



REPUBLIC OF ESTONIA
MINISTRY OF THE ENVIRONMENT

Wetland sub-sector in National Greenhouse Gas Inventory

Cris-Tiina Türkson

Ministry of Environment/ Senior officer at climate and radiation
departmen

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Greenhouse gas inventory sectors

- Energy
- Industrial Processes and Product Use
- Agriculture
- Waste
- LULUCF → wetland sub-sector

Wetlands

Greenhouse gas emission estimates only for managed wetlands

GHG emissions from wetlands in Estonia :

- peat extraction;
- loss of living biomass and dead organic matter due to Forest land conversion to peatland/wetlands.

Activity data is obtained from the National Forest Inventory (NFI) for 1990–2014 and Land Balances for 1970–1989.

Area of wetland

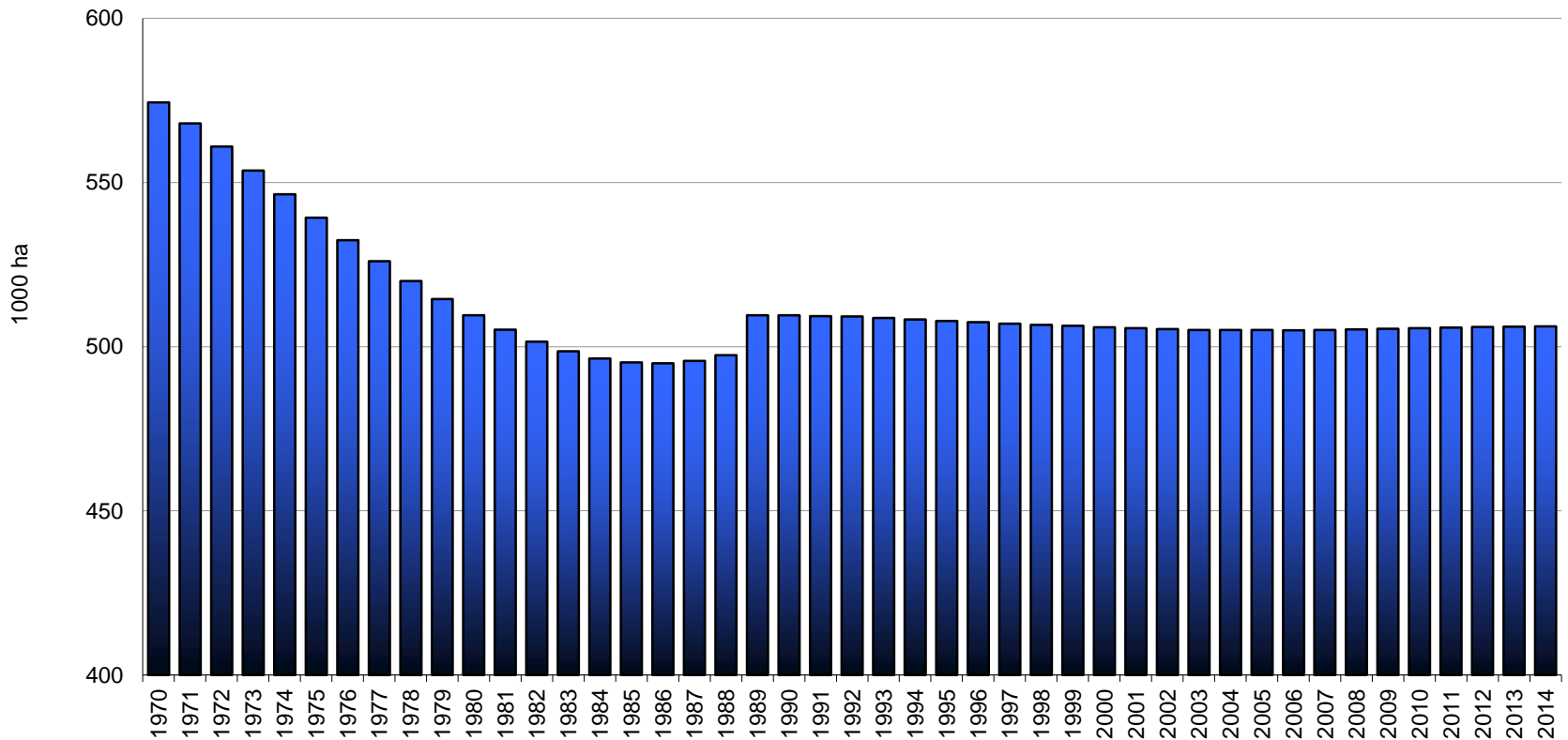


Figure 1 Area of Wetlands (including inland water bodies and peat extraction sites) in Estonia in 1970–2014, 1000 ha (Source: *Estonia's Draft National Inventory Report 2016*)

Peatland

Peat extraction sites are a part of Wetlands.

