



GREIFSWALD  
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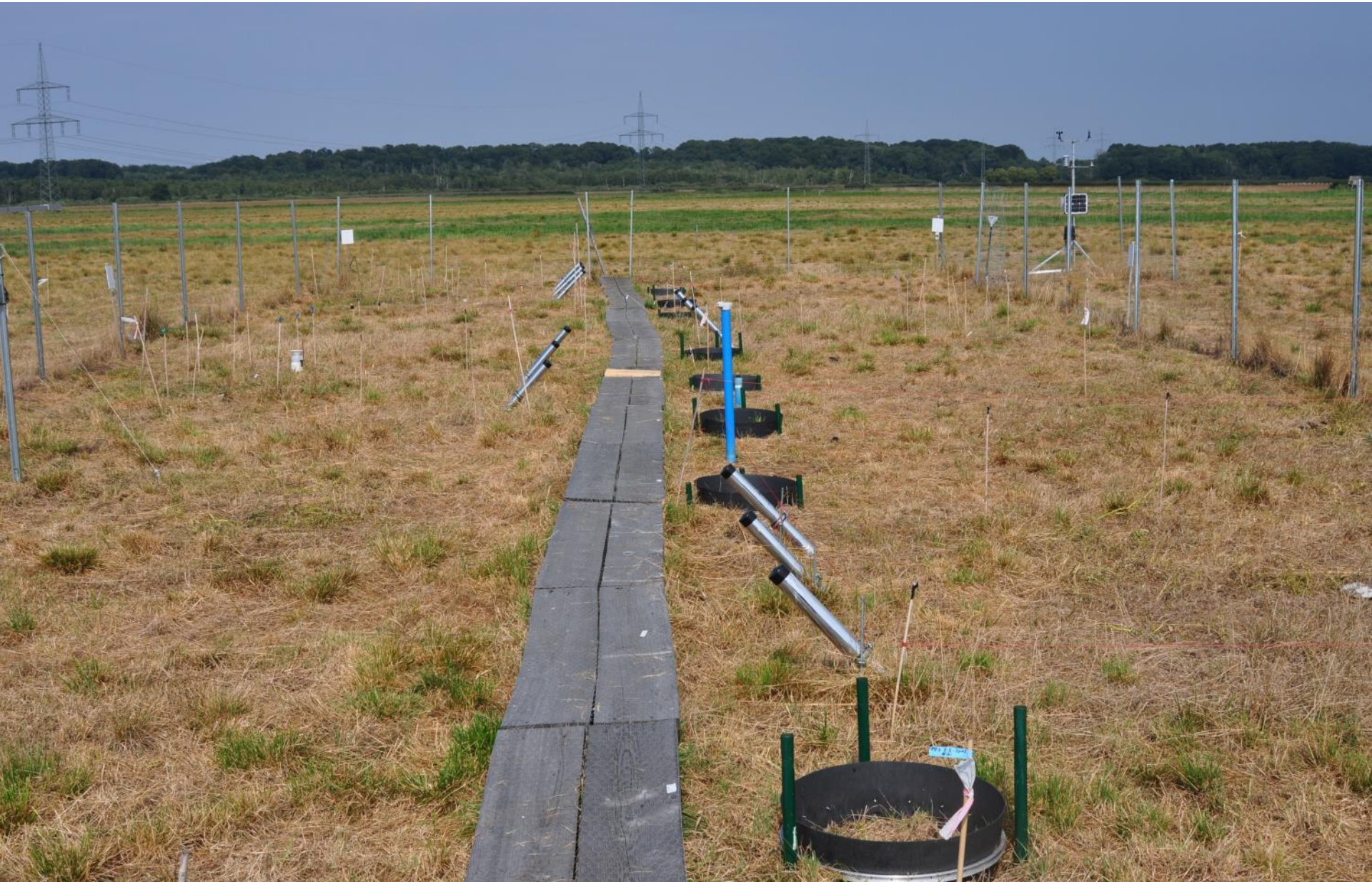
**INTERNATIONAL MIRE  
CONSERVATION GROUP**

# The peatland pathway to 2050

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The last 19 years have seen 18 of the warmest years on record, with increasing risks for food and water security ...



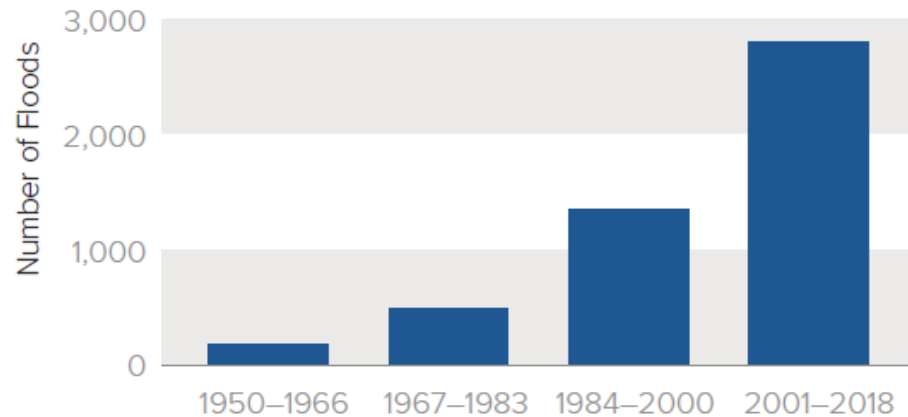


Disasters triggered by weather and climate caused in 2017  
thousands of deaths and US\$320 billion in losses...

