UK peatlands in a global context

- international obligations

Marcel Silvius, IUCN Peat Conference

Shrewsbury, 28 November 2016

IUCN National Committee United Kingdom

Peatland Programme

Wetlands International

Peat facts matter

- Peat (organic) soils cover only 3% of the land but hold more carbon than all global forest biomass
- 15% of these soils (= 0.4% of the land) are drained, mainly for cropland, grazing land and forestry.
- These emit 5% of the total global anthropogenic GHG;
  - equivalent to all air travel emissions!!
- Substantial emission reductions can be achieved by rewetting drained peat soils.
- Rewetting also stops soil degradation, subsidence, salt water intrusion, and consequent loss of productive land
- **Countries can kick-start major national emission reductions by focussing on drained peat soils**

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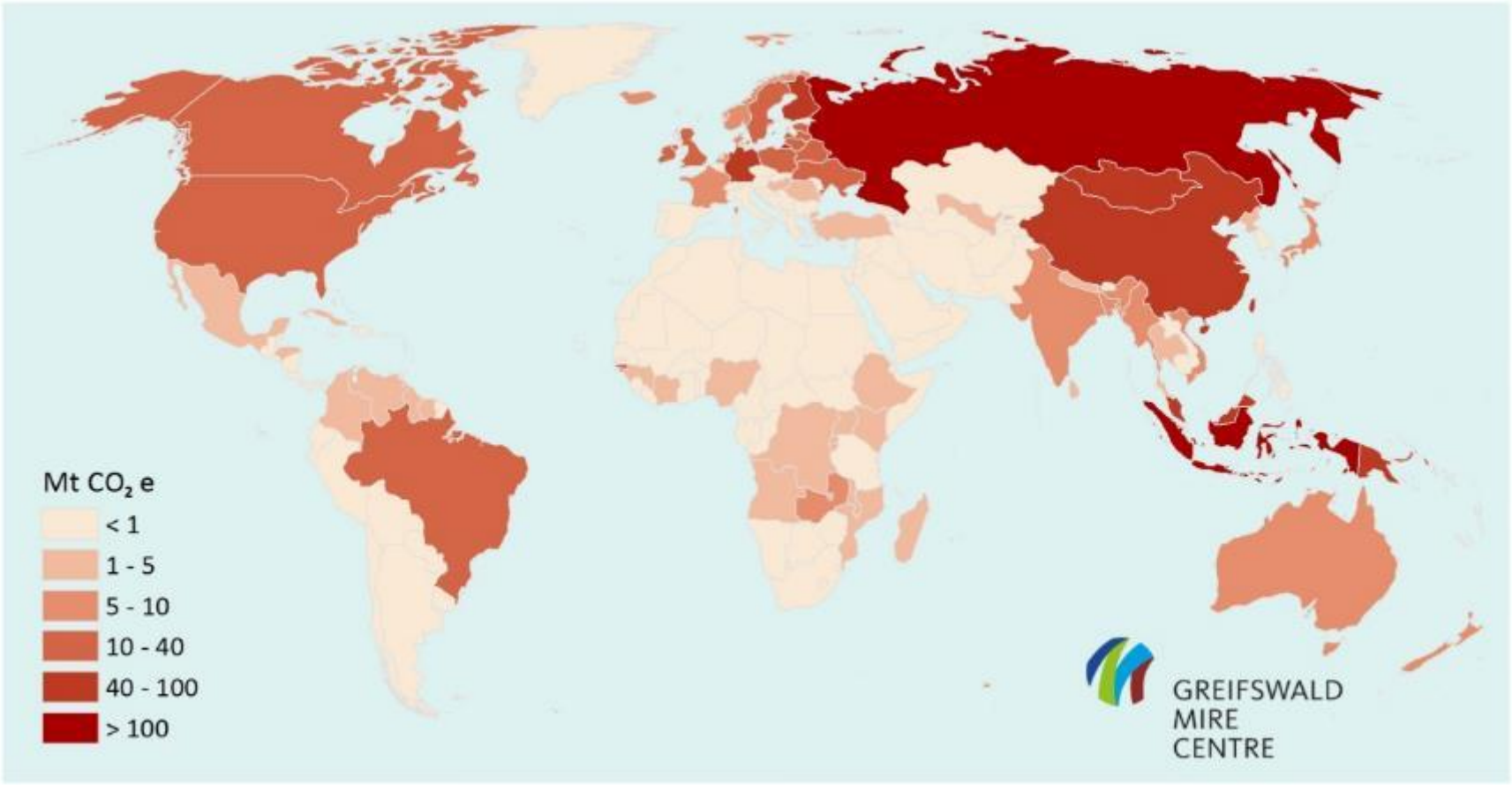
Countries contributing most peat emissions