Activity data for the estimation of emissions related to peat extraction is obtained from National Forest Inventory and the Estonian Peat Association.

Data for horticultural peat is obtained from Estonian Land Board publication.

Total peatland area and emissions

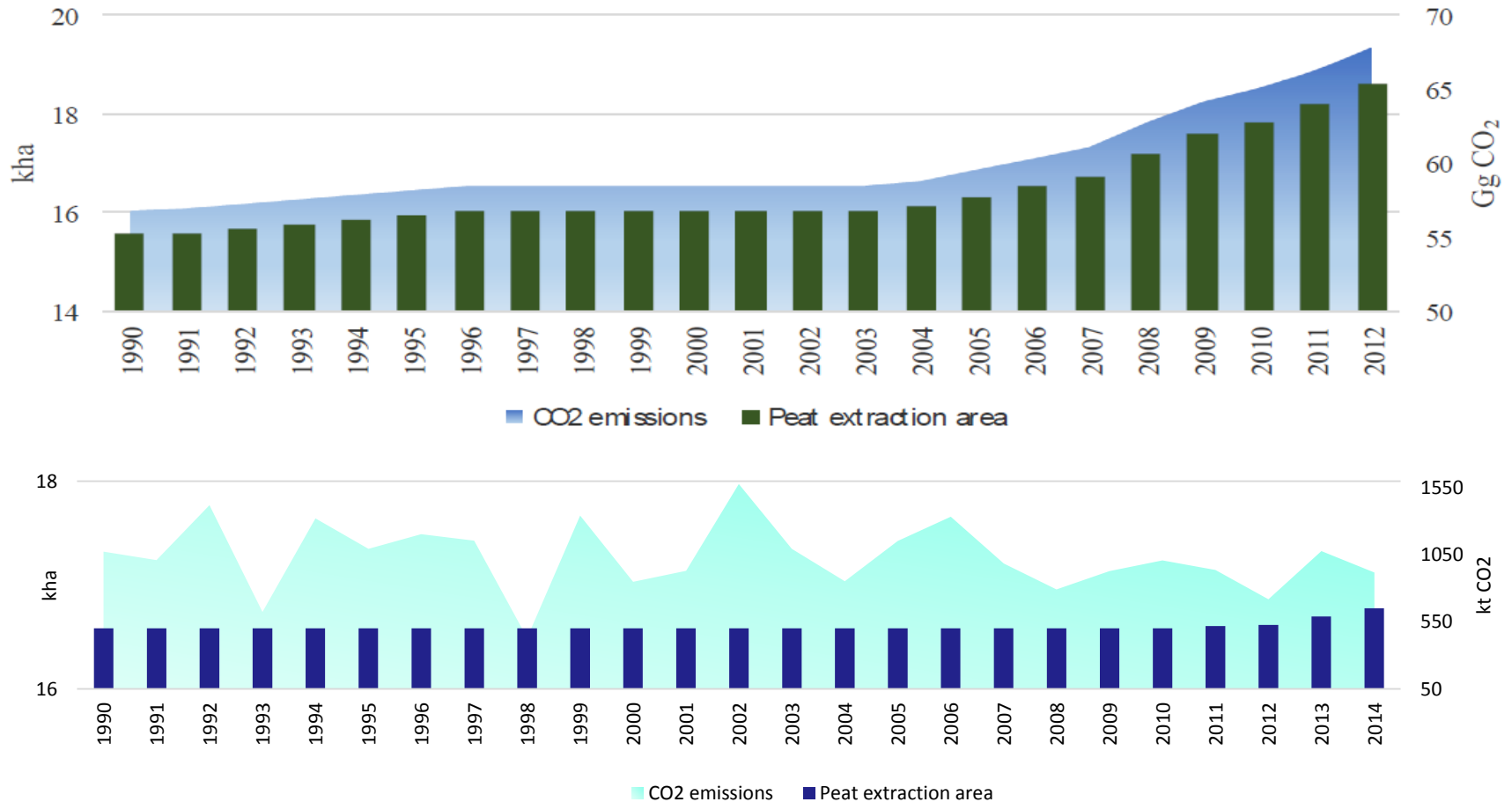


Figure 2 Total peatland area (kha) and emissions (kt CO₂) related to peat extraction
 (Source: Estonia's National Inventory Report 2014 and 2016)