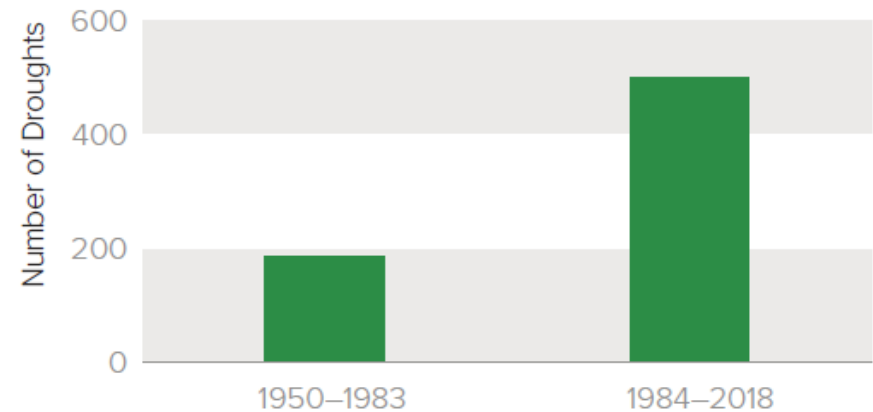


# Climate change increased the frequency and severity of floods, droughts, wildfires and extreme heat events

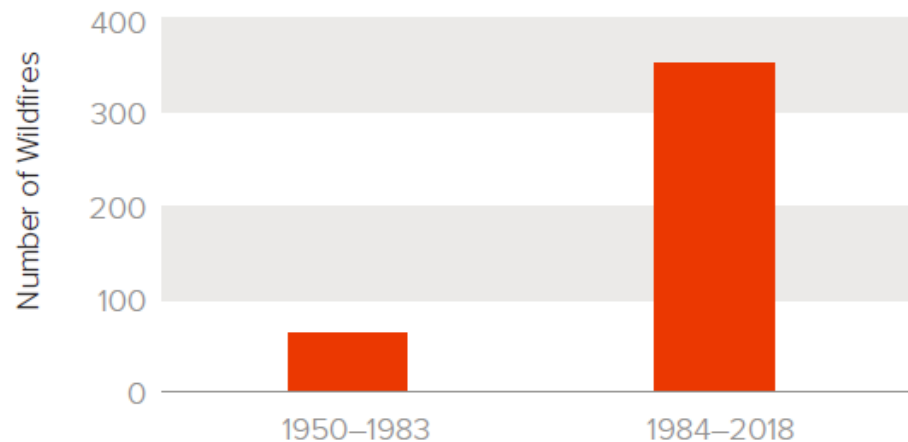
**Floods**



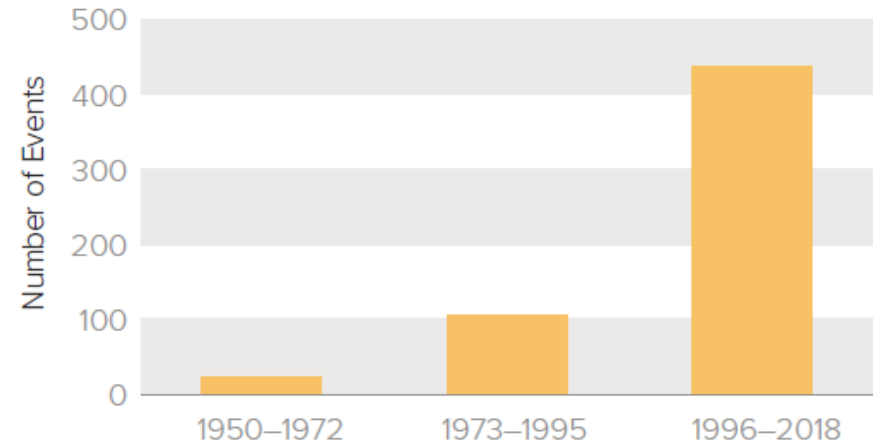
**Droughts**



**Wildfires**



**Extreme Temperature Events**





This process – we all agreed –has to stop....

# Nations Unies

## Conférence sur les Changements Climatiques 2015

COP21/CMP11

Paris France



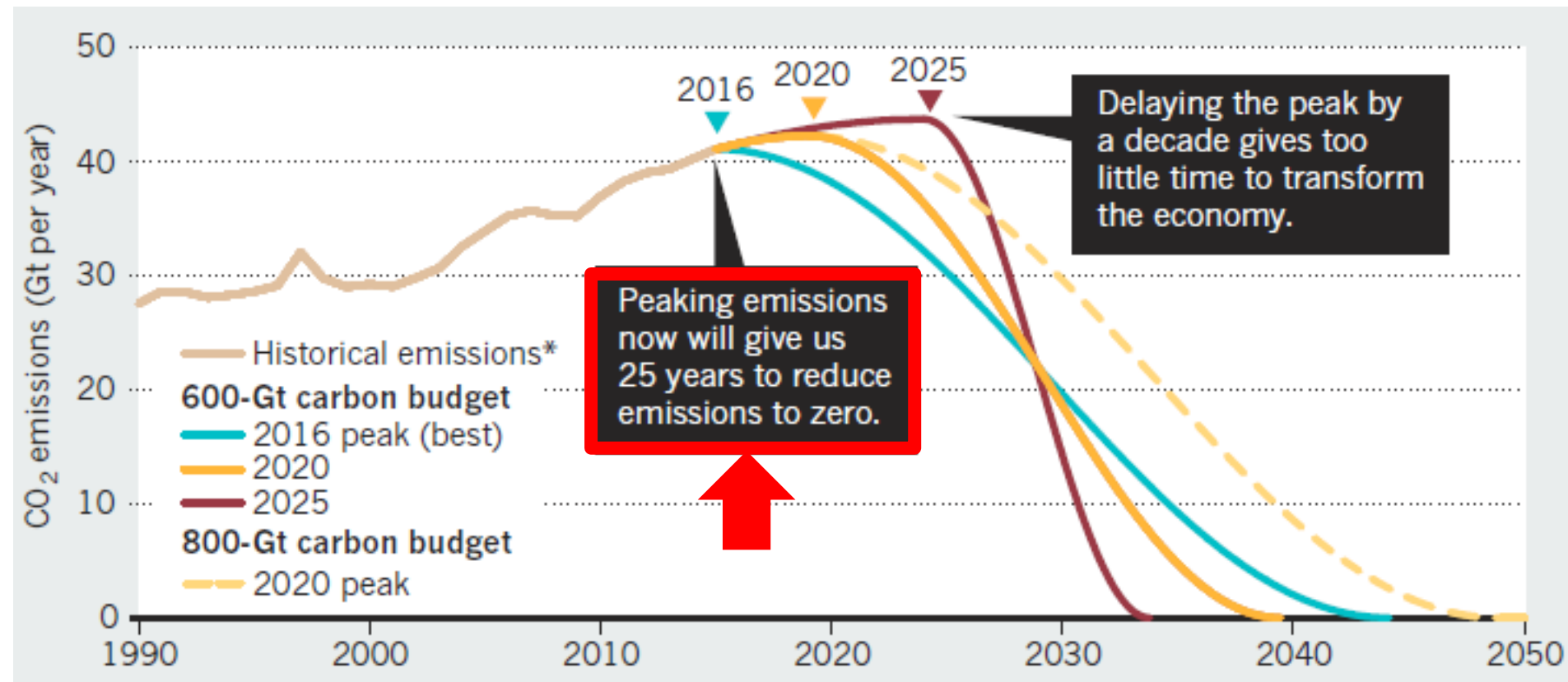


Paris has given the world one simple common goal:  $< 2^{\circ}$





Consequence: 0 net emissions by 2045/2050:  
me, you, we: all to 0. No more excuses, no more offsets

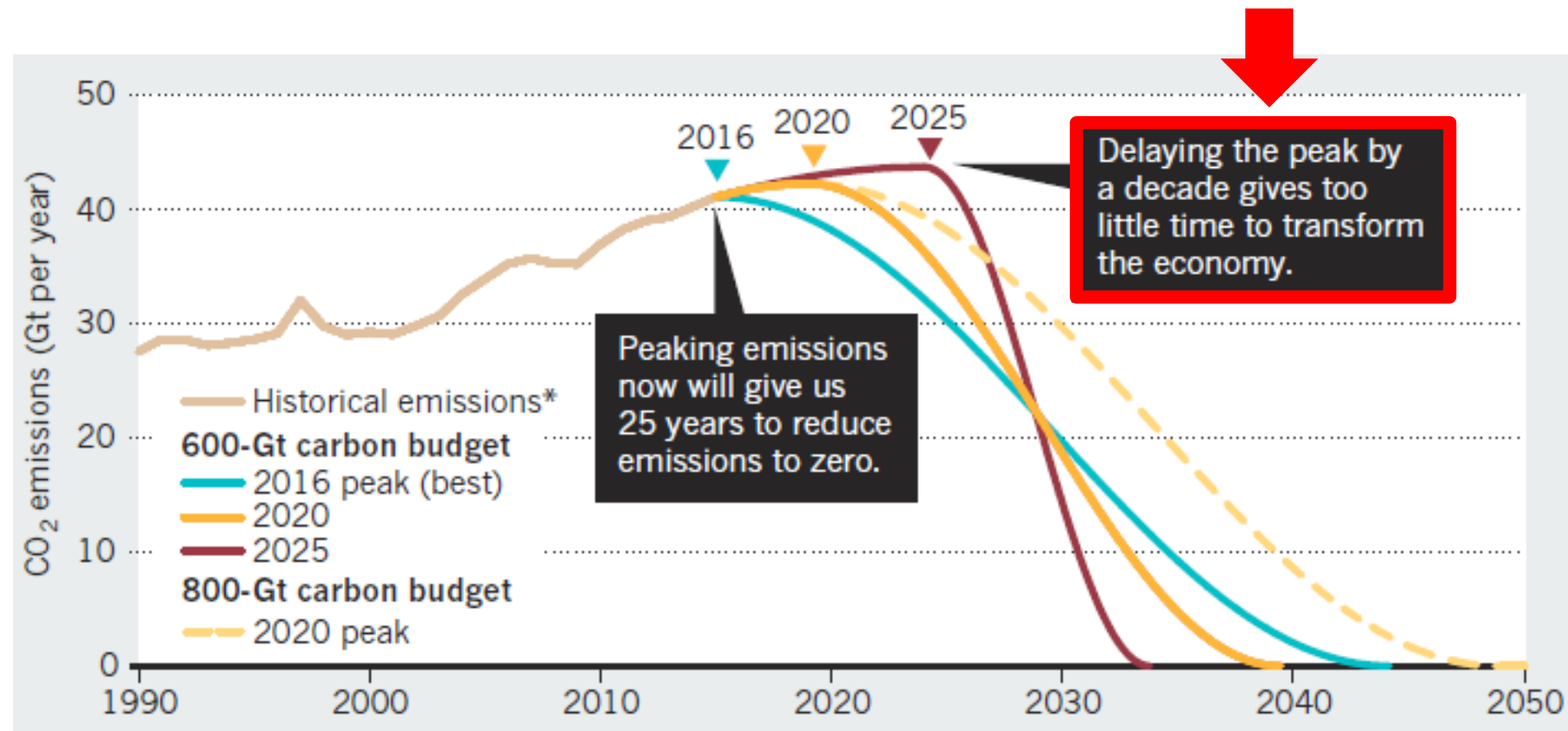


Figueres et al. 2017

[HTTP://GO.NATURE.COM/2RCPCRU](http://go.nature.com/2RCPCRU)



And the longer we wait, the faster we must reduce



Figueres et al. 2017

[HTTP://GO.NATURE.COM/2RCPCRU](http://go.nature.com/2RCPCRU)

Paris agreement: “...in the context of sustainable development and efforts to eradicate poverty”...





