

# Imagining a nature-based future for Europe in 2120

Mansholt lecture 2023

20 September 2023  
Tim van Hattum and many others

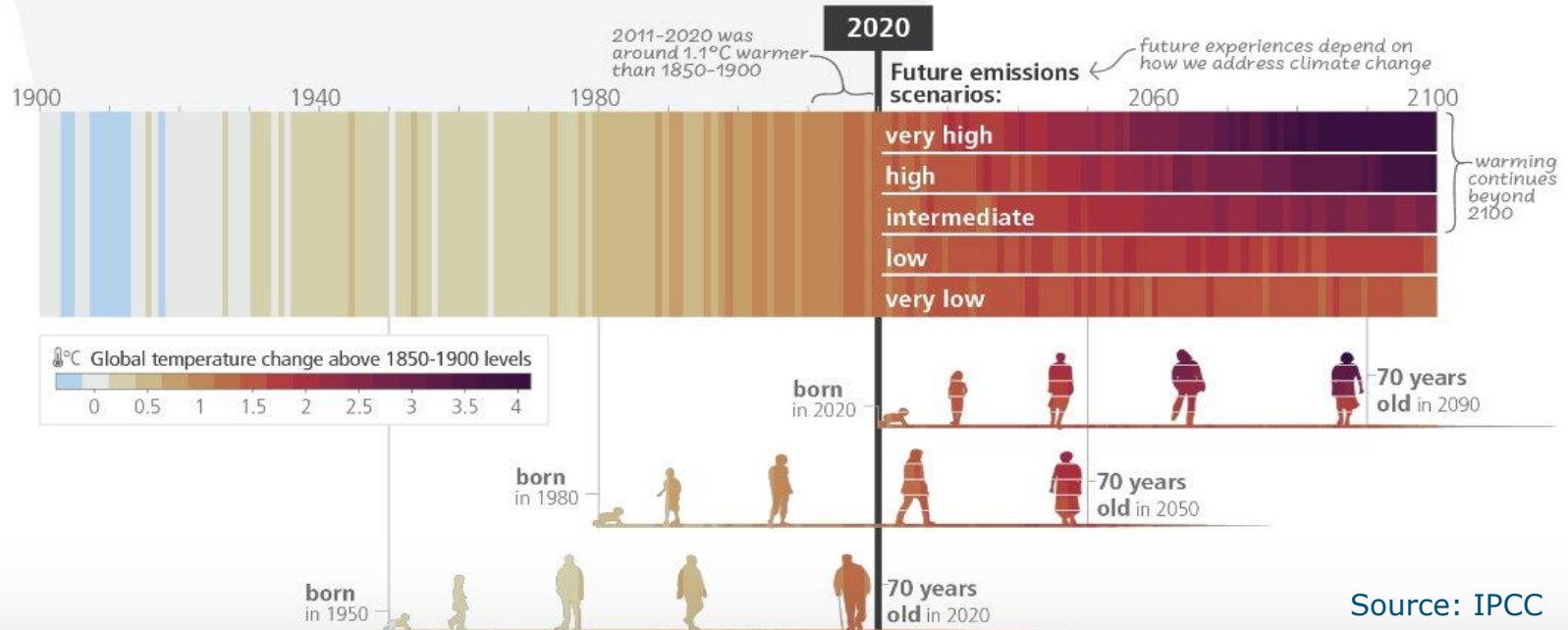




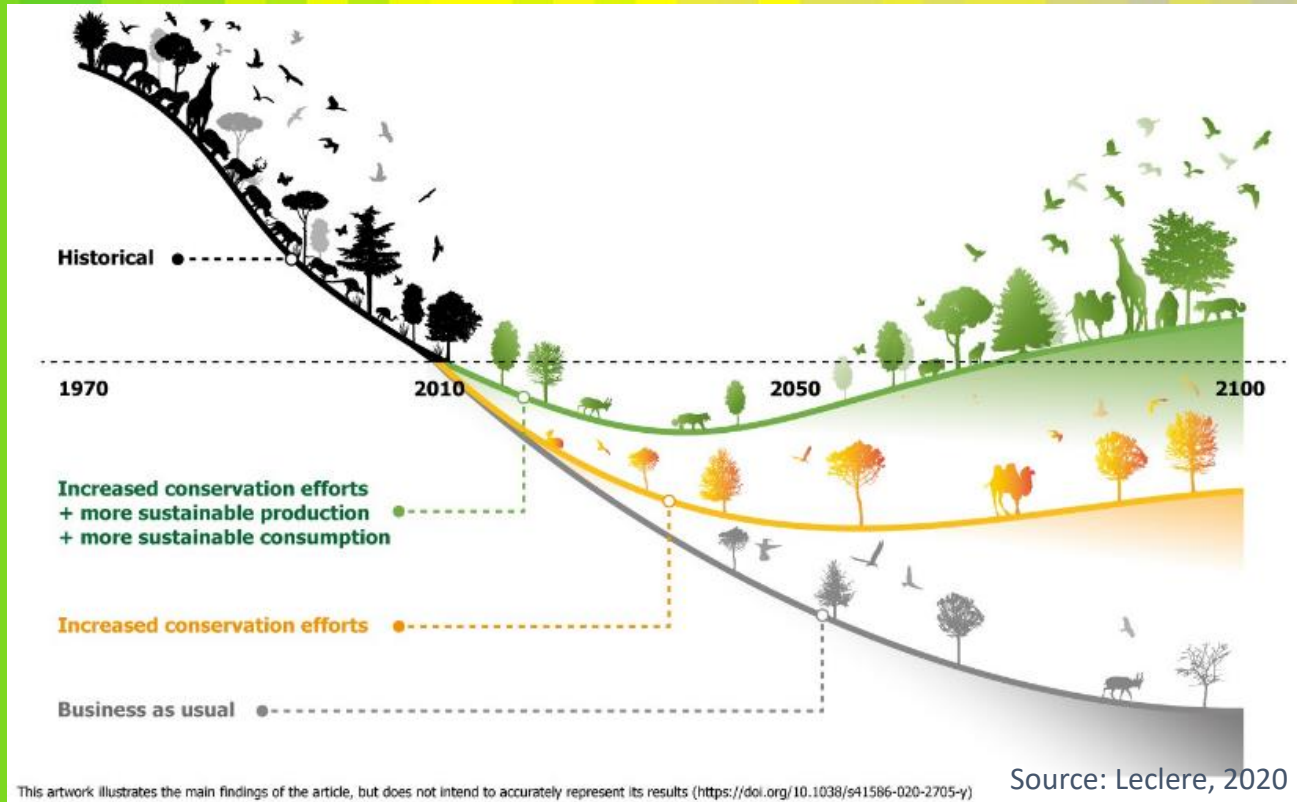


# Europe is a hotspot for climate change

c) The extent to which current and future generations will experience a hotter and different world depends on choices now and in the near-term



