




Land Monitoring

CLMS at the service of the European Green Deal

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Copernicus Land, Marine and Coastal WS (NSO)
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Introduction – CLMS policy context 2019-2024

A Union that strives for more

My agenda for Europe

By candidate for President of the European Commission
Ursula von der Leyen



POLITICAL GUIDELINES FOR THE NEXT EUROPEAN COMMISSION 2019-2024




The European Green Deal



The infographic shows the European Green Deal at the center, surrounded by eight pillars: Increasing the EU's Climate ambition for 2030 and 2050; Supplying clean, affordable and secure energy; Mobilising industry for a clean and circular economy; Building and renovating in an energy and resource efficient way; Financing the transition; The EU as a global leader; A zero pollution ambition for a toxic-free environment; Preserving and restoring ecosystems and biodiversity; From 'Farm to Fork': a fair, healthy and environmentally friendly food system; Accelerating the shift to sustainable and smart mobility; Leave no one behind (Just Transition); A European Climate Pact.

Source: COM(2019)640 final

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Outline presentation

A Union that strives for more


My agenda for Europe

By candidate for President of the European Commission

Ursula von der Leyen






POLITICAL GUIDELINES FOR THE NEXT EUROPEAN COMMISSION 2019-2024



Focus on 5 CLMS use cases:

- 🌍 **Climate ambition 2030 and 2050**
- 🌍 **Preserving and protecting ecosystems and biodiversity**
- 🌍 **'Farm to fork' strategy**
- 🌍 **Zero pollution strategy**
- 🌍 **Efficient building and renovating**

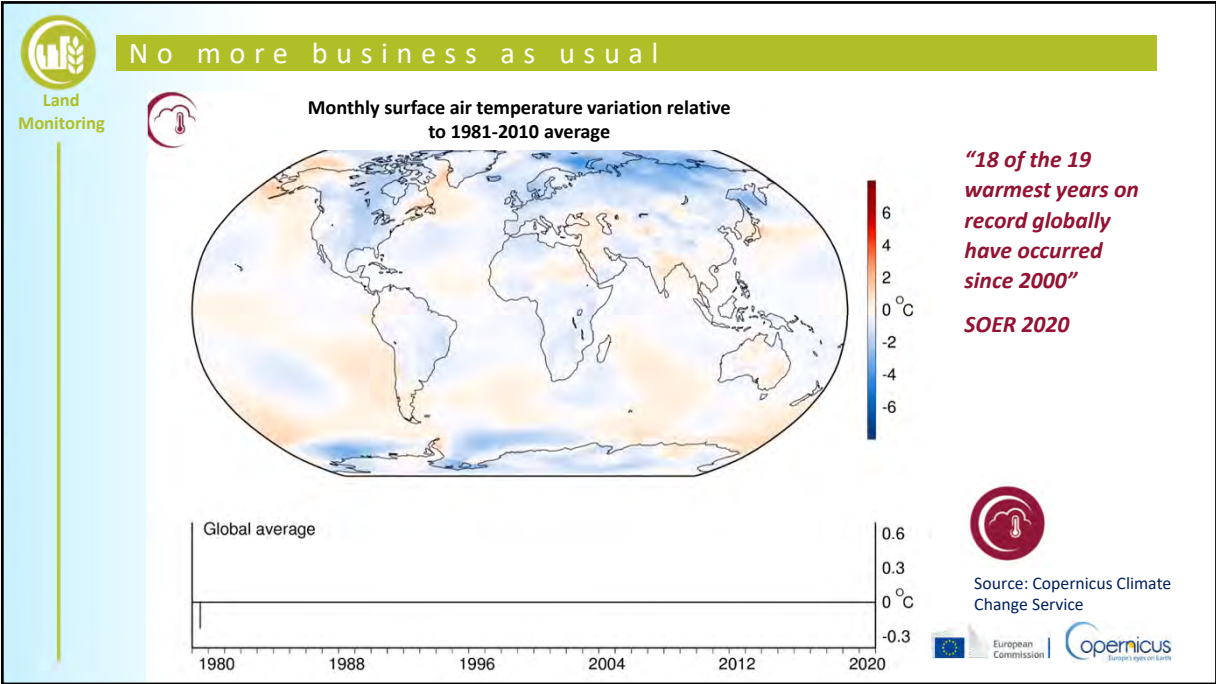
  

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Climate policy

"Climate ambition 2030 and 2050"

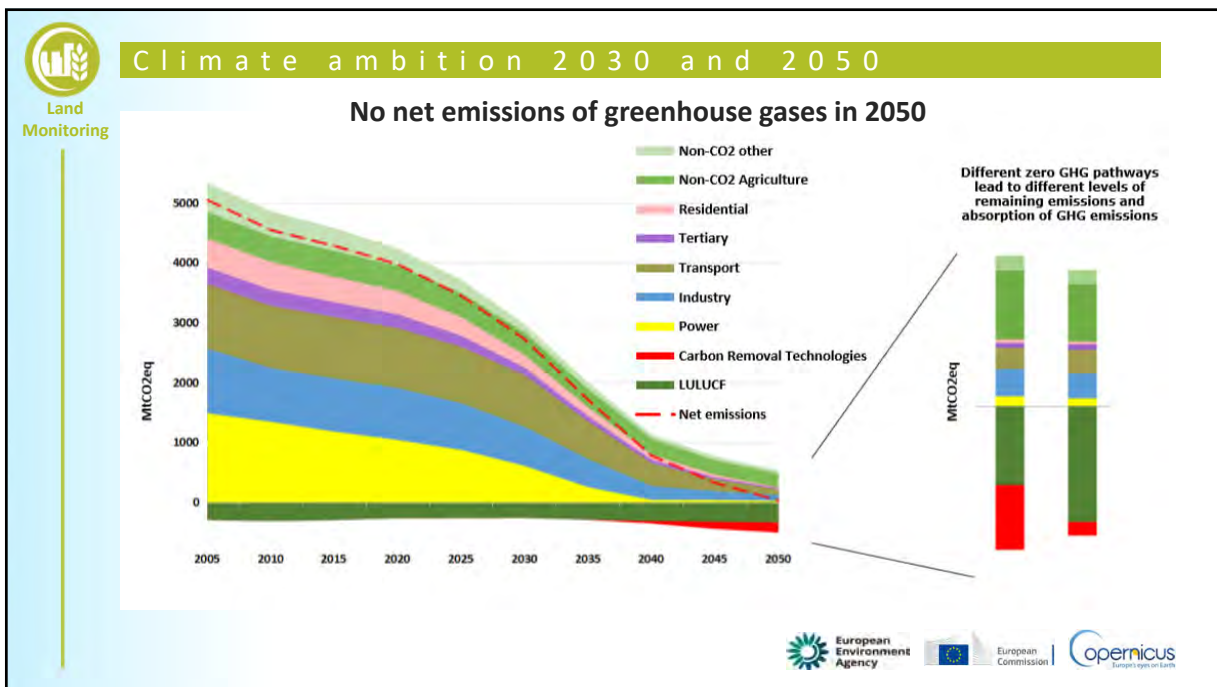
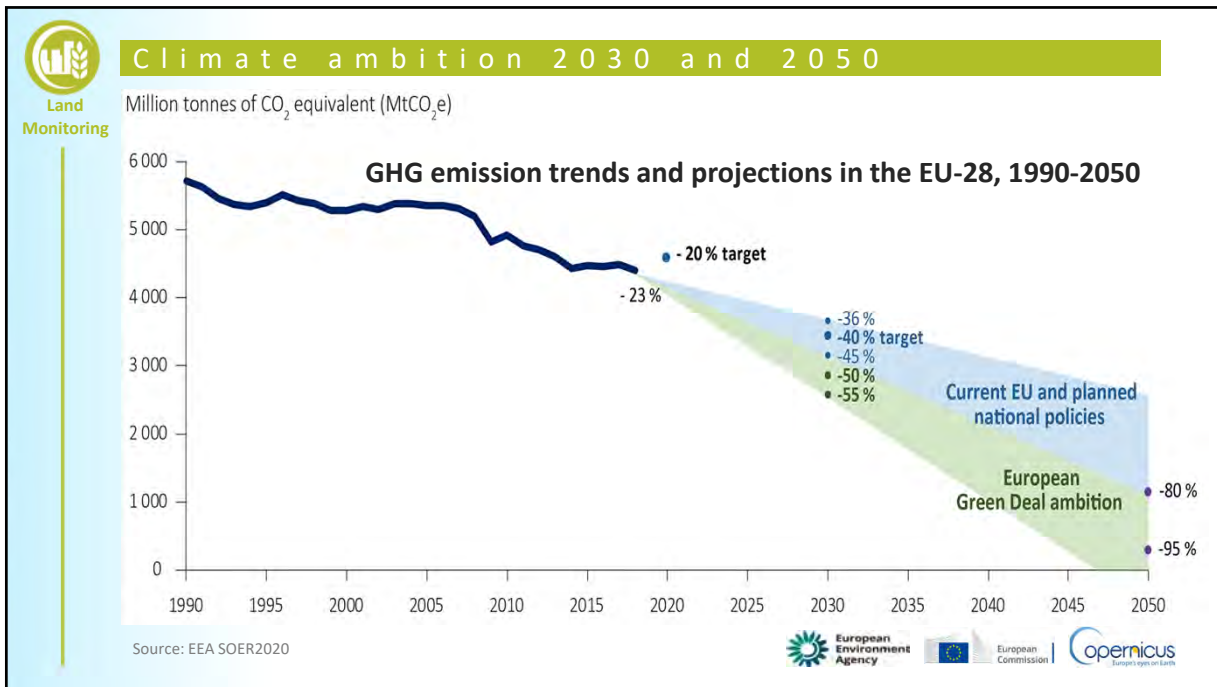


