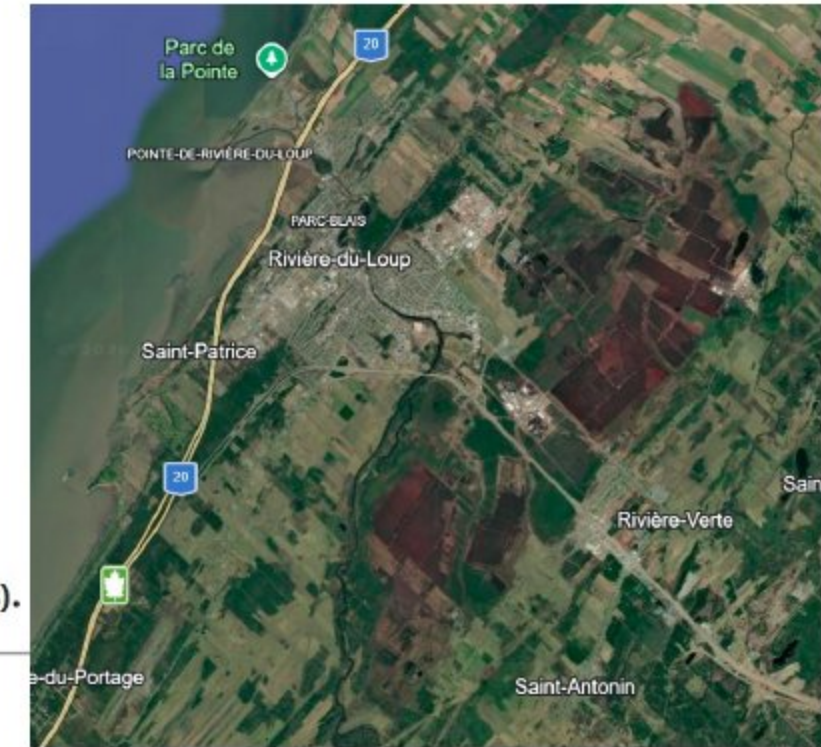
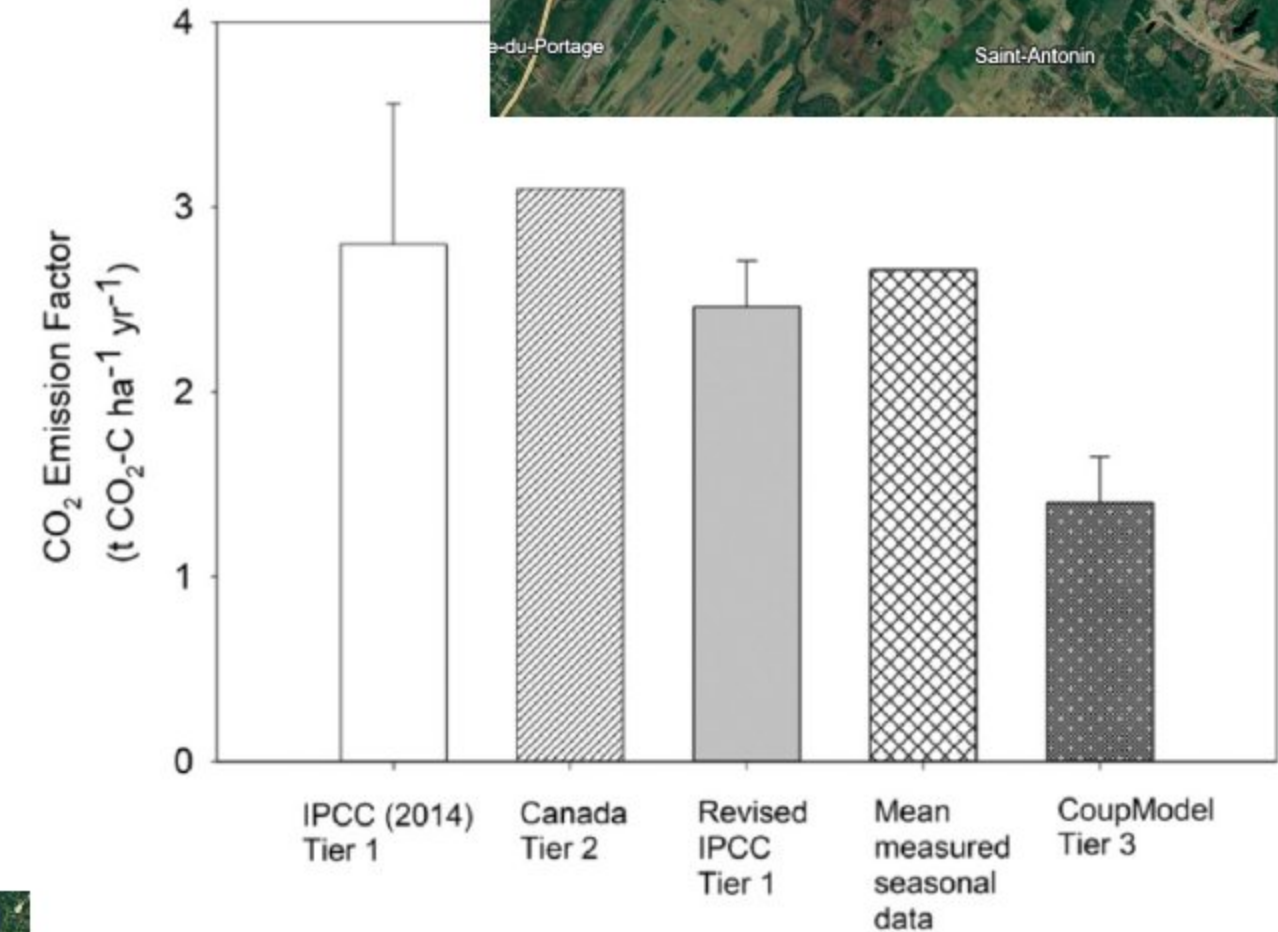
[Estonian NID \(2026\)](#)

