

Climate Services - XXL

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Trends

- Awareness of the risks of climate change and a call for climate action
- Growing availability of climate information
- Missing methods to translate climate related data into e.g. assessments, tools
- Gap between supply and demand
- Climate change opportunities are often overlooked



The market for climate service

- In the H2020 programme EU foresees an increasing demand, and calls for:
 - Demonstration of climate services
 - From climate service concepts to piloting and proof-of-concept
 - **Defining the European and international climate service market characteristics and foresight into market growth**
 - **Climate services market barriers and enabling conditions**

Leading questions

- Do we need a business case for a sustainable development of climate services?
- What is the business case?

Climate services - XXL



Focus of Climate Services - XXL

- Supporting businesses, public sector and individuals in climate-smart, strategic decisions by tailoring existing wealth of climate data and information into integrated tools, products and assessments.
- Opportunity-driven
- Adaptation + mitigation
- Co-design and co-produce



Three examples of existing market opportunities

- Information service
- Financial service
- Research and tool development

1. Agrifood for Climate Expedition



Expeditie Agrifood voor Klimaat

Tijdens de Nationale Klimaattop lanceerden IVO Nierland en Alterra Wageningen Environmental Research de nieuwe expeditie Agrifood voor Klimaat. De expeditie is bedoeld voor Agrifood bedrijven die werk willen maken van het klimaat. Dat kan door de eigen voetafdruk (mitigatie) te reduceren of door producten of diensten te ontwikkelen om met klimaatverandering om te gaan (adaptatie).

Het programma

Als deelnemer ontdek je tijdens de expeditie Agrifood voor Klimaat wat klimaatverandering betekent voor jouw bedrijf en welke stappen je kan zetten om daar wat mee te doen. Vanuit de gebundelde kennis en het netwerk van Wageningen Environmental Research en IVO Nierland word je begeleid door een ervaren team uit de wetenschap en praktijk. We brengen je ook in contact met de juiste partners om deze actie te realiseren.

Deelnemers

Dit zijn de bedrijven die deelnemen aan de expeditie. Jouw bedrijf hier ook bij? Meld je aan vóór 23 december via [Ingrid Comins](#) of [Gerard Teulings](#).



Identified challenges

- How to reduce CO₂ of production (gas)? Can we use heat coming from the production process?
- Is climate change affecting 'cow in the field'-reputation? How to deal with that?
- Is climate change affecting the feeding for chickens? Does climate change increase risk of diseases?
- How to develop a regional collaboration for a healthy food and climate friendly delta?

2. Climate change & Financial sector

- Rapidly increasing attention to climate risks (transition, physical) around the 2015 Paris Agreement
- G20 TFCD report on carbon-related financial disclosures and recommends to disclose potential impacts of climate-related risks and opportunities under different future scenarios
- Dutch initiative financial sector led by DNB