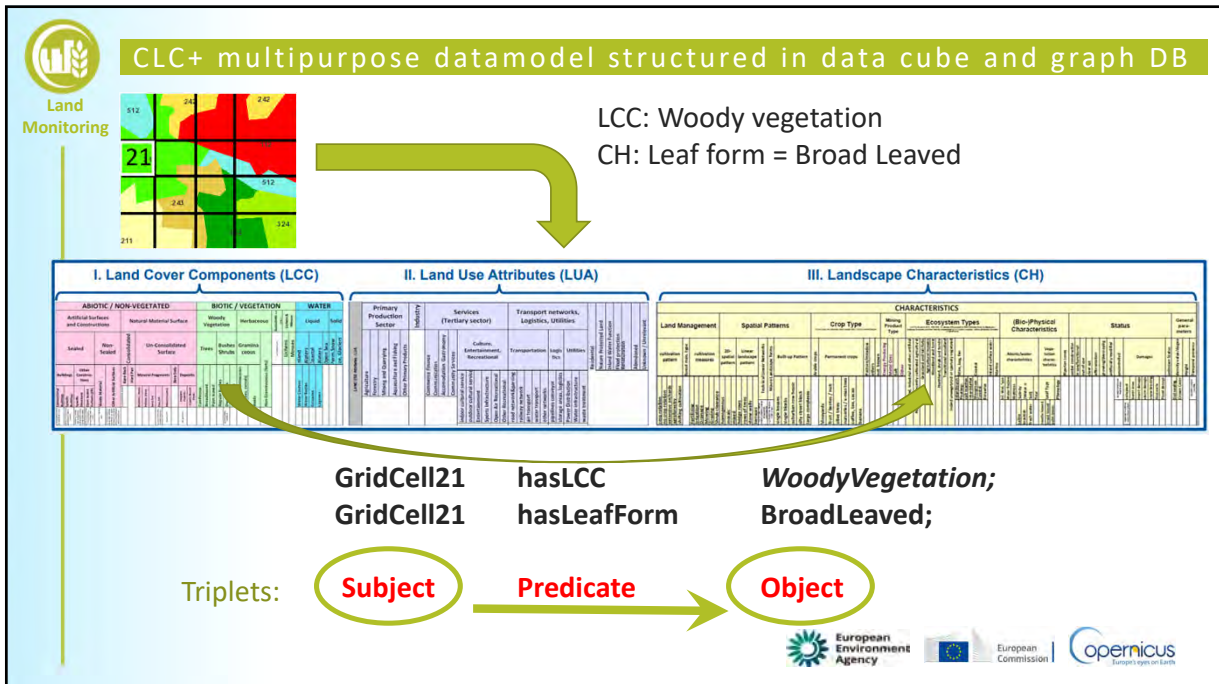
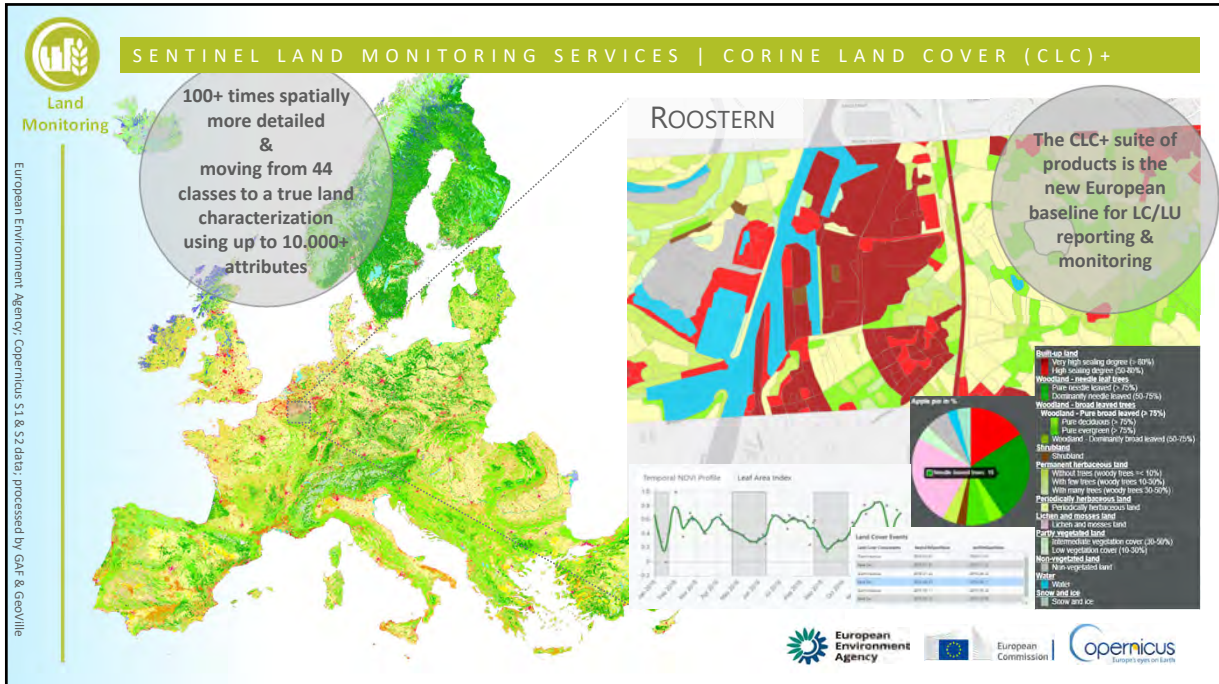
Climate ambition 2030 and 2050

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- Achieve climate neutrality by 2050
- “Current policies will only reduce greenhouse gas emissions by 61 %”

• LULUCF Regulation: inclusion of greenhouse gas emissions and removals from land use, land use change and forestry in the 2030 climate and energy framework.