- **25 countries are responsible for 95% of global peatland emissions**

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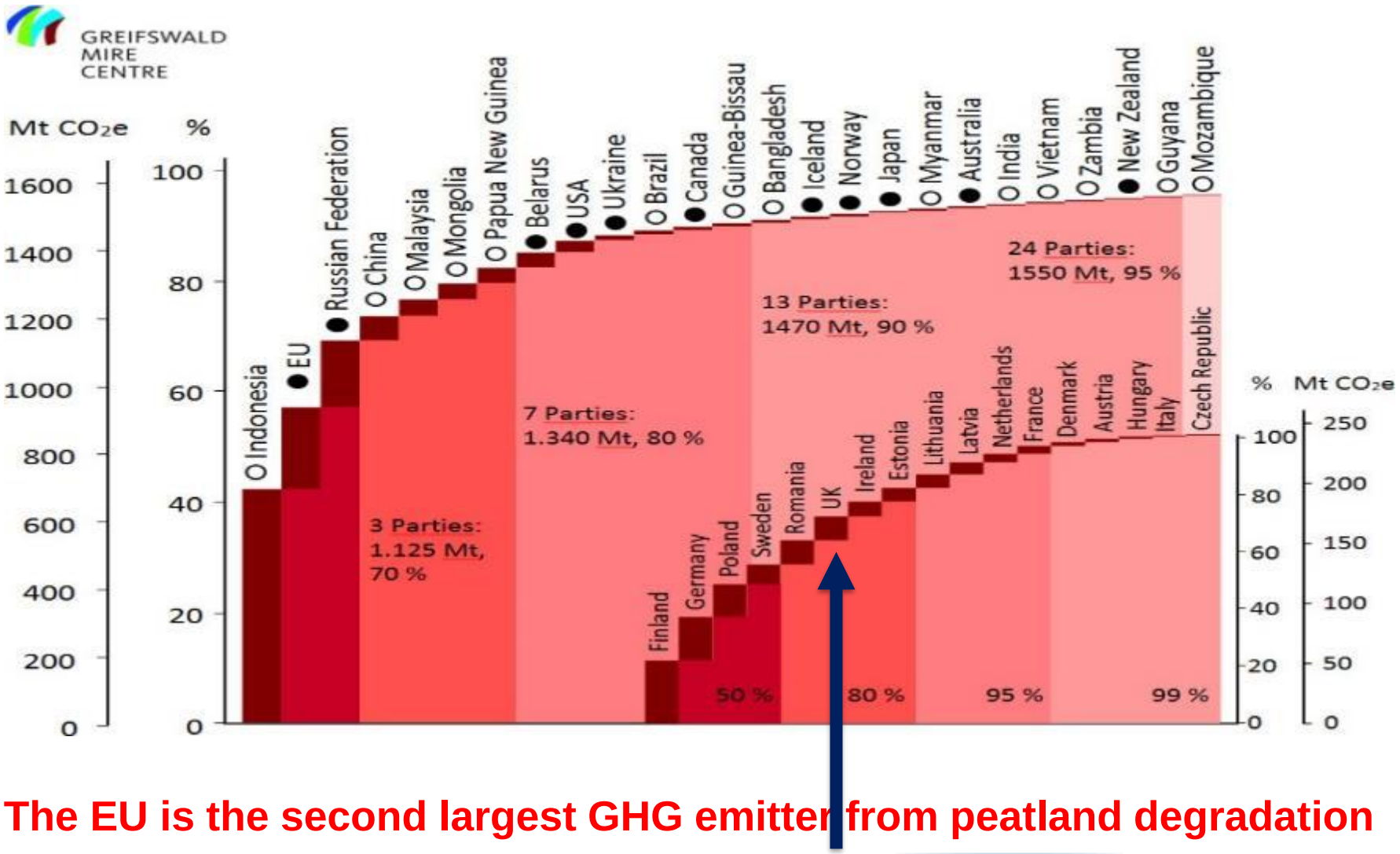
Peat GHG emissions from drainage