Drained peatlands responsible for 5% of global emissions  
→ break radically with wrong developments from the past





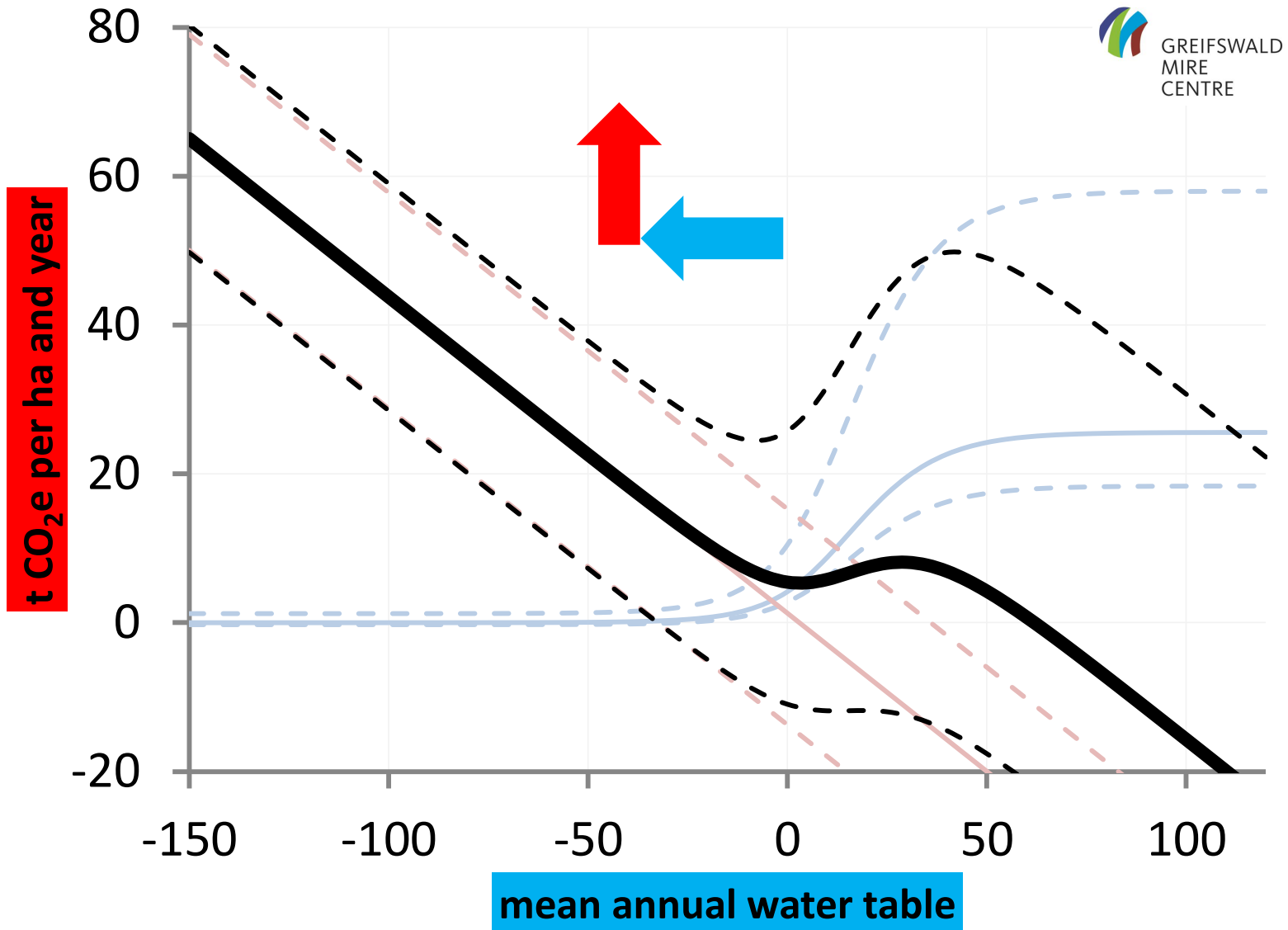
Peatland problems are caused by **drainage**



Peat is like atjar tjampoer or pickled herring: when you remove the conserving water, the organic matter rots away

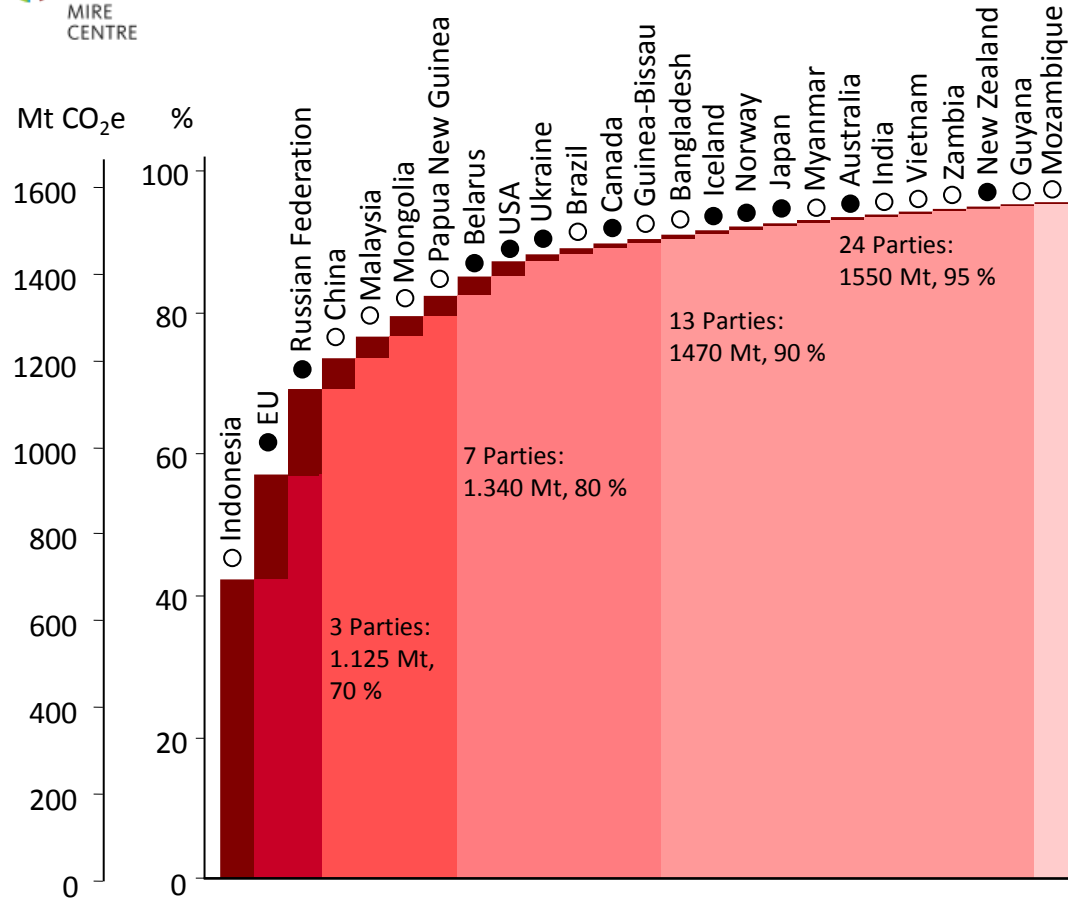


Deeper water table → more greenhouse gas emissions:  
In Germany: every 10 cm deeper → 5 tons per ha more





# 27 countries, incl. 12 European and 9 EU countries are responsible for 95% of all global peatland emissions



Indonesia leads the list of global top emitters, also without the enormous peatland fires...



