

Reconnecting urban and rural perspectives

Borders only exist in our heads....

Ecocity World Summit – 22 February 2022

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Reconnecting urban and rural perspectives

A reflection based on:

- > KB Feeding cities and migration
- > KB Nature inclusive transitions

...not a reflection behind the desk,
but in full connection
with stakeholders, areas and society!!

Knowledge Base (KB)

Fundamental and application-oriented research aiming to ensure the creation of in-depth knowledge and the development of relevant expertise, both of which are necessary for solving future societal issues.

This research is (partly) subsidized by the Dutch Ministry of Agriculture, Nature and Food Quality as part of the KB Programs Food Security and Valuing Water (KB34) and Nature inclusive transition (KB36)

...already connected



Dried up Berg River Dam in Cape Town.
Photo credits: groundup.org.za

Cape Town's Day Zero: 'We are axing trees to save water'

BBC News 2021 <https://www.bbc.com/news/world-africa-59221823>



Choosing which vineyard to save Western cape
Photo credits : VinPro



People queue to collect water in Cape Town 2018
Photo credits Reuters/Mike Hutchings

Cities draw heavily on watersheds well beyond their boundaries...

McDonald, R, et. al., Water on an urban planet: Urbanization and the reach of urban water infrastructure, Global Environmental Change, Volume 27, 2014, Pages 96-105, ISSN 0959-3780, <https://doi.org/10.1016/j.gloenvcha.2014.04.022>.

...already connected



The Rim Fire Stanislaus National Forest and Yosemite National Park, 2013 (USDA Forest Service, Chris Stewart)



King Fire, 2014 Source: Pacific Southwest Forest Service USDA (Flickr)

Wildfires Can Spark Widespread Contamination of Public Water Supplies

NRDC, 2020
<https://www.nrdc.org/stories/wildfires-can-spark-widespread-contamination-public-water-supplies>

State of emergency in San Francisco as huge wildfire moves into Yosemite

San Francisco is on alert as blaze threatens power and water supply

<https://www.theguardian.com/world/2013/aug/24/san-francisco-state-emergency-wildfire-yosemite>

"Rax-Feuer im Einzugsgebiet für Wiener Wasser"

▪ Was der Waldbrand für die Wiener Wasserversorgung bedeutet.

A forest fire in Austria could jeopardize the water supply in Vienna

Burned forests impact water supplies

Hallema, D.W., Sun, G., Caldwell, P.V. et al. Burned forests impact water supplies. *Nat Commun* 9, 1307 (2018). <https://doi.org/10.1038/s41467-018-03735-6>

...already connected



Photo credits: <https://www.alertmedia.com/blog/the-impact-of-wildfires-on-business/>



Photo credits: Noah Berger /AP

Development near natural areas puts more Californians in the path of wildfires

Wildland-urban interface areas grew 20 percent in the state from 1990 to 2010

Laura Hamers, Science News
<https://www.sciencenews.org/article/development-near-natural-areas-puts-more-californians-path-wildfires>

...already connected



The village of Blessem -Germany, 2021
Photo credits: Rhein-Erft-Kreis/AP

Cities boosted rain, sent storms to the suburbs during Europe's deadly summer floods

Yang, Long & Ni, Guangheng & Tian, Fuqiang & Niyogi, Dev. (2021). Urbanization Exacerbated Rainfall Over European Suburbs Under a Warming Climate. *Geophysical Research Letters*. 48. 10.1029/2021GL095987.



Flooded river in Valkenburg –The Netherlands, 2021
Photo credits: ANP, Sem van der Wal



Flash flood in Theux, Liege province, 2021
Photo credits: Forces of Nature via Youtube.com



Flooding Liège, Belgium, 2021.
Photo credits: Valentin Bianchi/AP

...already connected



the food system accounts for
20-50% of environmental pressures

**with majority accountable for the
demand of cities**

40% of most valuable croplands
directly around urban areas and at risk

direct and indirect effects
urban systems and rural systems

i.e. effects of rural-urban migration

i.e. urban effects on rural production

Photo credits (left)
Mohammed Taheed (Flickr.com)

Photo credits (right)
Aravindan Ganesan (Flickr.com)

But still... urban and rural divide



Set on the agenda...