# Europe's state of nature is declining fast



# Climate and biodiversity need an integrated approach

Global Climate Stripes, 1850-2021. Data: UK Met Office



**CLIMATE CHANGE**

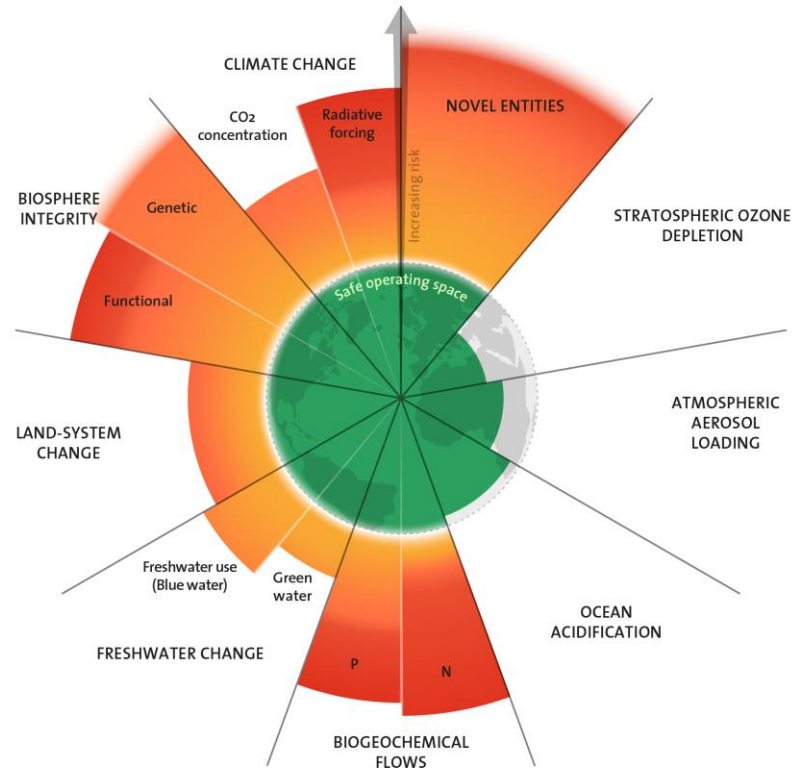
**SOLVE BOTH OR SOLVE NEITHER**



**BIODIVERSITY LOSS**

Global Bio Stripes 1970 to 2016 – Data: Living Planet Index

# Six planetary boundaries crossed

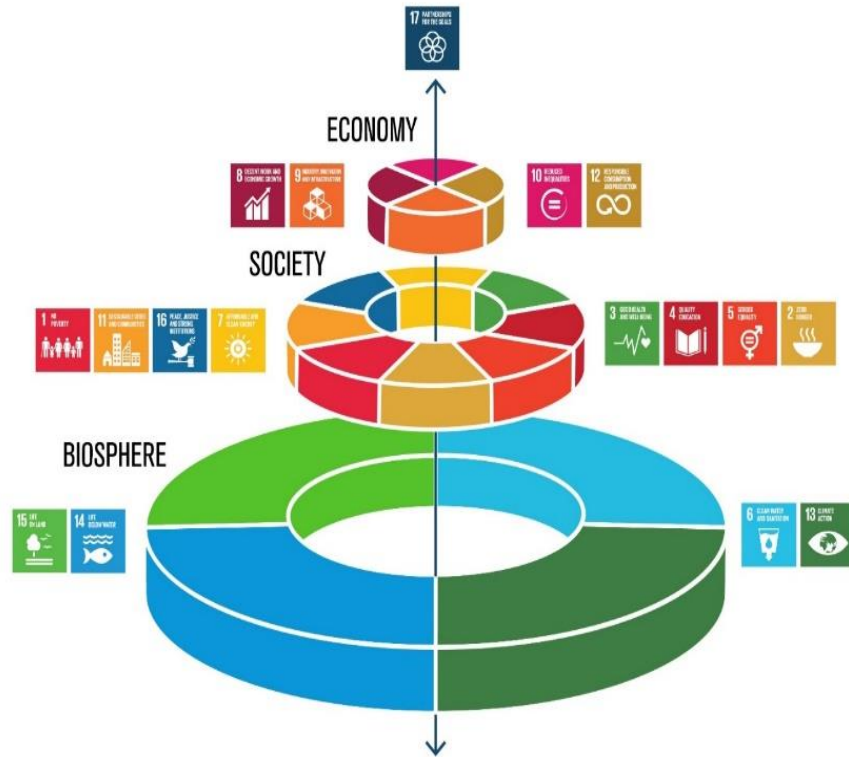


We need a narrative of hope and action





# Towards a safe and just operating space



Graphic by Bertien Luitmanus/Alamy

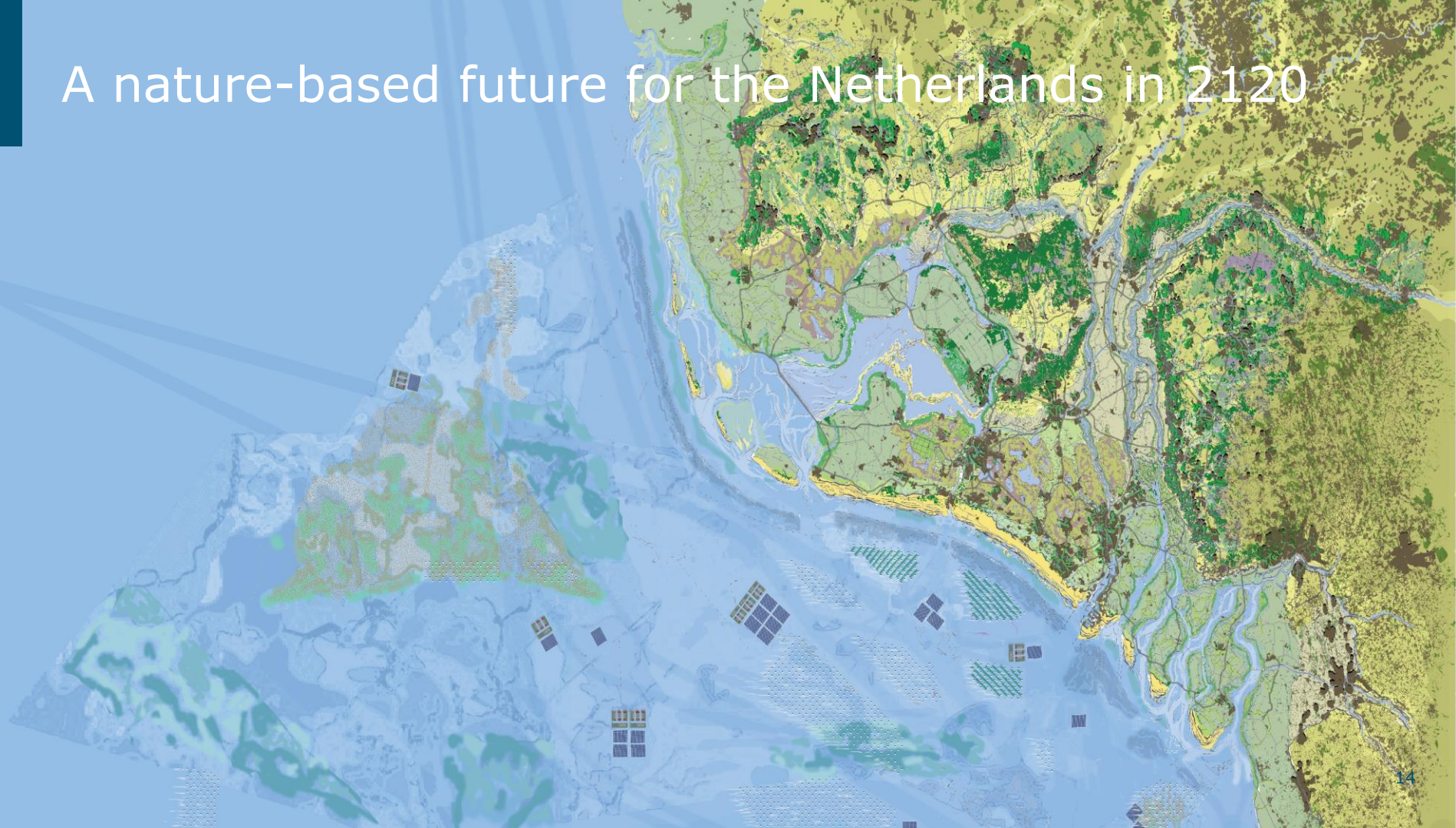
# Nature-based solutions: protect and restore nature



# A nature-based future for the Netherlands in 2120



# A nature-based future for the Netherlands in 2120



# Need for a hopeful perspective

## de Volkskrant

MFC  
VRIJDAG 3 JANUARI 2020

Binnenland 9

LINDA.NL

Onafhankelijk weekblad  
sinds 1877  
23 april 2020  
Jaargang 144 / Nr. 17-18  
€ 5,95

### DE GROENE AMSTERDAMMER

Steden in het groen, geen kansen langs de Maas en gehavende landbouwgrond



**Nederland in de toekomst**  
Reële scenario's over hoe we de grote problemen van nu het hoofd kunnen bieden



# BUITENHOF



## Nederland in 2120

NOS Nieuws - Sport - Live Programma's



Wageningen University & Research

NOS Nieuws • Donderdag 2 januari 2020, 14:53

Zo kan Nederland er over 100 jaar uitzien