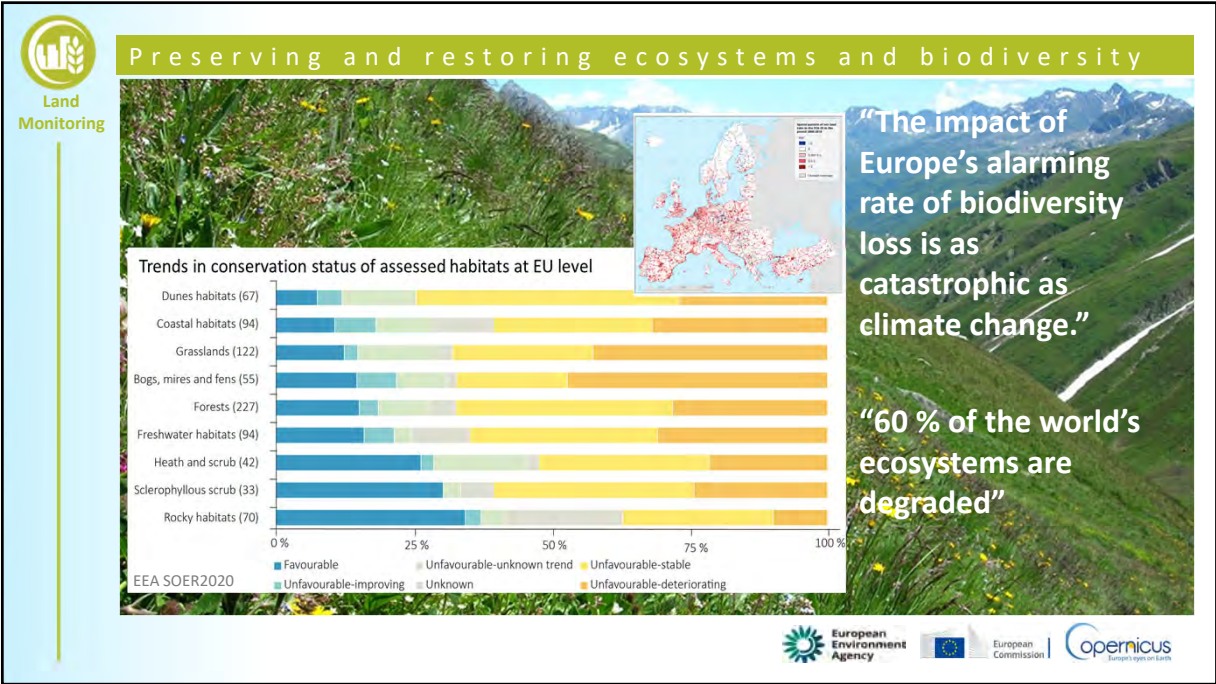




Biodiversity policy
"Preserving and protecting ecosystems and biodiversity"

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Preserving and restoring ecosystems and biodiversity

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"The impact of Europe's alarming rate of biodiversity loss is as catastrophic as climate change."

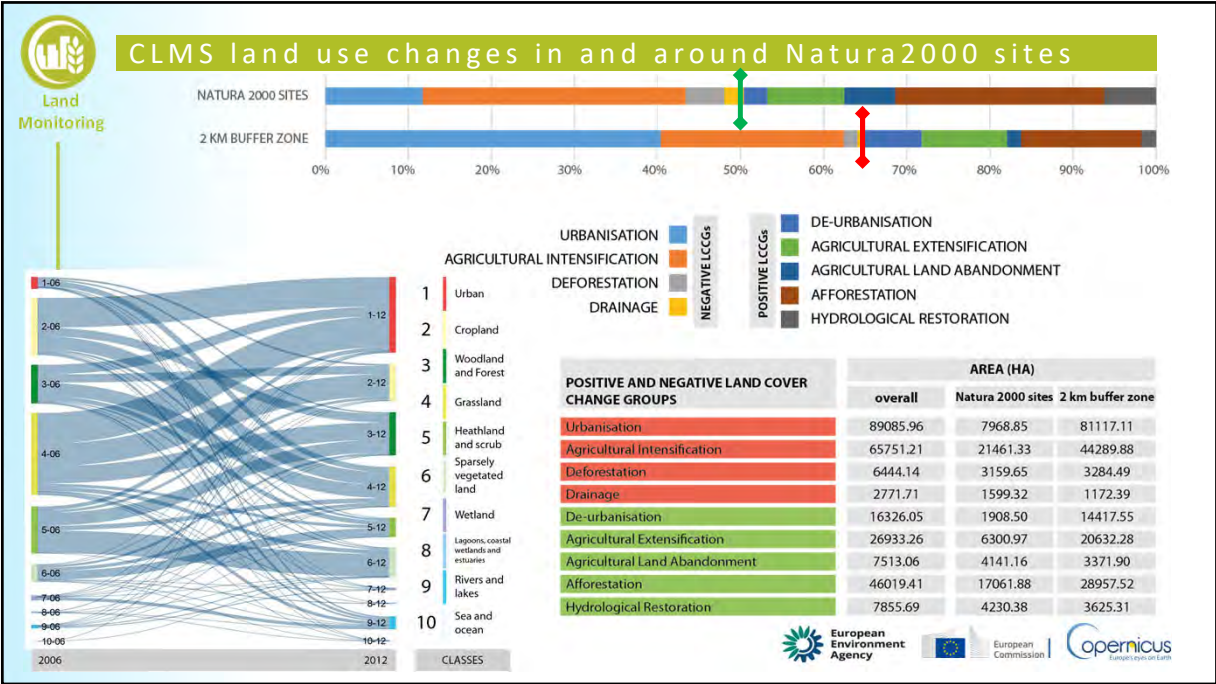
"60 % of the world's ecosystems are degraded"

Trends in conservation status of assessed habitats at EU level

Habitat Type (Number of Habitats)	Favourable	Unfavourable-improving	Unfavourable-unknown trend	Unknown	Unfavourable-stable	Unfavourable-deteriorating
Dunes habitats (67)	~10%	~5%	~15%	~5%	~25%	~40%
Coastal habitats (94)	~10%	~5%	~15%	~5%	~25%	~40%
Grasslands (122)	~10%	~5%	~15%	~5%	~25%	~40%
Bogs, mires and fens (55)	~10%	~5%	~15%	~5%	~25%	~40%
Forests (227)	~10%	~5%	~15%	~5%	~25%	~40%
Freshwater habitats (94)	~10%	~5%	~15%	~5%	~25%	~40%
Heath and scrub (42)	~10%	~5%	~15%	~5%	~25%	~40%
Sclerophyllous scrub (33)	~10%	~5%	~15%	~5%	~25%	~40%
Rocky habitats (70)	~10%	~5%	~15%	~5%	~25%	~40%

