European Climate Risk Assessment for businesses: preparing for a resilient and competitive business in 2025

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Organised by

Institute for European Environmental Policy

With the support and contribution

Environmental Defense Fund

SWECO

From Risk to Resilience: Adapting Real Estate to Climate Change

Jart Ligterink & Pieter Lootens

Damage to the built environment

- The average **annual weather and climate related damage** in the whole of the EU was around **44.5 billion** for the period 2020-2023. An increase of 53% from 2009 to 2023.

- Real estate portfolios are exposed to these climate hazards, and this is increasingly being considered by real estate investors and funds

Driving forces for the real estate sector

Stricter laws and regulations

EU

National

Local

Pressure from stakeholders

Employees

Investors

Tenants

Public Opinion

Mitigation risks

Physical risks as a consequence of climate change

Transition risks

Stranded Assets

Financial implications

Value of assets

Marketability

Green financing

The landscape of climate risk assessments for real estate

→ Large heterogeneity in methodology and granularity (SaaS vs detailed consultancy)

→ There is a need to move away from **'black box'** climate risk assessments that deliver outcomes that cannot be understood or benchmarked.

→ **Insight 1**: Transparency and open access are key elements for success and uptake in the market

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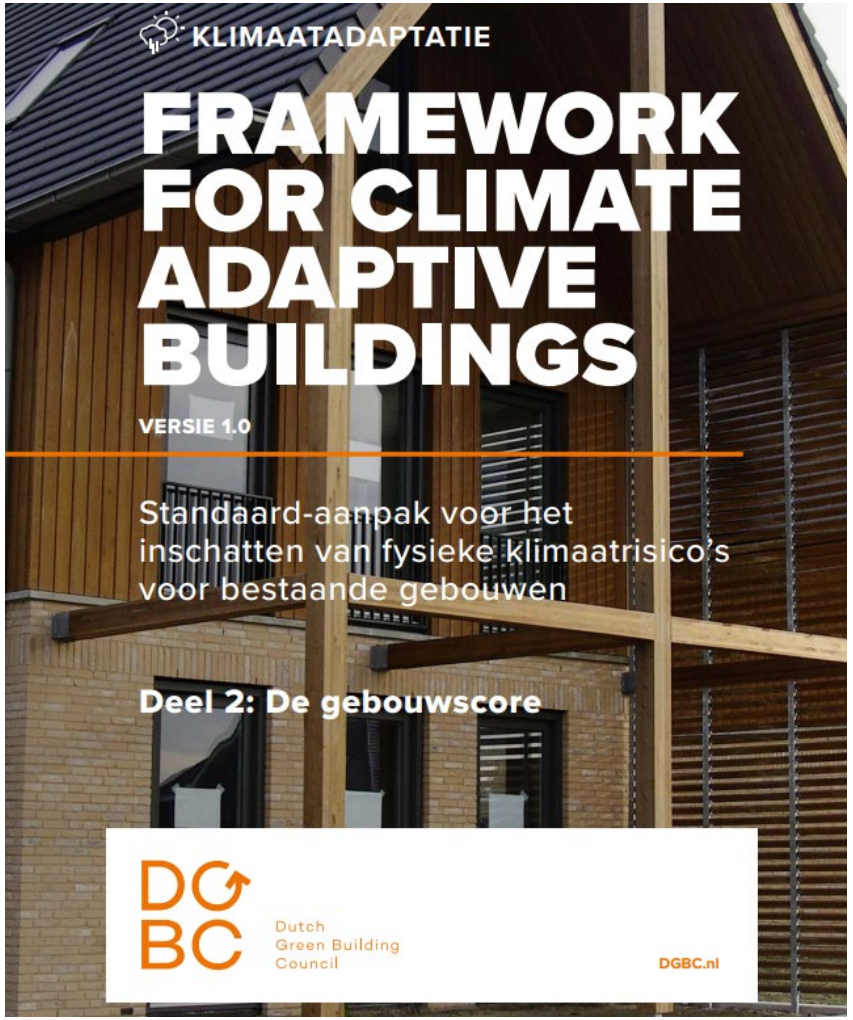
Our Solution: Sweco x Real Estate x EU Taxonomy

- The Framework was developed by the Dutch Green Building Council (DGBC) together with a broad alliance of over 40 organisations.

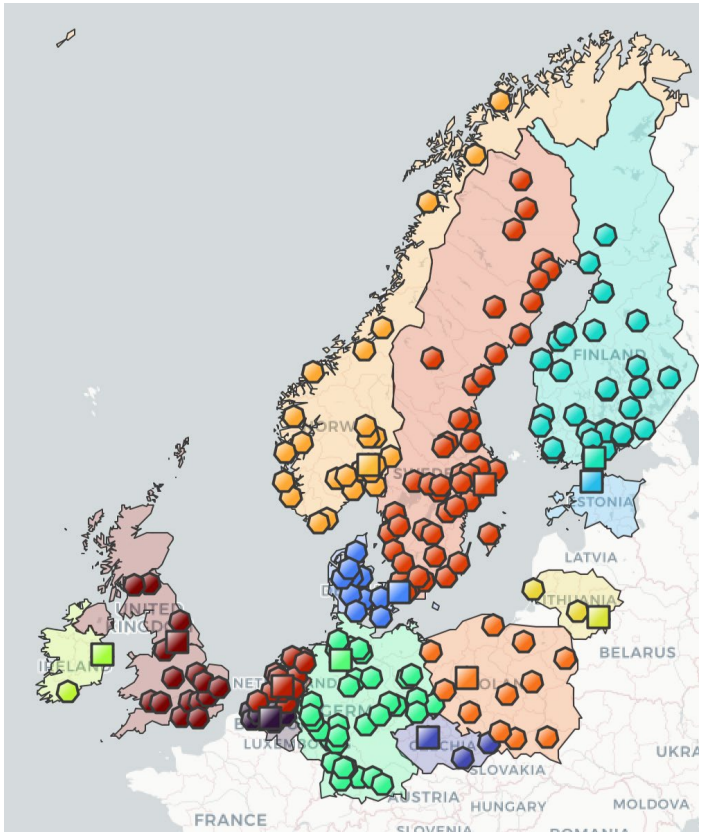
Insight 2: Develop in close collaboration with the sector



Applying our approach in a European context

The objective:
Identify and assess which physical climate hazards are of potential risk to Sweco offices

What we did:
A collaboration with experts from all Sweco countries to report climate risks by collecting the best regionally available data

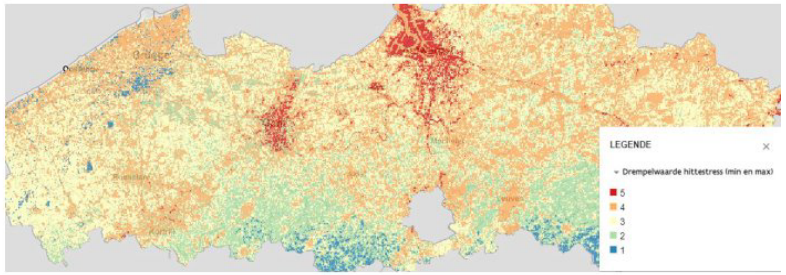


Insight 3: Consider the local context

Our approach in the Belgian context

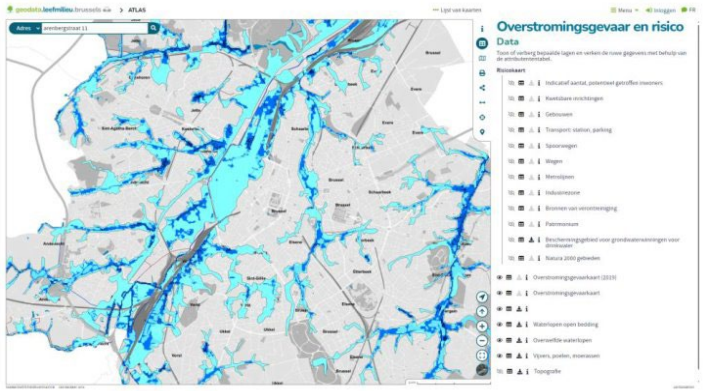
Main climate-related hazards investigated:

Heat Stress



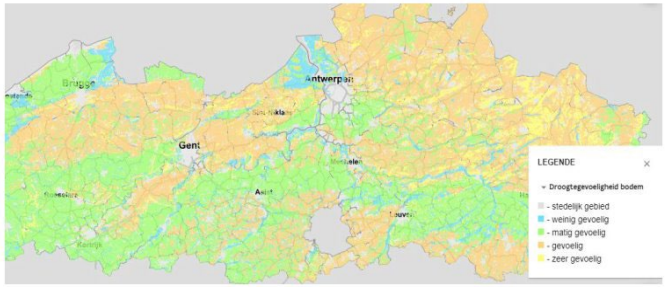
Heat stress score on map	Interpretation	Result
No data	none	Not applicable
1	Very low	Low exposure
2	Low	
3	Medium	Exposure
4	High	
5	Very high	

Flooding : coastal, pluvial, fluvial



Risk of flooding	Chance	Result in current scope
	none	Low exposure
	Small (1/100 year)	
	Medium high (1/25-50 year)	Exposure
	High (1/10 year)	

Drought



For each zone, a sensitivity to drought stress is defined by the scale below.

Drought stress score	Result in current scope
No data	No data
Urban areas	
Low sensitivity	Low exposure
Medium sensitivity	Exposure
High sensitivity	
Very high sensitivity	

Our approach in the Belgian context – Sweco offices

Table 12. Scenarios for offices in Flanders region.

Climate risk	Current scenario	Scenario 1	Scenario 2
Heat Stress	Heat stress no action – current climate	Heat stress Trend – high impact - 2050	Heat stress No action – high impact - 2100
Flooding • Coastal • Pluvial • Fluvial	Water depth Current climate – medium big chance	Water depth Future climate – medium big chance	Water depth Future climate – small chance
Drought	Drought sensitivity no action – current climate	N.A.	Drought sensitivity no action – high impact - 2100

Table 14. Data for offices in Flanders region.

Climate risk	Data	Data Source	Method
Heat Stress	Treshold value heat stress	Klimaatportaal Vlaanderen https://klimaat.vmm.be/	If the threshold value of the object is > 3, the object is classified as exposed
Flooding • Coastal • Pluvial • Fluvial	Waterdepth in cm	Waterinfo Vlaanderen https://www.waterinfo.be/kaartencatalogus	If the waterdepth in cm on the site or its close surroundings is > 20 cm, the object is classified as exposed
Drought	Drought sensitivity of the soil	Klimaatportaal Vlaanderen https://klimaat.vmm.be/	If the sensitivity is medium or above, the object is classified as exposed

→ **Insight 1**: Transparency and open access are key elements for success and uptake in the market

Our approach in the Belgian context – example Berchem office

Heat Stress

Heat stress for office Berchem, current scenario.

Heat stress for office Berchem, scenario 1.

Pluvial Flooding

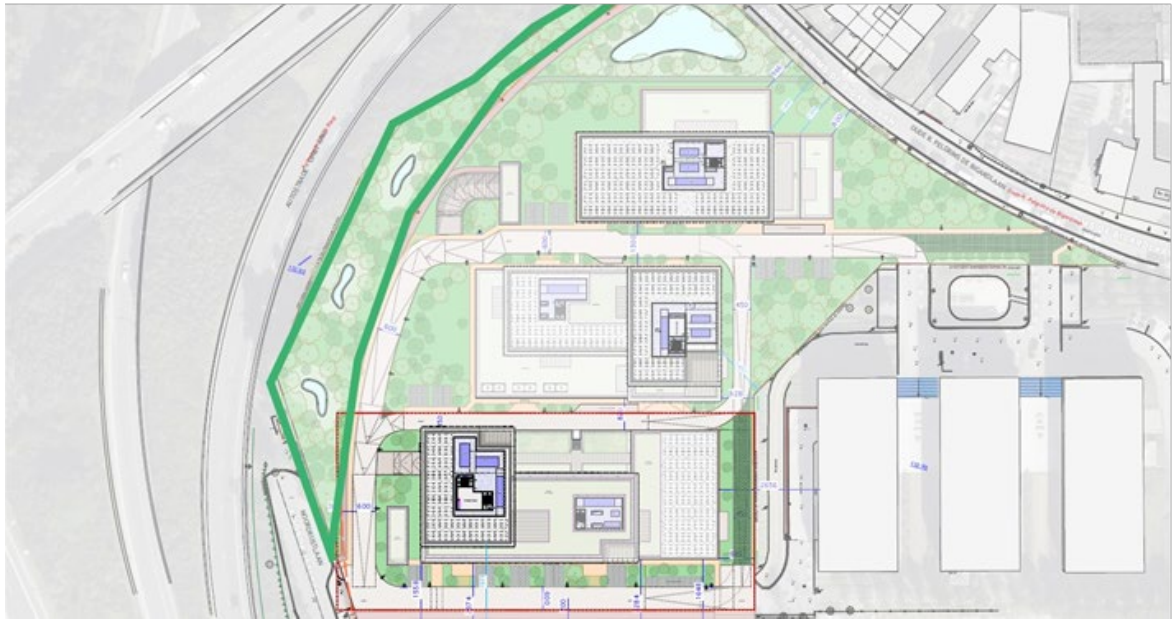
Drought

Insight 3: Consider the local context

Our approach in the Belgian context – results Sweco offices

CONTRACT_NAM	flooding from sea current scena	flooding from sea future scenario	flooding from sea future scenari	flooding from cloudburst current scenario	flooding from cloudburst future scenario 1	flooding from cloudburst futu scenario 2	flooding from lakes and watercourses current scen	flooding from lakes and watercourses future scenari	flooding from lakes and watercourse future scenar	Heatwaves/hea tstress current scenario	Heatwaves/heats tress future scenario 1	Heatwaves/h atstress future scenario 2	drought current scenario	drought future scenario 2
Brussel	N/A	exposure	exposure	N/A	low exposure	low exposure	/A	low exposure	low exposure					
Roeselare	low exposure	low exposure	low exposure	exposure	exposure	exposure	w exposure	low exposure	low exposure	low exposure	exposure	exposure	low exposure	low exposure
Berchem	low exposure	low exposure	low exposure	exposure	exposure	exposure	w exposure	low exposure	low exposure	exposure	exposure	exposure	exposure	exposure
Gent	low exposure	low exposure	low exposure	exposure	exposure	exposure	w exposure	low exposure	low exposure	exposure	exposure	exposure	N/A	N/A
Hasselt	low exposure	low exposure	low exposure	exposure	exposure	exposure	low exposure	low exposure	low exposure	exposure	exposure	exposure	exposure	exposure
Kortrijk	low exposure	low exposure	low exposure	low exposure	low exposure	low exposure	low exposure	low exposure	low exposure	exposure	exposure	exposure	exposure	exposure