Tier 2



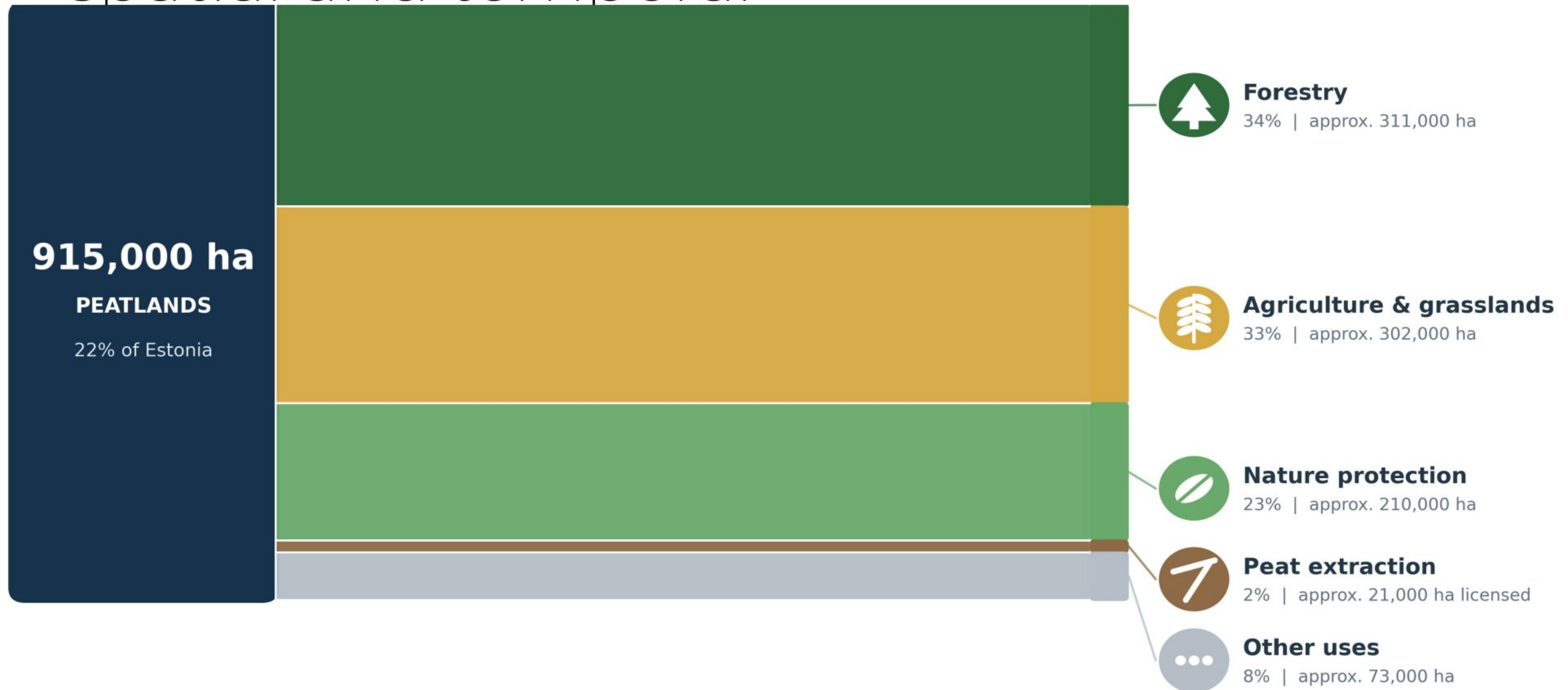
Tier 3(?)

Fig. 2: CO₂ emission factors (EFs).



[He & Roulet, 2023](#)