Ten guiding principles

- locally grounded
- integrated governance
- functional and spatial system based
- financially inclusive
- balanced partnership
- Human rights based
- Do not harm, and provide social protection
- environmentally sensitive
- participatory engagement
- data driven and evidence-based

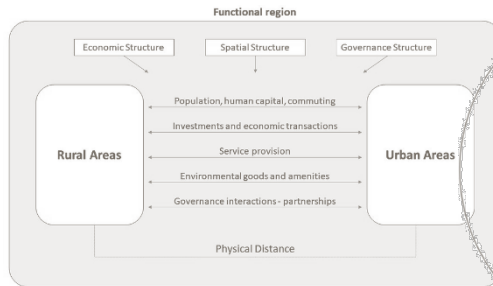
Urban-Rural Linkages: Guiding Principles and Framework for Action to Advance Integrated Territorial Development, UN HABITAT, 2019

Urban-Rural Linkages touch on a broad variety of thematic areas ranging from urban and territorial planning, strengthening small and intermediate towns, from enabling spatial flows of people, products, services and information to fostering food security systems as well as touching mobility and migration, reducing the environmental impact in urban-rural convergences, developing legislation and governance structures and promoting inclusive financial investments among others. **Fostering Partnerships – between urban and rural actors and areas at the local level are crucial for a transformative agenda.**

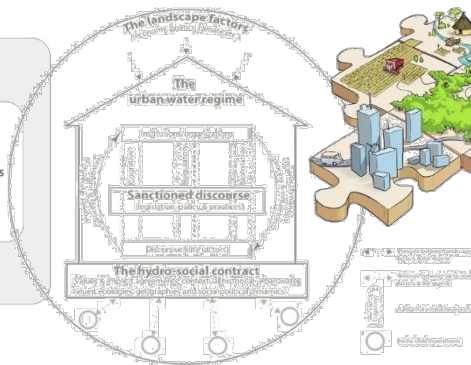
Habitat III, the third United Nations Conference on Housing and Sustainable Urban Development, 2016

...but stuck in boundaries and complexity

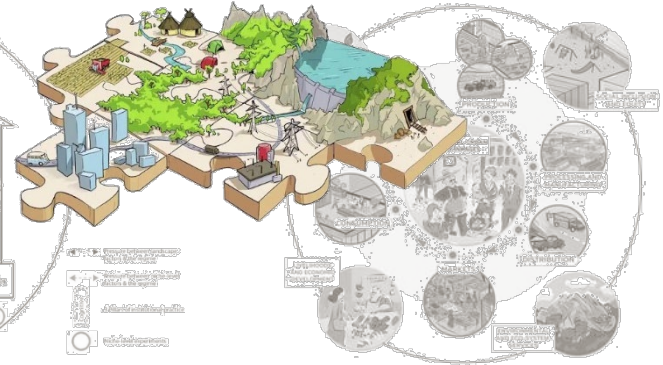
Dealing with HORIZONTAL, VERTICAL and SECTORAL BOUNDARIES



Source: OECD (2013[1]), *Rural-Urban Partnerships: An Integrated Approach to Economic Development*



Multi-Level Perspective on transition of large socio-technical systems for the case of urban water systems.
(Source: Mguni et al. 2015)



City Region Food system (source: FAO)

“ While rural and urban areas are often **separated by traditional administrative boundaries**, they are nonetheless deeply interconnected through a variety of complex relationships”
(OECD, 20210)

...and the reality of today

The biggest paradox to tackle

**“When rural and urban areas are more connected,
they can benefit from the complementarity**

...yet rural-urban interactions are **complex** and creating new linkages
is **not always risk-free**.

...achieving meaningful linkages **may entail costs and additional
administrative burdens**. It may be necessary to overcome
administrative constraints and co-operate across levels of government,
both horizontally and vertically.

...developing processes for this **may require time and resources, as well
as capacities** that are not in place at the start of the co-operation
process, the development of which may involve additional investment”

OECD (2021), *Perspectives on Decentralisation and Rural-Urban Linkages in Korea*, OECD Rural Studies,
OECD Publishing, Paris, <https://doi.org/10.1787/a3c685a7-en>.



Towards truly reconnecting...