Our approach in the Belgian context – example Resolve

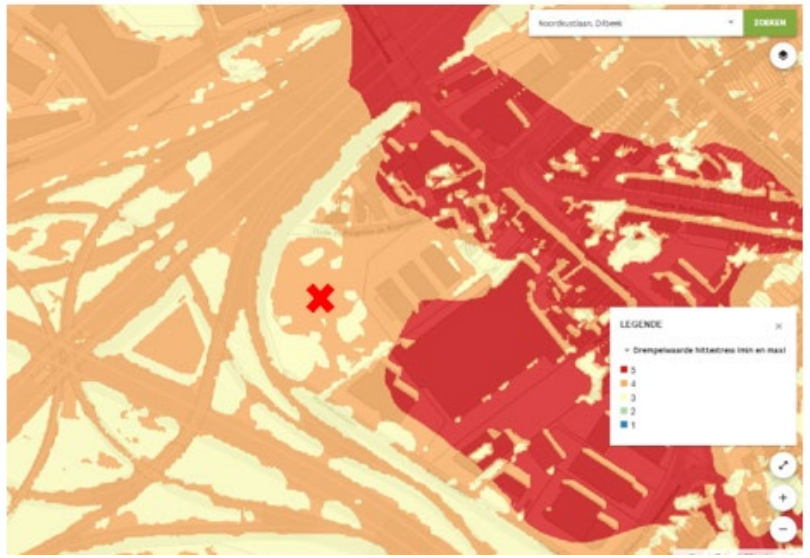


Klimaateffect in omgeving	x	Kwetsbaarheid pand	=	Klimaatrisico pand
1. Omgevingsscore *Gevaar*	x	2. Pandscore *Kwetsbaarheid*	=	3. Klimaatrisico score *Totaal klimaatrisico*
• Dreiging van bijv. wateroverlast (*waterdiepte na hevige regenbui*) of hitte		• De mate waarin een pand kwetsbaar is voor een klimaatdreiging		• Geïntegreerde score van het fysieke klimaatrisico van een vastgoedobject

Our approach in the Belgian context – example Resolve

Environmental Climate Risks

Heat Stress

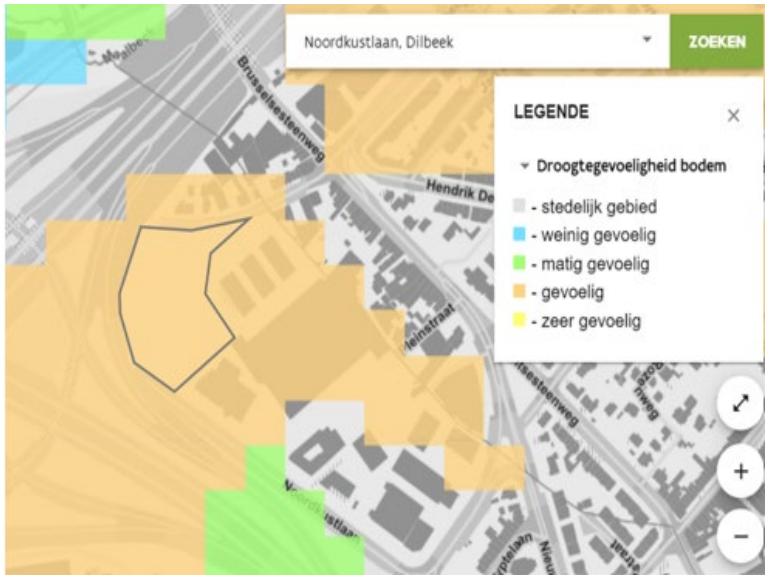


score	Interpretatie	WBGT max (°C)	WBGT min (°C)
No data	geen		
1	Zeer laag	<27,8	<17
2	Laag	27,8 – 28,75	17 – 17,5
3	Gemiddeld	28,75 – 29,5	17,5 - 18
4	Hoog	29,5 - 31	18 - 19
5	Zeer hoog	>31	>19

Flooding

score	Interpretatie	Waterdiepte – toekomstig klimaat – middelgrote kans (FLU)	Waterdiepte – toekomstig klimaat – middelgrote kans (PLU)
1	Zeer laag	1-25cm	1-25cm
2	Laag	20-50cm	20-50cm
3	Gemiddeld	50-100cm	50-100cm
4	Hoog	100-200cm	100-200cm
5	Zeer hoog	>200cm	>200cm

Drought



score	Interpretatie	Criterium
0	Geen	Stedelijk gebied
1	Laag	Weinig gevoelig
2	Gemiddeld	Matig gevoelig
3	Hoog	Gevoelig
4	Zeer hoog	Zeer gevoelig

Our approach in the Belgian context – example Resolve

Vulnerability of the building

Heat Stress

Gebouwspecifiek kenmerk		Variabele	Rekenregel; Mate van invloed op kwetsbaarheid binnen het kenmerk		Punten
Gebouwscore Opwarmen					
Gebouwschil	Glasoppervlakte	Ratio glas oppervlak glas ten opzichte van muuroppervlak op West, Zuid en Oost (%)	Zeer hoge kwetsbaarheid	>75%	30
	Zonwering	Aanwezigheid buiten zonwering/rolluiken	Zeer hoge kwetsbaarheid	Zonwering afwezig	25
	Type glas	g-waarde	Zeer lage kwetsbaarheid	g-waarde < 0,40 of zonwerend glas	1,5
	Kleur dak	Donkere of lichte kleur/zonnepanelen/groen dak	Hoge kwetsbaarheid	PV aanwezig voor minstens 50% dakoppervlak (ongeacht kleur van de afwerking)	4
	Kleur façade	Donkere of lichte kleur/ groene façade	Lage kwetsbaarheid	lichte kleur gevel + geen geventileerde spouw	2
functie	Interne lasten	verlichting, apparatuur, personen - interne last is grotendeels afhankelijk van de functie	Medium kwetsbaarheid	logistieke centers, kantoren, scholen, winkels	5
Gebouwvorm	Thermische massa	kleine thermische massa warmt snel op, grote thermische massa warmt traag op	Lage kwetsbaarheid	Hoge thermische massa > 400 kg/m² (thermische massa moeilijker toegankelijk)	4
	schaduw	natuurlijke schaduw en bouwkundige overstekken	Zeer lage kwetsbaarheid	overstel tussen 1.0 m en 2.0 m	2
Gebouwscore opwarmen = ∑ aantal punten					73,5

Gebouwspecifiek kenmerk		Variabele	Rekenregel; Mate van invloed op kwetsbaarheid binnen het kenmerk		Punten
Gebouwscore afkoeling					
Ventilatie en infiltratie	Aanwezigheid koeling	Aanwezigheid van een koelsysteem al dan niet redundant (ten allen tijden	Lage kwetsbaarheid	koeling voorzien (niet-redundant)	-35
	Isolatie	Isolatiewaarde (Rc)	Zeer hoge kwetsbaarheid	Rc waarde > 3,5 of bouwjaar >2013	-1
	Spuiventilatie	Optie ramen open (J/N) + aantal gevels	Zeer hoge kwetsbaarheid	Ramen kunnen niet open	0
Gebouwscore afkoeling = ∑ aantal punten					-36

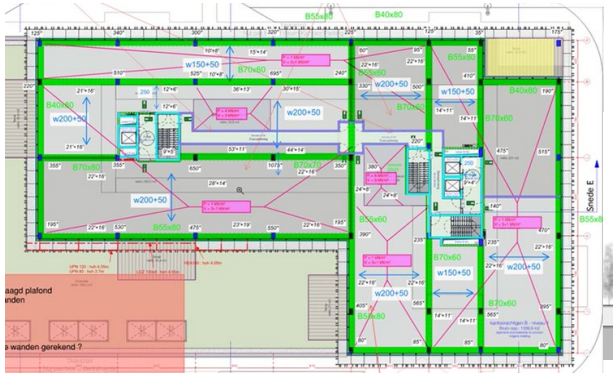
totaal	gevoeligheidsfactor
sport, kantoor, scho	1,12
gebouwscore	42

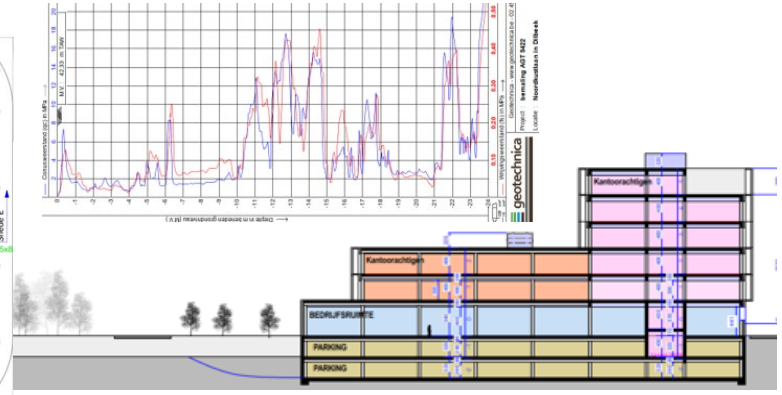
Flooding

Gebouwscore Wateroverlast

Gebouwspecifiek kenmerk		Variabele	Rekenregel; Mate van invloed op kwetsbaarheid binnen het kenmerk		Punten
Dryproofing	Hoogte ingang t.o.v. omringend maaiveld	Hoogte ingang t.o.v. maaiveld hoogte op een afstand van 2 meter om het gebouw, of hoogte waterschot indien aanwezig bij ingang (cm) Aanwezigheid waterkering (Ja/Nee)	Hoge kwetsbaarheid	Hoogte ingang 0-15cm	21
	Parkeerkelder of andere ondergrondse ruimte	Aanwezigheid parkeerkelder (Ja/Nee) Hoogte ingang parkeerkelder (incl. mogelijke drempel) Aanwezigheid waterrooster (Ja/Nee) Aanwezigheid waterkering (Ja/Nee)	Zeer hoge kwetsbaarheid	Aanwezig en drempelhoogte <0cm	10
	Overige instroompunten (kelderraam, spouw en/of kruipruimte ventilatie)	Aanwezigheid open stootvoegen ten behoeve van spouw- en/of kruipruimte ventilatie (Ja/Nee) Aanwezigheid kelderraam (Ja/Nee)	Zeer lage kwetsbaarheid	Niet aanwezig (binnen 15cm boven maaiveld)	2
Wetproofing	Terugslagklep aanwezig in toiletpot/douche/wasbak	Type riool (gemengd riool/gescheiden riool) Aanwezigheid terugslagklep (Ja/Nee) Aanwezigheid ontlastput (Ja/Nee)	Zeer lage kwetsbaarheid	Terugslagklep OF ontlastput aanwezig OF gescheiden riool	1
	Aanwezigheid vaste apparatuur en installaties	Aanwezigheid vaste apparatuur en installaties onder straatniveau of op BG (Ja/Nee) Hoogte ingang (cm)	Hoge kwetsbaarheid	Installaties op BG en hoogte ingang = 0	14
	Hoogte stopcontacten, schakelaars en aansluitpunten	Hoogte stopcontacten, schakelaars en aansluitpunten t.o.v. vloerpeil (cm)	Zeer hoge kwetsbaarheid	<15cm	10
Gebouwscore Wateroverlast = ∑ aantal punten					58