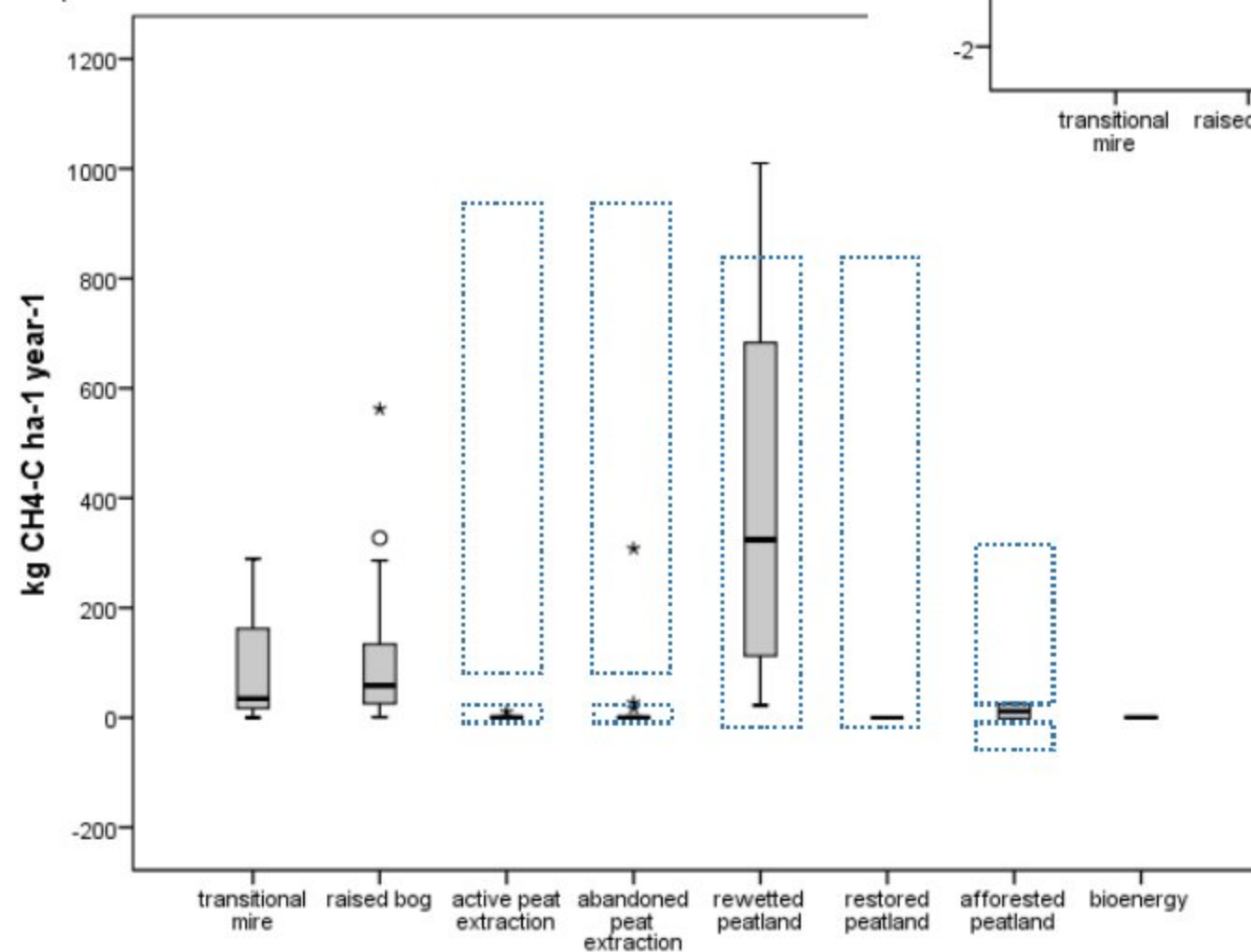
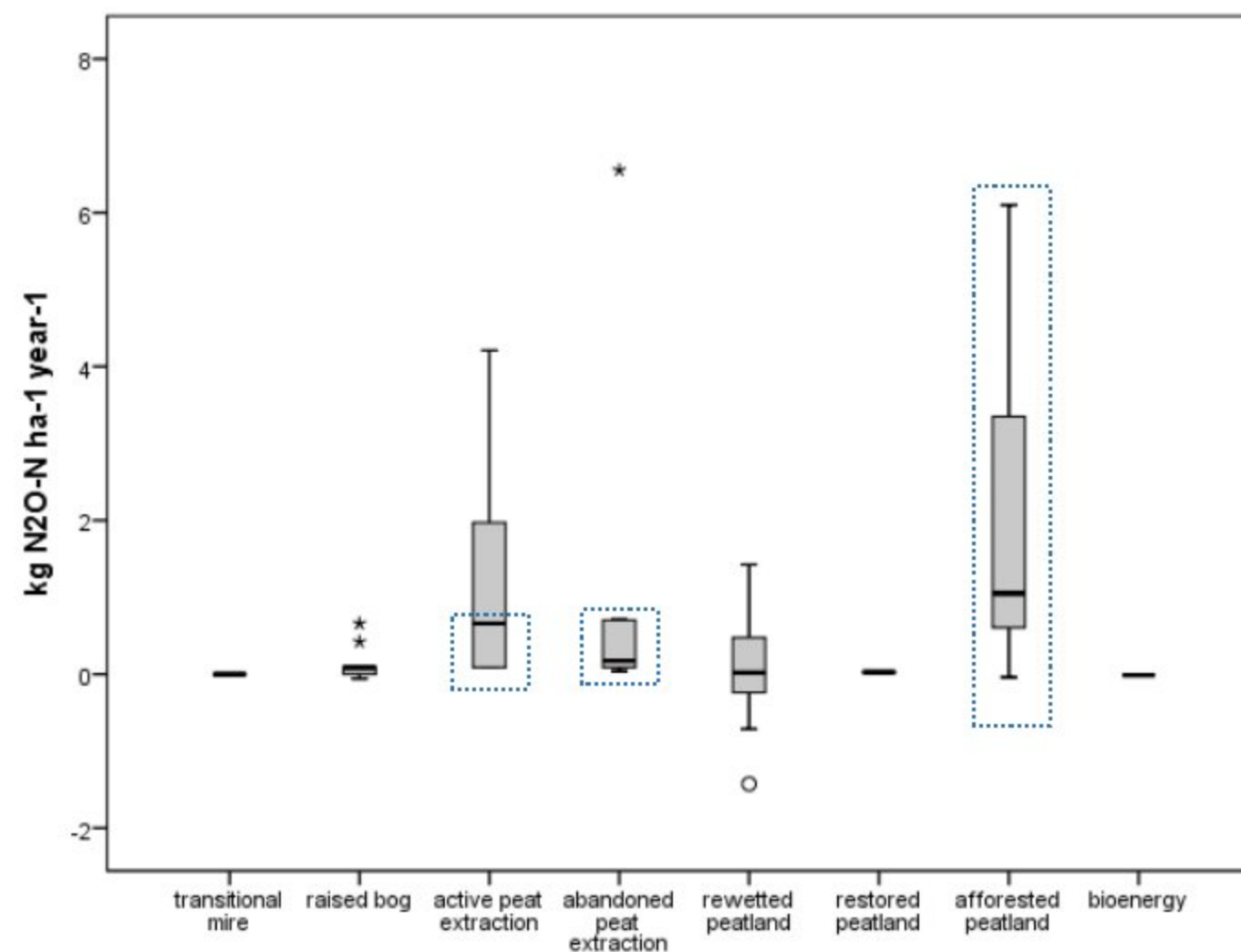
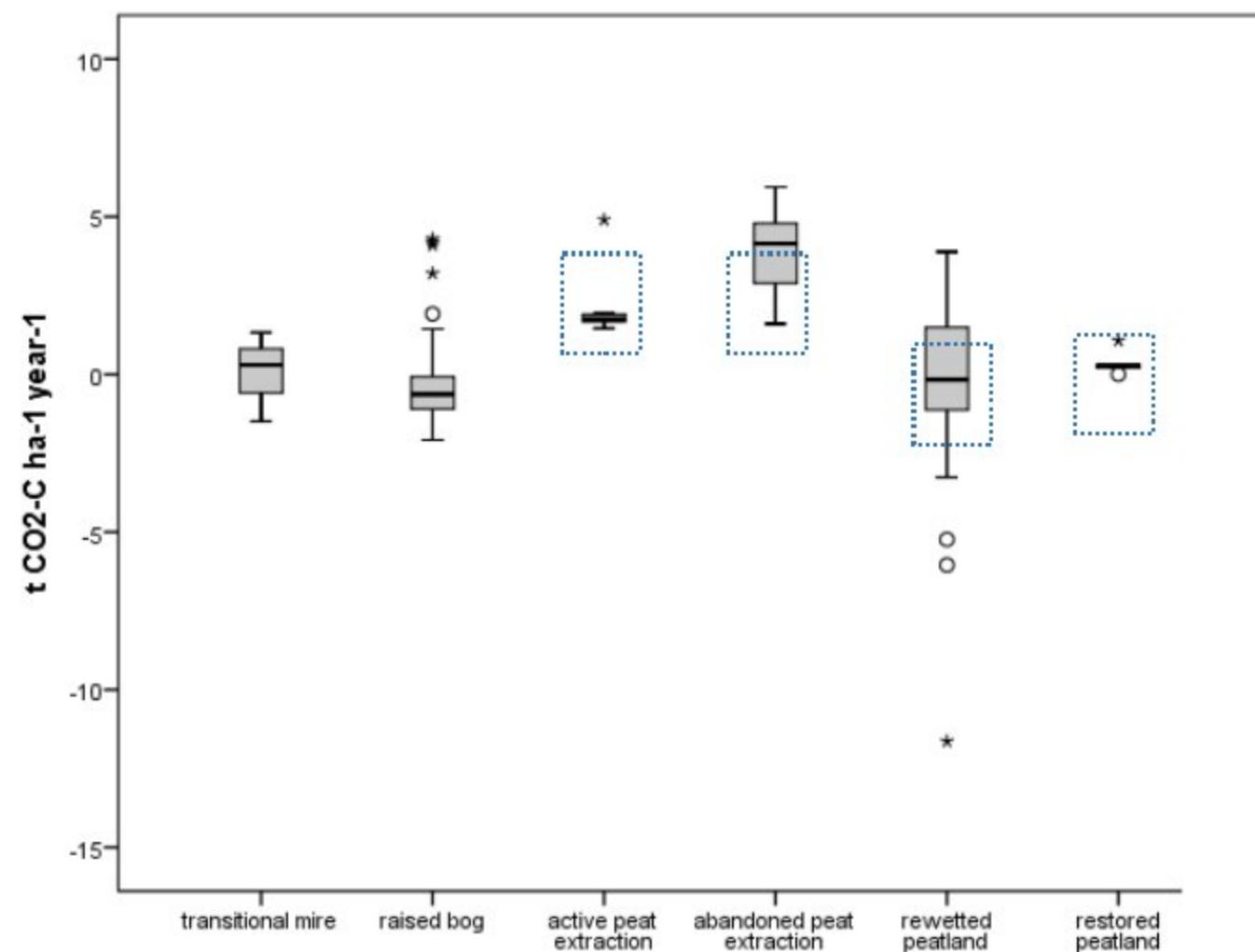
Measurements must be representative – spatial and temporal





Putting science together

On-site emissions fit into confidence



IPCC Tier 1
emissionfactors (95
% confidence
interval)

Not only “cold climate” questions



IPS member webinar: Towards updated emission factors for Southeast Asian and other tropical peatlands: Results of the FAO Peat Emit project