#### LANDSCHAP

### 2120: een groen land met brede rivieren

Onderzoekers van Wageningen University maakten een kaart van Nederland over 100 jaar. Als zij gelijk krijgen, zijn dit de grootste gevolgen

Steden in het groen, geen kansen langs de Maas en gehavende landbouwgrond



#### 1 Wereldwijding in het oosten

Meer steden in het groen. De laatste tijd zijn er steeds meer steden die groen worden. Dit is vooral in landen als Nederland, België en Duitsland. Dit komt door de groei van de wereldwijde economie. Dit is vooral in landen als Nederland, België en Duitsland. Dit komt door de groei van de wereldwijde economie. Dit is vooral in landen als Nederland, België en Duitsland. Dit komt door de groei van de wereldwijde economie.

#### 2 Brede rivieren, lang duinwater

Veel meer water uit de Rijn stroomt nu de Maas toe. Dit komt door de groei van de wereldwijde economie. Dit is vooral in landen als Nederland, België en Duitsland. Dit komt door de groei van de wereldwijde economie.

#### 3 Steden aan de kust

De kustlijn zal steeds meer worden beschermd. Dit komt door de groei van de wereldwijde economie. Dit is vooral in landen als Nederland, België en Duitsland. Dit komt door de groei van de wereldwijde economie.

#### 4 Groen landbouw

De landbouw zal steeds meer groen worden. Dit komt door de groei van de wereldwijde economie. Dit is vooral in landen als Nederland, België en Duitsland. Dit komt door de groei van de wereldwijde economie.

Can we imagine a nature-based Europe?