What's the way to really **reconnect in action?**

Cherish complexity, but

"A better understanding of the interconnections ... with **an adequate complexity**, are needed to strengthen urban-rural linkages... **to create options** ...**at different spatial scales** and policy levels"

Doernberg A., Weith T. (2021) Urban-Rural Interrelations—A Challenge for Sustainable Land Management. In: Weith T., Barkmann T., Gaasch N., Rogga S., Strauß C., Zscheischler J. (eds) Sustainable Land Management in a European Context. Human-Environment Interactions, vol 8. Springer, Cham.



...via a shared story!

“It also requires a first **reference to the objectives to be pursued and the underlying values and norms**”

Doernberg A., Weith T. (2021) Urban-Rural Interrelations—A Challenge for Sustainable Land Management. In: Weith T., Barkmann T., Gaasch N., Rogga S., Strauß C., Zscheischler J. (eds) Sustainable Land Management in a European Context. Human-Environment Interactions, vol 8: Springer, Cham.



A spatial open-ended vision that truly link transitions, systems, motifs and people!
It all comes together in the same space

...and thus, the same story!

“Visions are essential to inspire, mobilize and keep a collective of people on track toward their goals”

Anderson, M. (2019). The importance of vision in food system transformation. Journal of Agriculture, Food Systems, and Community Development, 9 (Suppl. 1), 55–60

Requires different kind of knowledge...

Imagination is more important **than knowledge**

(Albert Einstein)

....**but knowledge** empowers imagination

touching the heart

...more specific

...better integration

...more appealing

...more space

OPEN
DECISIVE
POSITIVE
CONSTRUCTIVE
CONNECTING

more insights...

better choices...

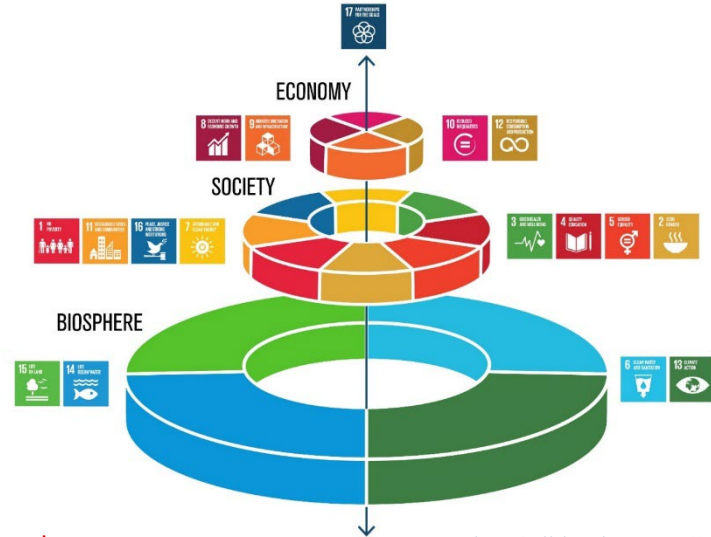
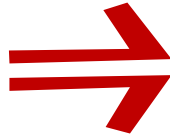
better discussions...

more space...