Drought: qualitative analysis



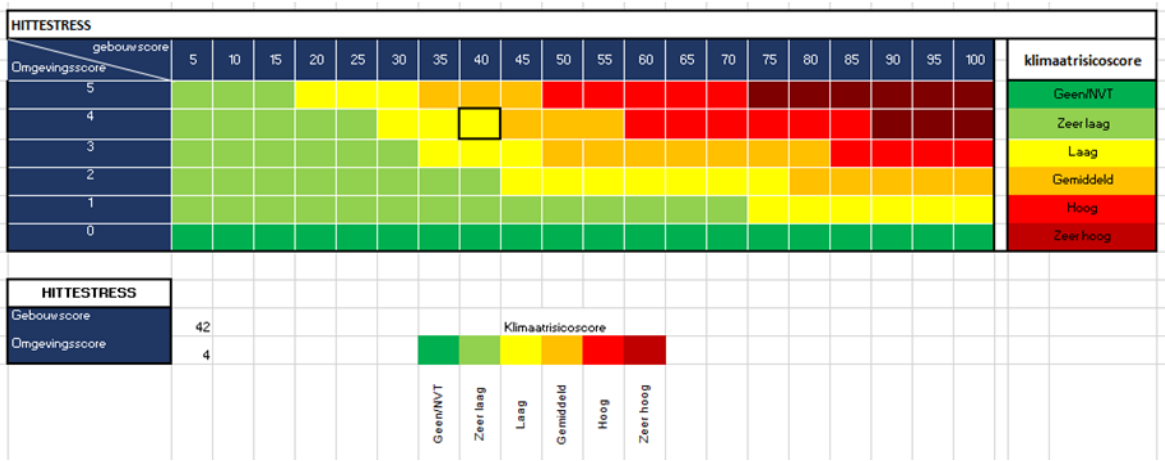


→ **Insight 4**: not only the environment matters. Take into account the vulnerability of the building

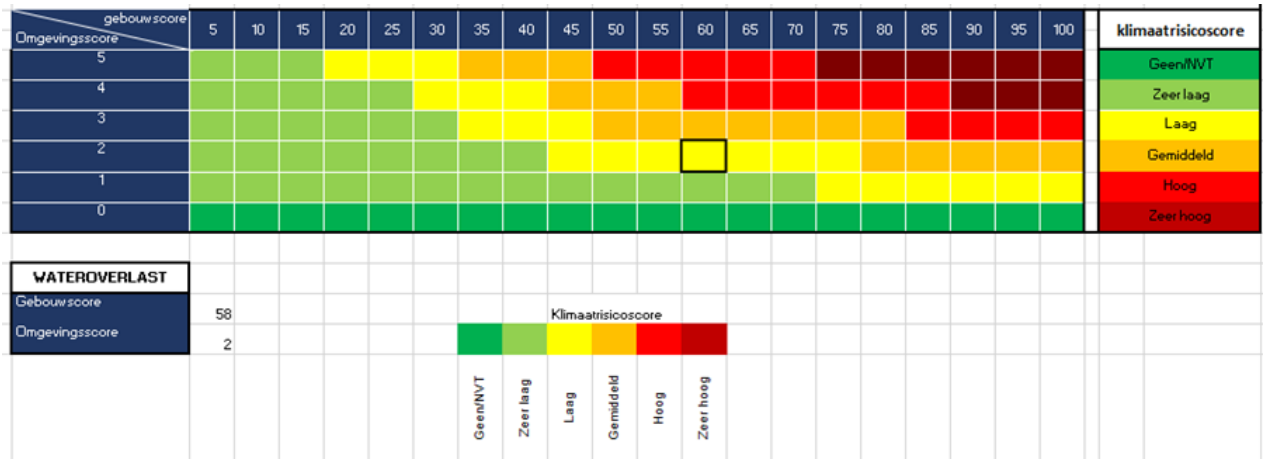
Our approach in the Belgian context – example Resolve

Total Climate Risk Score

Heat Stress: low risk

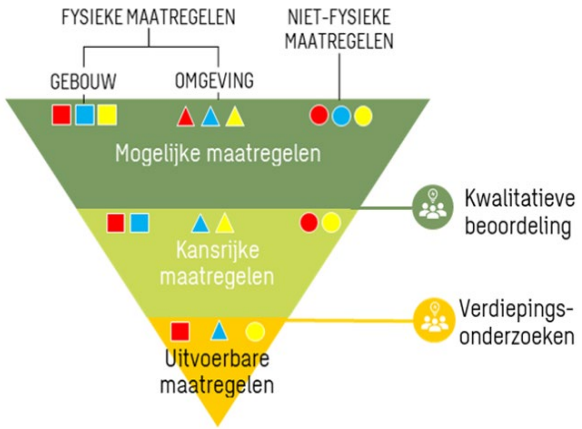


Flooding: low risk



Drought: qualitative analysis => low risk

Adaptation Measures



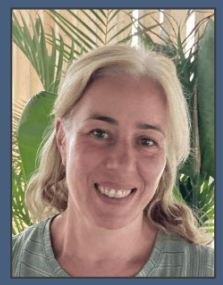
Maatregel	Toelichting
Maatregelen om het gebouw	
Aanplanten van bomen nabij gebouw	Bomen verkoelen doordat ze schaduw geven en water verdampen. Indien aanplanten in de bodem niet mogelijk is, kan overwogen worden om bomen in grote plantenbakken (winterhard, vorstvrij) aan te planten. Op het bestaande terrein zijn bomen aanwezig, op het inplantingsplan blijken deze ook voorzien. Nieuwe aan te planten bomen hebben tijd nodig om te groeien en hun verkoelende effect waar te maken
Reflecterend wateroppervlak nabij het gebouw aanleggen	Fonteinen of wateroppervlaktes helpen verkoelen. Op het inplantingsplan blijkt een wateroppervlak getekend
Schaduw creëren met vaste objecten zoals een schaduwdoek	Het gebouw beschaduwen voorkomt opwarming van de buitenkant en vermindert zoninstraling.
Maatregelen aan het gebouw	
Wit dak realiseren	Het dak wit of een lichte kleur verven, laat zonlicht reflecteren zodat het gebouw minder opwarmt.
Verminderen van glasoppervlakte	Door de ratio glasoppervlak ten opzichte van bruto muuroppervlak op West, Zuid en Oost te verminderen zal er minder zoninstraling zijn.
Groen dak realiseren (extensief)	Op platte daken kan een groen dak worden gerealiseerd. Begroeiing kan bestaan uit sedum, kruiden of lage grassen. Door waterretentie en verdamping kan het verkoelend werken want vegetatie warmt minder snel op dan andere materialen, waardoor onderliggende verdiepingen minder snel opwarmen.
Groen dak realiseren (intensief)	Op platte daken kan een intensief groen dak worden gerealiseerd. Draagkracht van het dak moet worden nagegaan, extra onderhoud is vereist. Door waterretentie en verdamping kan het verkoelend werken en vegetatie warmt minder snel op dan andere materialen, waardoor onderliggende verdiepingen minder snel opwarmen.
Blauw dak realiseren	Een blauw dak is het zogenaamde waterretentiedak. Deze opstelling vraagt extra aandacht bij uitvoering (geen helling, waterdichtheid moet gegarandeerd worden). Draagkracht van het dak moet worden nagegaan, extra onderhoud is vereist. Door waterretentie en verdamping werkt het verkoelend waardoor onderliggende verdiepingen minder snel opwarmen.
Groen/blauw dak realiseren	Groene daken kunnen gecombineerd worden met waterretentiedaken voor extra afkoeling. Draagkracht van het dak moet worden nagegaan, extra onderhoud is vereist. Begroeiing kan bestaan uit sedum, kruiden of lage grassen. De combinatie van waterretentie, verdamping en vegetatie heeft een verkoelend effect, waardoor onderliggende verdiepingen minder snel opwarmen.

Take home messages

- **Insight 1**: Transparency and open access are key elements for success and uptake in the market
- **Insight 2**: Develop in close collaboration with the sector
- **Insight 3**: Consider the local context
- **Insight 4**: not only the environment matters. Take into account the vulnerability of the building

Session II: Coordinating and aligning public and private finance for the transition to sustainable and resilient agriculture

Presentation
Blaz Kurnik
Head of Climate Risks and Resilience Unit
European Environment Agency



Moderator
Melanie Muro
Head of CAP and Food
IEEP

Julien Vastenaekels
University of Reims Champagne-Ardennes &
Environmental Defense Fund (EDF)

Sarah Garré
Professor
ILVO Vlaanderen

Stefania Avanzini
Director
OP2B

Emmanuelle Mikosz
Programme and Deputy Director
Forum for the Future of Agriculture

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Climate risk and resilience in the agriculture sector

Preparing for a resilient and competitive business in 2025

Session II: Coordinating and aligning public and private finance
for the transition to sustainable and resilient agriculture

Dr. Blaž Kurnik, Head of Climate Risk and Resilience
European Environment Agency

European Environment Agency

Europe is not prepared

- Europe is the fastest warming continent in the world.
- Climate risks are growing rapidly as we exceed 1.5 degrees C global warming
- Climate risks are threatening energy and food security, ecosystems, infrastructure, financial stability, and people's health.

European Environment Agency

European climate risk assessment: a comprehensive assessment of major climate risks facing Europe

to help identify **adaptation-related policy priorities** for the Commission

to inform the **further development of EU policies** in climate-sensitive sectors

to support the **prioritisation of adaptation-related investments** for the next Multi-annual Financial Framework

to provide a reference for conducting national and regional climate risk assessments

European Environment Agency

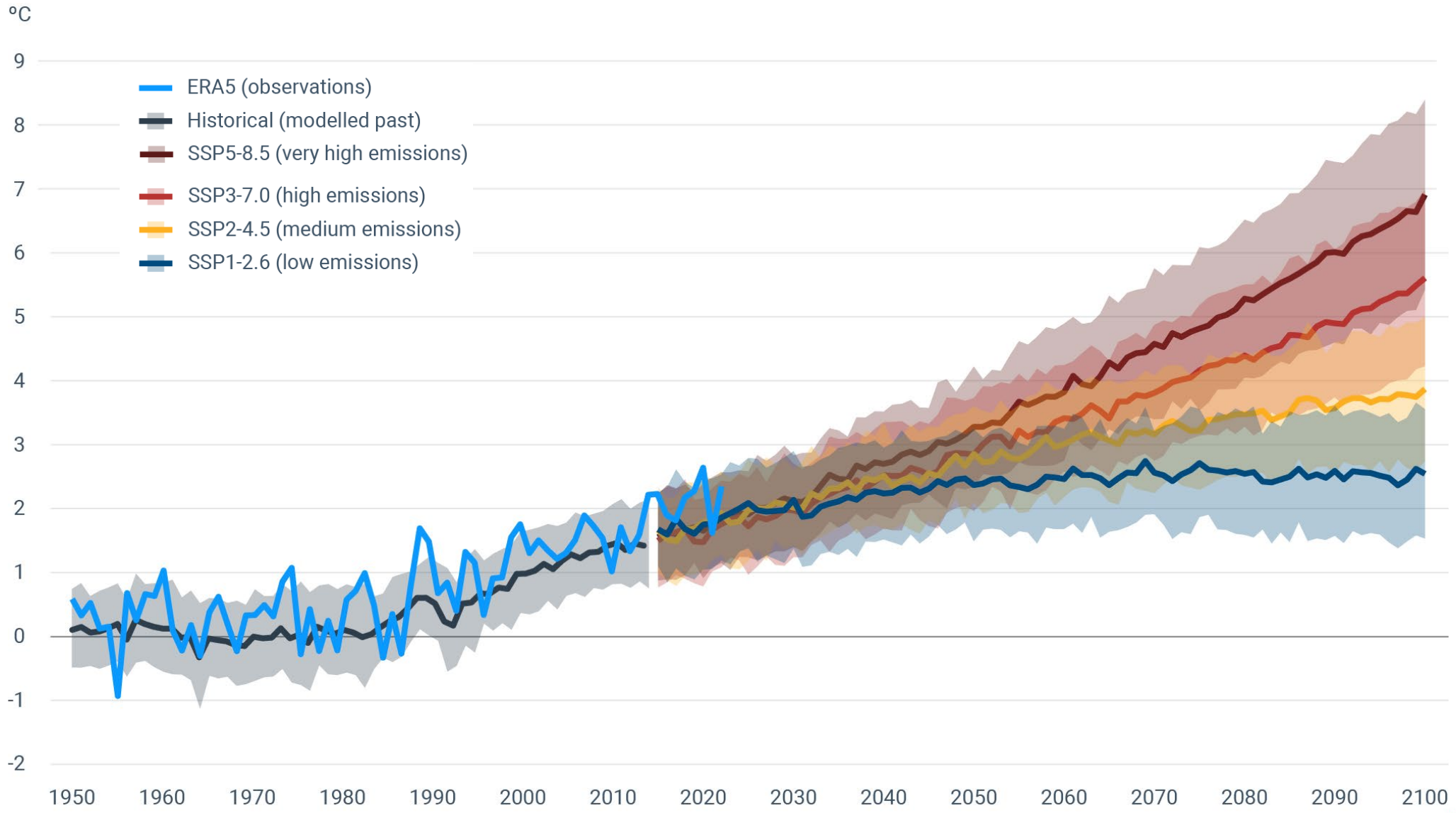
European Commission Communication on managing climate risks, 12 March 2024

"Climate impacts are already here, and **risks will continue to increase in the coming decades** and beyond due to the inertia of the climate system, even if ambitious global emission cuts reduce the potential damage."

"Climate resilience is a matter of **maintaining societal functions**, but also of **competitiveness for economies and companies**, and thus jobs."