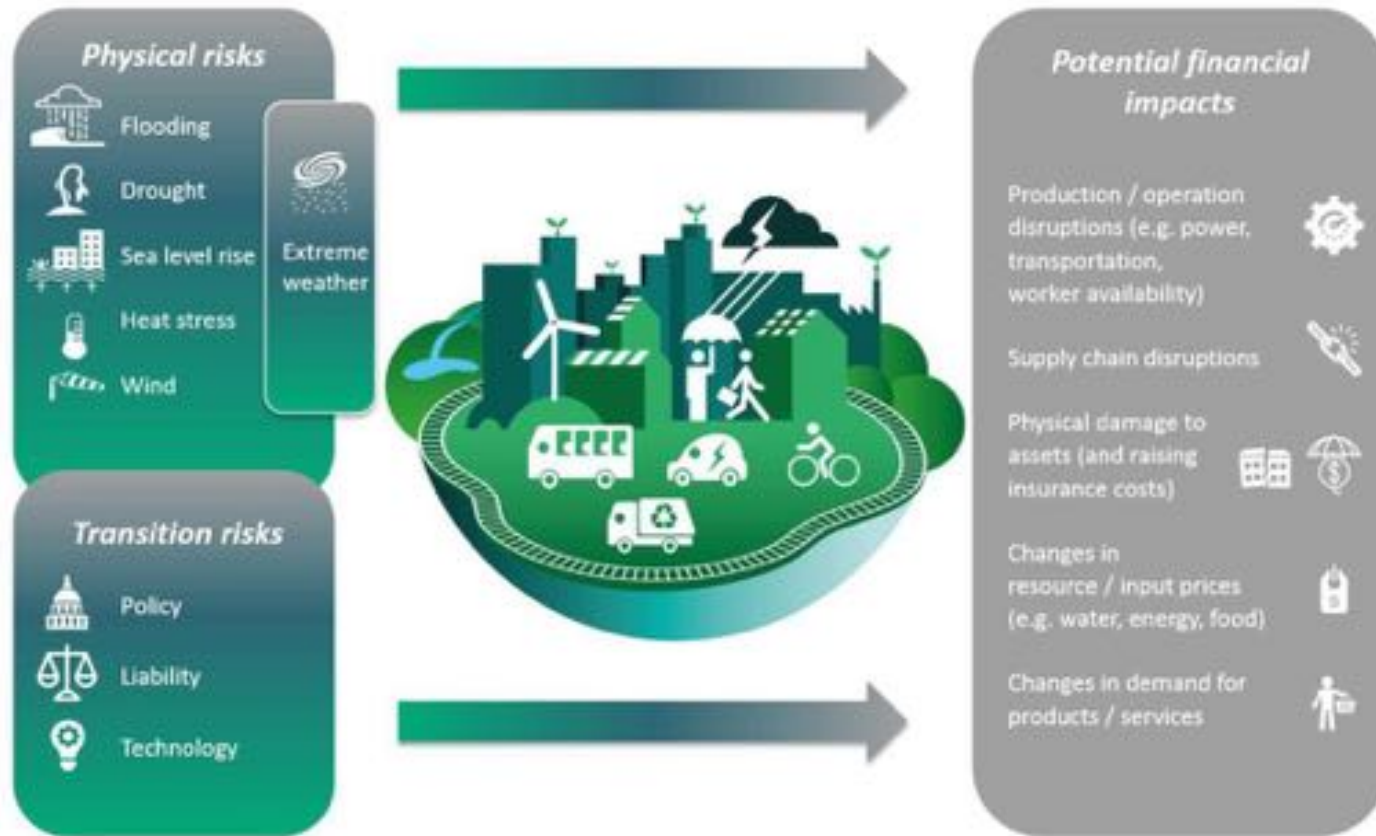


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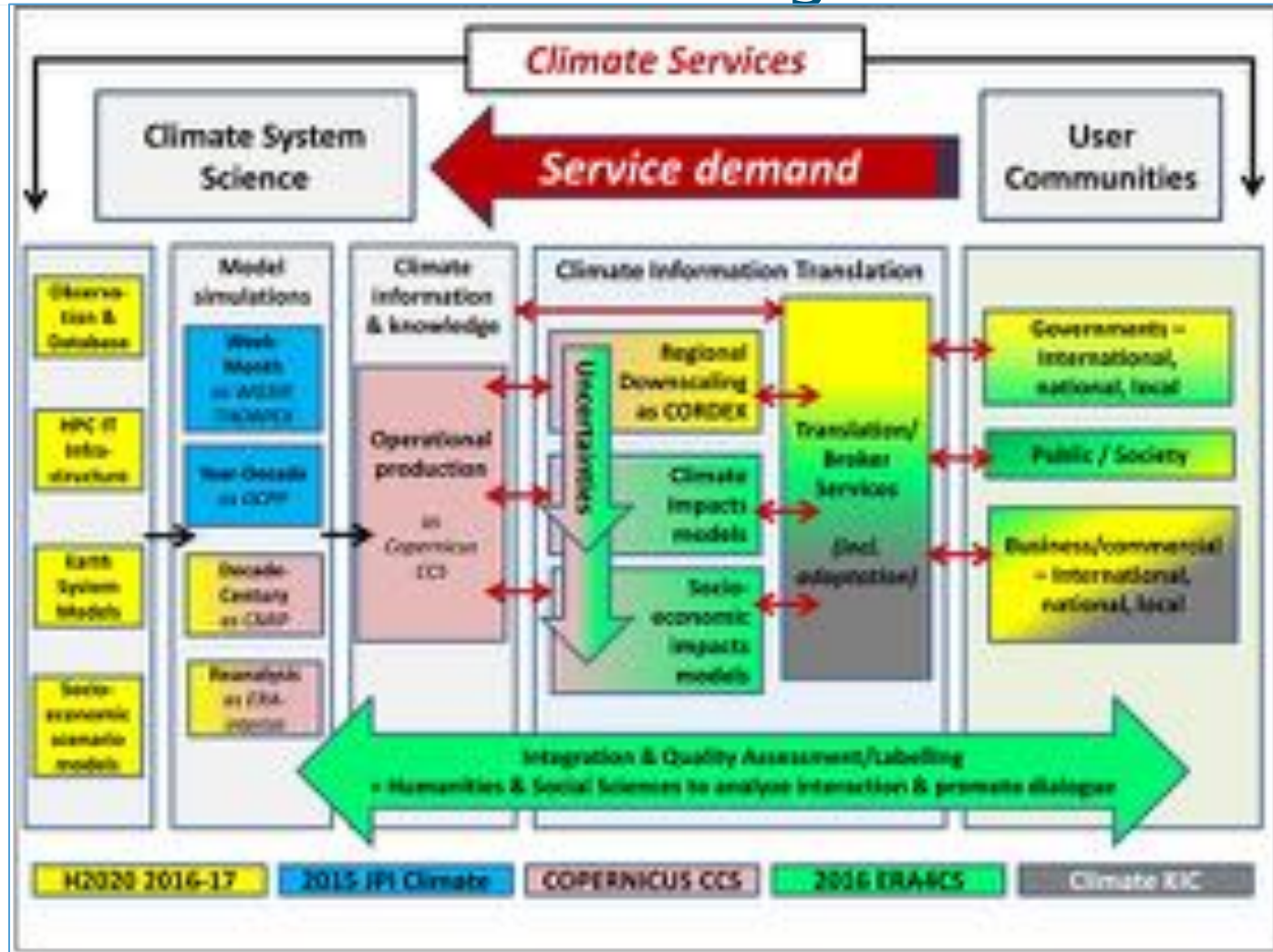
EU requires pension funds to assess climate change risks



Climate risk and potential financial impacts



3. Research and tool development: Copernicus Climate Change Services



SECTEUR Project

- ★ The **S**ector **E**ngagement for the **C**opernicus Climate Change Service: **T**ranslating **E**uropean **U**ser **R**equirements project (**SECTEUR**) is one of the **C3S** projects.
- ★ **SECTEUR** works with public and private sector organisations to understand their requirements in different sectors:
agriculture and forestry, health, insurance, infrastructure, coastal areas and tourism.