activating and encouraging

...and based on common grounds

The natural fundament connects...
...but often still a white spot



nature based approach

source: Rockström, Stockholm Resilience Institute, 2018

Disclaimer

~~blueprint~~

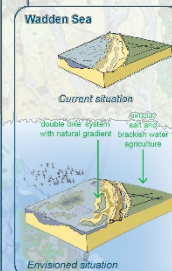
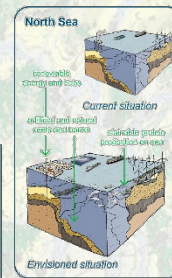
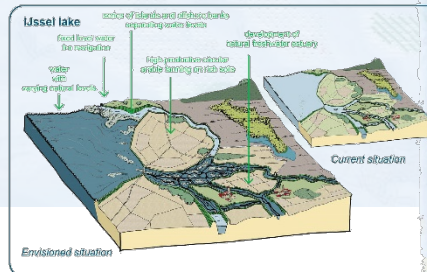
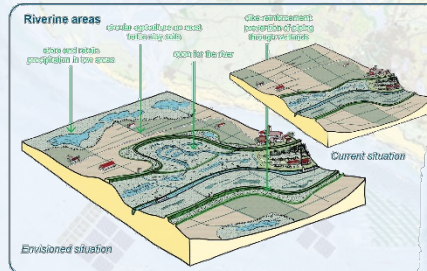
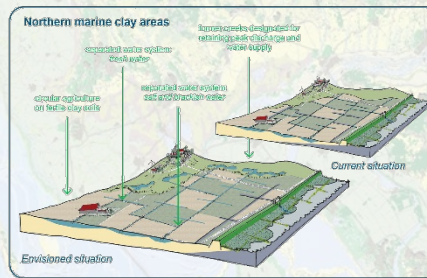
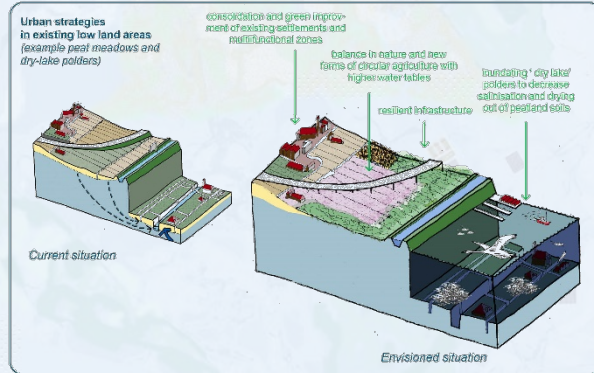
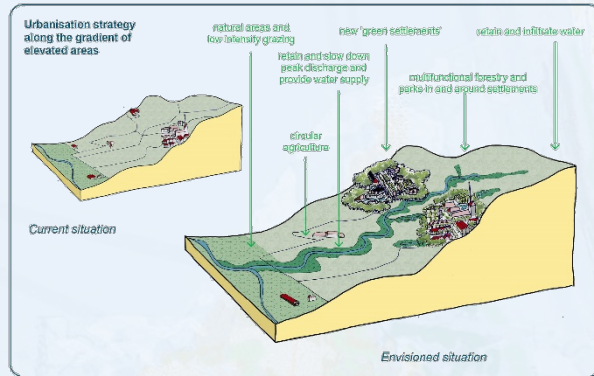
“Visions are not meant to be static, but rather give an open-ended desirable state allowing improvement through revisiting, reflecting or even reframing them”

Hölscher K., Frantzeskaki N., Pedde S., Holman I. (2020), Agency Capacities to Implement Transition Pathways Under High-End Scenarios. In: Hölscher K., Frantzeskaki N. (eds) Transformative Climate Governance. Palgrave Studies in Environmental Transformation, Transition and Accountability. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-49040-9_11