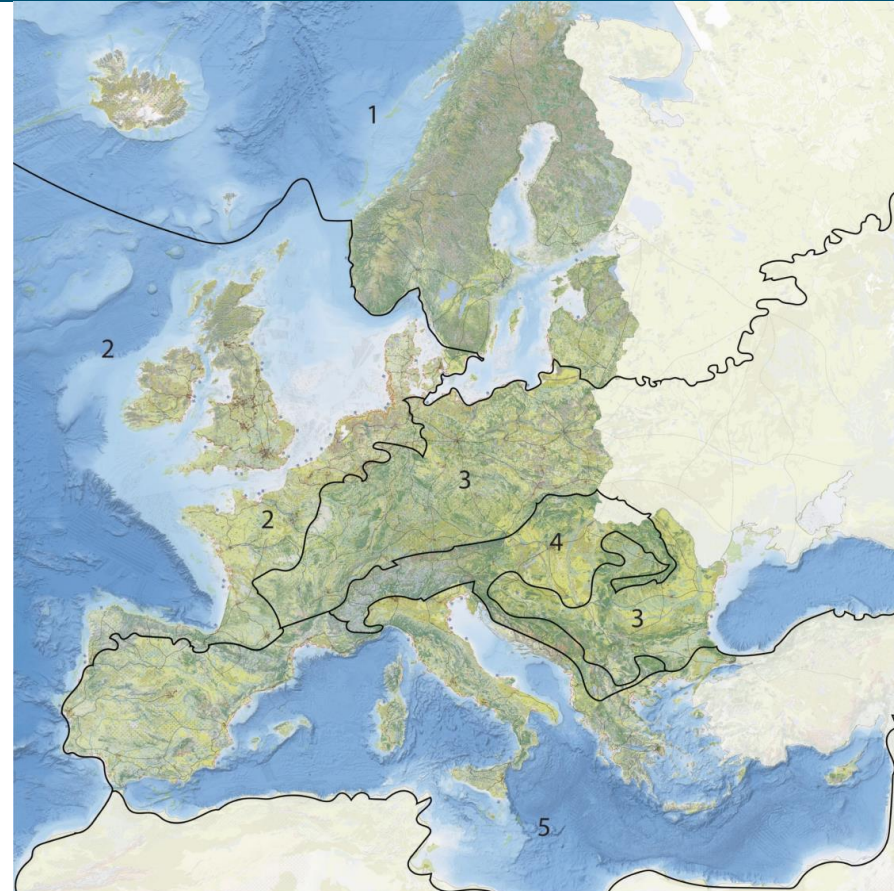


# Co-designing the future we want



# Five Eco-regions

1. North: Arctic and Boreal biogeographical region, including Baltic Sea
1. West: Atlantic biogeographical region, including North Sea and Atlantic Ocean
2. East: Continental biogeographical region, including Black Sea
3. Central: Alpine and Pannonian biogeographical region
4. South: Mediterranean biogeographical region, including Mediterranean Sea





# Five guiding principles

1. A healthy biosphere as the cornerstone for Europe's future

*Water and soil as guiding principles*

2. Adaptive and resilient

*Working with nature and continuously adapting to a warming world*

3. A climate-positive and circular bioeconomy

*A paradigm shift*

4. A nature-positive society

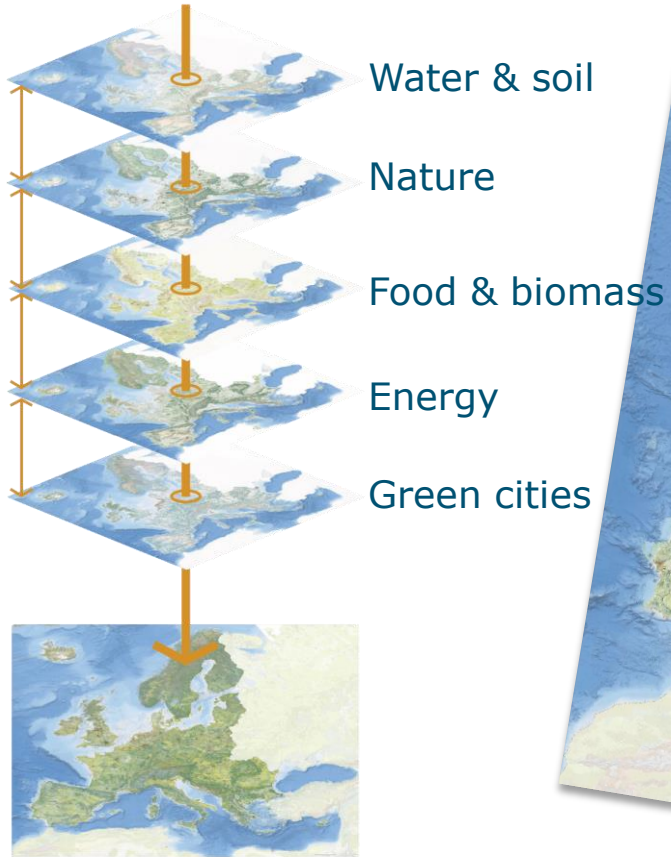
*Regenerating biodiversity and nature inclusiveness as the norm*

5. Inclusive and just

*Locally embedded and cherishing cultural differences*

Systemic and integrative

# Europe in 2120



## Healthy water and soil

- Blue green landscapes as sponges
- More space for rivers as ecological corridors through European landscapes
- Restored wetlands and nature-based coastal protection