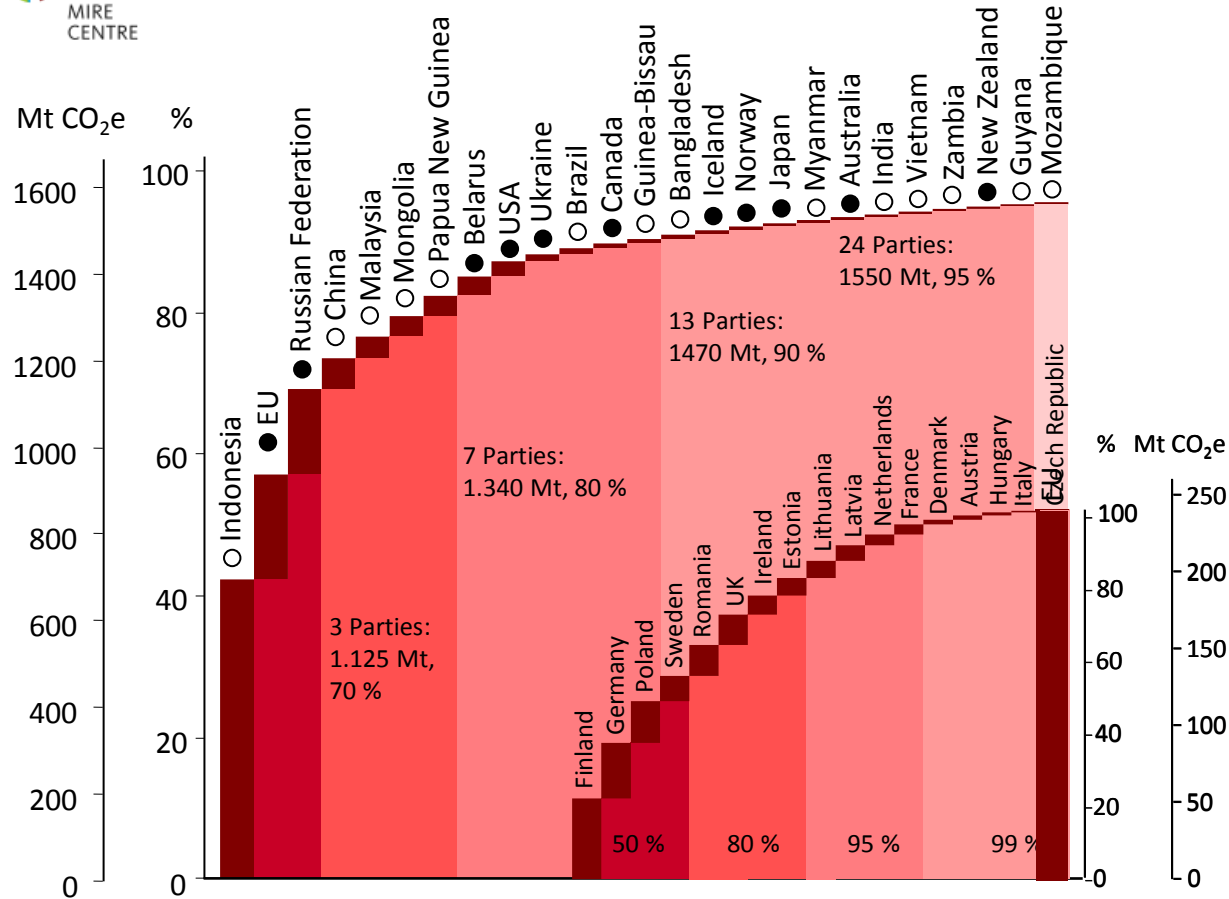


But, and that is often forgotten:  
the European Union is a good second ...





# Finland, Germany, Poland, and Sweden are responsible for half of the EU emissions

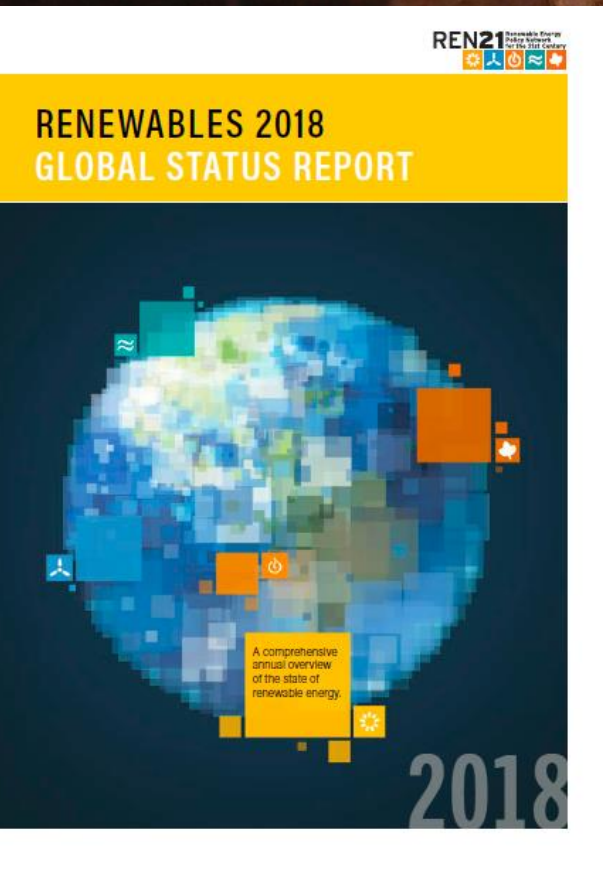
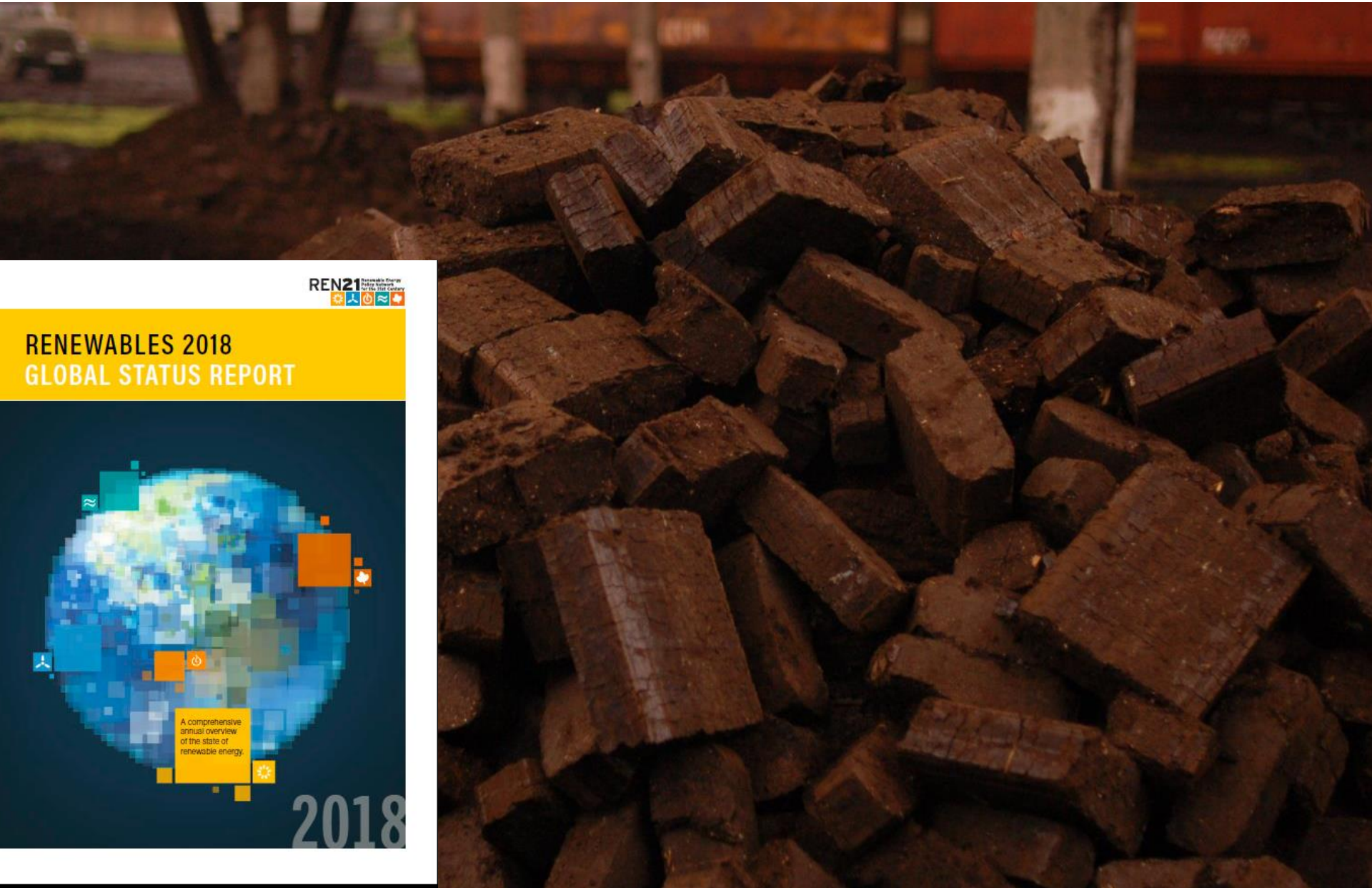