European Environment Agency

European warming projected to increase, but how much?

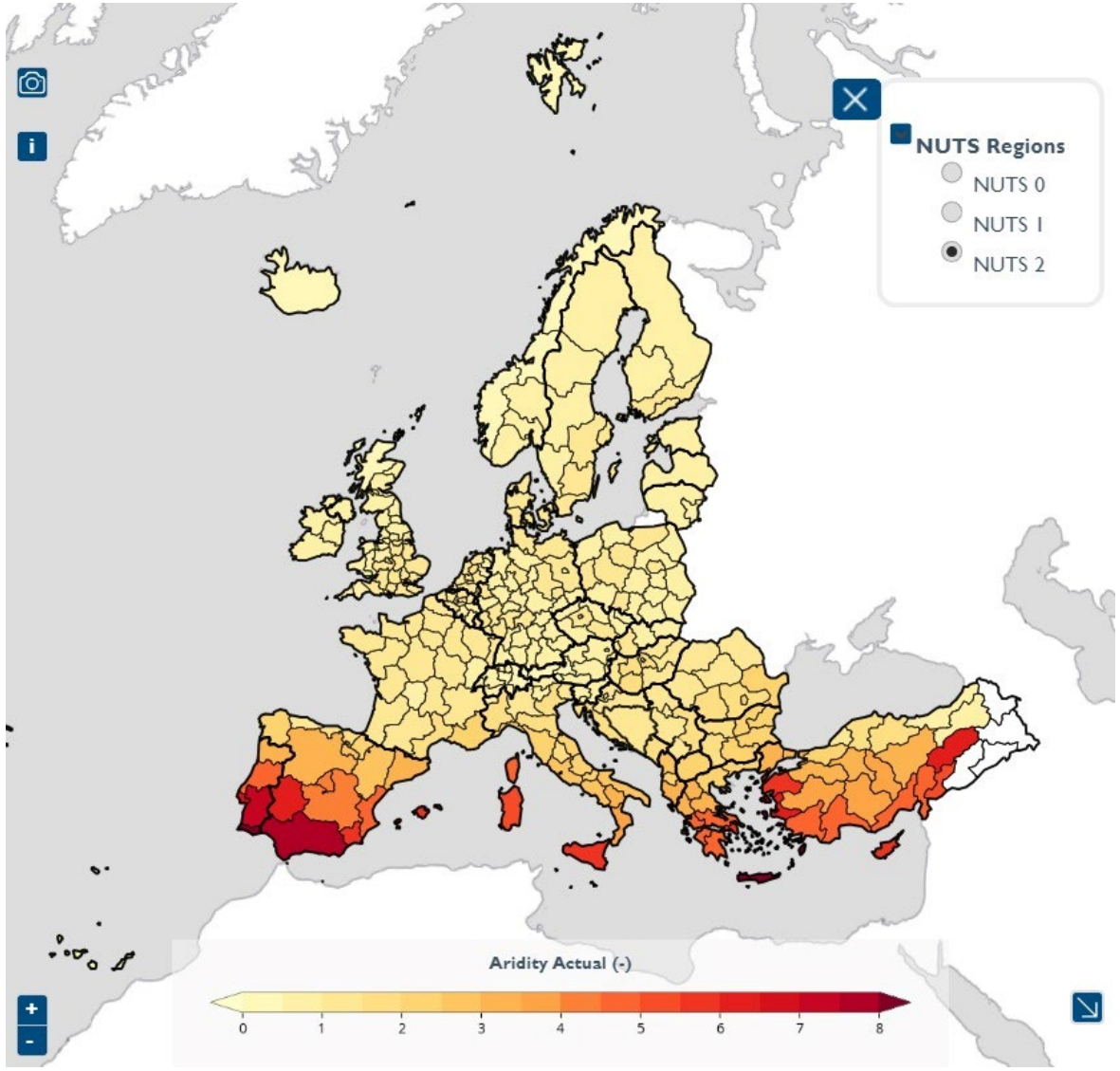


Source: Observed and projected temperature increase over European land area, Copernicus climate change service based on CMIP6

European Environment Agency

Droughts to become more frequent, severe and longer

Projected aridity index at the end of the century (RCP8.5: high emission scenario)

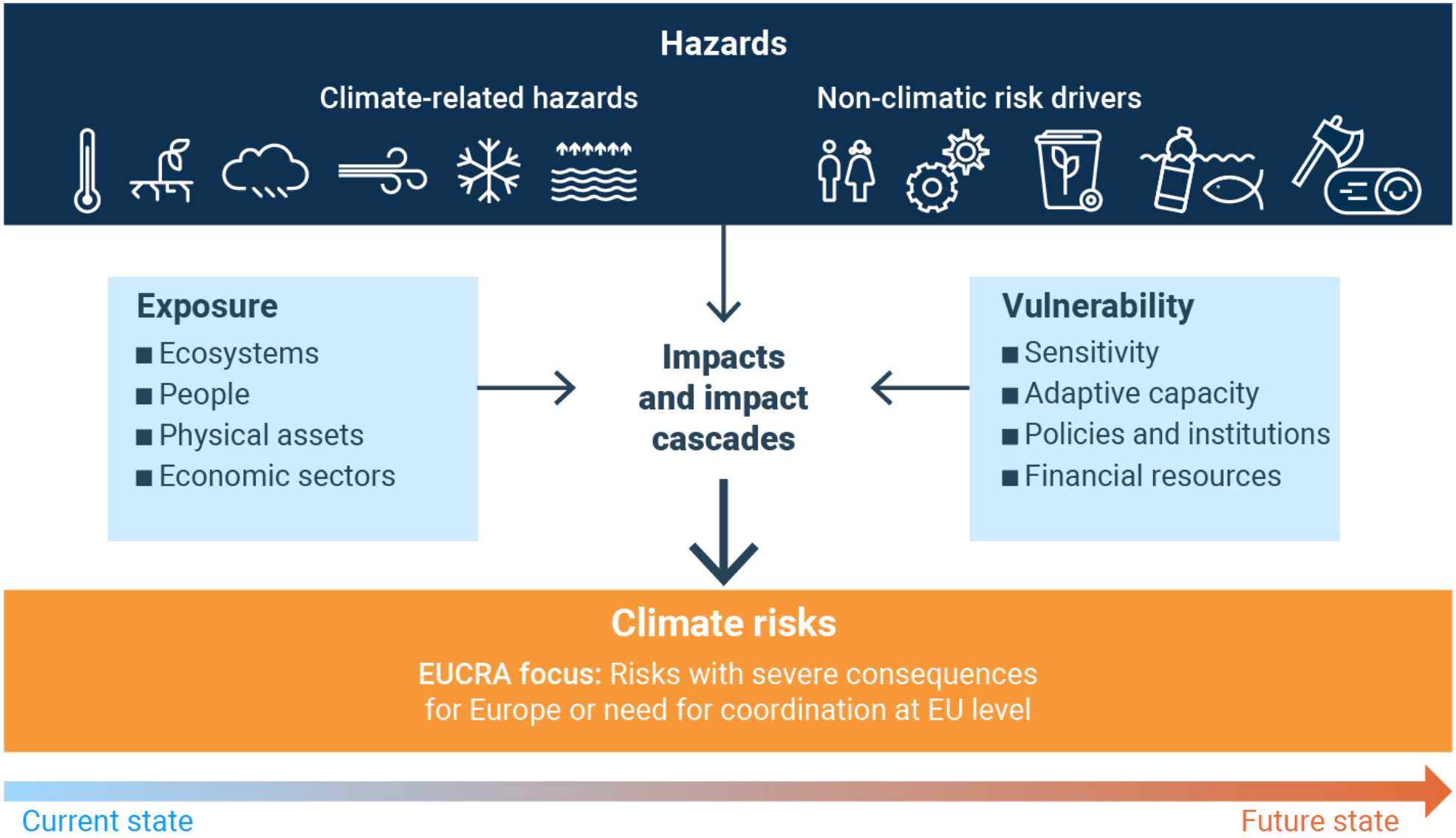


- Between 2000 and 2023, the EU was affected by severe droughts, with 2003, 2007, 2018, 2019 and 2022 being the most extreme years.
- By the end of the century, drought magnitude in southern Europe could triple.

Source: https://climate-adapt.eea.europa.eu/en/metadata/indicators/aridity-actual
Based on C3S

European Environment Agency

EUCRA: combining different types of risks



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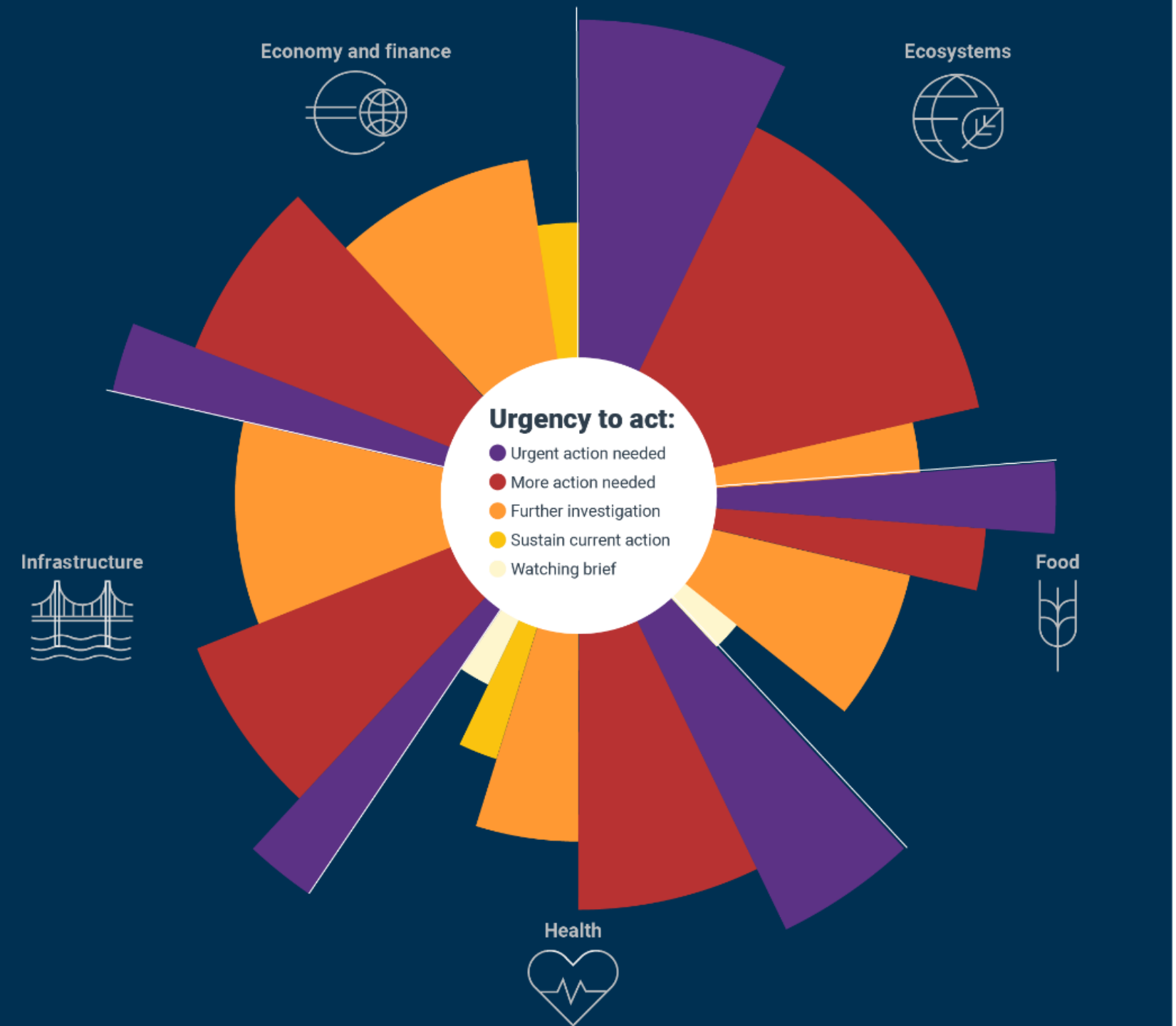


Urgency to act now

More than half (21 out of the 36) key climate risks for Europe need more action now, with 8 of them being particularly urgent.