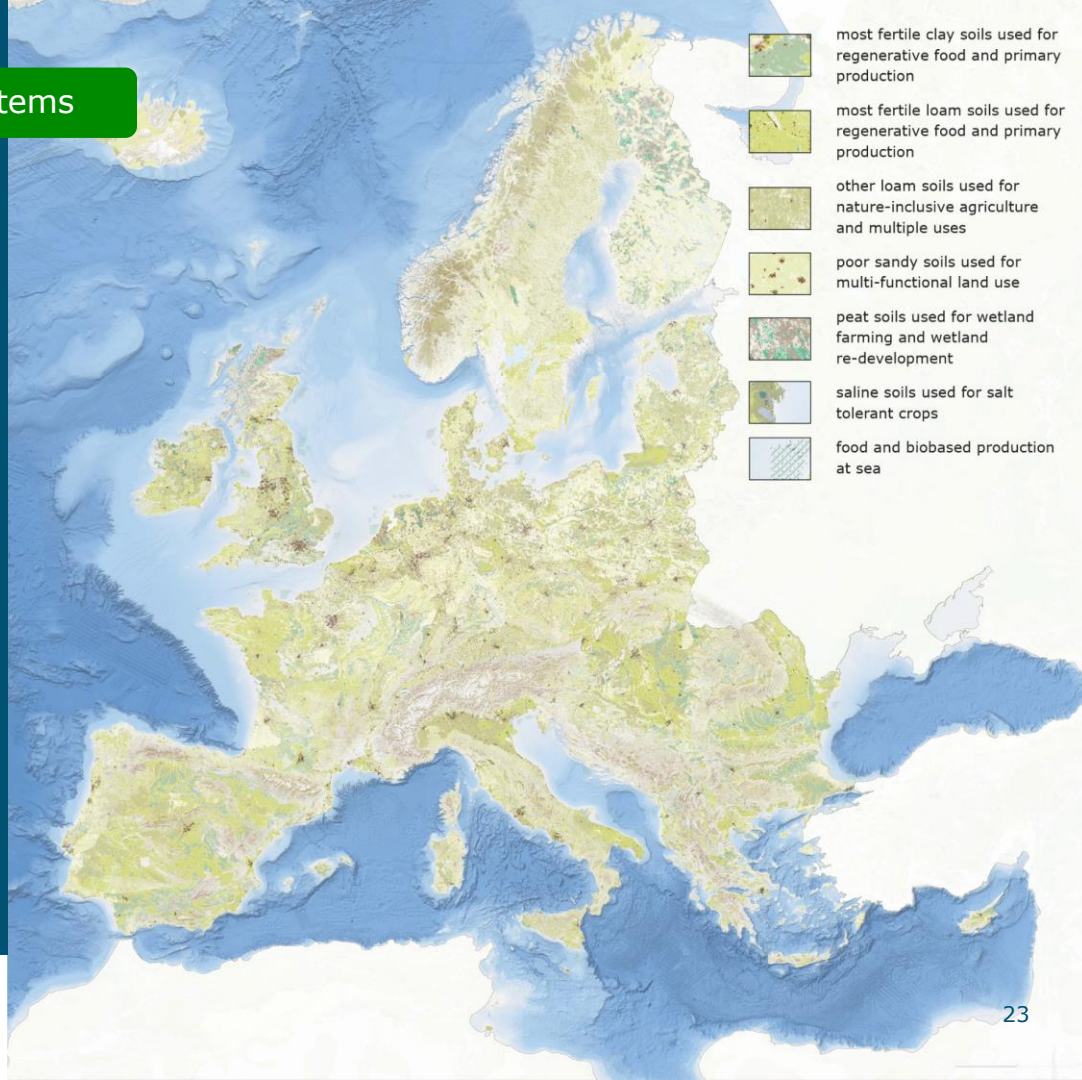
## Connected resilient nature

- At least 30% of sea and 30% of land is now protected and restored nature
- Network of ecological 'rewilding' corridors connects European nature
- Climate smart new and existing forests



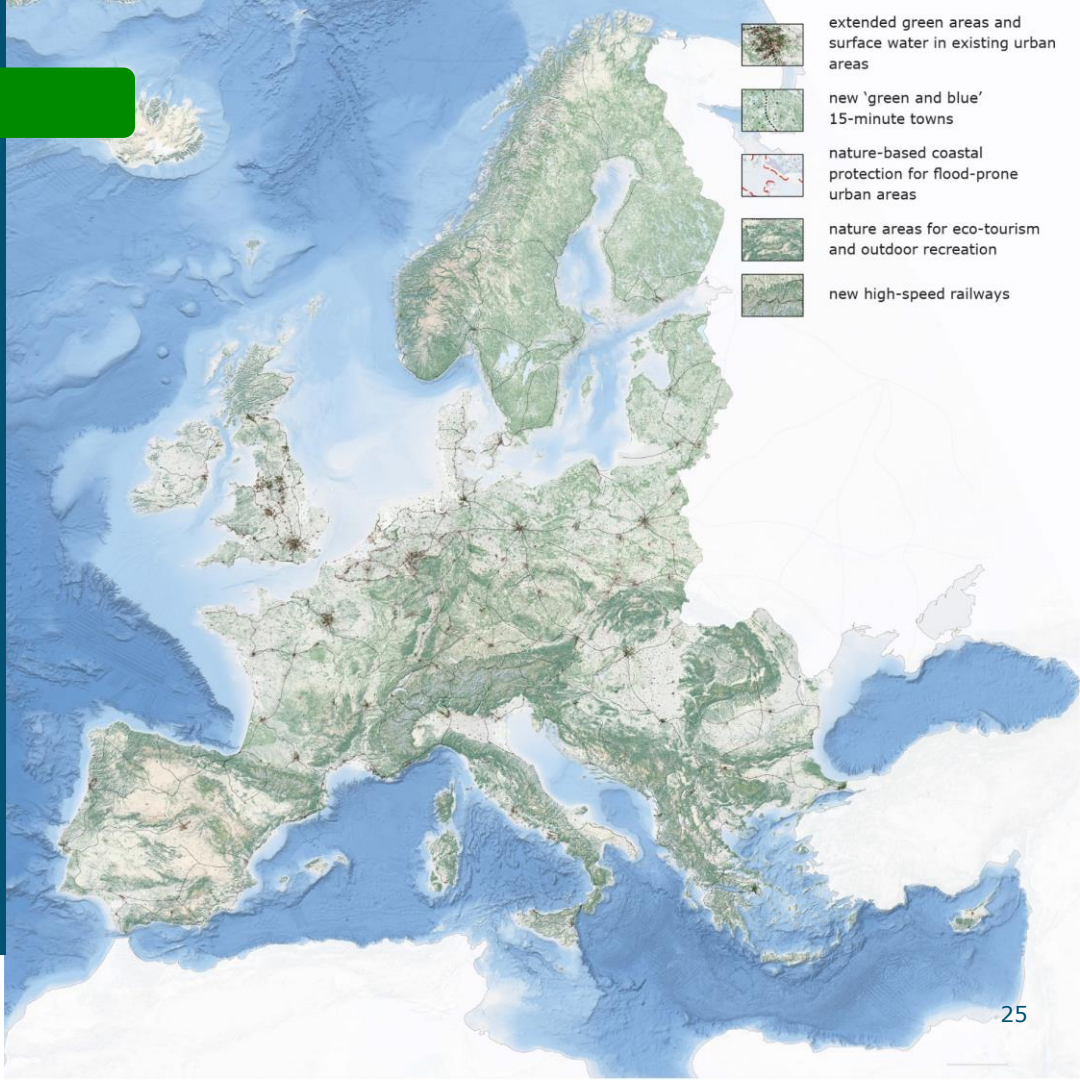
## Regenerative food & primary production systems