The peatland pathway to 2050 implies the complete fading out of using the fossil resource 'peat'





For peat as an energy resource, cost-effective alternatives are available and are rapidly being further developed



For growing media, climate-friendly alternatives are not yet sufficiently available and peat industry must do much more





Laudable initiatives exist but this is simply not enough





More alternatives have to be tested to dilute and eventually replace peat completely





Substantial reduction must initially be achieved by shrinkage of lower-quality markets, such as hobby gardening





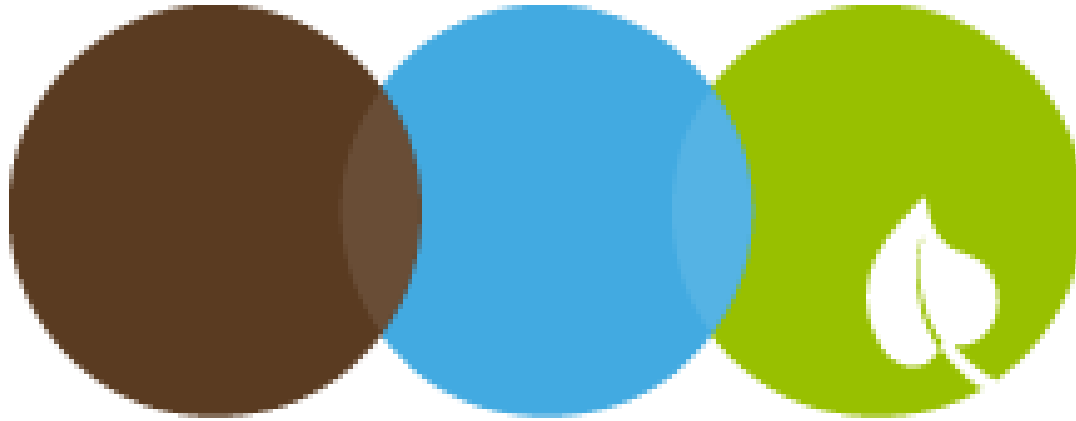
Substrate and horticultural industry must focus on shifting demand away from high environmental impact meat/dairy



But without peat!



... and refrain from using unjustified claims such as 'peat = biomass', 'complete LCAs' and 'responsible peat'...



but also

responsibly produced peat



**Moor**  
Futures

**After Paris: time is over....**

*Ihre Investitionen in Klimaschutz.*

The peatland pathway to 2050 implies also the complete fading out of drained peatland use





No more cows on drained peatland...





...carrots on drained peatland...





... forests on drained peatland....





... oil palm on drained peatland...





... or pulpwood on drained peatland....