The Netherlands in 2120



...integrated strategies



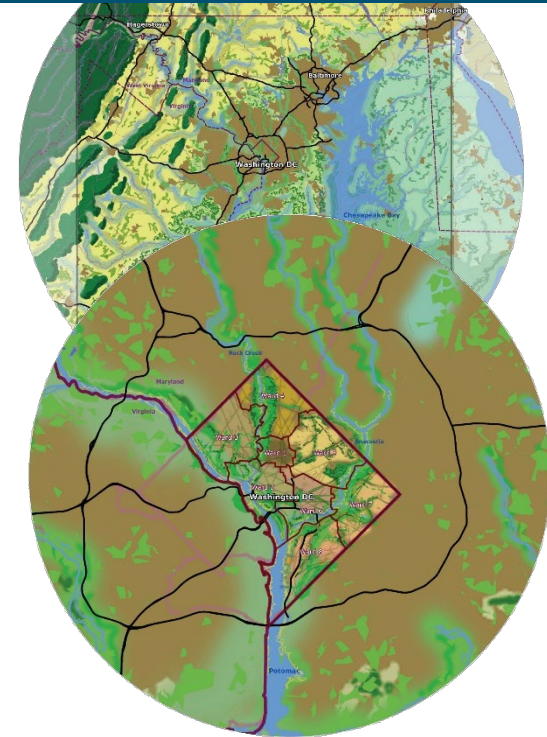
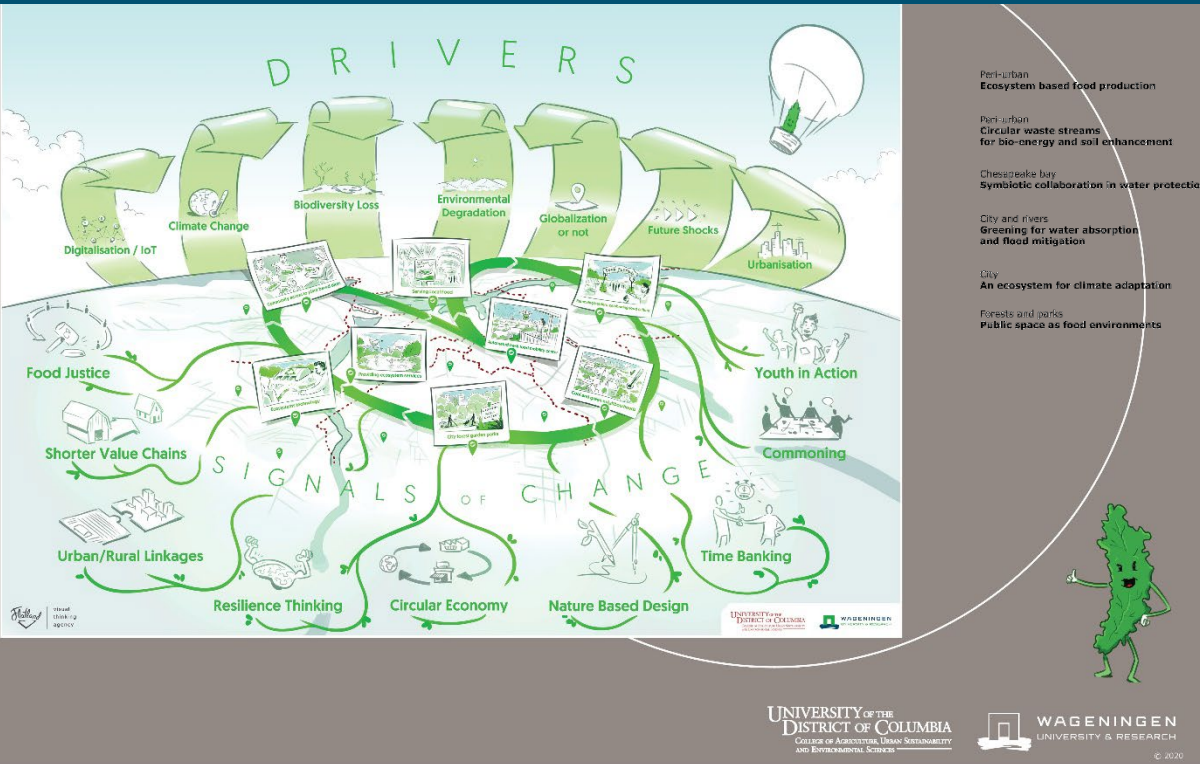
- ✓ **policy impact**
- ✓ **societal impact**

NL2120 is widely embraced
 ...beyond the urban rural divide
 ...beyond sectoral approaches
 ...at different levels



Food connects 2050

...a nature-based food economy for all in the Washington DC region

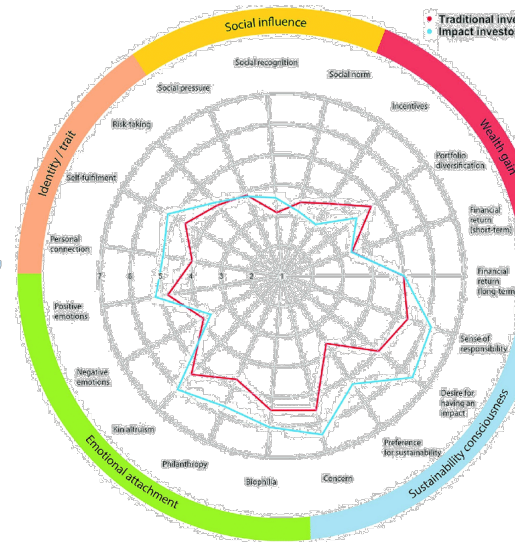
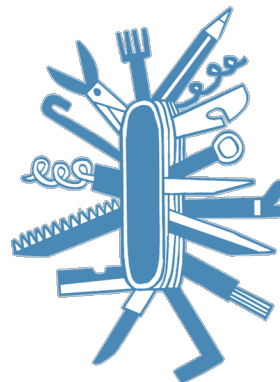


no matter what entry point...