European Environment Agency

Food cluster

Climate risks for 'Food' cluster	Urgency to act	Risk severity			Policy characteristics		
		Current	Mid-century	Late century (low/high warming scenario)	Policy horizon	Policy readiness	Risk ownership
Crop production (hotspot region: southern Europe)	Urgent action needed	+++	++	++	Short	Medium	Co-owned
Crop production	More action needed	+++	++	++	Short	Medium	Co-owned
Food security due to climate impacts outside Europe (*)	Further investigation	++	++	+	Short	Medium	EU
Food security due to higher food prices	Further investigation	++	+	+	Short	Medium	Co-owned
Fisheries and aquaculture	Further investigation	++	+	+	Short	Medium	Co-owned
Livestock production	Watching brief	++	++	+	Short	Medium	Co-owned

Legends and notes

Urgency to act
- Urgent action needed
- More action needed
- Further investigation
- Sustain current action
- Watching brief

Risk severity
- Catastrophic
- Critical
- Substantial
- Limited

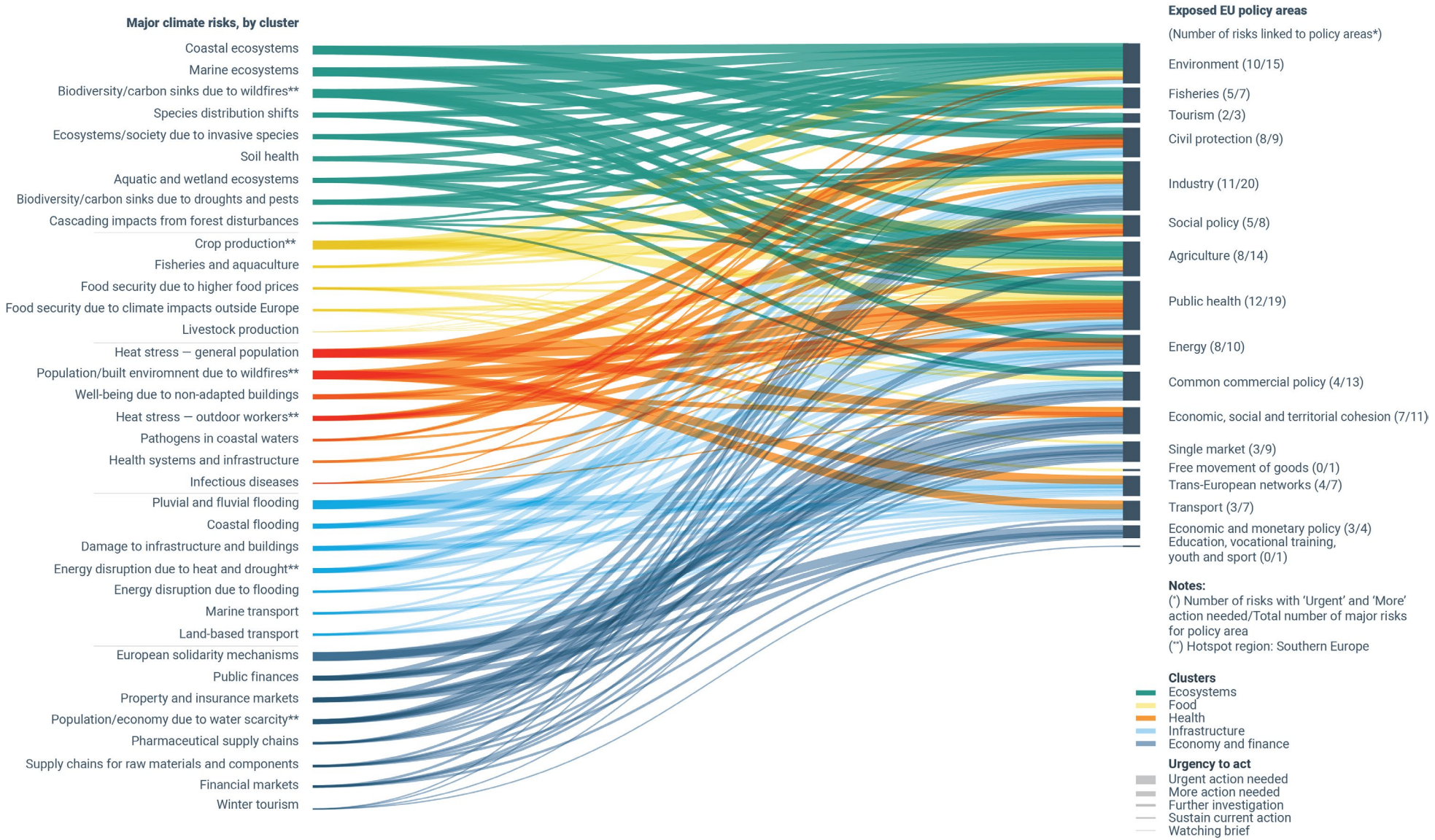
Confidence

Low: +
Medium: ++
High: +++

(*) Wide range of evaluations by authors and risk reviewers.

European Environment Agency

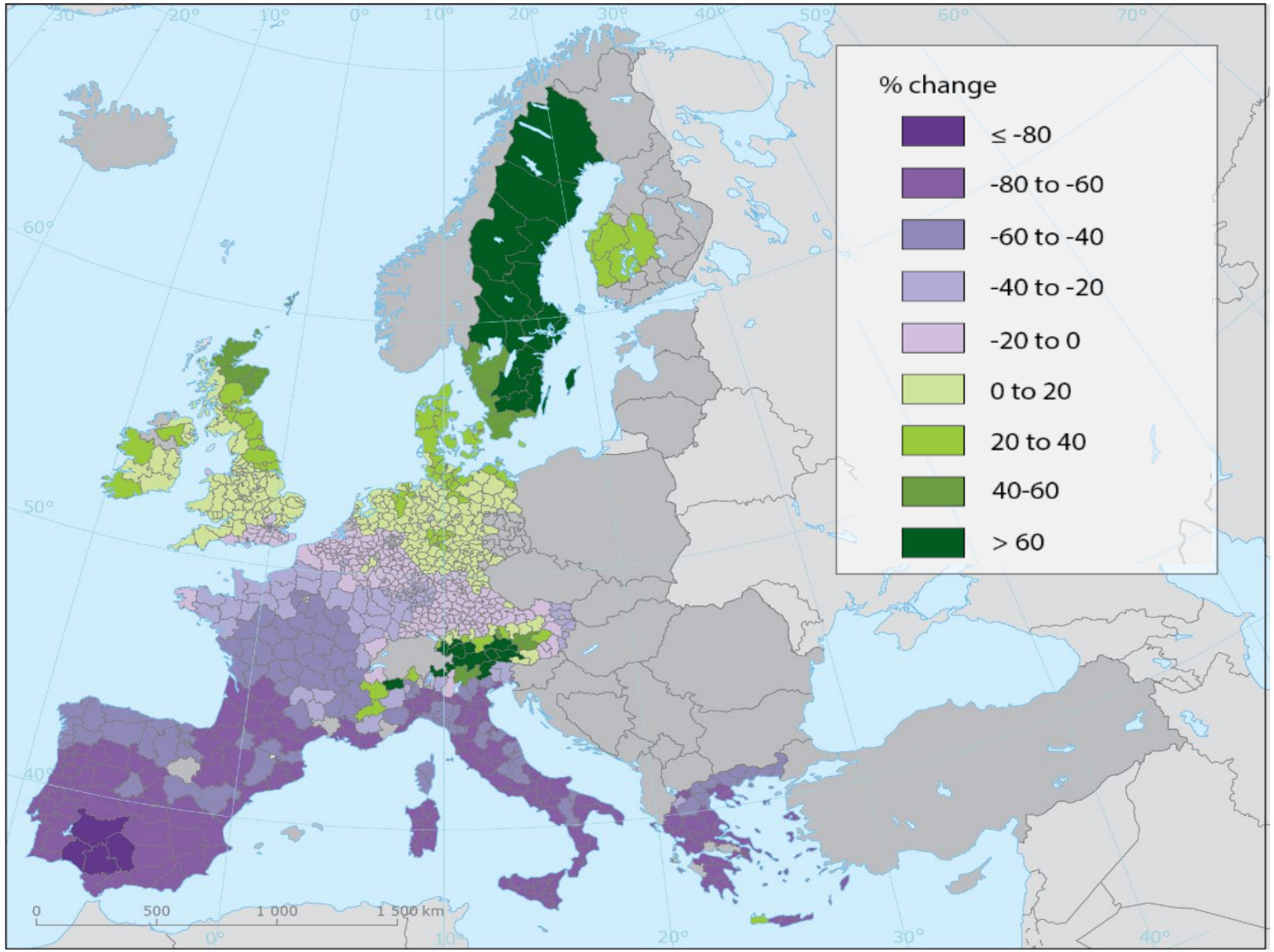
Climate risks affect nearly all EU policy areas



European Environment Agency

Climate change will affect the economy of farmers

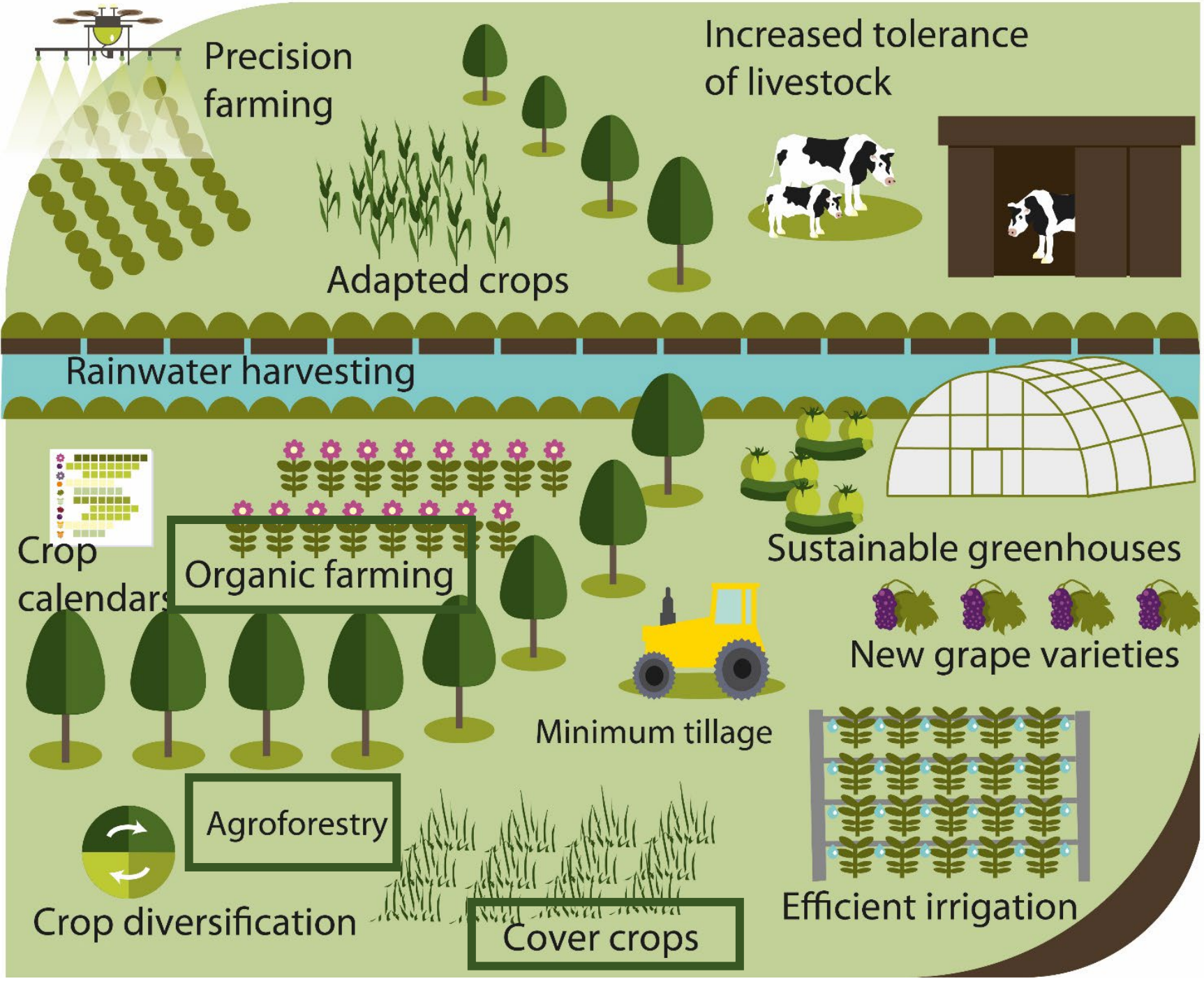
Projected change in farmland value by 2100



Based on: van Passel et al., 2017

- Agricultural income in Europe is projected to decrease
- **Farmland values projected to decrease the most in southern Europe** (mostly due to droughts/water scarcity)
- Some farmland might be abandoned due to climate change if no adaptation is introduced

European Environment Agency



Nature-based solutions (agroforestry, cover crops, organic farming, …) are part of the solution to **reduce climate risks**

And also:

- Sustain resilient production
- Conserve soil and water resources
- Reduce emissions
- Increase sink of CO_2
- Be economically viable
- Increase the quality of rural life

European Environment Agency

Key takeaways

- **2024 was the warmest year recorded** and above 1.5 °C. Several major climate risks for Europe have already reached critical levels.
- Almost **all major climate risks could reach critical or even catastrophic levels during this century**, under a high warming scenario.
- **Water resilience is central for managing major climate risks**.
- **Nature-based solutions are a crucial part of the societal preparedness.**
- Most major climate risks are co-owned by the EU and its Member States – **working together at all governance levels is essential to progress**.
- **The new European Climate Adaptation Plan should be systemic and complement national adaptation actions.**

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European Climate and Health Observatory
https://climate-adapt.eea.europa.eu/observatory

European Climate Data Explorer
https://climate-adapt.eea.europa.eu/knowledge/european-climate-data-explorer/

Summer extremes platform
Climate change (europa.eu)

Thank you!