Drained use must also stop for stopping subsidence

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AUTOS

HOMES

JOB

CLASSIFIED

OUR PRODUCTS

84°



LOCAL

TRUMP

EXCLUSIVES

WEATHER

SPORTS

TRAVEL

FOOD

EPAPER

# Irma could harm Florida's crops, especially sugar cane and citrus

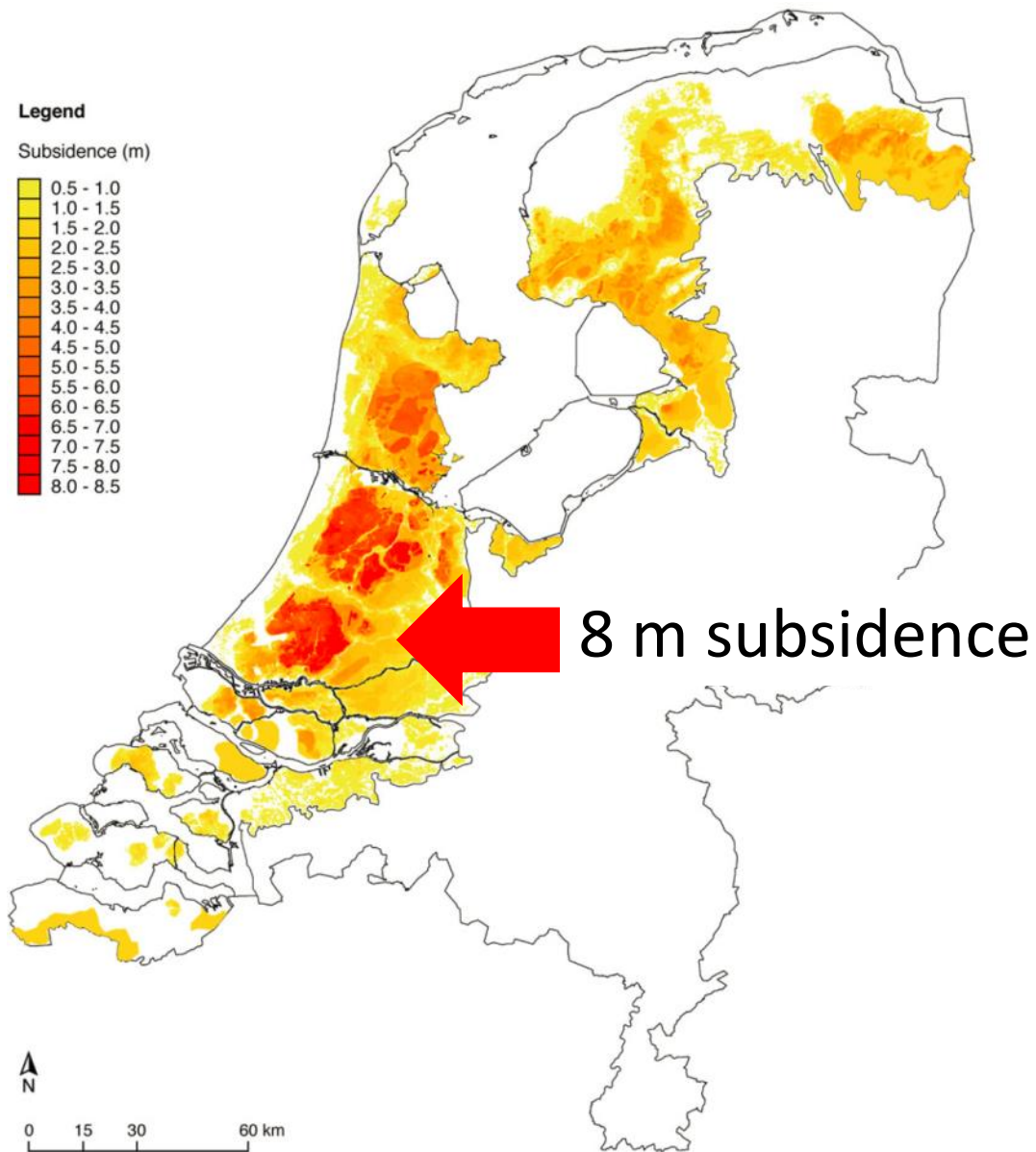
BUSINESS

By Susan Salisbury - Palm Beach Post Staff Writer

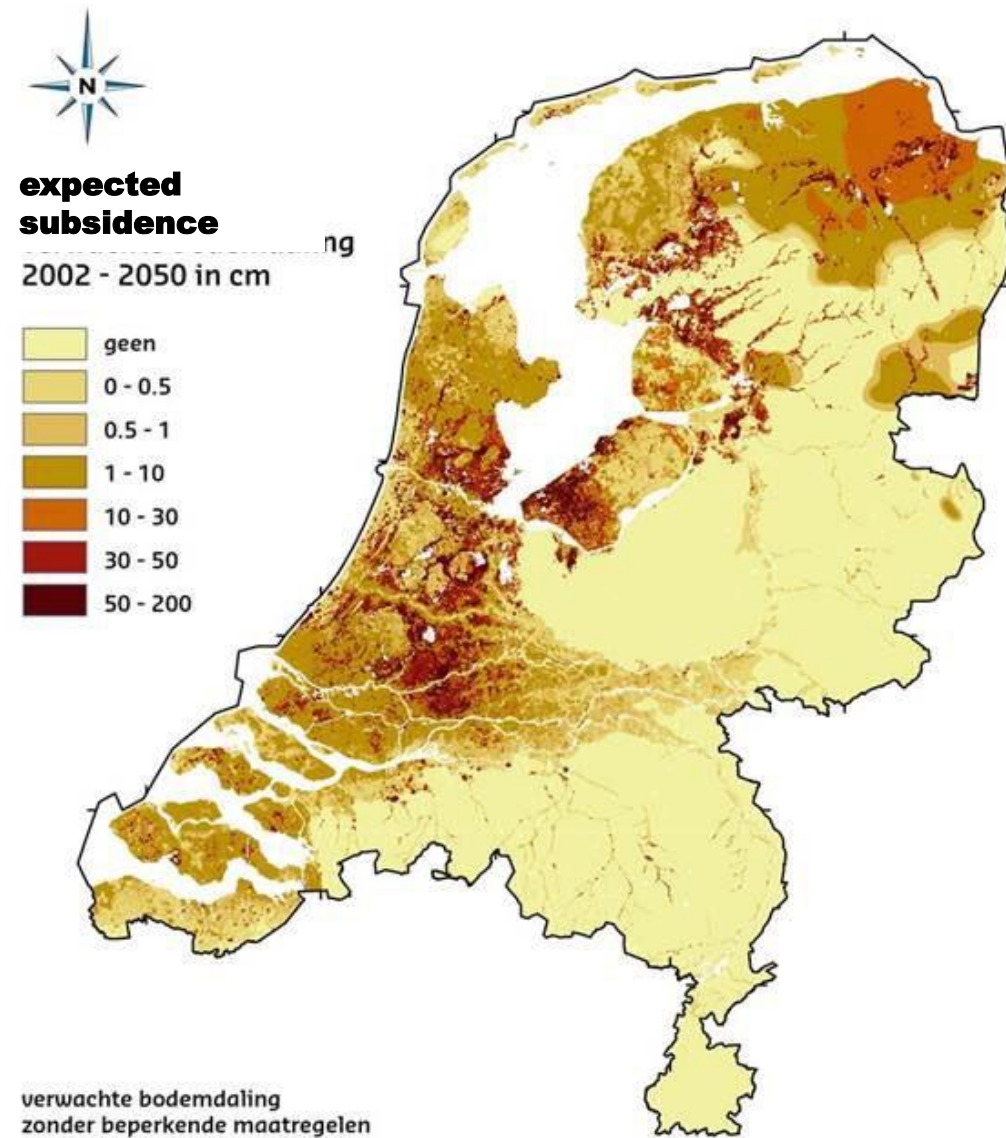




# ...*Nether*-lands: bogged down by 1000 yr of peatland drainage and subsidence



...and subsidence continues...





Peatland subsidence may this century lead to uncontrolled flooding of 10-20 million ha of productive land worldwide





We are losing land, now that we need it most: for more people, for less poverty, and for replacing fossil resources



Kalimantan

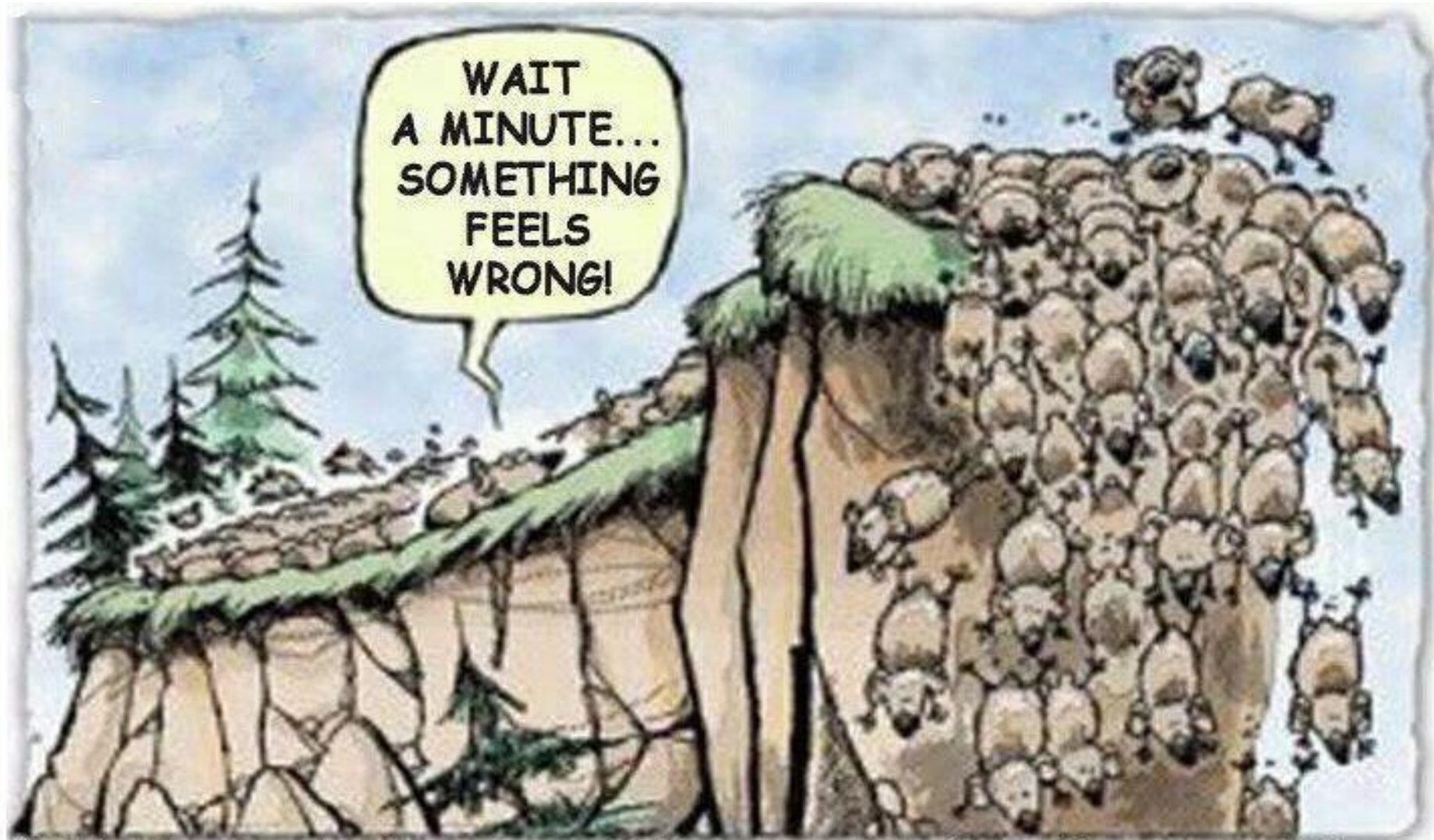


Some stick to a 'business-as-usual' model, e.g. with submerged drainage, but even if it would work, it's no solution





If you are heading for the cliff, it is not sufficient to half your speed: you must stop and turn around!