EEA SOER2020

European Environment Agency | European Commission | Copernicus

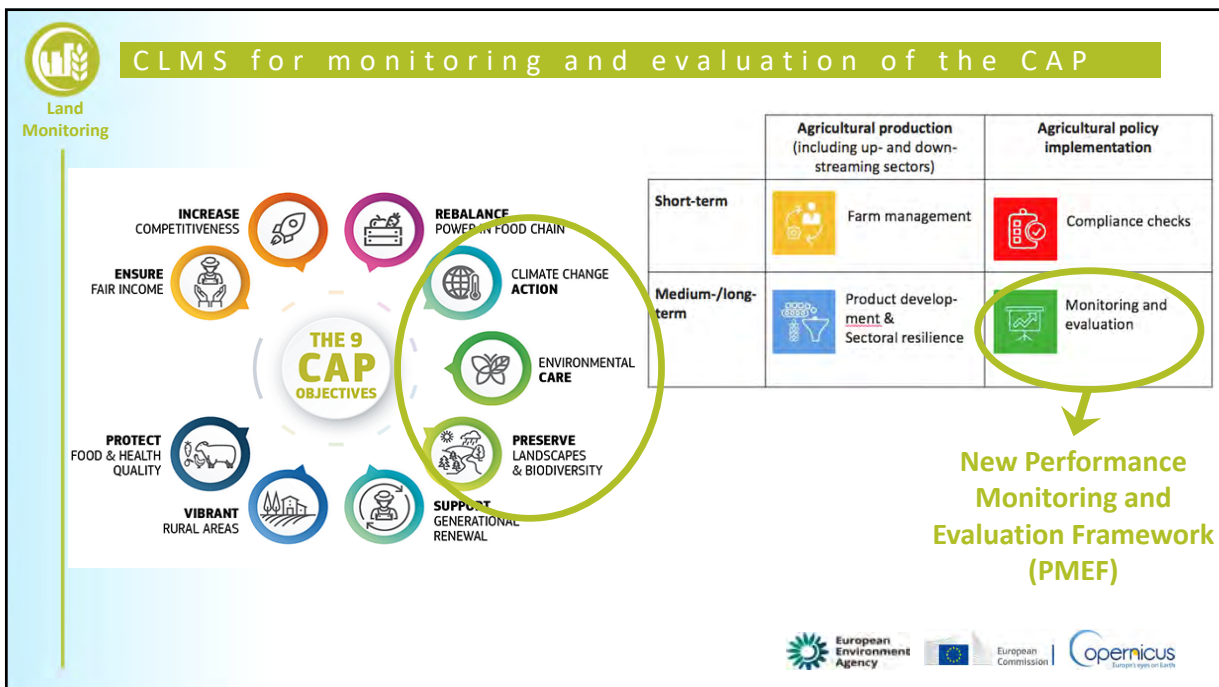
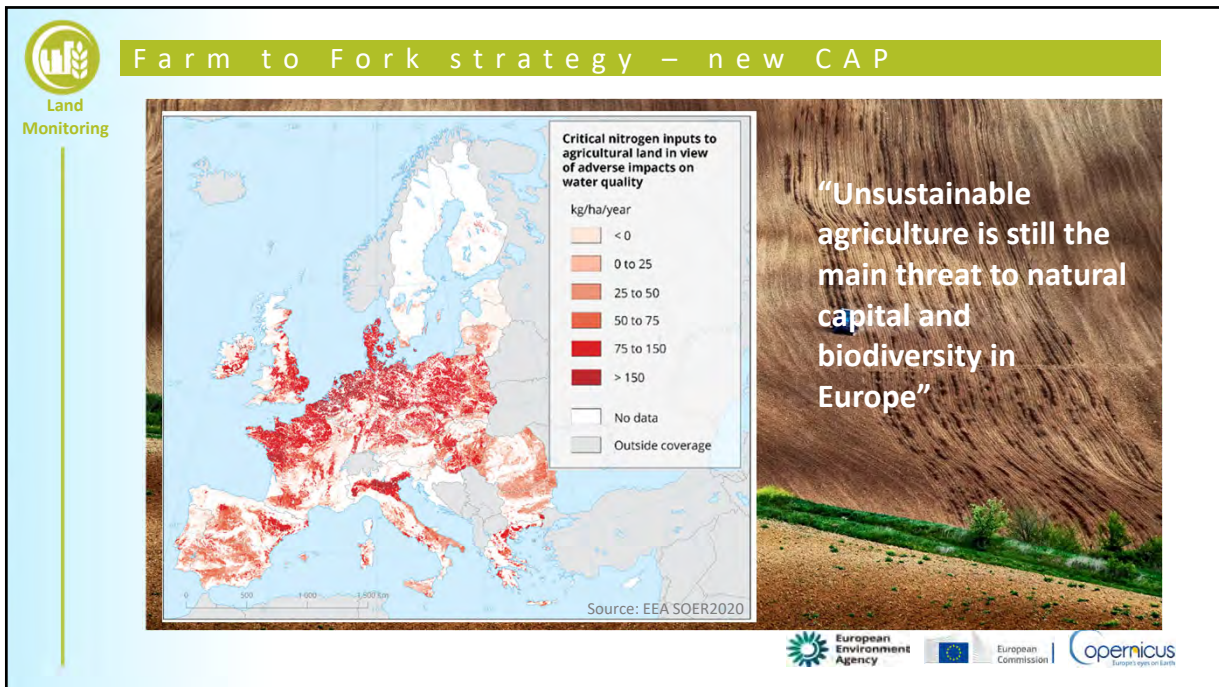


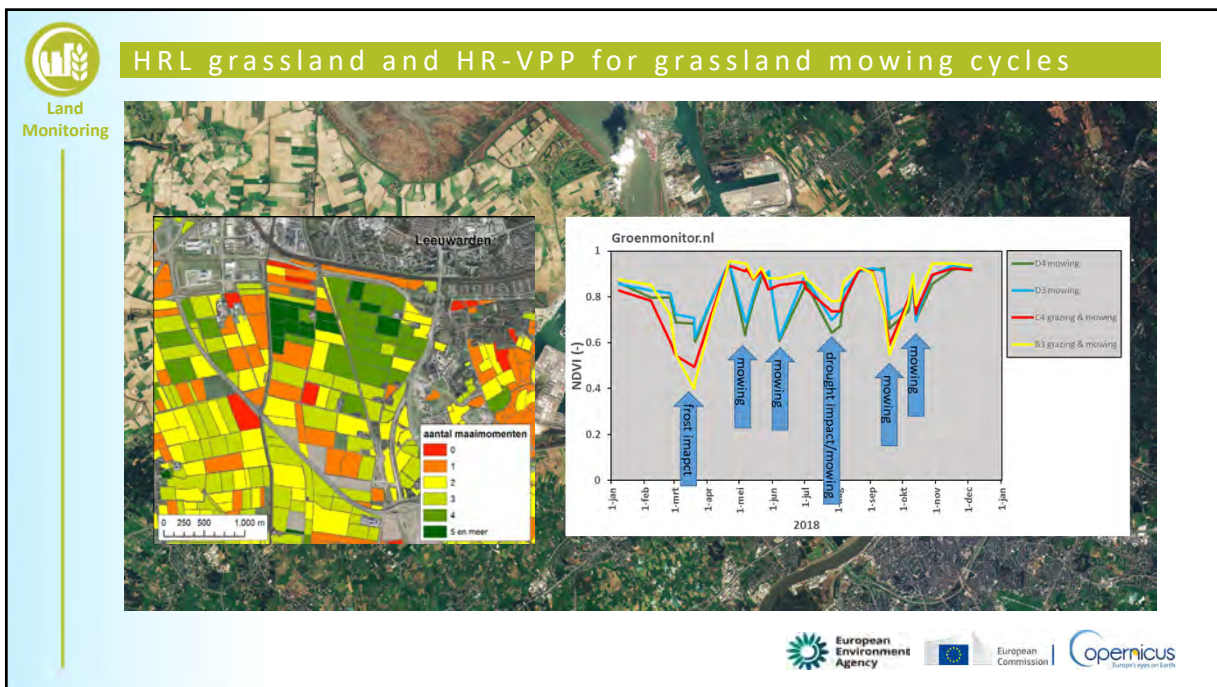
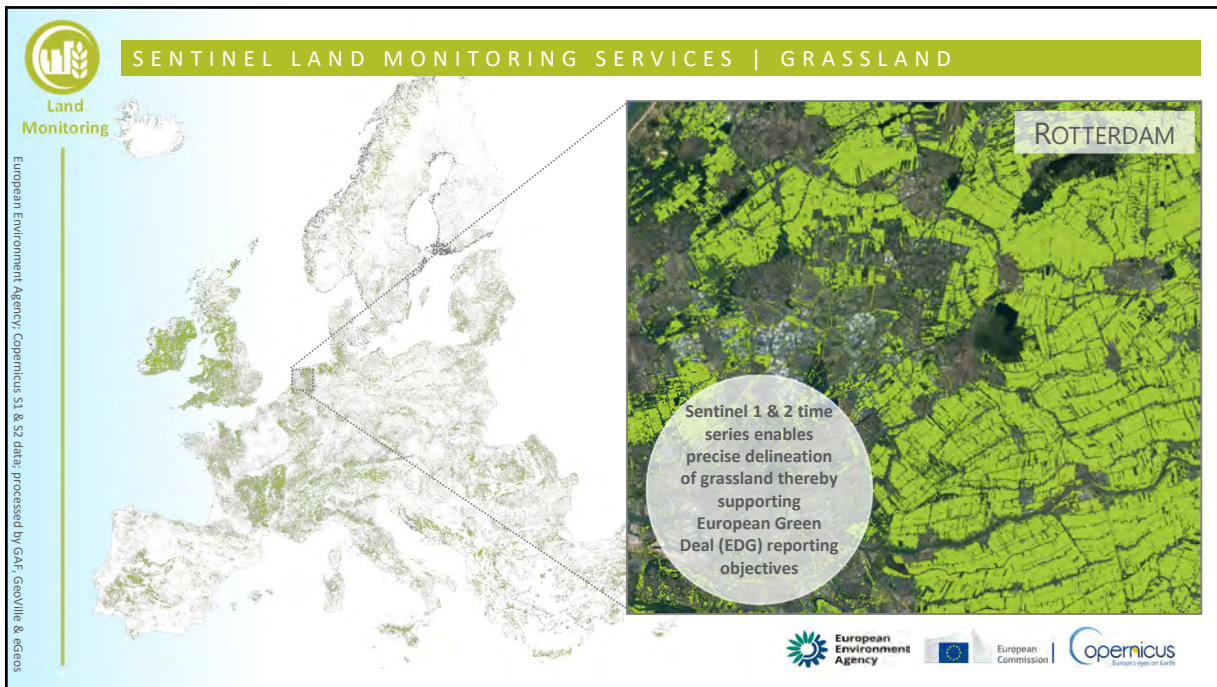
Agriculture policy