Leicester & online 03.12.2025 For Members

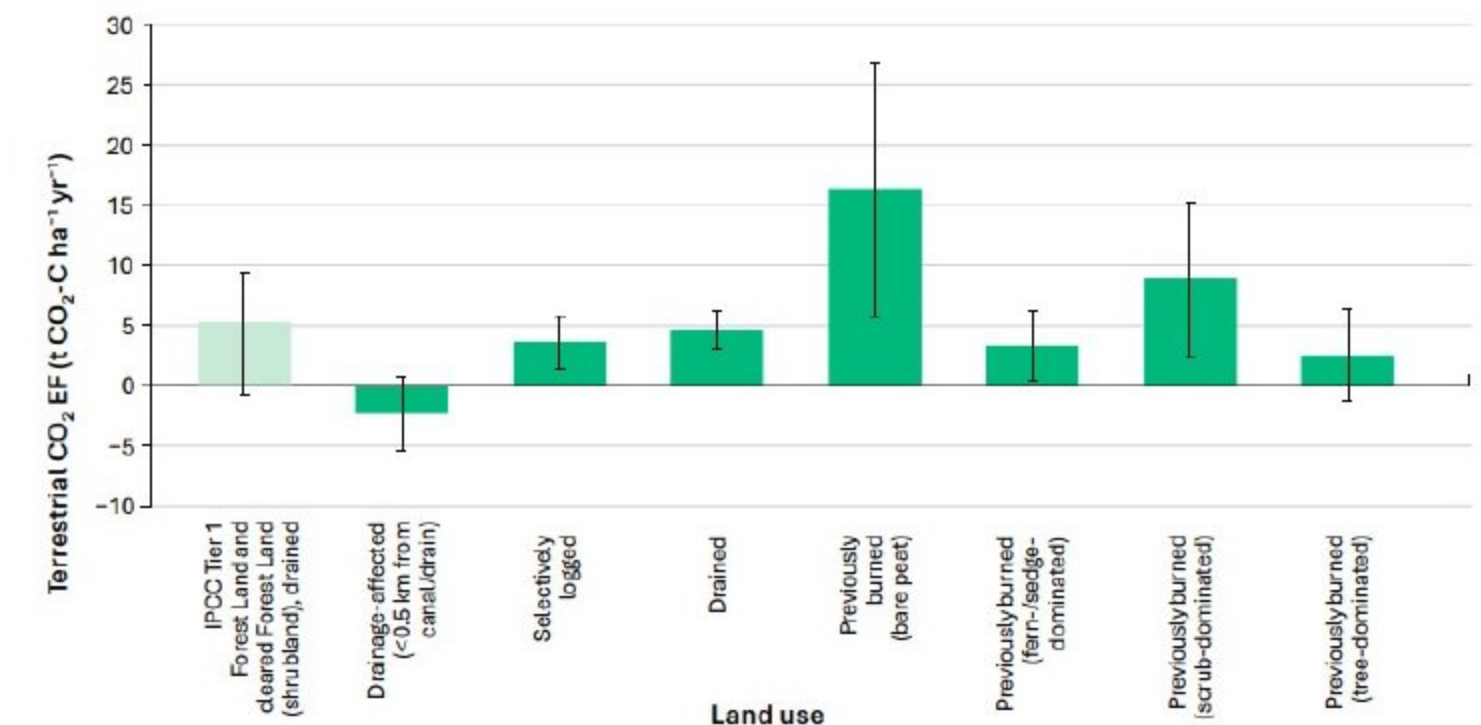
Prof. Chris Evans (Centre for Ecology & Hydrology, UK) & Prof. Sue Page (University of Leicester, UK) 3 December 2025 15-16 hrs EET, 13-14 hrs UTC, 14-15 hrs CET Link will be provided by email The 2014 IPCC Wetlands...

Food and Agriculture
Organization of the
United Nations

Peat-Emit

Supporting developing economies to estimate and report greenhouse gas emissions from organic soils

Figure 5 Disaggregation of terrestrial carbon dioxide emission factors for Forest Land on drained organic soil in warm climate Asia



Notes: The figure shows the IPCC Tier 1 default EF from the *Wetlands Supplement* (lighter green) and subcategory EFs produced by this study (darker green). Error bars represent 95% confidence intervals (CIs).

[Freeman et al., 2026](#)



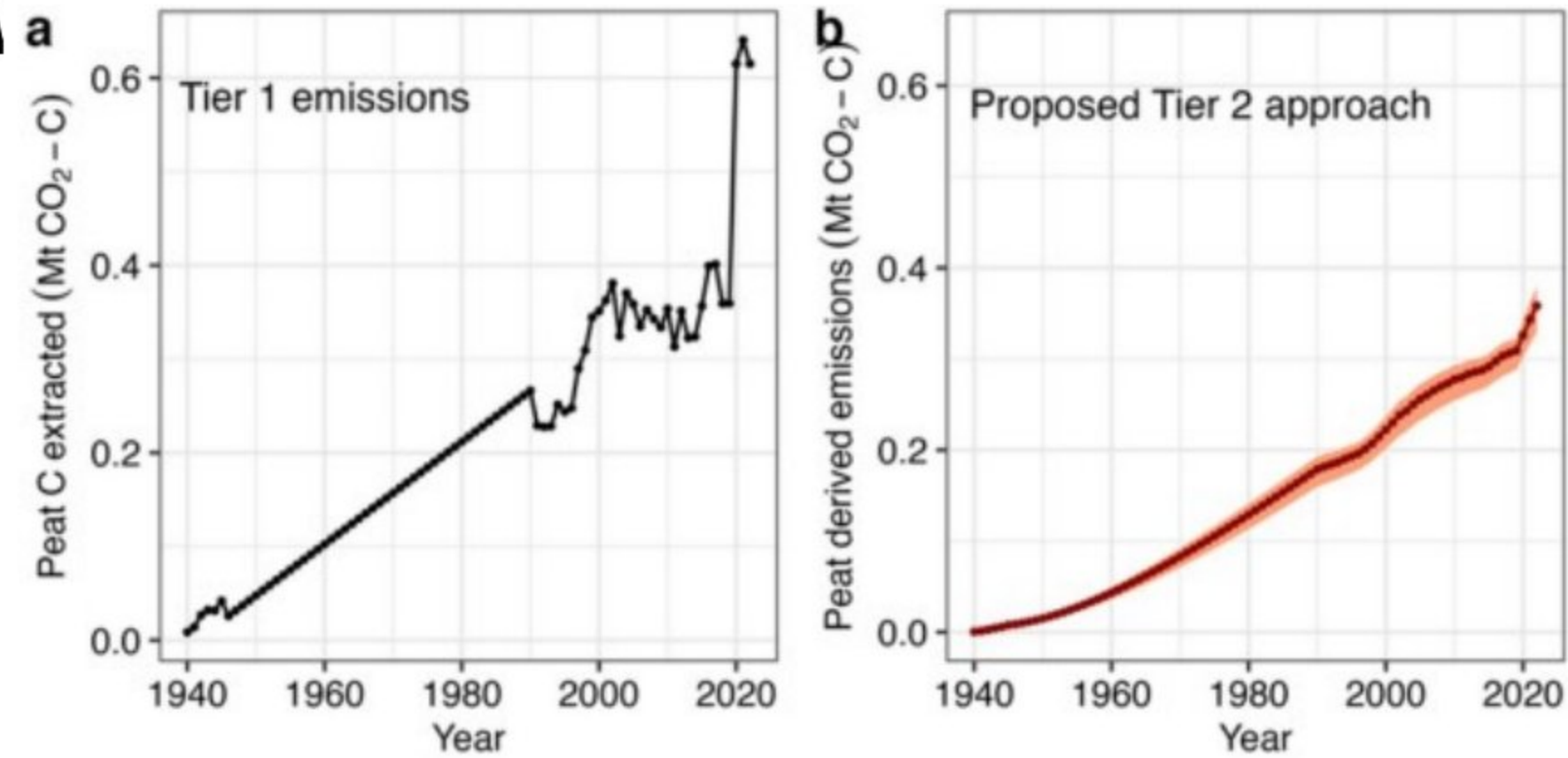
We need to talk about off-site emissions...