Change in carbon stocks in living biomass and dead wood

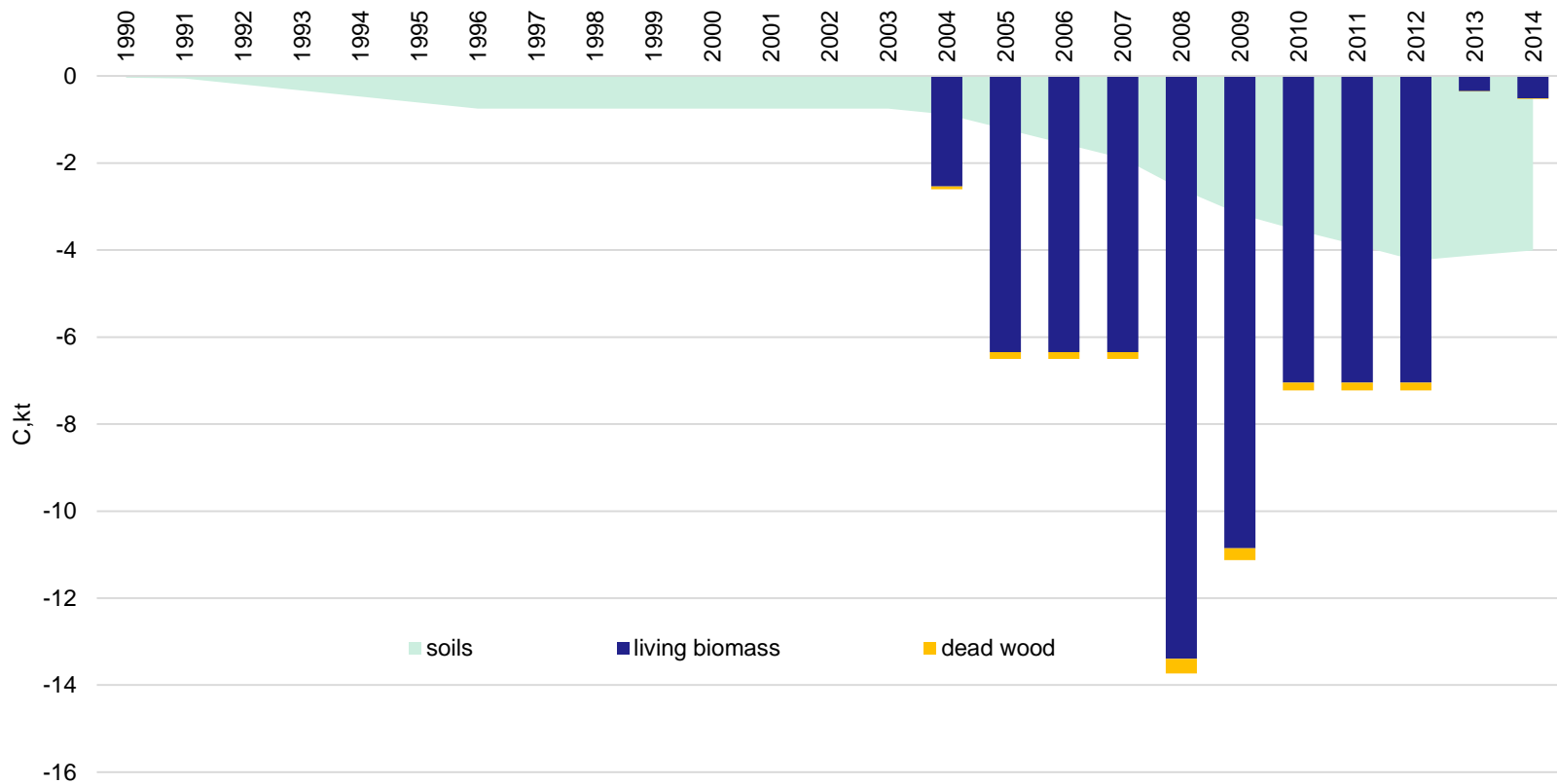


Figure 3 Carbon loss in living biomass, dead organic matter and soil after land conversion to wetlands and peat extraction sites in 1990–2014, kt C (Source: Estonia's Draft National Inventory Report 2016)

Land-use changes to wetlands and peat extraction sites

Table 1 Cumulative land-use changes to Wetlands and peat extraction sites in 2014
(Source: Estonia's Draft National Inventory Report 2016)

Land-use change	kha
Forest land→Wetlands	0.9
Grassland→Wetlands	0.4
Other land→Wetlands	1.3
Total to WL	2.7
Forest land→Peat extraction	2.1
Wetlands→ Peat extraction	0.2
Total to WL _{Peat}	2.3
Flooded land→Flooded land	0.0
Total to WL _f	0.0

Estonian Low Carbon Development Strategy

Continues business as usual scenario →
peat extraction areas stay the same

Extraction sites are restored after peat
extraction has finished.



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Thank you!

Cris-Tiina Turkson

Cris-Tiina.Turkson@envir.ee