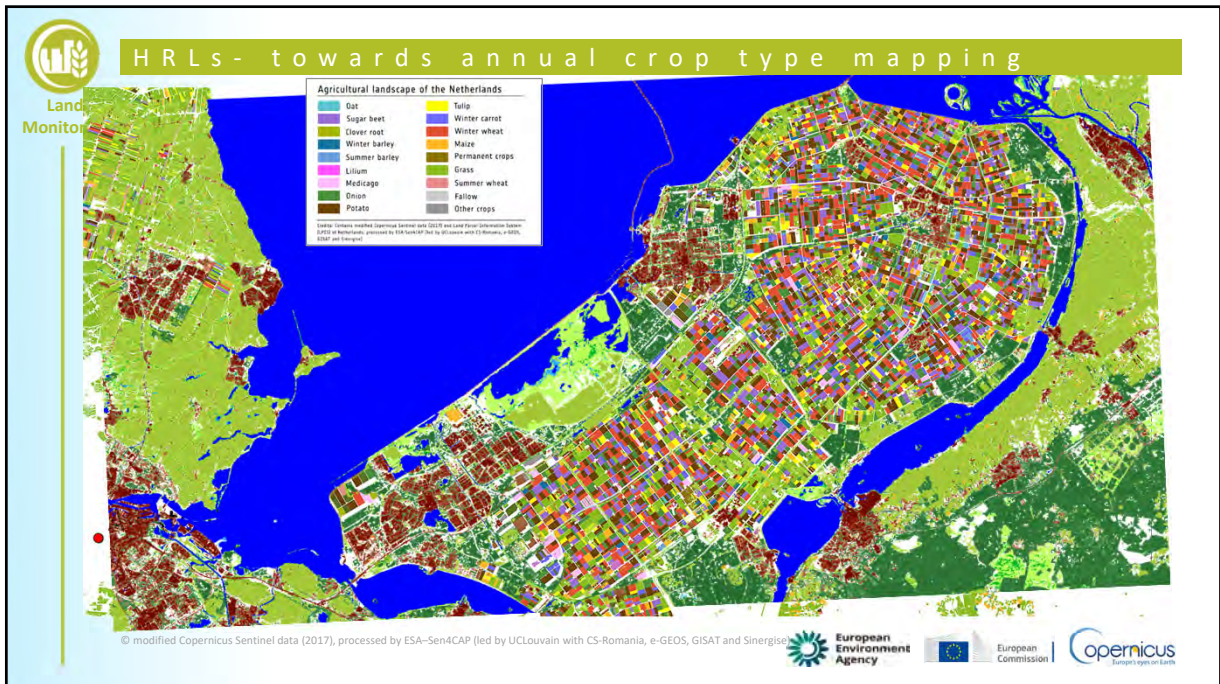
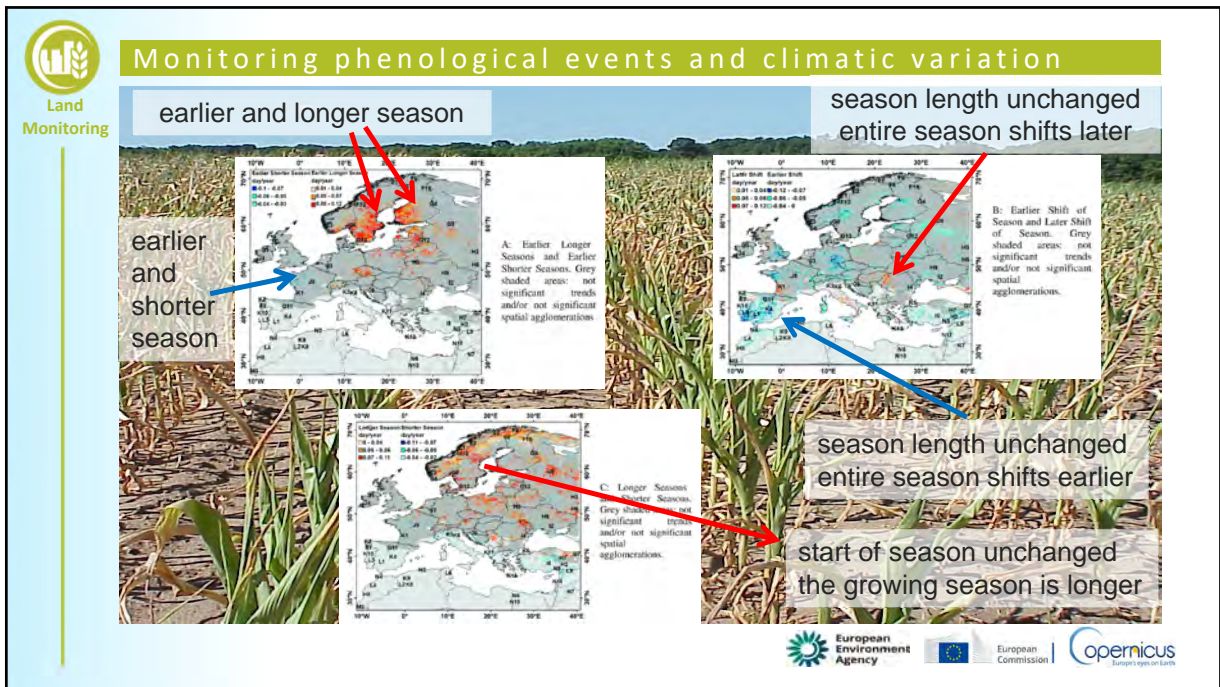
Food and nutrition security & CAP
"Farm to fork strategy"