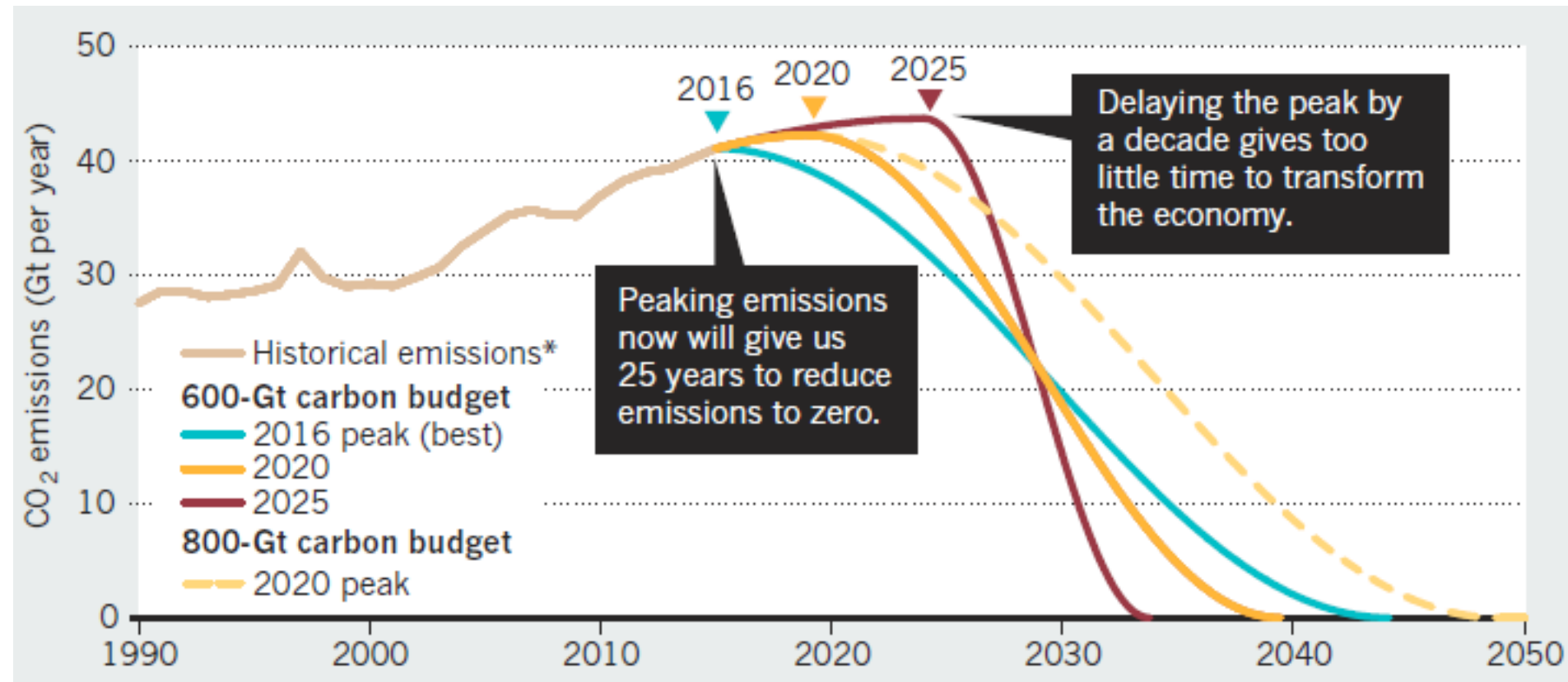


**"Shut up, you moron! Do as you've been told  
It's for your own good!"**



# What does Paris mean for peatlands?:

We must rewet 500,000 km<sup>2</sup> of peatland = 20,000 km<sup>2</sup> per yr!



Figueres et al. 2017

[HTTP://GO.NATURE.COM/2RCPCRU](http://go.nature.com/2RCPCRU)

Rewetting in Europe has hitherto focuses on the easy stuff:  
abandoned and low productive land with few emissions





E.g. with large scale rewetting projects in Belarus, Russia,  
Germany and UK...





... but we have to go to the core problems: intensive agriculture and forestry on drained peat...

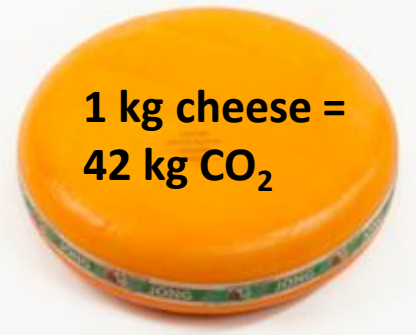




Cheese is the Dutch equivalent of palm oil:  
produced on the base of peatland emissions and subsidence



1 kg cheese =  
42 kg CO<sub>2</sub>





But we cannot flood all 500,000 km<sup>2</sup> of drained peatland worldwide and take them out of production





We can only solve the drainage problems while maintaining production: i.e. with *paludiculture*: wet agriculture/forestry





Like reed for high-quality building material...





...or cattail for insulation and cattle fodder...





...or alder for furniture and furneer...



Jörg Schröder



Indonesia needs paludiculture for its huge peatland rewetting program (24,000 km<sup>2</sup>!), e.g. Jelutung