The impact of site size and extraction amounts on emissions



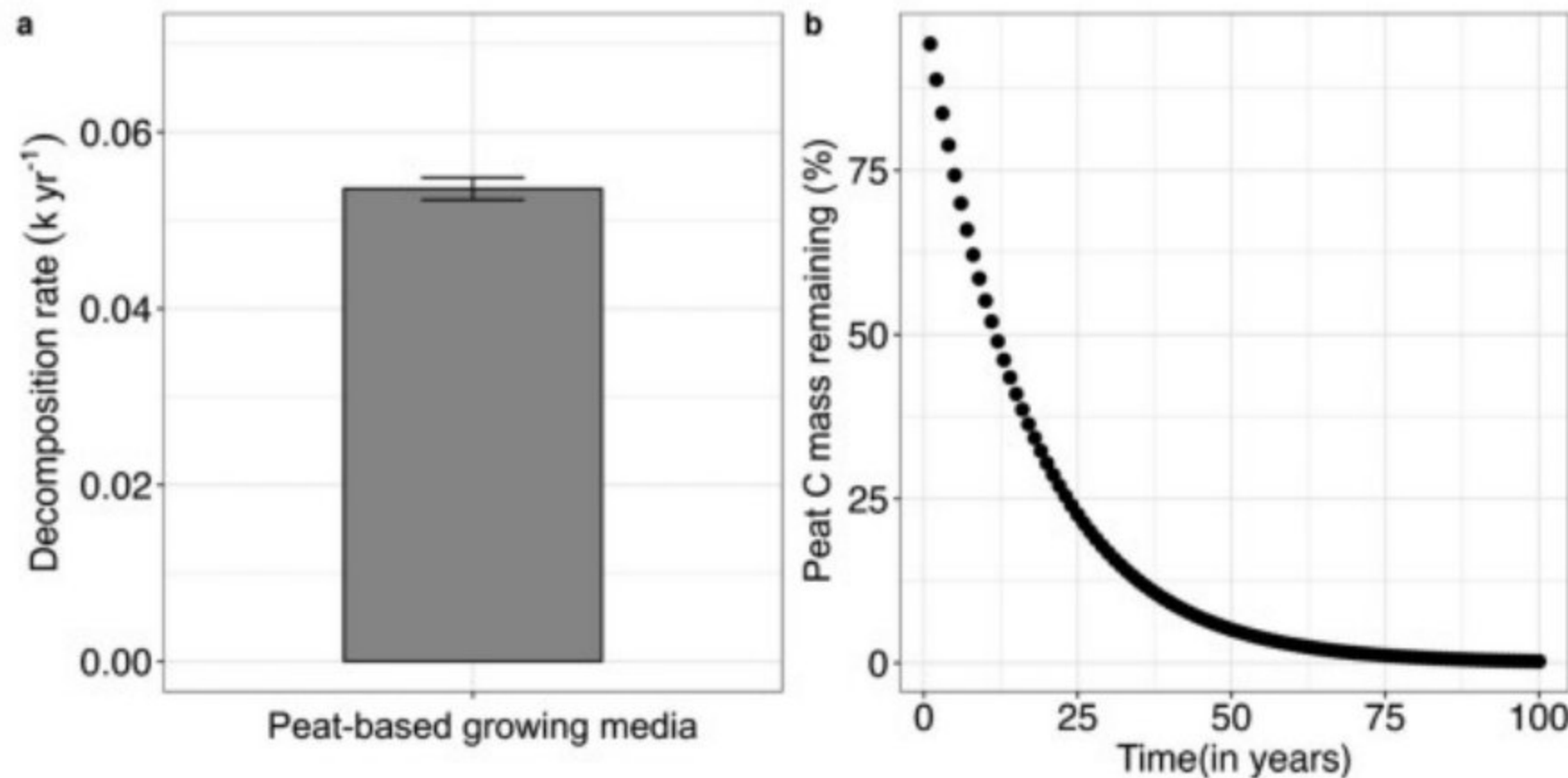
Instant oxidation vs slow decomposition

REPORTING



(Sharma et al., 2025)

(Sharma et al., 2025)