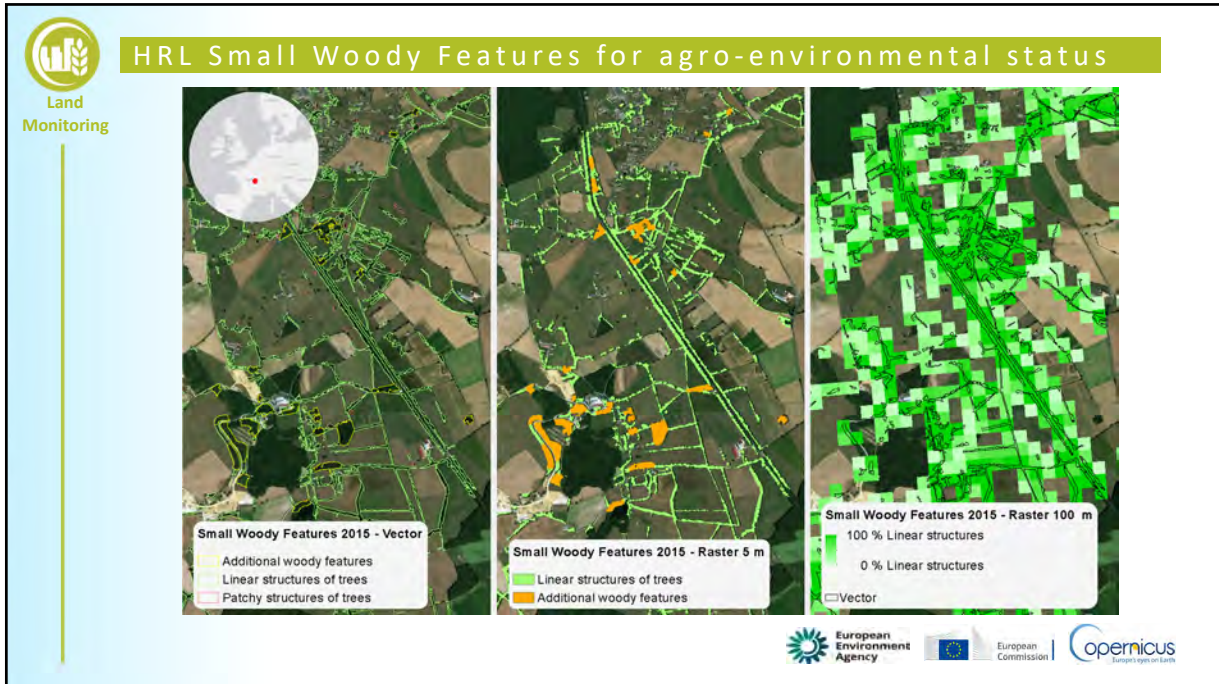
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Water and soil policy

"Zero pollution strategy"

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Zero Pollution strategy - WFD

Support Water Framework Directive

- Pollution
- Abstraction
- Hydrological pressures and physical changes

Source: EEA SOER2020

European Environment Agency | European Commission | Copernicus

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SENTINEL LAND MONITORING SERVICES | WATER & WETNESS

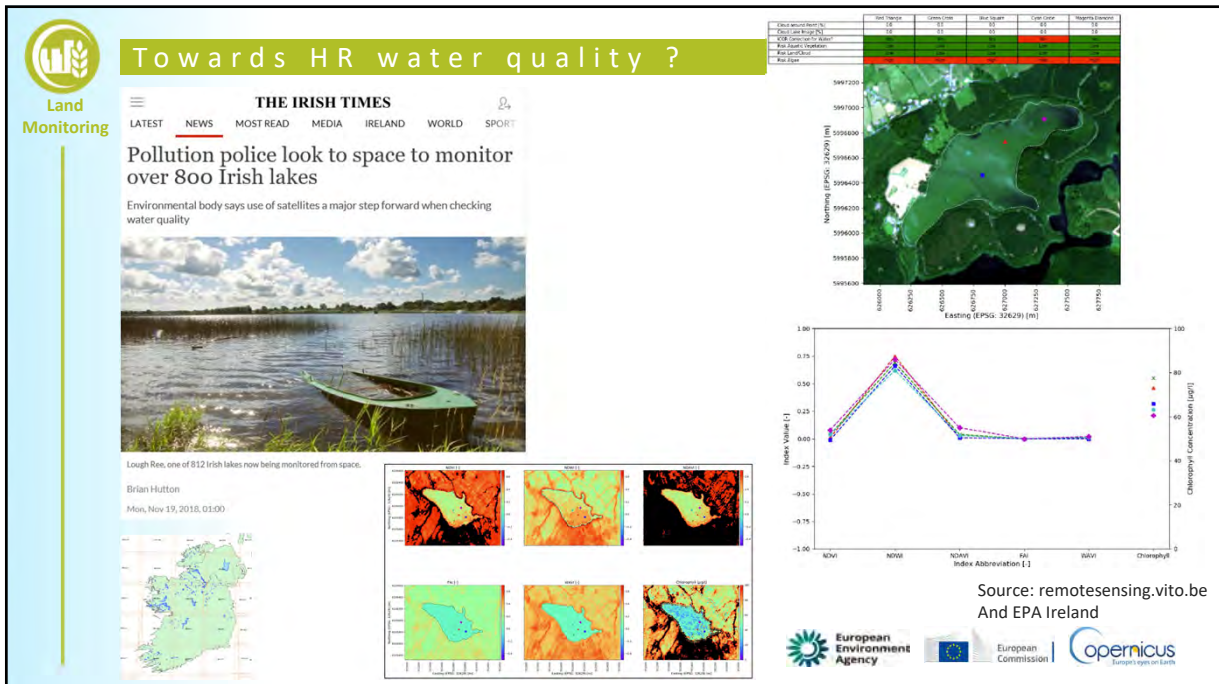
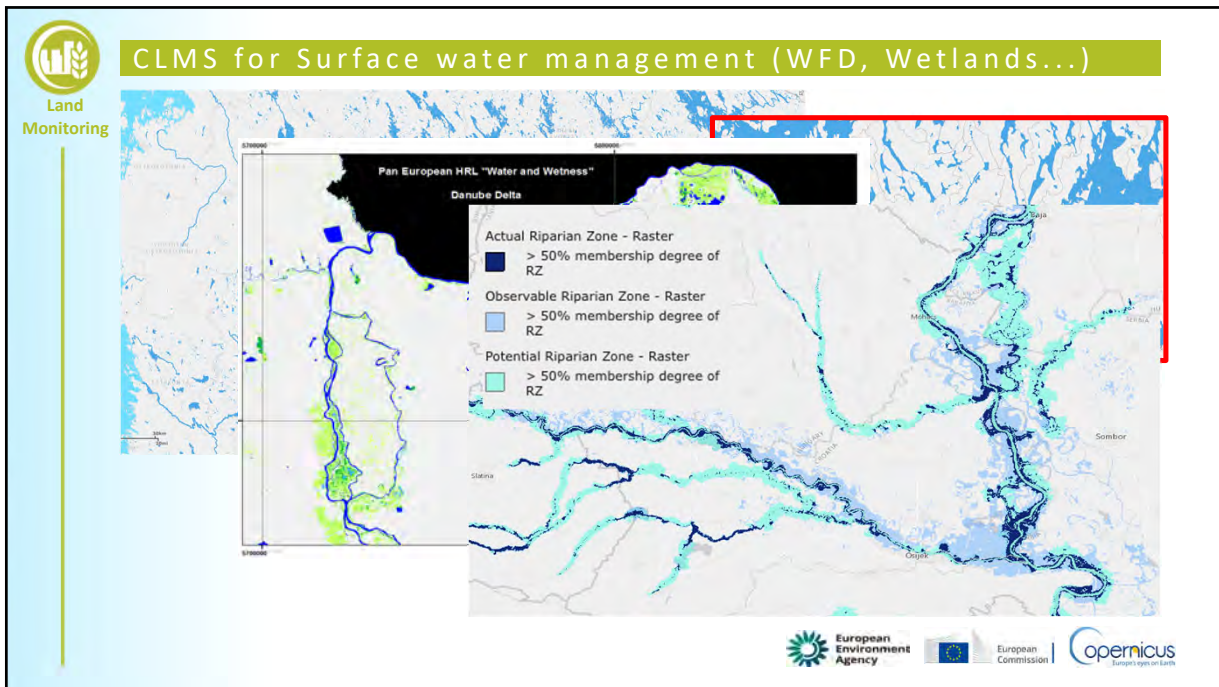
Sentinel 1 & 2 provide unprecedented observation capacity for wetland protection and Water Framework Directive reporting obligations