The EU is the second largest GHG emitter from peatland degradation

The UK is EU's 6th largest peatland GHG emitter

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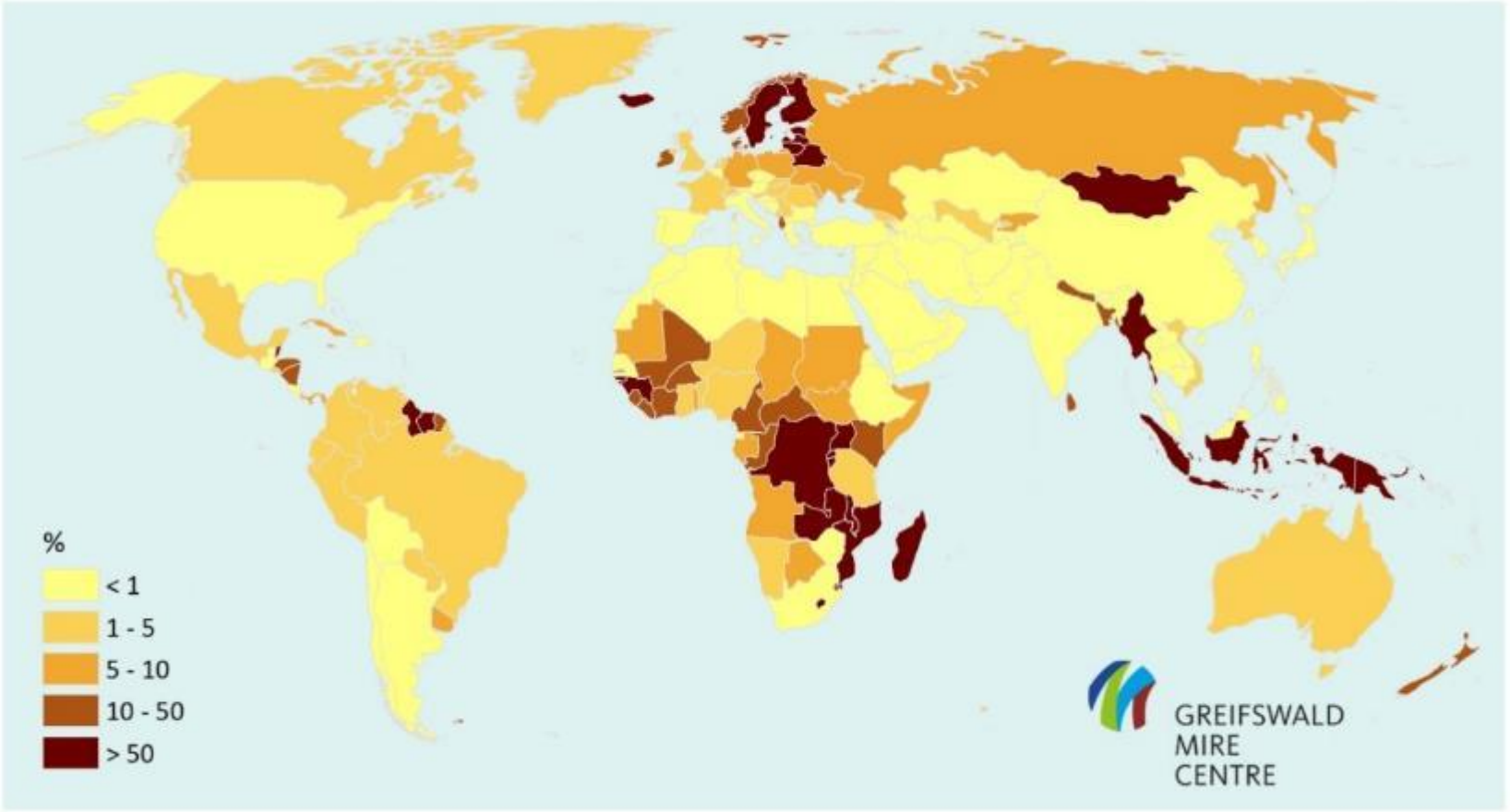
National peatland emissions often exceed 50% emissions from fossil fuel and cement



In 18 developing and 7 European Annex-I countries peat emissions exceed 50% of total emissions from fossil fuels and cement!