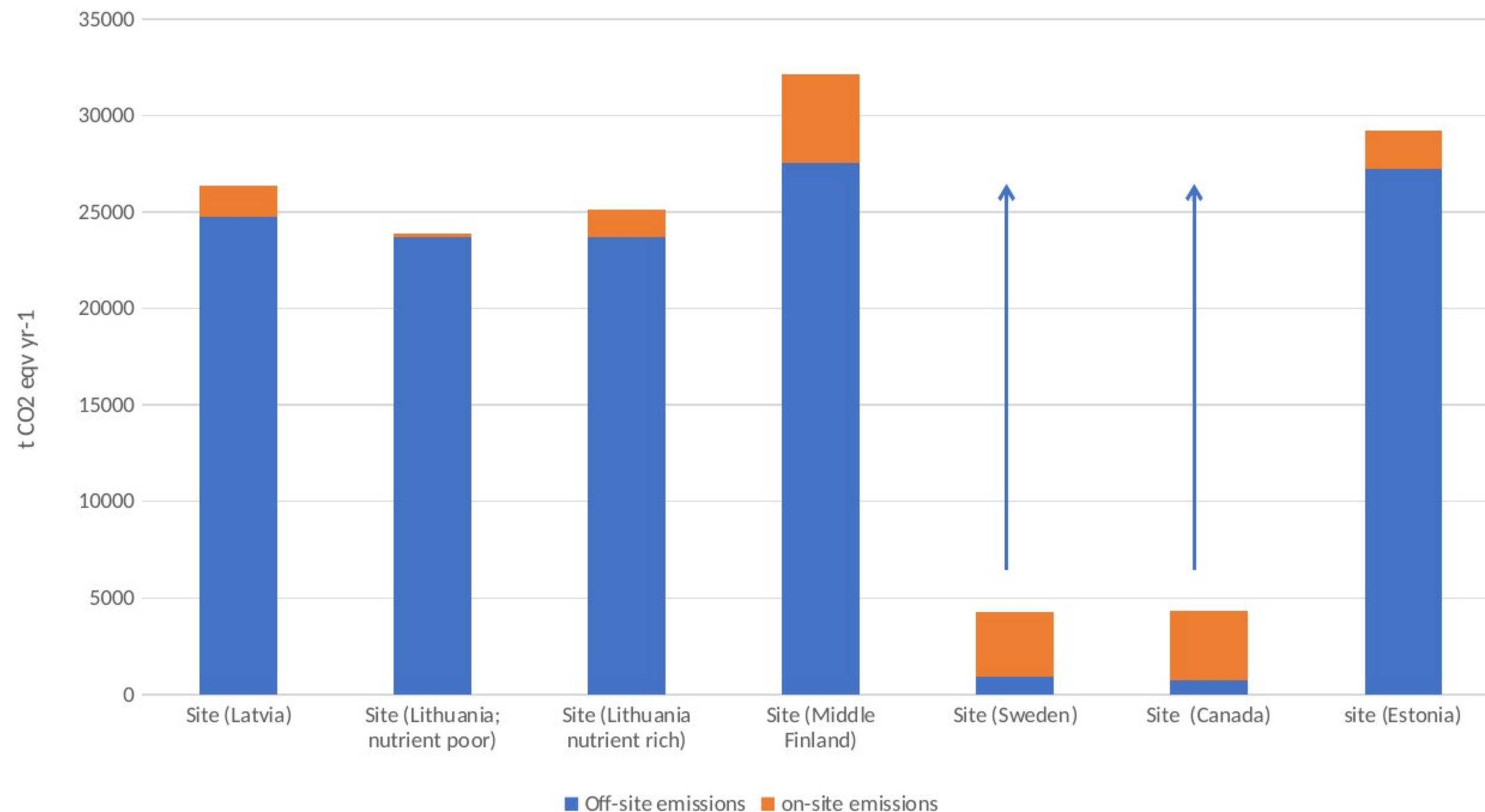


REALITY

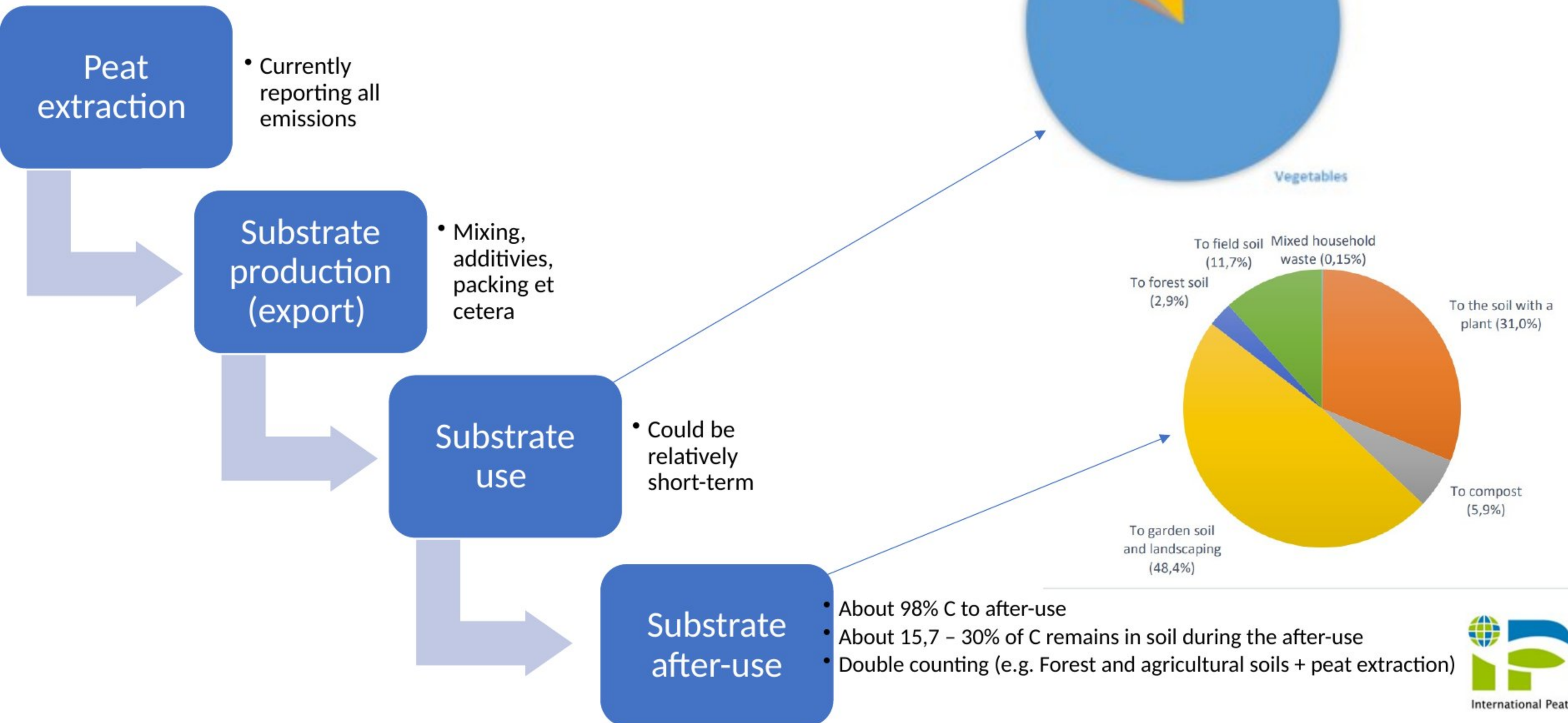


How annual reported emissions of the same site look in different countries?

- 300 ha site with 15 000 thousand tons of annual extraction



Off-site emissions relate horticultural peat



How to mitigate?

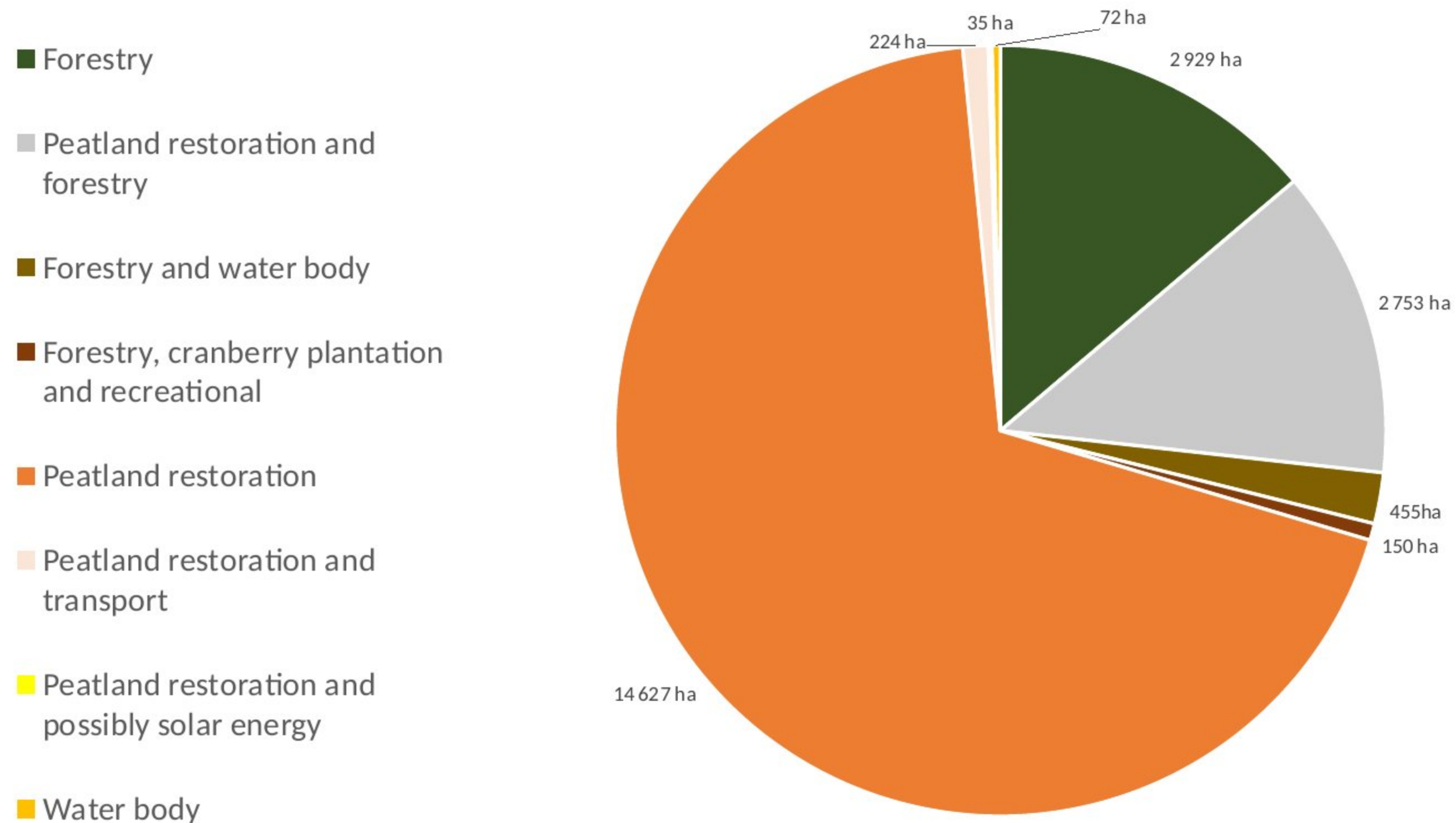


How to mitigate and compensate climate impact?