Nîmes

Montpellier

European Environment Agency | Copernicus S1 & S2 data; processed by GeoVillie & VITO

European Environment Agency | European Commission | Copernicus






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Urban and regional policy

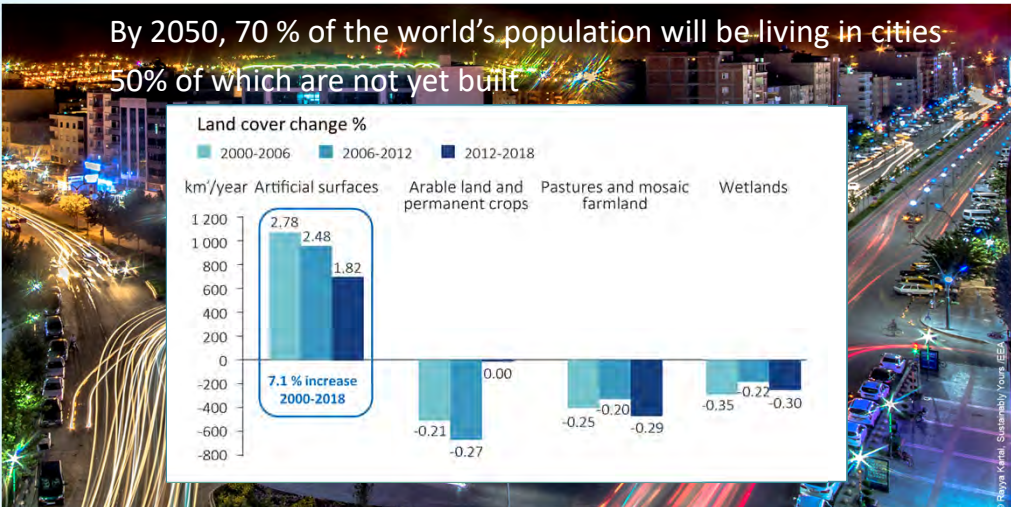
“Efficient building and renovating”





Efficient building and renovating

By 2050, 70 % of the world’s population will be living in cities
50% of which are not yet built