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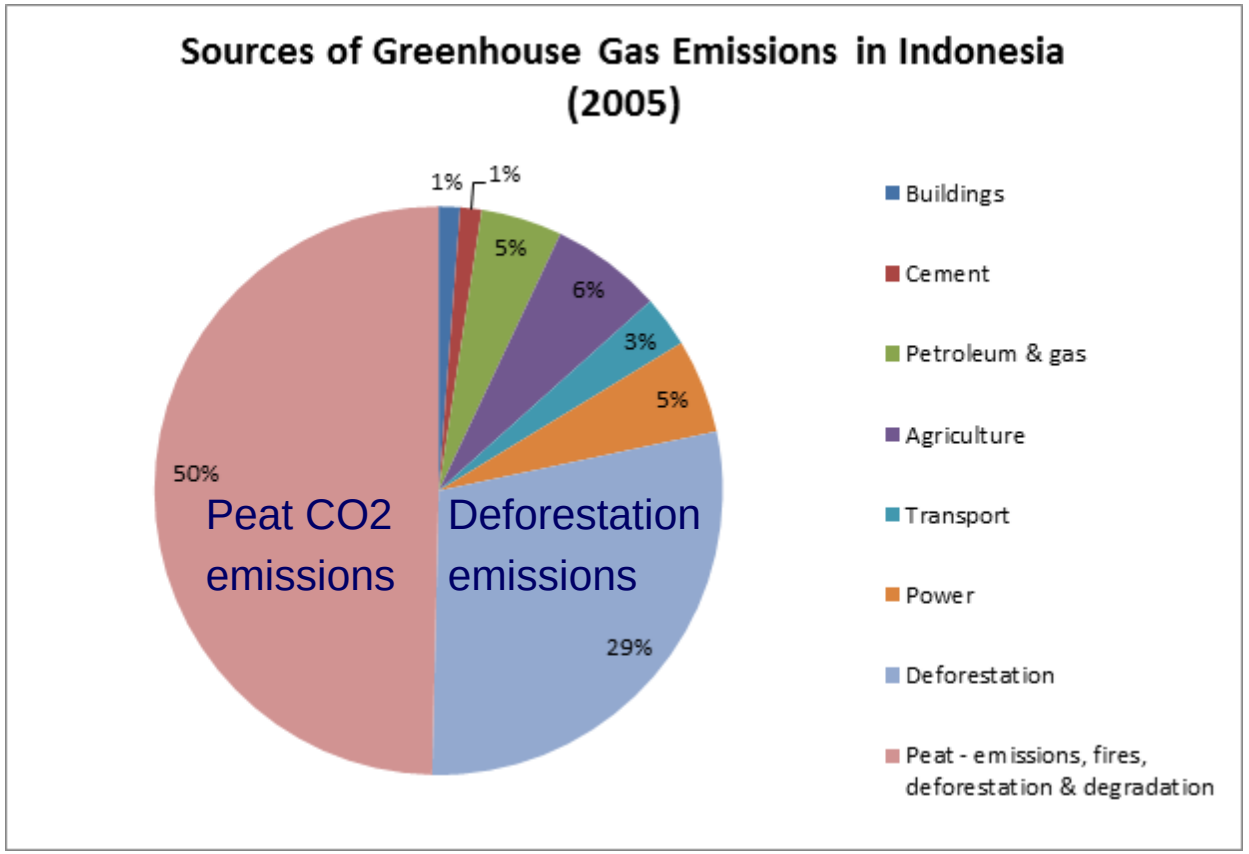
Peatland degradation
largest carbon emission source in Indonesia



- **50% of all Indonesian GHG emissions is from peatlands**
  - From only 6% of agricultural land
  - Without GHG emissions from fires!