Blaz.Kurnik@eea.europa.eu

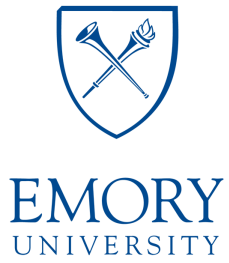
European Environment Agency

Futuring for transformative agricultural change

Examples from the US and the EU

Julien Vastenaekels
University of Reims Champagne-Ardenne

In collaboration with **Emily Burchfield**, Emory University



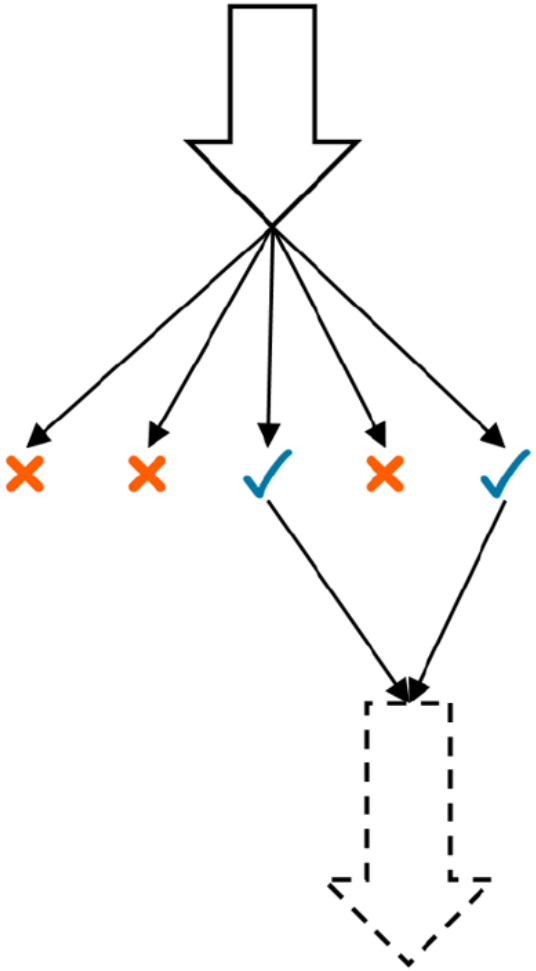
Major **transition** is **necessary** and **inevitable**.

Transition towards ***what***?

And given where we are, **how do we get there**?

How do we (as researchers and stakeholders) **support transition**?

How might agricultural systems change in the future?



Step 1 – What is?
Develop a shared understanding of the system.

Step 2 – What could be?
Explore potential evolutions of the system.

Step 3 – What should be?
Select acceptable pathways of change.

Step 4 – Toward a renewed 'what is.'
Collectively propose and implement change.

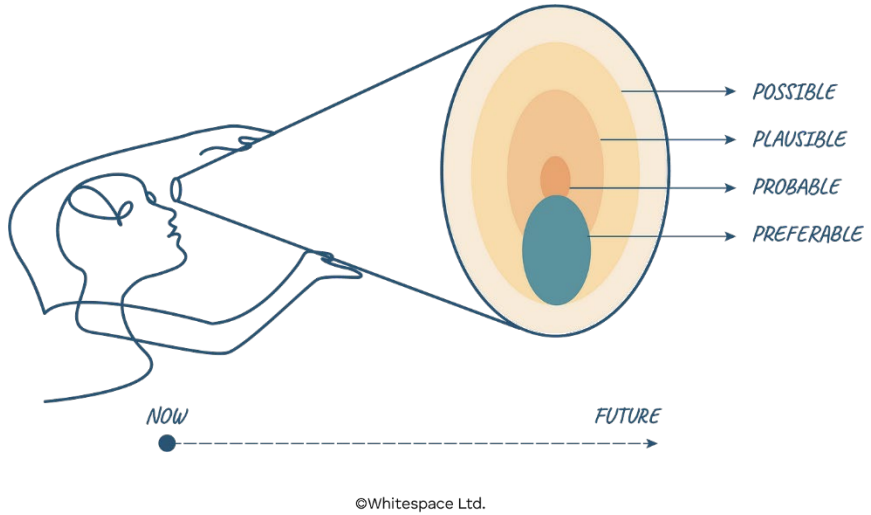


Illustration by Nathalie-Raux-Copin (2023)

Figure inspired by and adapted from Dendoncker N, Boeraeve F, Crouzat E, Dufrêne M, König A, Barnaud C. How can integrated valuation of ecosystem services help understanding and steering agroecological transitions? Ecol Soc. 2018 Jan 26 ;23(1).

Predictive modeling of agricultural land use in the US

→ What predicts where major crops have been grown historically?

- Which variables matter? Where? How?

→ What are the implications for the future?

- As climate changes (fairly easy)
- As humans respond to changes in climate (very challenging)

More here:

- Burchfield, E. K. (2022). Shifting cultivation geographies in the Central and Eastern US. *Environmental Research Letters*, *17*(5), 054049.
- https://www.thrivingfuturecropscapes.org/

How to model the people, *with and for* the people?

Here's what Emily's team has been experimenting with:

BEFAST - Bioeconomy of the EU: Futures, Anticipation, and System Transformations

- EU bioeconomy is shaped by **coexisting** and **competing** trajectories:
  - **Industrial-scale** biomass and **biorefineries** vs. decentralized **agroecological** models
- Are we **reinforcing unsustainable paths** or opening **new possibilities**?
- Using system dynamics modeling and stakeholders engagement to explore alternative policy **scenarios**

Stakeholder engagement: Key to viable transitions

- What is **'desirable**' is not **predefined**—it is **negotiated**
- Competing visions: Agribusiness, policymakers, farmers, NGOs
- Without including marginalized voices, transitions risk being captured by dominant players
- Participatory futuring ensures research and recommandations align with **real-world needs**, not just theoretical goals

Why this matters for policy and investment

- Futuring exercises reduce investment risk by providing **long term visions**
- They reveal hidden **leverage points**—many barriers are systemic, not technical
- Aligning funding with sustainability requires clear, **evidence-based pathways**
- Policy and investment must steer **transformations** not just scaling up

We need more agricultural futuring research

- **Agricultural transitions will happen** — with or without futuring.
- The question is: **Who is shaping them and in which direction?**
- Investing in future-driven research fosters:
  - Coordinated policy and finance
  - Socially and economically viable transitions
  - Sustainable, just, and resilient agricultural futures

OP2B, scaling up Regenerative Agriculture

Stefania Avanzini
Feb 19, 2025

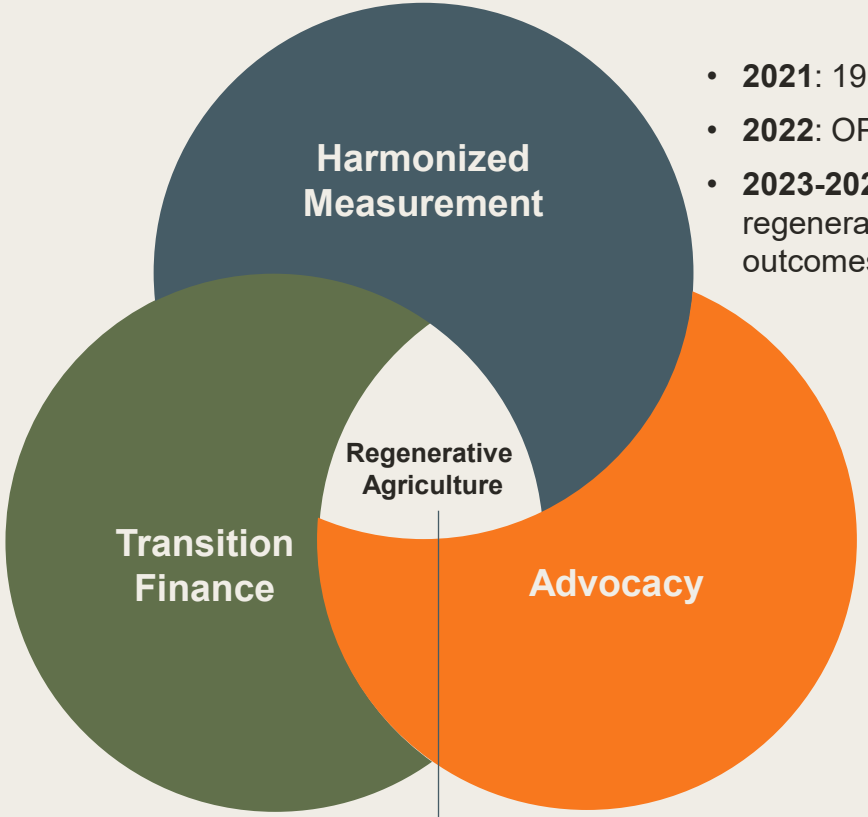
World Business Council *for Sustainable Development*

op2b one planet business for biodiversity

OP2B is a coalition of leading businesses in regenerative agriculture who are investing in farmers' transitions

$3.6 BN invested | **300k** farmers engaged | **3.9M** hectares impacted

- **2023**: Showcased a successful farmer transition model in *Cultivating Farmer Prosperity*.
- **2024**: United 250+ OP2B members, landscape initiatives, financiers, and policymakers to drive collaborations for financing regenerative agriculture in Europe
- 25 work is missing



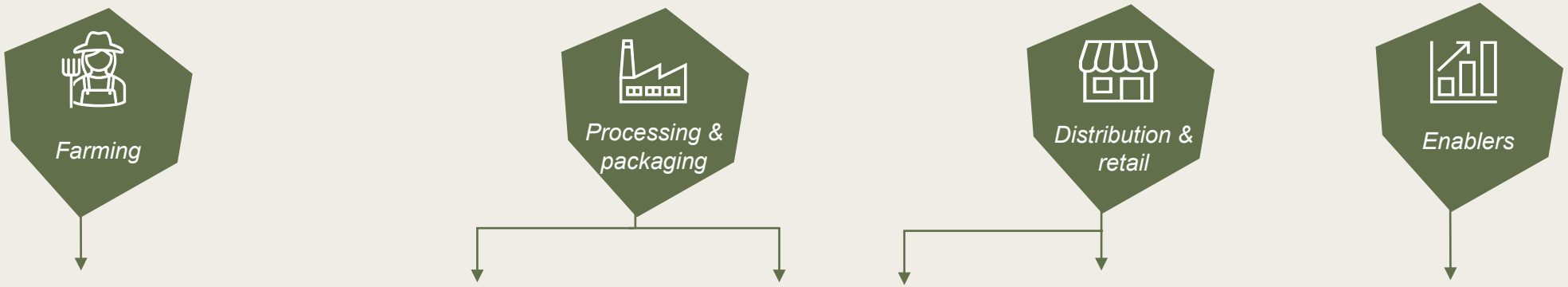
- **2021**: 19 value chain actors united on regenerative ag principles.
- **2022**: OP2B members aligned on restoration action principles.
- **2023-2024**: 52 companies and 33 partners unified over a shared regenerative vision, impacting 1,100+ businesses with 11 outcomes and 10 indicators.

- **2021-2024**: Contributed to EU Soil Health Law, CBD Biodiversity Framework, and Nature Restoration Law.
- **2022-2023**: Held workshops with the EU Commission and 12 OP2B members on financing and derisking farmer transitions.
- **Ongoing**: Advocating OP2B's regenerative ag definition for adoption at UNCCD COP16

2021- 2024: compendium of **66 case studies** & 15+ impact stories of members

25 OP2B members*

with combined revenues of +682 bn USD



Farm cooperatives

inVivo, Arla, FrieslandCampina

Input providers

YARA

Food & beverage manufacturers

Unilever, McCain, Nestlé, DANONE ONE PLANET. ONE HEALTH, PEPSICO, Pernod Ricard, DIAGEO, Carlsberg, Mondelēz International

Cosmetics industrials

L'ORÉAL, Groupe L'OCCITANE

Fashion industrials

KERING, INDITEX, LVMH

Retailers

IKEA

Financial institutions & funds

Rabobank, TIKEHAU CAPITAL, mirova Investing in sustainability, CLARMONDIAL, LIVELIHOODS FUNDS

Data

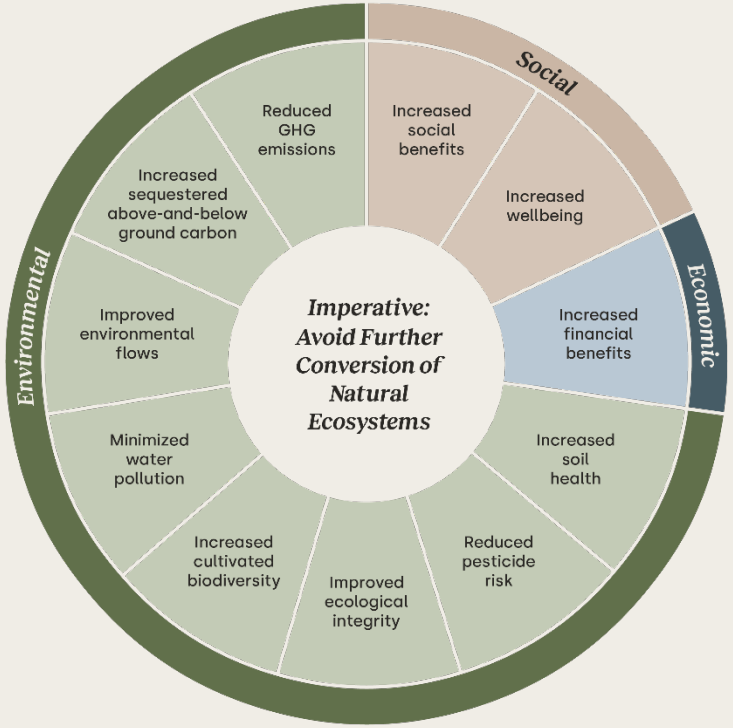
HowGood

Knowledge partners

BCG BOSTON CONSULTING GROUP

Regenerative agriculture impact 2023-24

A shared vision for regenerative agriculture



Outcomes	Indicators
Reduced GHG emissions	*GHG emissions*
Increased sequestered above-and-below ground carbon	*Soil carbon sequestration*
	Total carbon sequestration
Increased soil health	*Soil organic carbon*
Improved environmental flows	*Blue water withdrawal*
Minimized water pollution	*Nutrient Use Efficiency*
Increased cultivated biodiversity	*Crop diversity*
Improved ecological integrity	*Natural/restored habitat in agricultural landscapes*
Reduced pesticide risk	*Pesticide risk*
Increased financial benefits	*Farmer net income*
Increased social benefits	
Increased wellbeing	