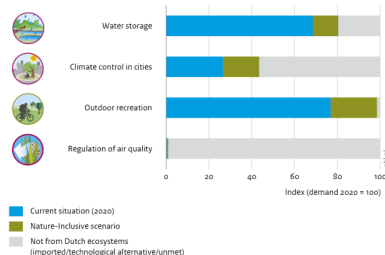
Iterative process with...

■and yes, with need evidence and indication!

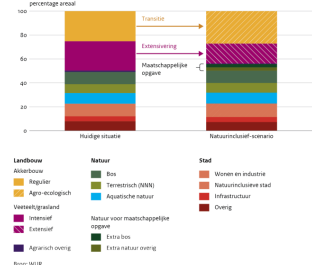
- linked to motifs
- potential impact and effects
- synergies and potential trade-offs
- dealing with (un)certainities and choices
- > support tools



Supply from ecosystem services related to urban areas, 2020



Landgebruiksveranderingen in het Natuurinclusief-scenario, 2050



Reyhanloo, Tony & Baumgärtner, Stefan & Haeni, Matthias & Quatrini, Simone & Saner, Philippe & von Lindern, Eike. (2018). Private-sector investor's intention and motivation to invest in Land Degradation Neutrality. PLOS ONE. 13. e0208813. 10.1371/journal.pone.0208813.

To conclude...

- **Reconnecting urban and rural perspectives**

- ...requires a connected story

- ...based on opportunities and mutual benefits

- ...based on common ground (systems connect)

- ...doing the right thing at the right place at the right time

- ... by intrinsic motivation, shared ambitions and inspiration!**

*"I love it
when a
plan comes
together"*

BORDERS EXIST
only in our head

Get
Over
it

Thank you for your attention!

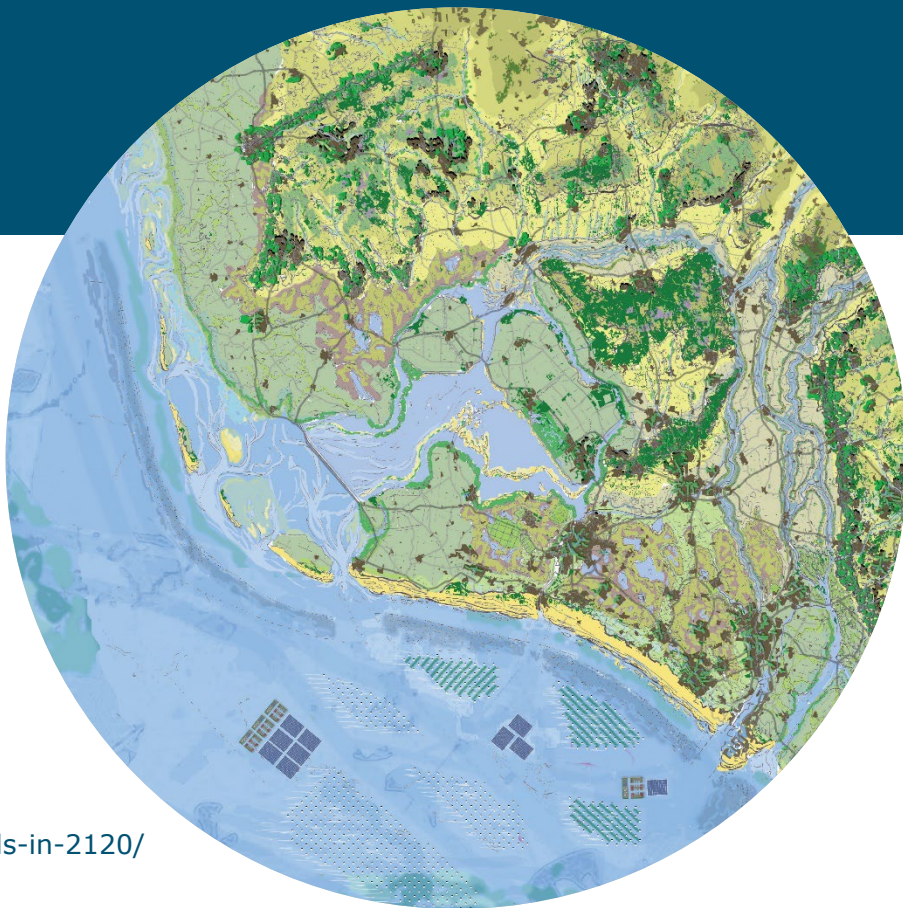
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