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Peatland fires

Photo by Bjorned,
Palangka Raya, sept 2015

Peatlands and Sustainable Development

- 2015 **peat fires in Indonesia** emitted a total of **18 GT CO_2e**
- Such fire emission events are not accounted for in IPCC's future climate scenarios but are significant in overall global emissions
- The 2015 Indonesian peat fires resulted in **16.1 billion USD overall economic damage in Indonesia,** affected **43 million people, hospitalized 550,000 and killed thousands of people**
- **Drainage of peatlands causes land subsidence.** The entire area of lowland peatlands in Southeast Asia (~25 million ha) may become flooded; - making sustainable development impossible.

20 October 2015
Palangkaraya

Picture: Kuala Lumpur under haze of Indonesian peat and forest fires

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After the fires oil palms are planted.

- 25% of all palm oil is imported by the EU (including UK)
- 65% of palm oil imported in EU is used as biodiesel and for bio-energy

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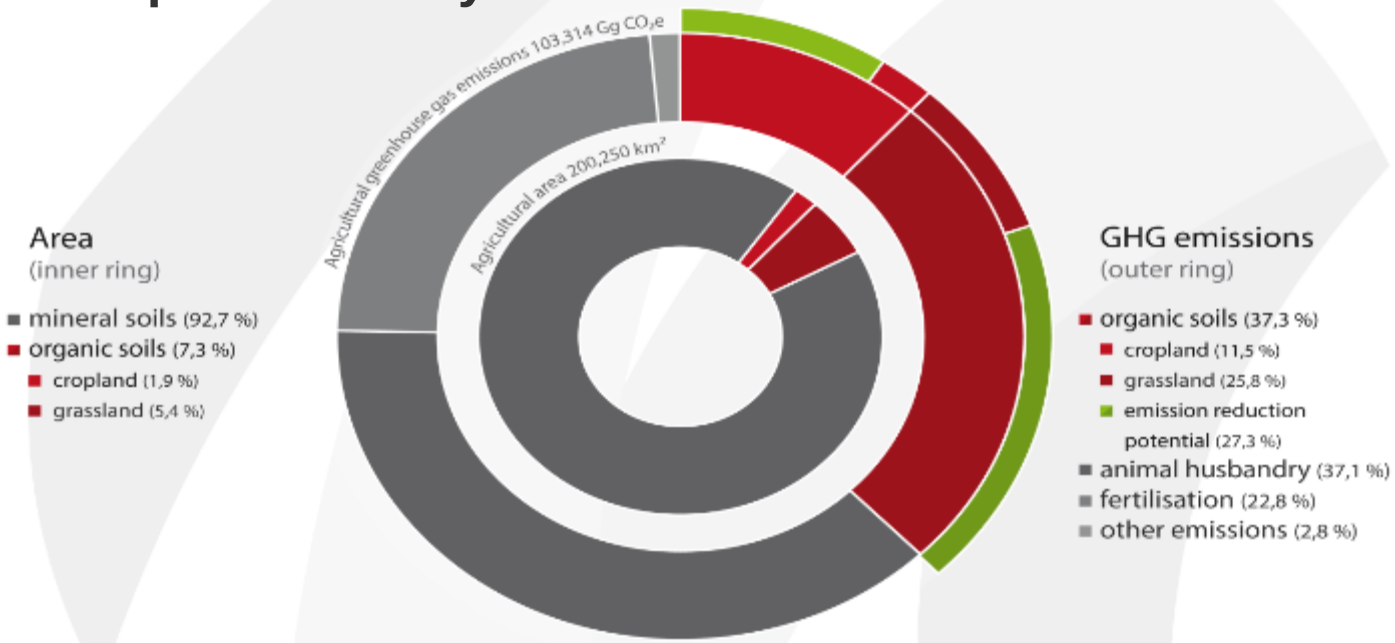
Land use on peat
is a substantial source of emissions from the land

Example: Germany



Graph based on data of the National Inventory Report, Germany 2016.