18 months → **60+** Monthly participants → **7** Working groups = **11** Holistic cross-sectoral outcomes → **10** Key indicators → **5** Technical reports → **1** Webpage launched → **950+** Companies reached

OP2B’s position paper and policy asks

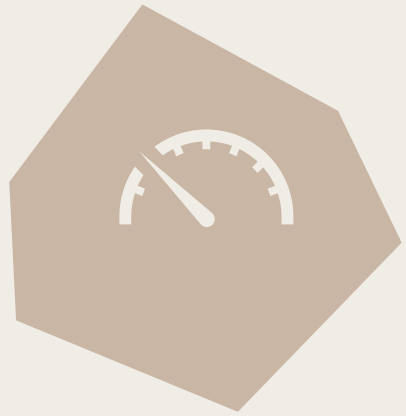
Read the full position paper here

Support and accelerate transition to RegenAg:

1. Align policies to improve outcomes related to soil health, biodiversity, water, climate and farmer livelihoods.
2. Support the development of new equitable business models and reinforce markets for ecosystem services
3. Improve access to peer-to-peer training, technical assistance and knowledge.

Financing & De-risking farmers:

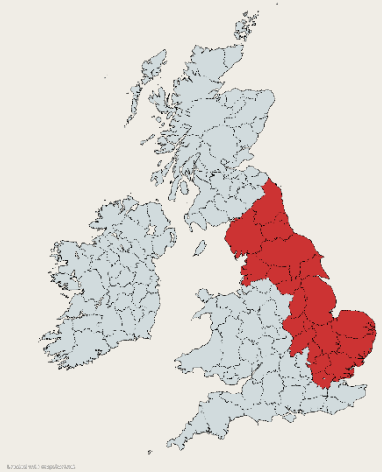
1. Repurpose subsidies to accelerate the transition
2. Foster public-private partnerships to scale up and accelerate the transition to regenerative agriculture and promote collaboration within value chains.
3. Establish risk-sharing mechanisms and insurance programs



Accountability and metrics

1. Provide clear and consistent metrics through established standards
2. Support farmers in collecting and reporting data.
3. Align policy frameworks with internationally recognized standards

LENs' East of England project



- **# of interested OP2B members:** 5
- **# of members engaged:** 3
- **Crops of interest:** milk; wheat; rapeseed; potato; bovine, ovine, and caprine leather;

Funding availability Overview

Fund	Per project fund availability
Soil Capital (private carbon credit)	**€37.8 million - €121.3 million***
Sustainable Farming Incentive (Public/National)	Between £10 and £732 per hectare, depending on the action. Max funding of £36.6 million*
UK Government Defra Sustainable Farm Incentive	
VanLanschot (Private equity)	Size of fund is €400 million. Single investments from €10-25 million for medium sized farms.

*Funds availability is estimated based on a 50,000 ha project scope

Local context

Current regenerative market:

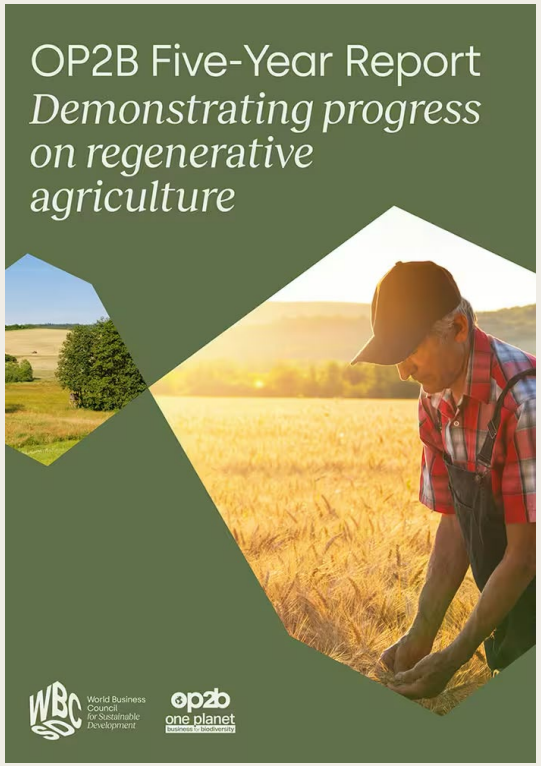
LENs works beyond regen ag- including water resilience, livelihoods and infrastructure and key assets. There is high diversity of land-uses- including root crops; arable; conservation bodies.

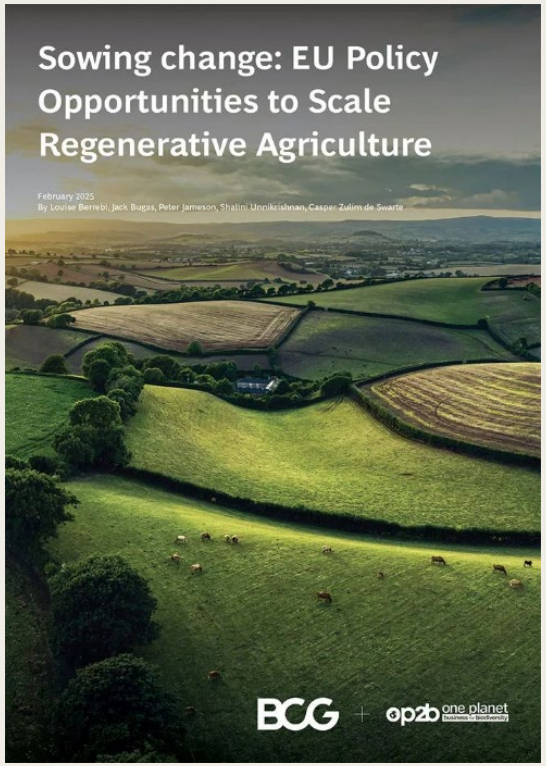
Regional political support:

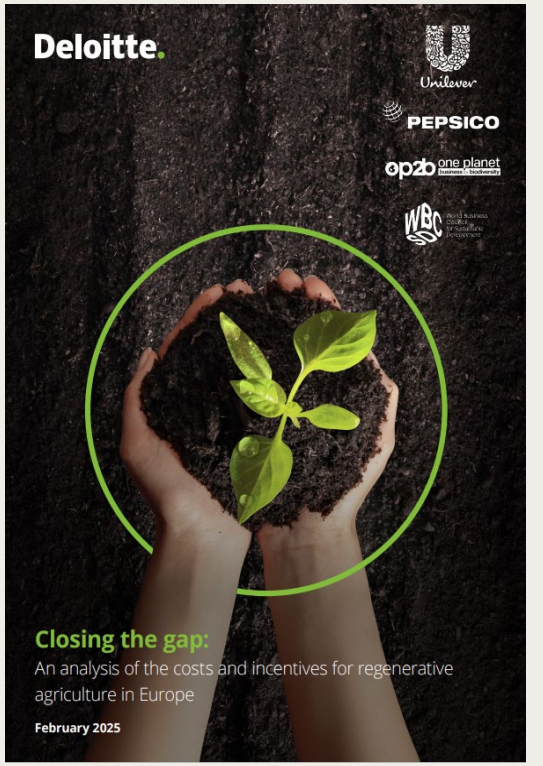
West Northamptonshire Council are a funder and LENs has funding from the Environment Agency

Further reading

https://www.wbcsd.org/actions/one-planet-business-for-biodiversity-op2b/







Insights into the state of transition

Sowing change: EU Policy Opportunities to Scale Regenerative Agriculture was published yesterday.

OP2B/ BCG/ Carlsberg

Sustainable economics

Appropriate value chain and cross-chain partnerships

Standardized MMRV systems and Tools

Farmer training & technical guidance

Enabler

Adequate policy frameworks and PPP

4 **Earmark EIB funds for an agri-transition fund** to finance regenerative ag transitions, including (i) a regen ag-conditioned land bank for new farmers, (ii) a PPP initiative with insurers for better coverage and (iii) a capital loan program to provide transition financing for farmers

1 **Set an outcome-based EU-wide definition of regenerative agriculture.** This definition can serve as the foundation of an EU-wide benchmarking system, aligning with the Strategic Dialogue's recommendations

3 **Integrate outcome-based criteria into Pilar I of CAP** with mixed outcome- and practice- based payments

2 **Develop an EU-wide program for regenerative agriculture MMRV, building on CRCF work.** Standardize methodologies, enhance data accessibility, and integrate proven global frameworks to promote effective measurement and private-sector engagement

5 **Set up a knowledge-sharing program** through university curriculums and peer-to-peer learning initiatives

6 **Foster public-private partnerships to encourage investments and strengthen the market to reward ecosystem services.** This framework would align stakeholders, create mechanisms to valorize ecosystem services and support regenerative practices adoption

Priority: Primary focus 1 — 6 Supporting actions

EIB: European Investment Bank. CAP: Common agricultural policy. MMRV: Monitoring, reporting & verification
Source: Expert interviews; BCG analysis

Closing the Gap: an economic analysis of costs and incentives in Europe

OP2B/ Deloitte/ Pepsico/Unilever

De-risking the farmer business case, increasing investor returns, developing fit for purpose funding and making funding accessible will ensure a positive economic model for farmers

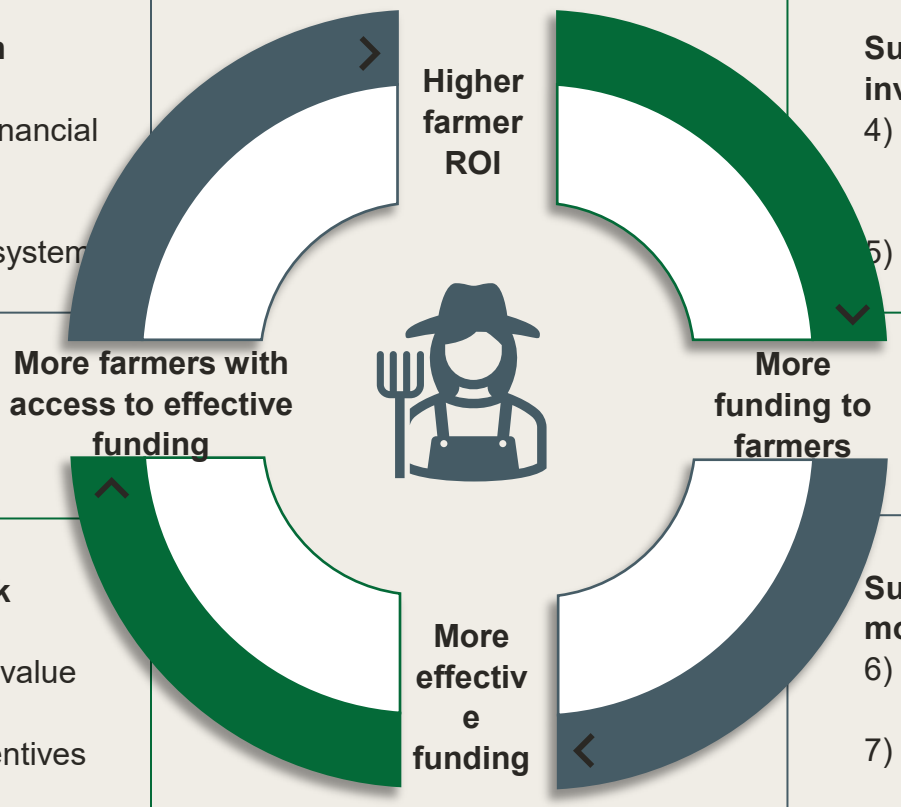
9 major recommendations to help farmers achieve a positive economic model

Financing needs: Optimize farmer Return on Investment

1) Ensure farmer support on agronomic and financial advice on regenerative agriculture roll-out
2) Foster equipment sharing
3) Align on conditions for monetisation of ecosystem services as additional revenue stream

Sufficiency: Increase returns and reduce risk for investors

4) Attract new investors (incl. institutional investors) through combining risk-reward expectations, e.g., in blended finance constructions and PPP[1]
5) Close the information gap on farmer business cases for investors to increase confidence in investments