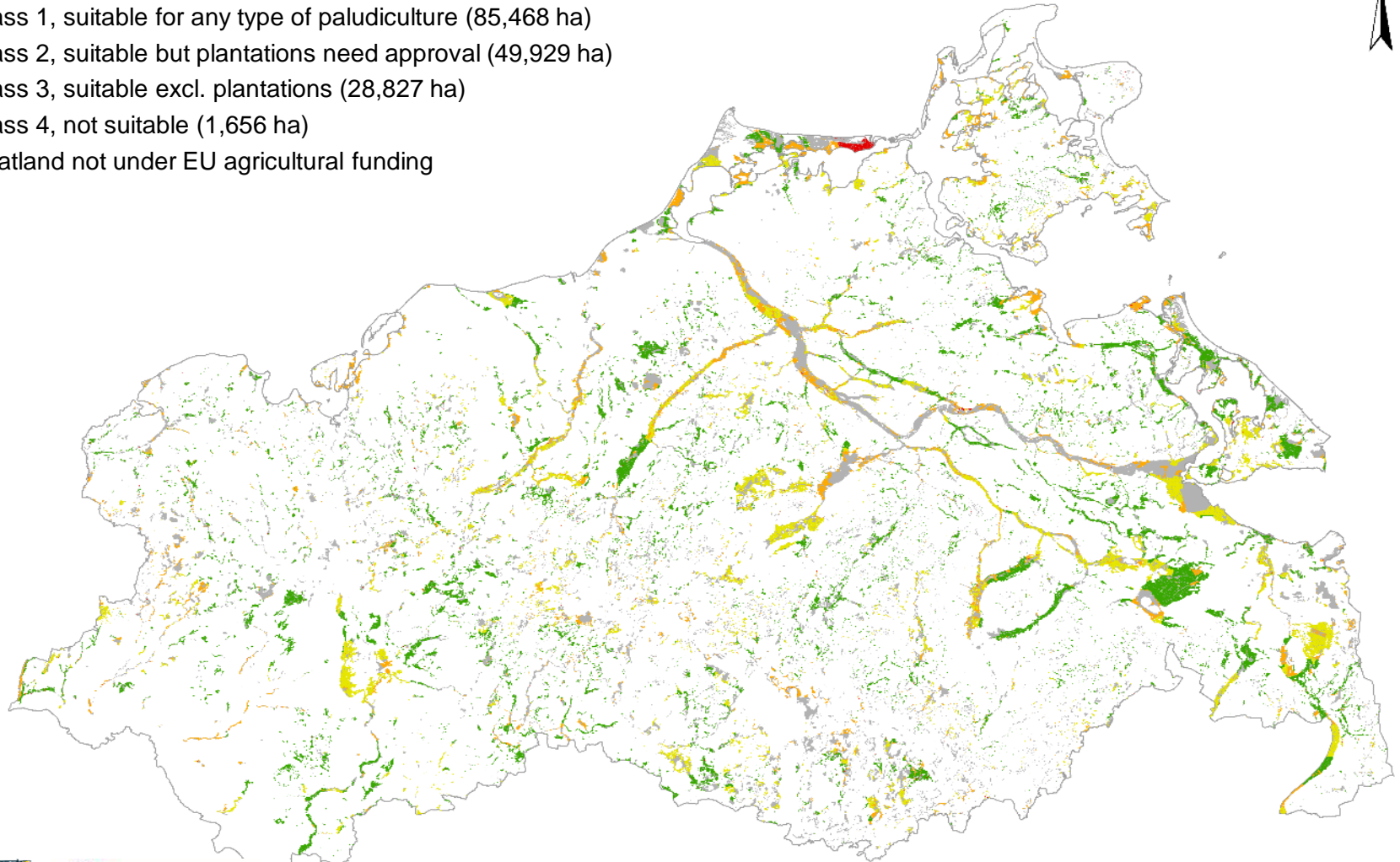




# Dec. 2017: launch of paludiculture strategy of Mecklenburg-Western-Pomerania (1/3 of all emissions from peatland)

## Paludiculture suitability map of Mecklenburg-Vorpommern (NE-Germany)

- Class 1, suitable for any type of paludiculture (85,468 ha)
- Class 2, suitable but plantations need approval (49,929 ha)
- Class 3, suitable excl. plantations (28,827 ha)
- Class 4, not suitable (1,656 ha)
- Peatland not under EU agricultural funding





Minister of Agriculture Till Backhaus: in 2050 *West-Pomerania* will be *Wet-Pomerania*: all peatland rewetted!





Germany: until 2045 rewet 400 km<sup>2</sup> per year...  
**Illusory, naive...?**





Finland drained in the 1970s 3,000 km<sup>2</sup> every year!





Indonesia has in the last decades followed the old example of Europe in draining peatlands on a large scale





But they have learned: Indonesia has *in 2017* rewetted more peatland than *entire* Europe in its *entire* history: 2.000 km<sup>2</sup>!

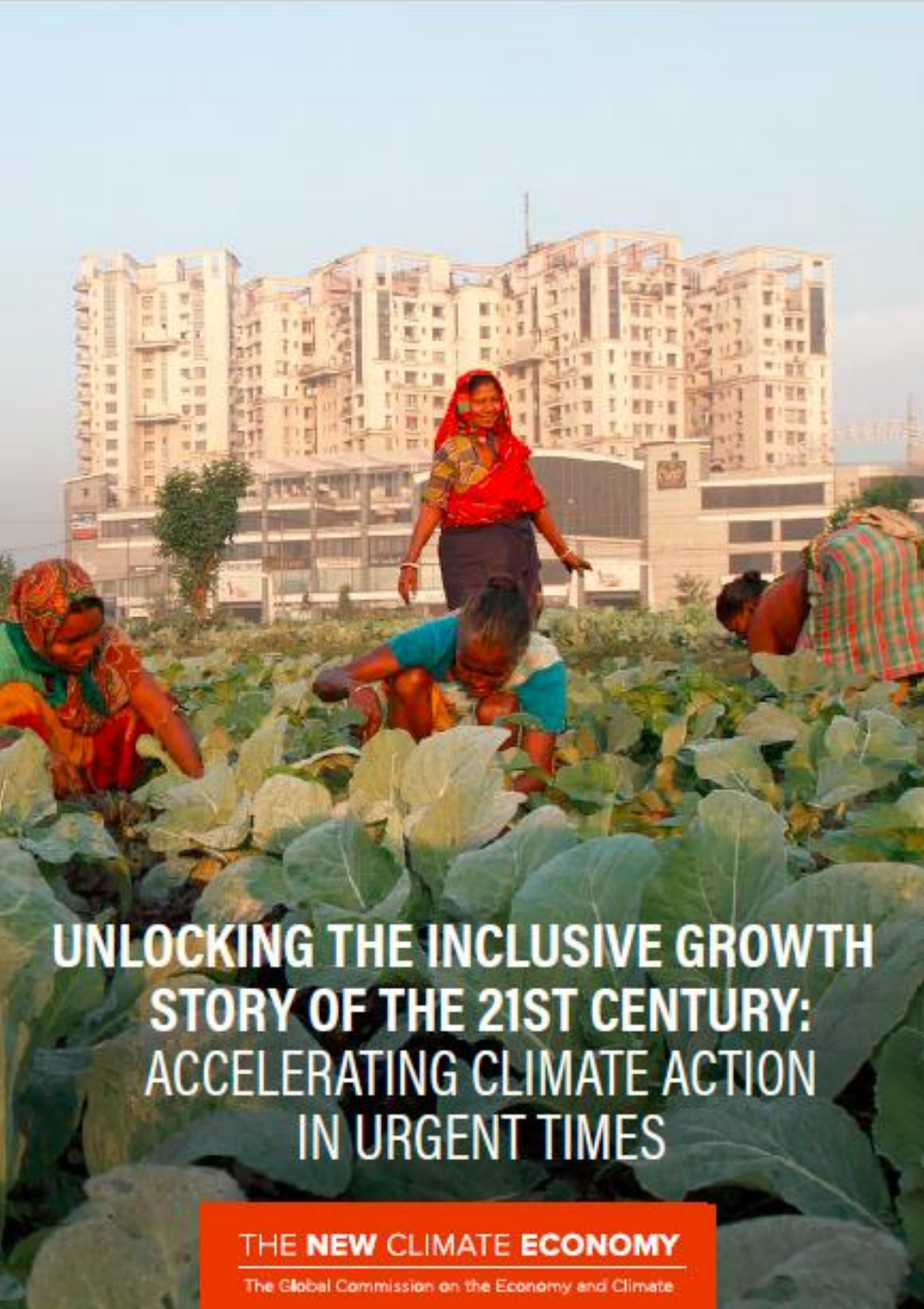




And Indonesia also addresses the difficult issues: the highly productive oil palm and pulpwood!





A photograph showing several women working in a field of large-leafed vegetables, likely cabbages. In the background, a dense urban skyline with multiple high-rise apartment buildings is visible under a clear sky. The women are wearing colorful traditional clothing, including headscarves and saris. One woman in the center is standing and looking towards the camera, while others are bent over working in the field.

# The Global Commission on the Economy and Climate

August 2018

**UNLOCKING THE INCLUSIVE GROWTH  
STORY OF THE 21ST CENTURY:  
ACCELERATING CLIMATE ACTION  
IN URGENT TIMES**

**THE NEW CLIMATE ECONOMY**

The Global Commission on the Economy and Climate



# Global Commission on the Economy and Climate August 2018:

“ The growth story of the 21st century will unlock unprecedented opportunities and deliver a strong, sustainable, inclusive global economy.

The benefits of climate action are greater than ever before, while the costs of inaction continue to mount.

It is time for a decisive shift to a new climate economy.”



# Global Commission on the Economy and Climate August 2018:

- This is our 'use it or lose it' moment: the decisions we take over the next 2-3 years will determine our growth and climate future.
- The choice we face today, therefore, is not whether or how to act, but how quickly we will do so:
- We can either make a gradual shift locking us into an unsustainable future or a decisive change of direction towards this new growth agenda.



A photograph of a person wading through a vast, flat peatland landscape. The person is wearing a light green shirt and light-colored shorts, and is carrying a long stick or pole. The ground is wet and reflective, mirroring the sky and the person. The landscape is covered in tall, dry grass and small shrubs. In the background, there is a line of trees under a blue sky with scattered white clouds. A bare tree is visible on the left side of the frame.

No Paris without peatlands!

Peatlands must be wet:  
for the climate, for the land,  
for the people, for ever...