- Healthy soils provide the basis for producing healthy – mainly plant-based – food using agro-ecological principles
- Farmers as stewards of European biodiverse landscapes
- Food production at sea & saline agriculture in coastal areas



## Green and liveable cities

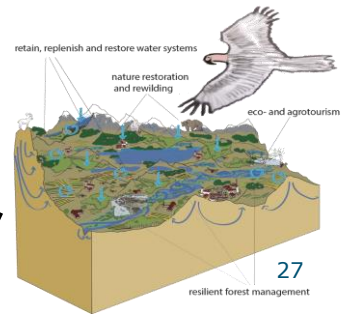
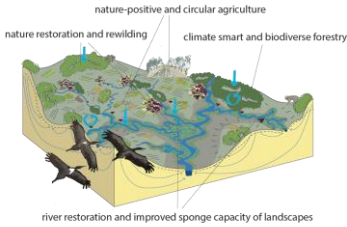
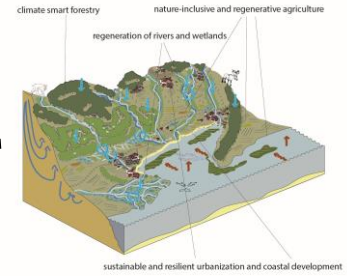
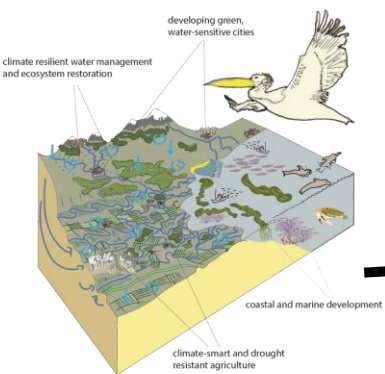
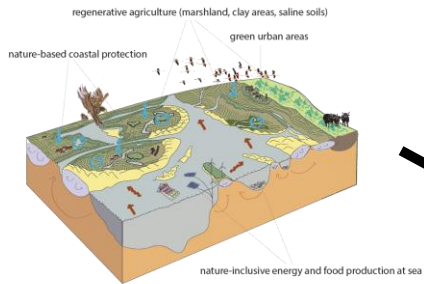
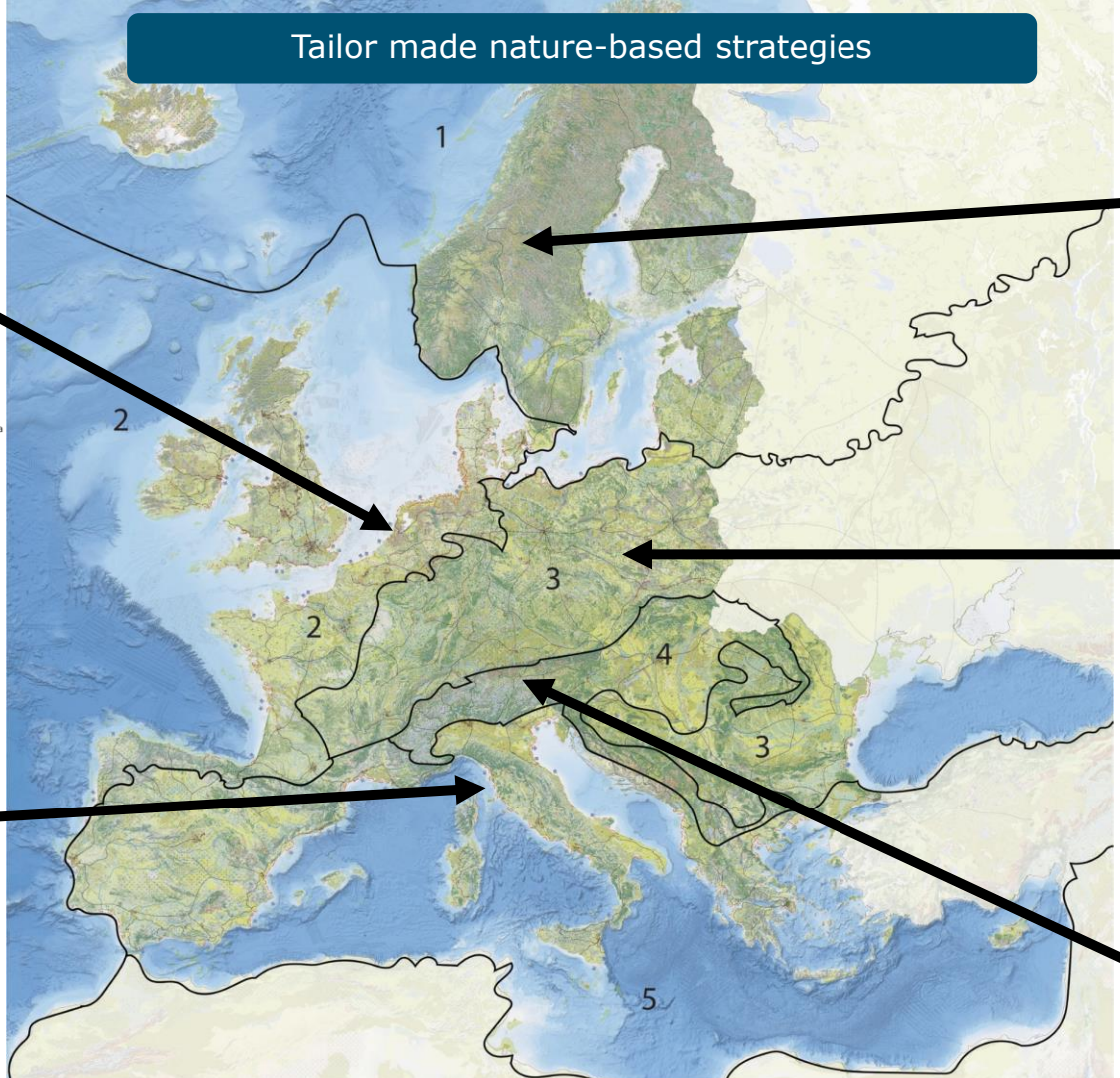
- Walkable 15-minute cities for people
- Green and healthy cities with green public spaces, urban forestry and open water
- High speed rail network connecting European cities