Transparency & accountability: Report, track and adjust funding

8) Develop incentive platform for farmers and value chain players
9) Monitor, track, identify gaps and adjust incentives

Suitability: Develop fit-for-purpose funding models

6) Grow funding for capital expenditures and initial costs
7) Collaborate across stakeholders to share expertise to develop fit-for-purpose funding and respective E2E farmer support model

Notes: 1. Public-private partnerships

Source: Deloitte Cost and Incentives analysis, expert interviews

DEALING WITH WATER SECURITY AND WATER SAFETY IN AGRICULTURE

SARAH GARRÉ

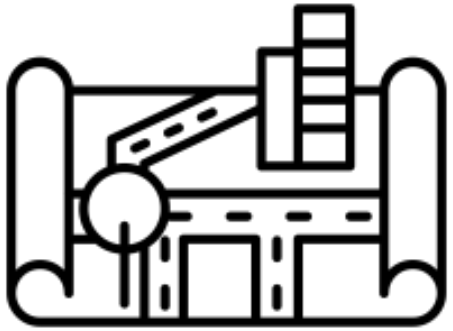
Coordinating and aligning public and private finance for the transition to sustainable and resilient agriculture

IEEP seminar, 11/02/2025

Water security and safety: a real challenge for Flanders

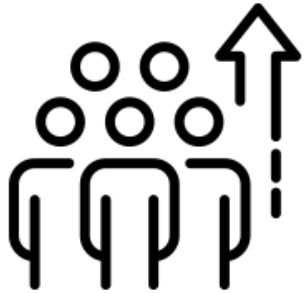
More frequent extreme events

+



Intense land use, soil sealing and compaction
Reduced groundwater recharge

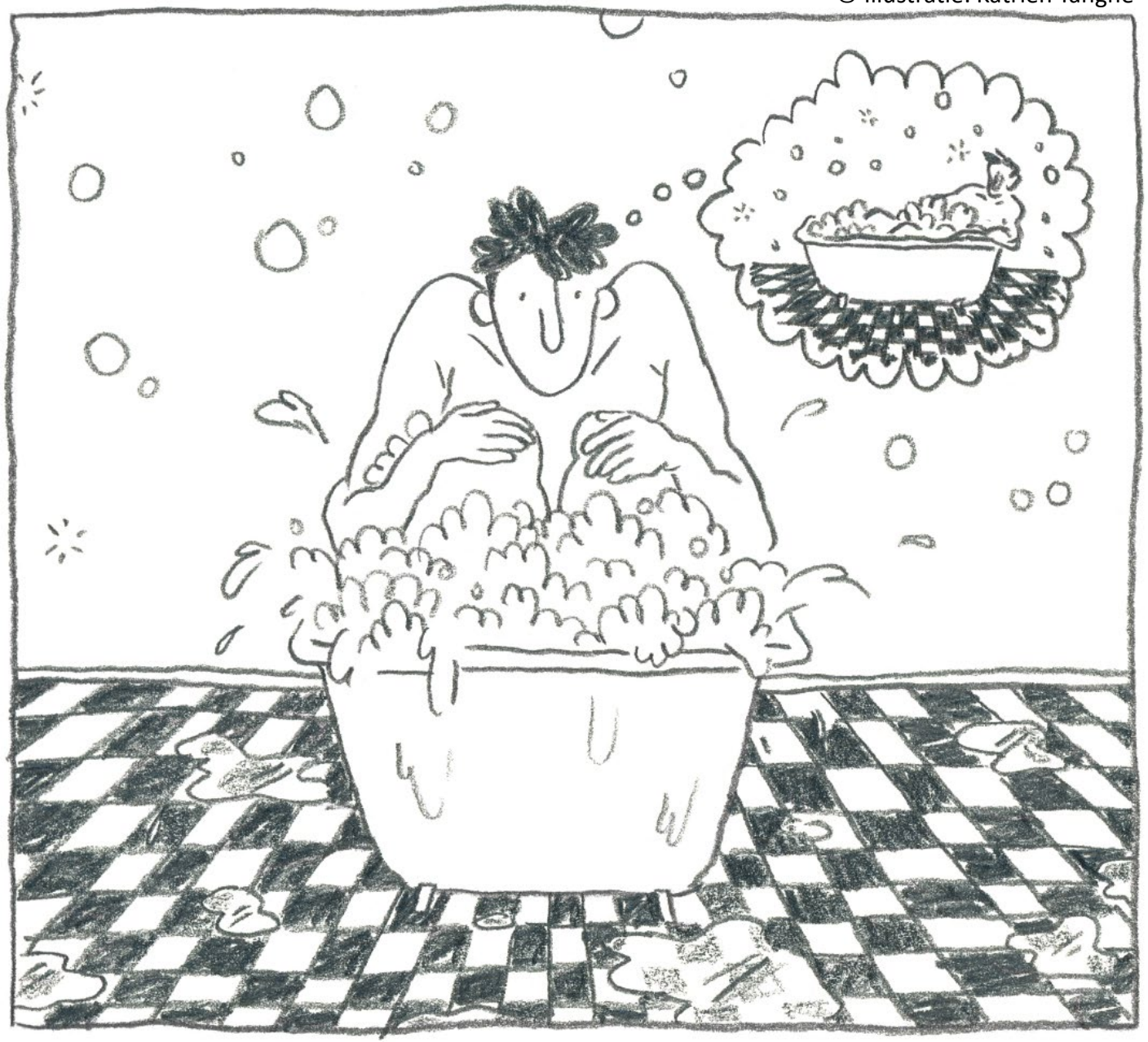
+



High population density:
High water demand

ILVO

© Illustratie: Katrien Tanghe



Store water in reservoirs?

ILVO

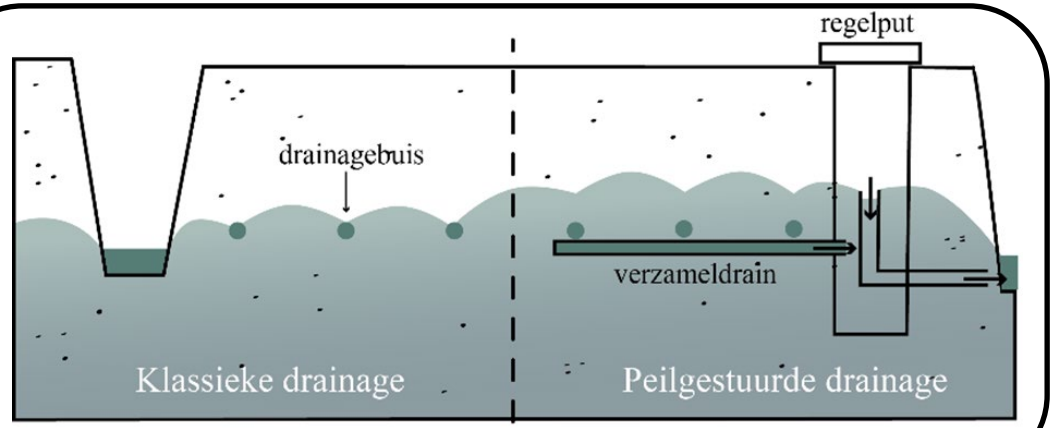
ILVO

Not only too dry…

How retain water in the agricultural landscape?

Weirs?

Paludiculture?



Controlled drainage?

Bodemzorg?

… + … + … ?

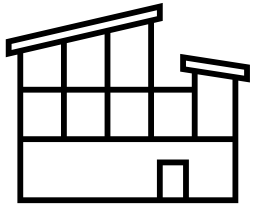
Contour farming, Swales?

Needs significant infrastructure, labour and knowledge: who supports & who pays?

Government

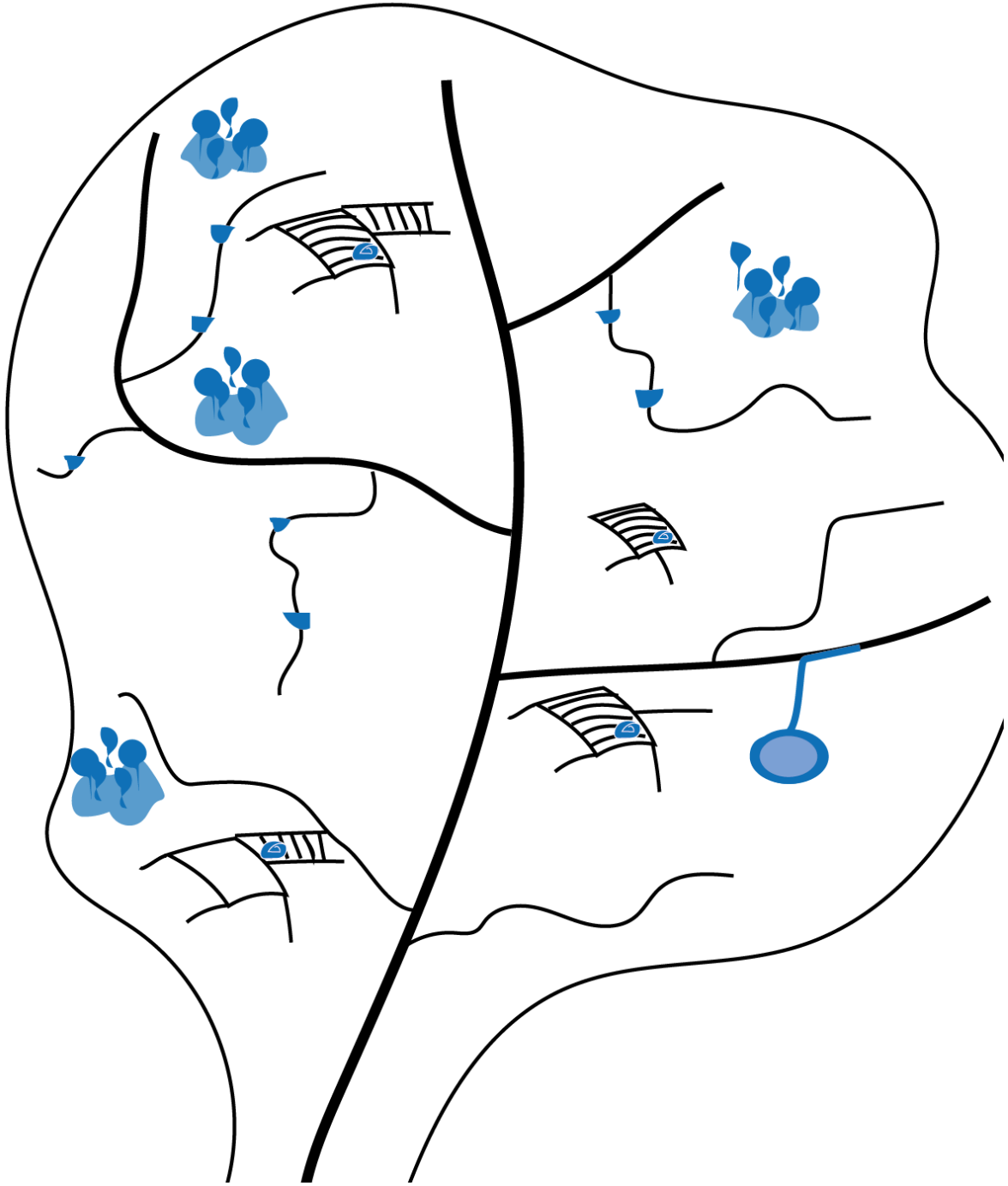
Consumer

Farmer



Processing industry

Retail



Nature-based solutions and instruments to realize visions at landscape scale

ILVO

Reflect on spatial planning and necessary land use changes

The importance of social capital

Thank you!

Questions?

Contact: Sarah.Garre@ilvo.vlaanderen.be

Instituut voor Landbouw-,
Visserij- en Voedingsonderzoek
Burg. Van Gansberghelaan 92
9820 Merelbeke – België
T + 32 (0)9 272 25 00

elk@ilvo.vlaanderen.be
www.ilvo.vlaanderen.be

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Session II: Coordinating and aligning public and private finance for the transition to sustainable and resilient agriculture

Presentation
Blaz Kurnik
Head of Climate Risks and Resilience Unit
European Environment Agency

Moderator
Melanie Muro
Head of CAP and Food
IEEP

Julien Vastenaekels
University of Reims Champagne-Ardennes &
Environmental Defense Fund (EDF)

Sarah Garré
Professor
ILVO Vlaanderen

Stefania Avanzini
Director
OP2B

Emmanuelle Mikosz
Programme and Deputy Director
Forum for the Future of Agriculture

Institute for European Environmental Policy

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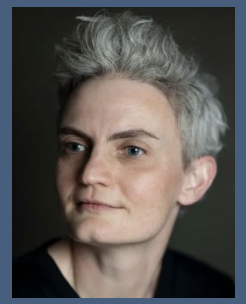
Coffee break

Session II: Coordinating and aligning public and private finance for the transition to sustainable and resilient agriculture



Presentation
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European Climate Risk Assessment for businesses: preparing for a resilient and competitive business in 2025

Conclusive remarks
Blaz Kurnik
Head of Climate Risks and Resilience Unit
European Environment Agency

Closing of the workshop
Mercedes Sanchez Varela
Member of the Board
Institute for European Environmental Policy (IEEP)

Institute for European Environmental Policy

Thank you for your participation