- **In Germany peatlands cover 7.3% of the agricultural land, but emit 1/3rd of all agricultural GHG emissions**
- **Drained peatlands are use to grow Corn to produce Biogas**
- **Carbon footprint: 8 times larger than fossil fuel !**
- **Subsidised with climate funding!**

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Peatland rewetting

An economic solution

- Rewetting peatlands concerns only a minor part of the total agricultural land
- Reaching similar emission reductions in fertilization and animal husbandry will much stronger affect agricultural productivity
- Rewetting does not imply discontinuation of agricultural use:
- **Paludiculture, the productive use of wet peatlands, provides major opportunities to continue production while avoiding the environmental burden of drainage based agriculture.**

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Peatlands are important beyond climate

Among the most valuable ecosystems on Earth:

- ✓ Provision of clean water & key role in flood management
- ✓ Support many rare, specialist and threatened biodiversity

Recognised by international environmental agreements and initiatives

- ✓ Convention on Biological Diversity (CBD)
- ✓ Ramsar Convention
- ✓ Convention for Combating Desertification and Land Degradation (CCD)

United Nations Convention on Biological Diversity Strategic Plan for 2011-2020 and Aichi Targets

Recognise the importance of:

- ✓ **Conservation and restoration of peatlands**
  - ❖ highlight their role in climate change mitigation and adaptation

Nagoya, Japan COP10. Decision X/33 on Biodiversity and Climate Change

- **Enhance the conservation, sustainable use and restoration of** [ ] habitats that are vulnerable to the effects of climate change or which contribute to climate change mitigation, such as mangroves, **peatlands**, [ ] as a contribution to achieving the objectives of the UNFCCC, CBD, CCD and Ramsar Convention on Wetlands

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12th Meeting of the Conference of the Parties to the Convention on Wetlands (Ramsar, Iran, 1971)
Punta del Este, Uruguay, 1-9 June 2015

Resolution XII.11 Peatlands, climate change and wise use: Implications for the Ramsar Convention

Contracting Parties to:

- ✓ Limit activities that lead to drainage of peatlands and may cause subsidence, flooding and the emission of greenhouse gases
- ✓ Greater international cooperation, technical assistance and capacity building
- ✓ Map the distribution of their peatlands with a view to determine the extent to which they sequestrate carbon
- ✓ Collaborate on the relationship between peatlands and climate
- ✓ Promote collaborative work among the Multilateral Environmental Agreements in support of the implementation of this resolution.

Securing the future for global peatlands

IUCN World Conservation Congress Hawai'i 2016

CONCERNED !!

Globally, there exists no legal provision for the stewardship of peat and peatlands !!

The World Conservation Congress in Hawai'i, USA, 1-10 Sept 2016:

1. REQUESTS the preparation of draft legislation for nations as guidance on how to preserve and restore peatlands
2. CALLS on IUCN Committees to cooperate in national programmes to protect, restore and sustainably manage peatlands
3. URGES states to place a moratorium on peat exploitation until their legislation is strengthened to ensure peatlands are protected or managed wisely
4. RECOMMENDS states to consider the importance of the preservation of peatlands

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The Global Peatlands Initiative

The Global Peatland Initiative

A collaborative effort by leading experts and institutions to save peatlands as the world's largest terrestrial organic carbon stock

- ✓ improve the conservation, restoration and sustainable management of peatlands.
- ✓ contribute to Sustainable Development Goals, including reducing GHG emissions, maintaining ecosystem services and securing livelihoods
- ✓ Implement a Global Peatland Assessment, focusing on the status of peatlands, their importance in the global carbon cycle and for national economies.

Rationale for a Partnership

- There is an enormous scope of work currently being carried out on and around peat
- However knowledge and information gaps remain
- There is limited coordination at research & implementation level

GPI Key actions

- Support a **shift in management practices** towards inclusive, sustainable approaches
  - ✓ **involving peatland rewetting and paludiculture**
- Pilot projects will contribute to the transition to a **Green Economy**
- A **knowledge and experience sharing platform** will be made available in early 2017
- **South-South-North** cooperation
- **Up-scaling to the 25 key countries**

Nationally Determined Contribution of the EU and its Member States

- The EU **and its Member States** are committed to a binding target of at least 40% domestic reduction in greenhouse gas emissions by 2030 compared to 1990
- Policy on how to include **Land Use, Land Use Change and Forestry** into the 2030 greenhouse gas mitigation framework will be established.
- In line with the EU objective and IPCC developed countries should **reduce their emissions by 80-95% by 2050**

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If you think about land use, think about peat!

- **Protect undrained peatlands**
- **Phase out drained peat land use:** Rewet drained peatlands, while maintaining their production function (paludiculture)

Thank You

www.globalpeatlands.org

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