# Europe in 2120



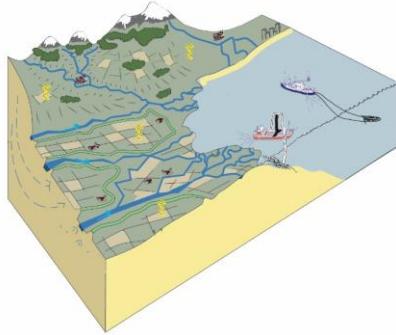
# Tailor made nature-based strategies





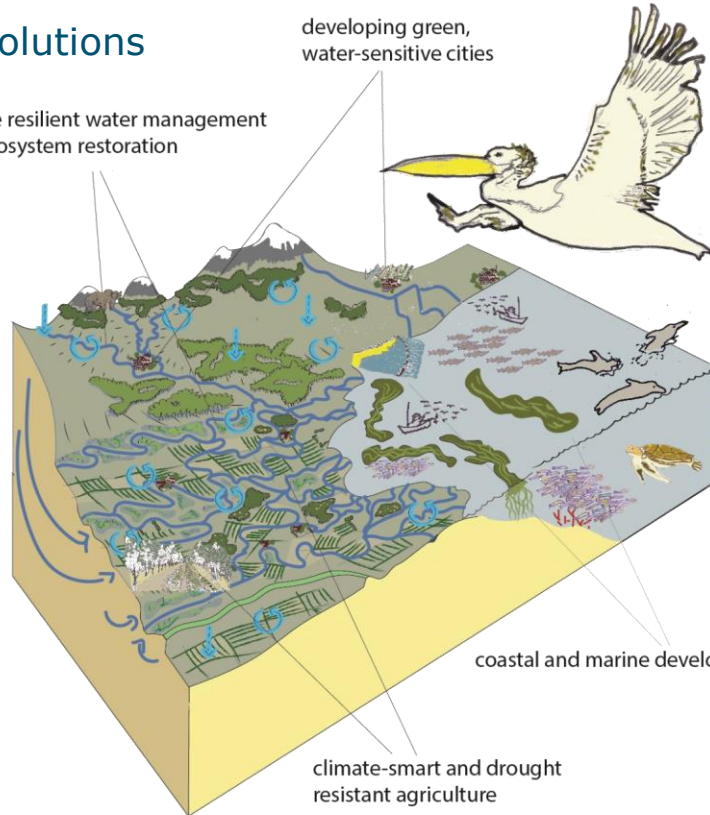
# South: the Mediterranean region

## Challenges & nature-based solutions



climate resilient water management  
and ecosystem restoration

developing green,  
water-sensitive cities



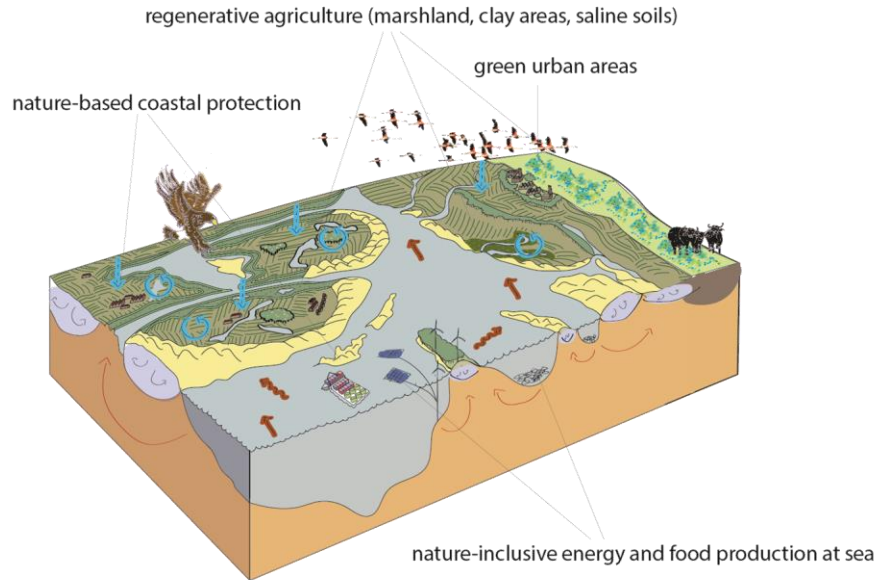
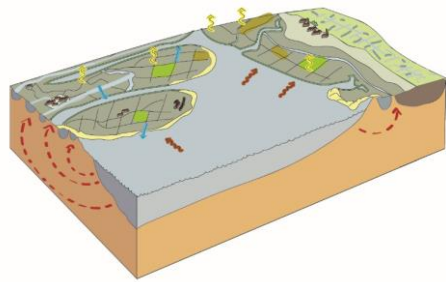
coastal and marine development