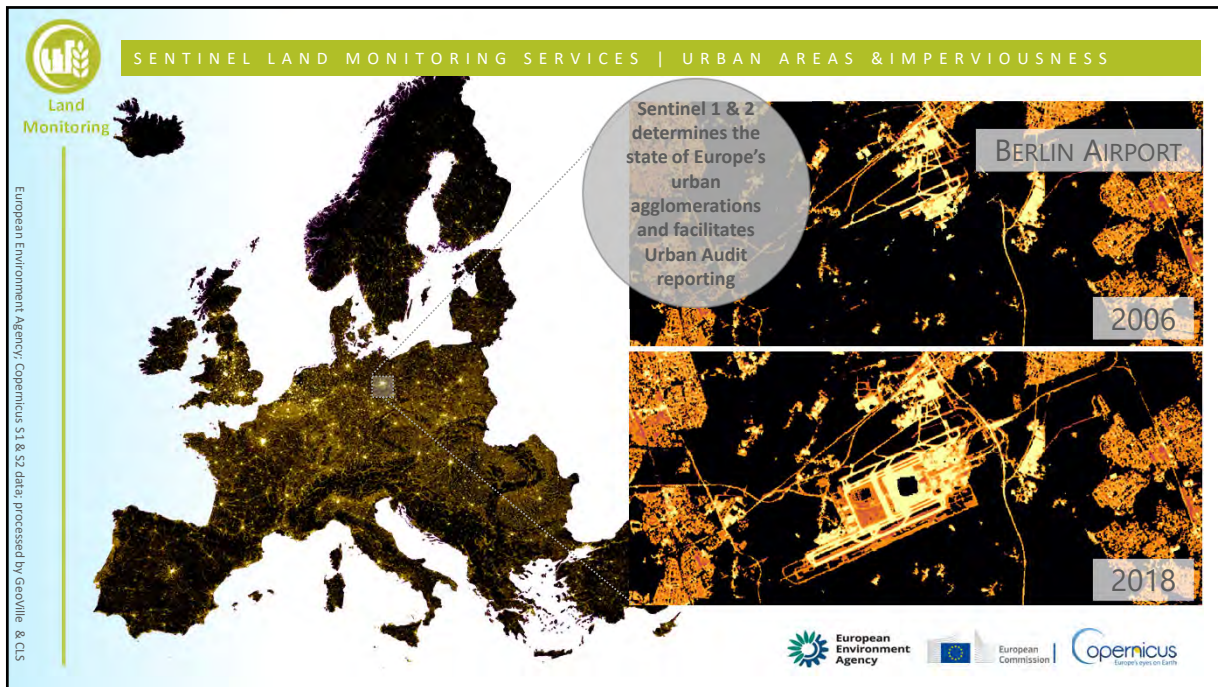
Land cover change %

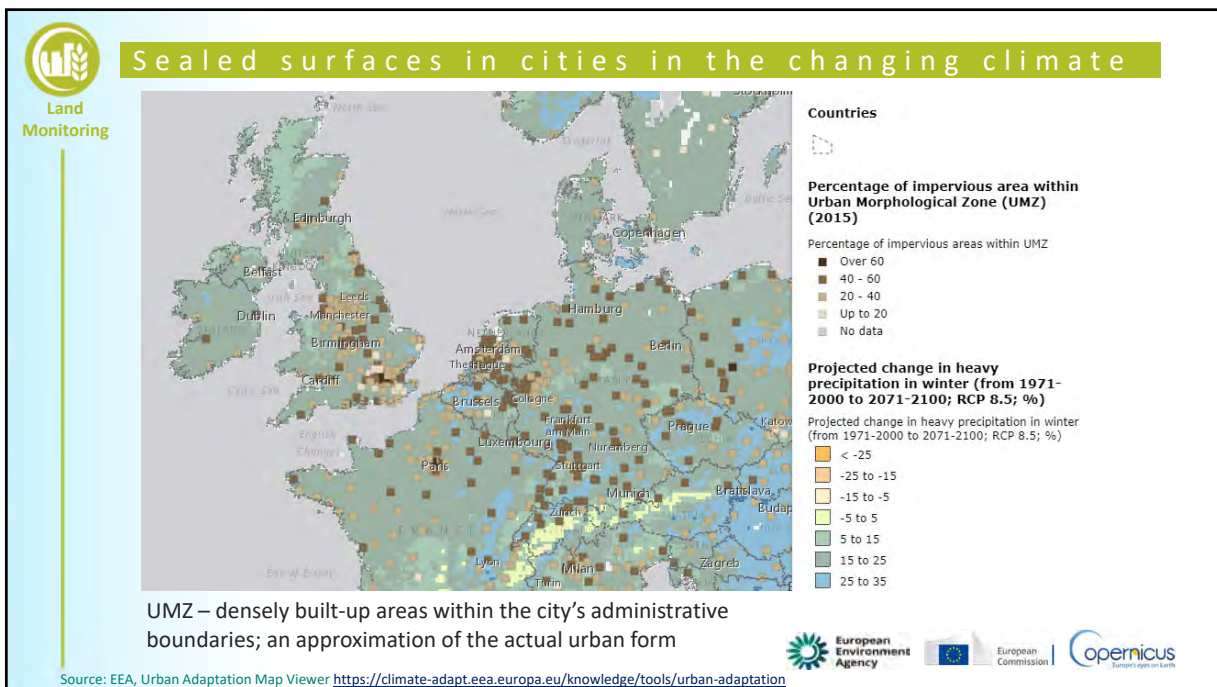
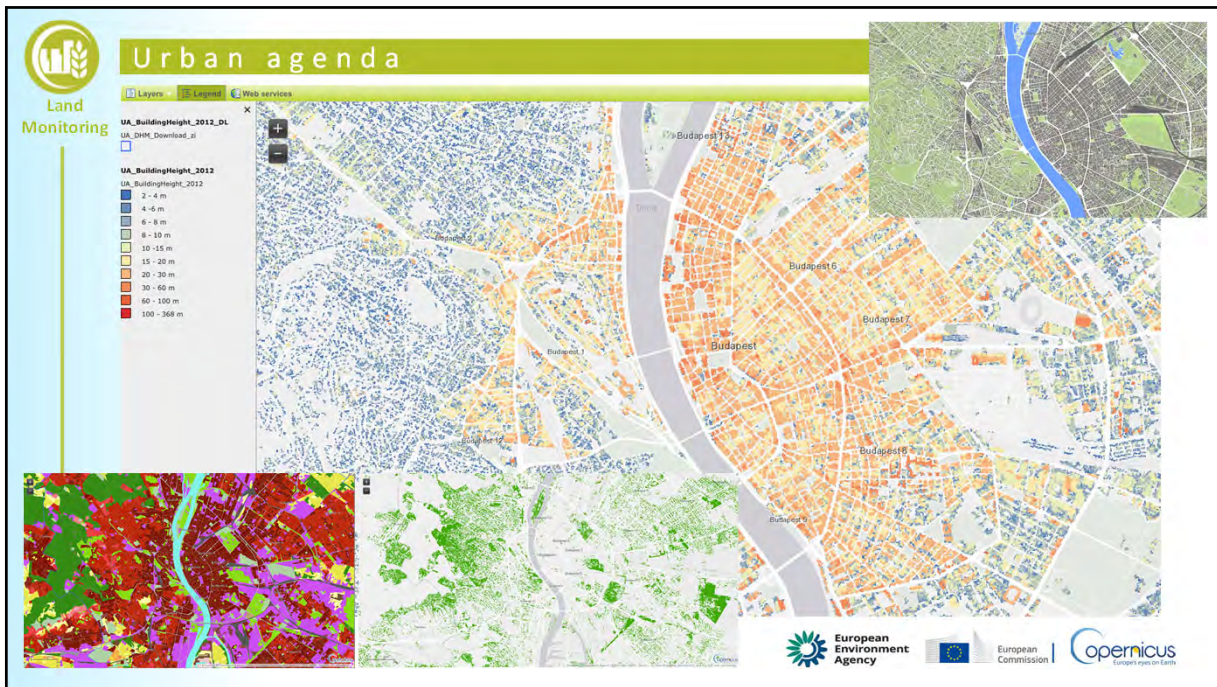
km/year Artificial surfaces Arable land and permanent crops Pastures and mosaic farmland Wetlands

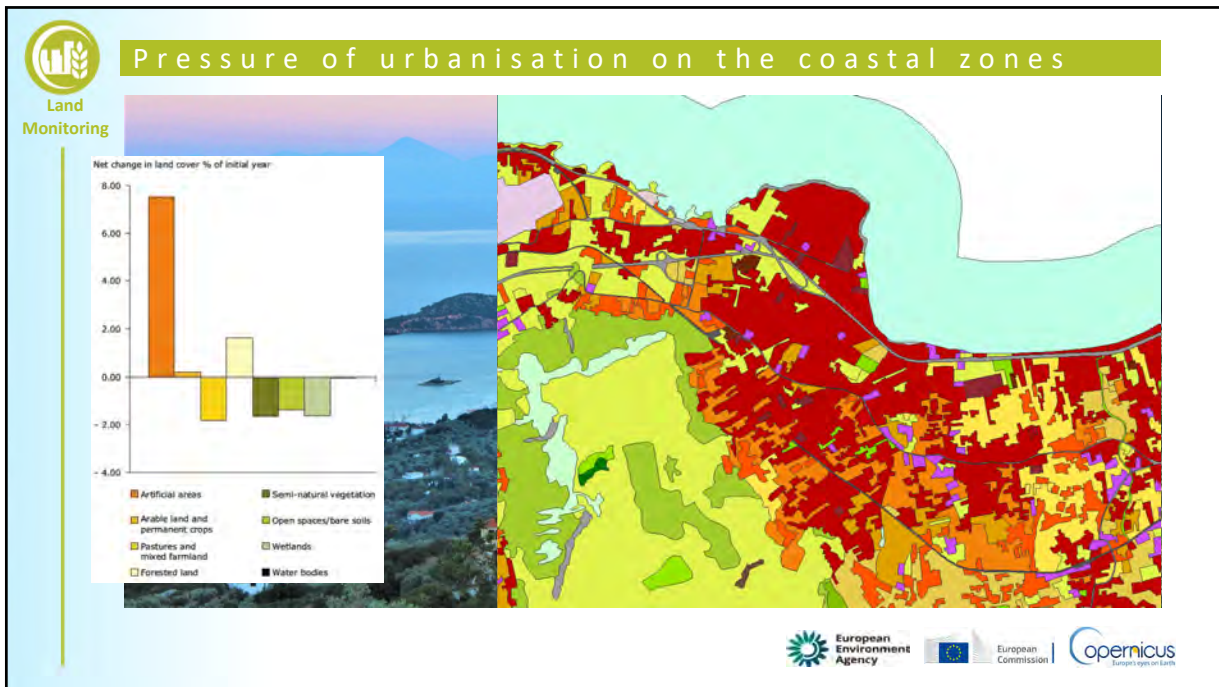
Period	Artificial surfaces	Arable land and permanent crops	Pastures and mosaic farmland	Wetlands
2000-2006	2.78	-0.21	-0.25	-0.35
2006-2012	2.48	-0.27	-0.20	-0.22
2012-2018	1.82	0.00	-0.29	-0.30

7.1 % increase 2000-2018








Conclusion

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Use of Copernicus for monitoring of progress

European Green Deal Priority	EEA-EIONET Monitoring & Reporting	Use of Copernicus key core service
Protect, conserve and enhance EU's natural capital	Natura2000, MAES, Forests, Marine MFS, land degradation	CLMS CMEMS
Protect health and well-being of citizens from environment-related risks	Air emissions, Water emissions, Urban Waste Water, Water quality	CAMS CLMS
No net emissions greenhouse gases in 2050	Land Use, Land Use Change and Forestry, GHG emission reporting	CLMS C3S
Designing a fair, healthy and environmentally-friendly food system	Sustainability assessments	CLMS C3S
Environmental and climate legislation enforcement	Evaluation of MS reporting under directives (GHG inventories, NECD, WFD, MSFD, etc)	CEMS, CLMS, CAMS, CMEMS, C3S
A sustainable blue economy (incl. decarbonisation, maritime spatial planning, etc)	Marine renewable energy Integrated coastal zone management	CMEMS CLMS