- Increased use of renewable materials
- Combining peatland use
- GHG-related studies (especially off-site emissions!) and improvement of calculation methods
- Creation of carbon-sinks and decreasing emissions (peatland restoration and wet use)
- Carbon credits (e.g. Biochar, Moorfutures jne) and certificates

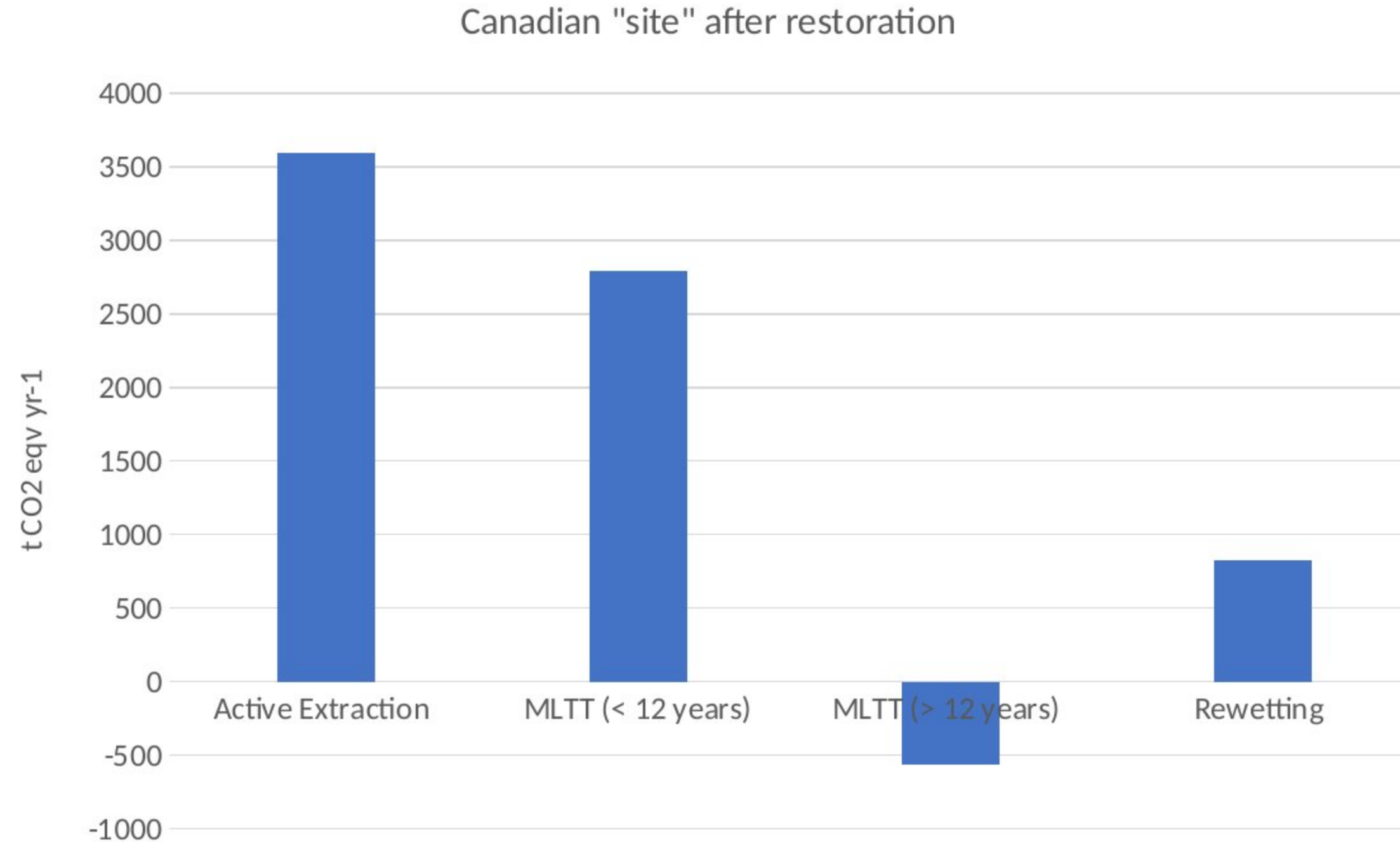
rewetting
Moss-layer-transfer technique
agriculture
re-forestation
solar panels

After-use of current extraction sites in Estonia



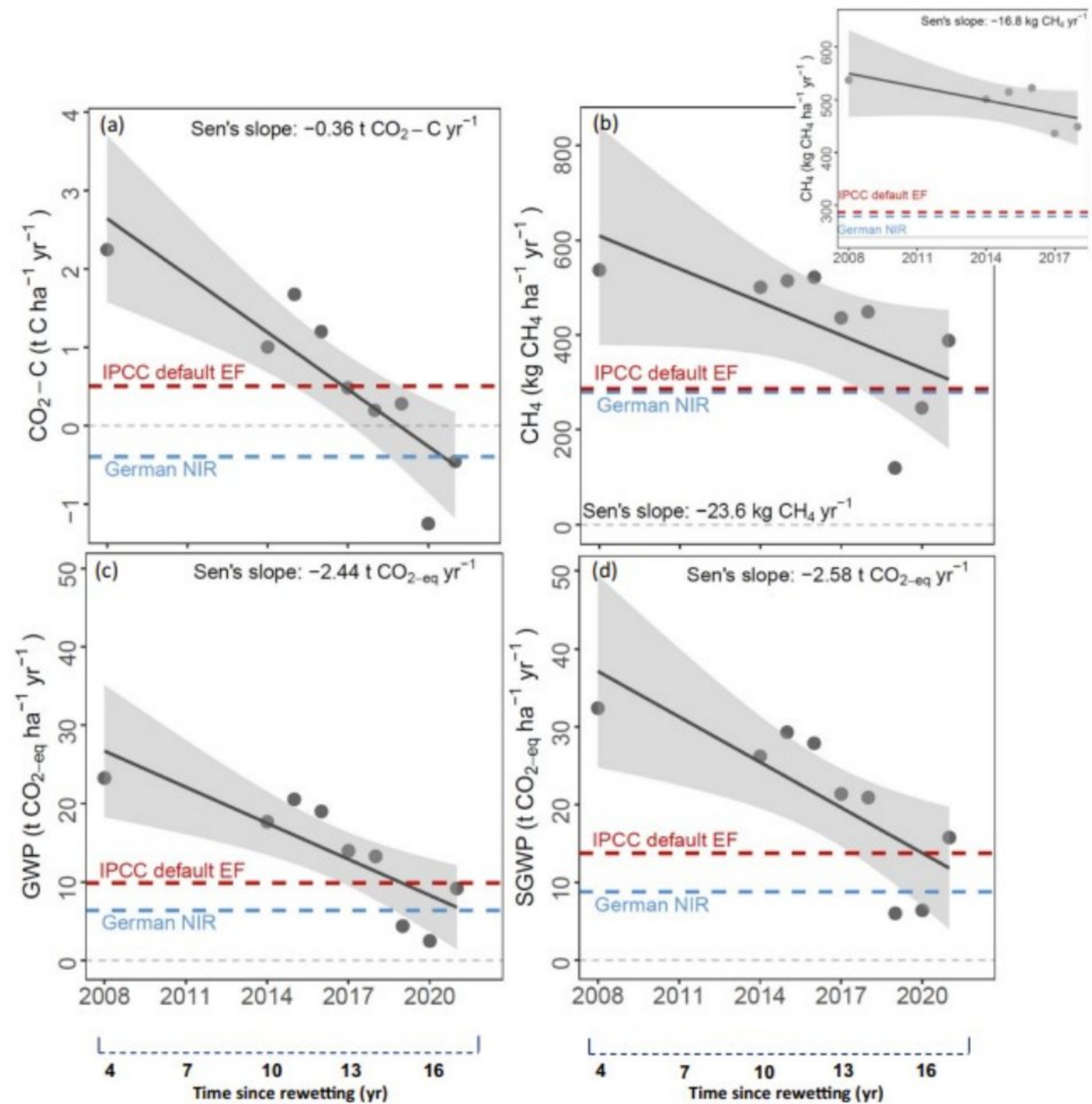
What happens with reported emissions after restoration?