climate-smart and drought  
resistant agriculture



# West: the Atlantic region

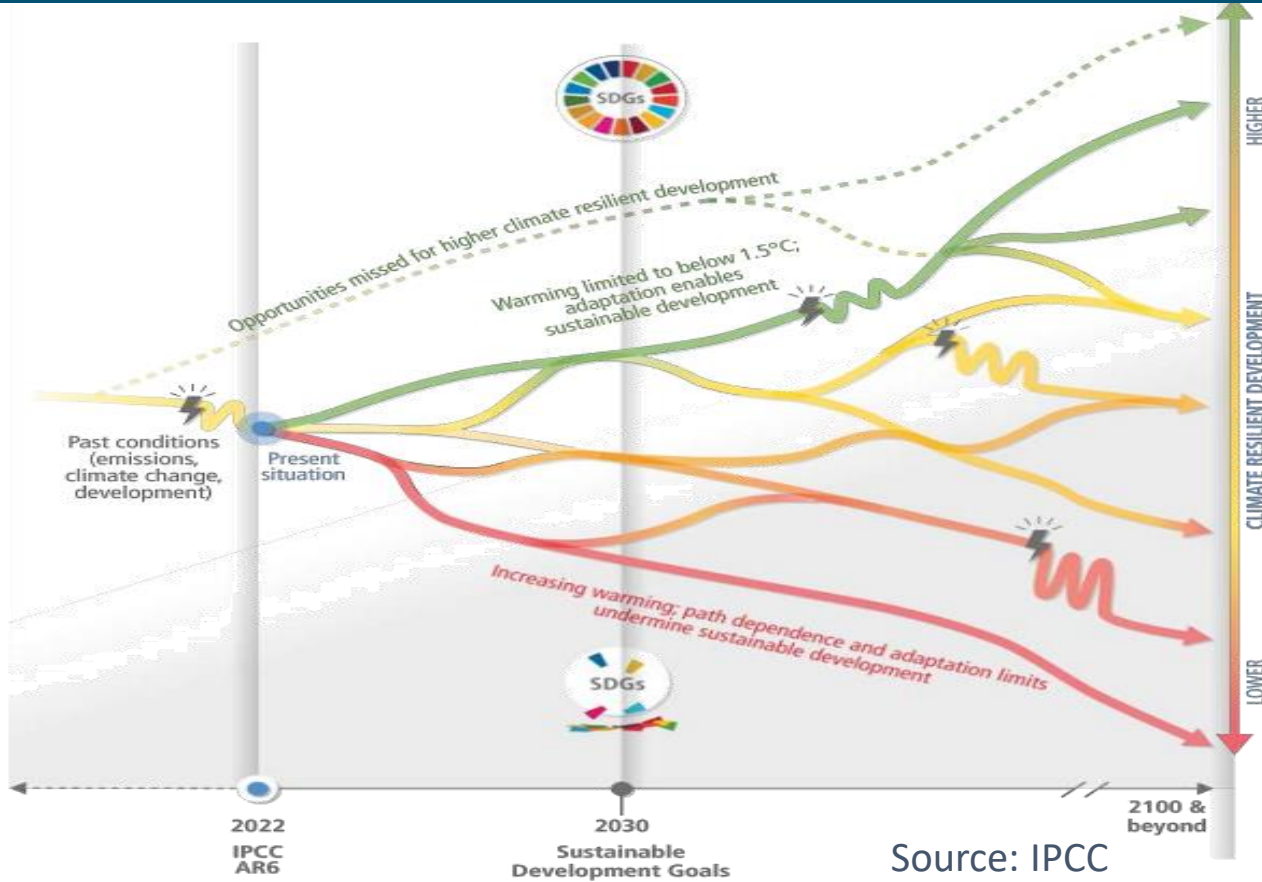
## Challenges & nature-based solutions



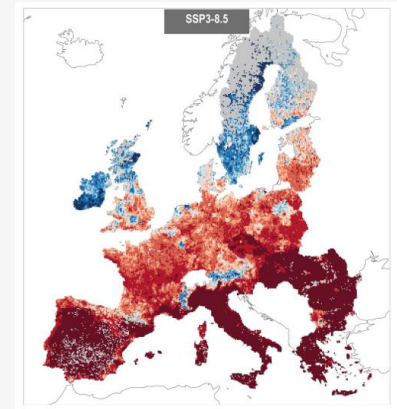
# Accelerating a nature-based transition



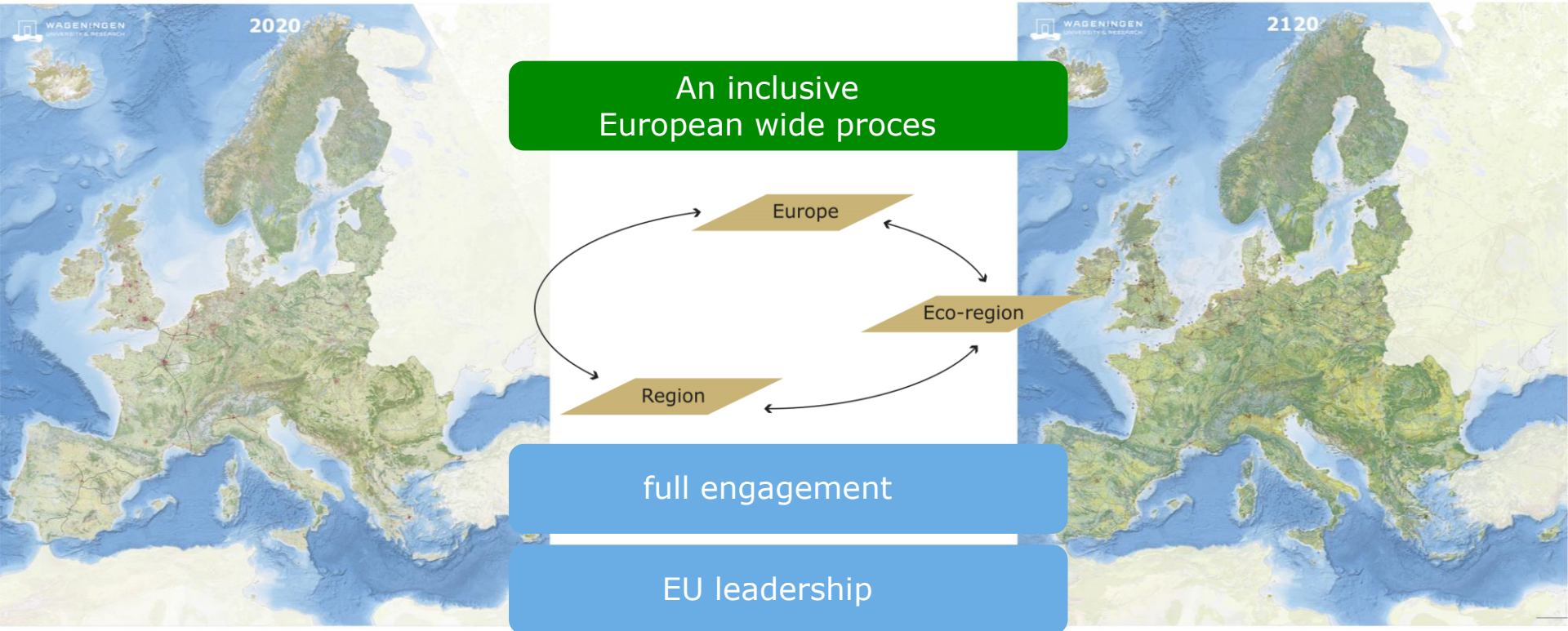
# The future starts today



Source: IPCC



# Co-designing nature-based futures together



Thanks to all students  
and experts that contributed



# Imagining a nature-based Europe in 2120

Mansholt lecture 2023

## Thanks for your attention

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Download:

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