- 300 ha site





Rewetting emissions are complex



Temporal change in emissions in German rewetted area (Kalhori et al., 2024)

How to make changes in the reporting?

- National changes – based on country-specific national published peer-review data is relatively easy – it is country's decision to do so
- Need to move to Tier 3 level (modelling, detailed data)
- Large-scale changes need large-scale studies
- Need for published peer-reviewed data



IPS Ensures science-based representation to balance regulations and counter radical viewpoints in global, regional and national decision-making

Consultations

EU rules on land use, land use change and forestry (LULUCF) – evaluation

Have your say - Public Consultations and Feedback > Published Initiatives > EU rules on land use, land use change and forestry (LULUCF) – evaluation

- In preparation
- Call for evidence
 - Feedback period
 - 13 June 2024 - 11 July 2024
 - Feedback: Closed
 - Upcoming
- Commission adoption
 - Planned for
 - Third quarter 2025

About this initiative

Summary	This is the first evaluation of the LULUCF Regulation since it entered into force in 2018.
Topic	Climate action
Type of act	Evaluation
Category	Evaluation

Call for evidence

Feedback: Closed

Feedback period
13 June 2024 - 11 July 2024 (midnight Brussels time)

Carbon Removals and Carbon Farming (CRCF) Regulation

Find out how the CRCF Regulation supports the deployment of carbon removals and carbon farming across Europe.

Page contents

- What are carbon removals and carbon farming?
- Carbon Removals and Carbon Farming (CRCF) Regulation
- EU Expert Group on carbon removals
- CRCF newsletter
- Explore these pages to learn more

What are carbon removals and carbon farming?



Carbon removals

Innovative processes that capture carbon dioxide (CO₂) from the atmosphere and store it durably in geological, terrestrial or marine reservoirs, or in long-lasting products.



Carbon farming

Climate-friendly practices implemented by farmers and foresters to enhance carbon sequestration - the process of capturing and storing CO₂ emissions - in forests and soils, as well as reduce GHG emissions from soils.

As highlighted in the [Sustainable Carbon Cycles Communication](#), carbon removals and carbon farming play a central role in achieving EU climate neutrality by extracting CO₂ from the atmosphere and storing it

In the [Wetlands](#) category, the largest calculated emissions are from the on-site and off-site. We support the current calculation which is regularly assessed and Tier 1 emission is not included.

from off-site use of peat as it progresses to Tier 2. Tier 2 includes off-site emissions based on the amount of CO₂ released instantly at the point and time of peat extraction, including emissions from energy peat. However, in the horticulture industry, there peat is not used for growing media substrates in greenhouses, but is released to the atmosphere and not completely captured (including the remaining C) is re-applied to other uses, such as forestry, or as a soil improver in agriculture, promoting biomass production and soil health.

It is far from reality in this complex economy to require all Member State National Accounting of off-site peat emissions from the country where the peat is used and develop and apply peat management protocols for peat soils, especially in the Wetlands category. We advocate the need for EU support on long-term standardised GHG accounting for peat soils, especially in the Wetlands category. We have attached a pdf of our recently published report on the topic.

Our report offers to support further development of the LULUCF and to develop protocols for peat soils, especially in the Wetlands category. We advocate the need for EU support on long-term standardised GHG accounting for peat soils, especially in the Wetlands category. We have attached a pdf of our recently published report on the topic.

Revision of national targets and flexibilities in the EU climate policy framework

In "A new plan for Europe's sustainable prosperity and competitiveness"

Actions

Information updated as of 01/08/2026. [Latest changes](#)

[SUBSCRIBE](#)

[CONTACT](#)

Go back to previous editions: 01/08/2026

Metadata

Status: **Announced**

Type: Legislative

CWP: 2026

The Commission's work programme for 2026 announced legislative revision of national targets and flexibilities in the EU climate policy framework in the fourth quarter (Q4) of 2026.

The revision will align the climate policy framework with the 90 % reduction in net greenhouse gas emissions by 2040, compared to 1990, under the EU Climate Law. The amended European Climate Law, including the 2040 target and related details, entered into effect on 7 April 2026 (see separate file).

Rapporteur(s)

On 17 March 2026 the Environment Council held a first exchange of views on decarbonisation efforts in the post-2030 climate framework.

Sharing



The framework revision is expected to include, as a minimum two regulations: the Land use, land use change and forestry (LULUCF) Regulation as well as the Effort-Sharing Regulation (ESR). Together with the European Union Emissions Trading System (EU ETS) (also under revision - see separate file) they form the key pillars of the current EU climate policy framework.

A public consultation on the post-2030 climate framework was open from 9 February to 4 May 2026. On 8 July 2026 the Commission published the summary report of the public consultation. Simultaneous to the public consultation above, the Commission also received input in a separate public consultation on legal framework for the possible use of international carbon credits towards the 2040 EU climate law target. From 18 December 2025 to 19 March the Commission held a public consultation on the use of international carbon credits towards the 2040 EU climate law target. From 18 December 2025 to 19 March the Commission held a public consultation on the use of international carbon credits towards the 2040 EU climate law target.

2040 climate target

Reducing the EU's net emissions by 90% by 2040

Page contents

Documentation

In March 2026, the EU adopted an amendment to the [European Climate Law](#) to set an [EU climate target for 2040](#), as set out in the [Commission Political Guidelines for 2024-2029](#). Specifically, the EU has a legally binding headline emission reduction target of 90% by 2040 relative to 1990, with a domestic target of 85% and up to 5% of international carbon credits.

The 2040 climate target reaffirms the EU's determination to tackle climate change and will shape our path after 2030, to ensure the EU reaches [climate neutrality by 2050](#). The climate neutrality objective is at the heart of the [European Green Deal](#), and is a legally binding objective set out in the Climate Law.

Our [2030 climate target](#) is to reduce net GHG emissions by at least 55% relative to 1990. The 2040 target builds on this target and sets out a pragmatic and flexible pathway towards a decarbonised European economy by 2050.

The 2040 climate target takes full account of the current economic, security and geopolitical landscape in alignment with the [EU Competitiveness Compass](#), [Clean Industrial Deal](#) and [Affordable Energy Action Plan](#). It provides the necessary predictability and stability for investments in the EU's clean energy transition and for driving industrial competitiveness.



Climate convention

Meeting with IPCC and UNFCCC representatives in Bonn
(02.05.2025)

Participation at UNFCCC SB62 in Bonn (June, 2025)

Participated at COP30 (Belem, Brazil; Nov. 2025)

Participate at COP31 (Antalya, Turkey, Nov. 2026)

UNFCCC consultations (e.g. deforestation roadmap)

The documents must have correct facts, terminology,
basis and directions

It is important to be informed on possible changes and
topics, and have possibility to have access to decision-
makers and possibly comment relevant documentation



Are you are still interested in emissions?

- Webinars, their recordings, books and Peatlands International
- IPS Annual assembly (13-16.06.2027) Fryslan, Netherlands
- 18th International Peatland Congress (11-16.06.2028), Riga, Latvia
- IPC2032, Edmonton, Canada



peatlands2028.com



Peatlands and Climate Change

Scientific facts and figures for
decision-makers

2nd edition

Aitäh!
Paldies!
Ačiū!

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