User engagement

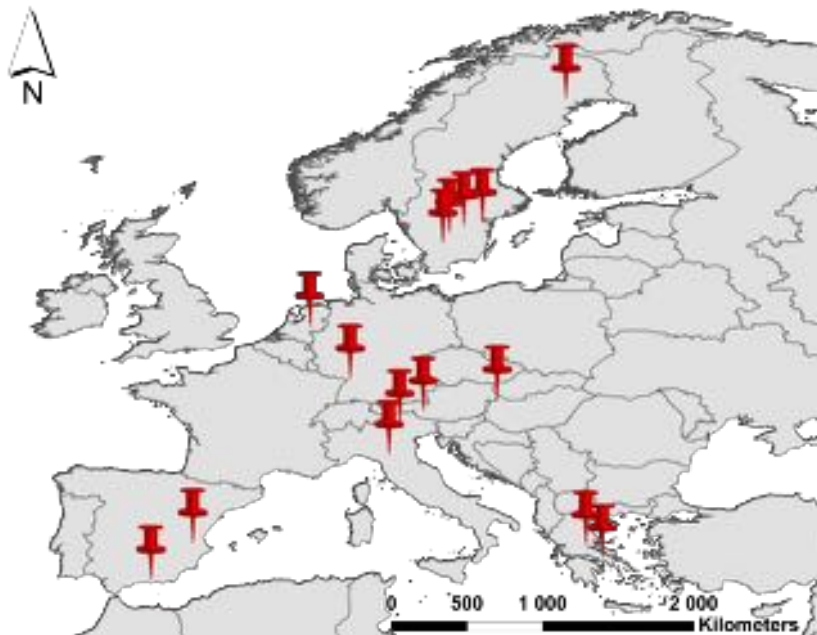
- ★ SECTEUR is engaging with a wide number of organizations through surveys, workshops and interviews
- ★ The ultimate aim is to translate user requirements into freely available climate services (use cases) that will provide an added value to users for the benefit of society



Cagliari 20 Oct. 2016

Copernicus Climate Change Service Project
**SWICCA, Service for Water Indicators in Climate
Change Adaptation**

**SWICCA offers readily available climate-impact
data to speed up the workflow in climate-
change adaptation of water management
across Europe.**



- Web-based services to provide access to data for climate impact assessments
- Visualising and describing pan-European climate impact indicators (climate, water and socio-economic) that represent historical periods, seasonal forecasts and future conditions

- consulting engineers
(knowledge purveyors)
- Policy makers

Services are co-designed in real life case studies at the local and regional level where purveyors support their clients in taking water management decisions in the context of climate change

Duration: 16 months, started November 2015 to February 2018

Coordination: SMHI

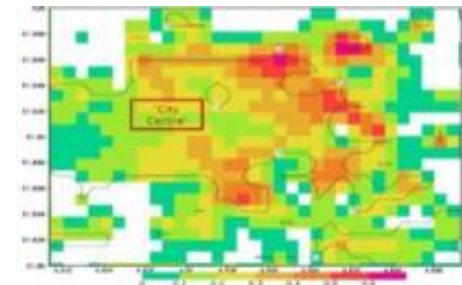
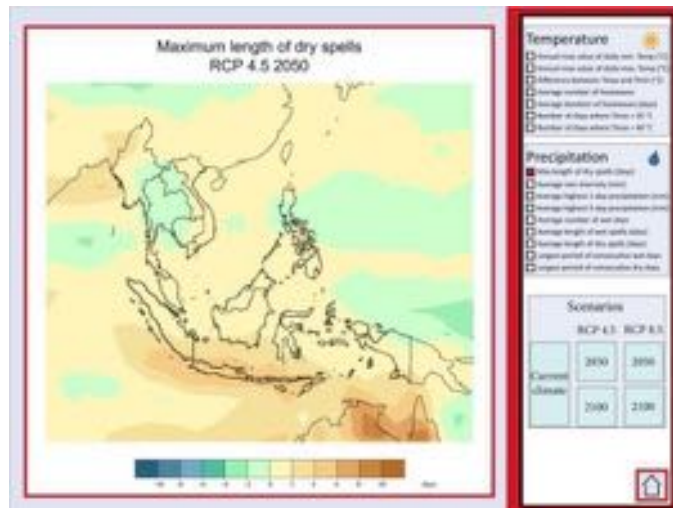
Consortium: 10 sub-contractors and 3 in-kind partners

- WU en WER

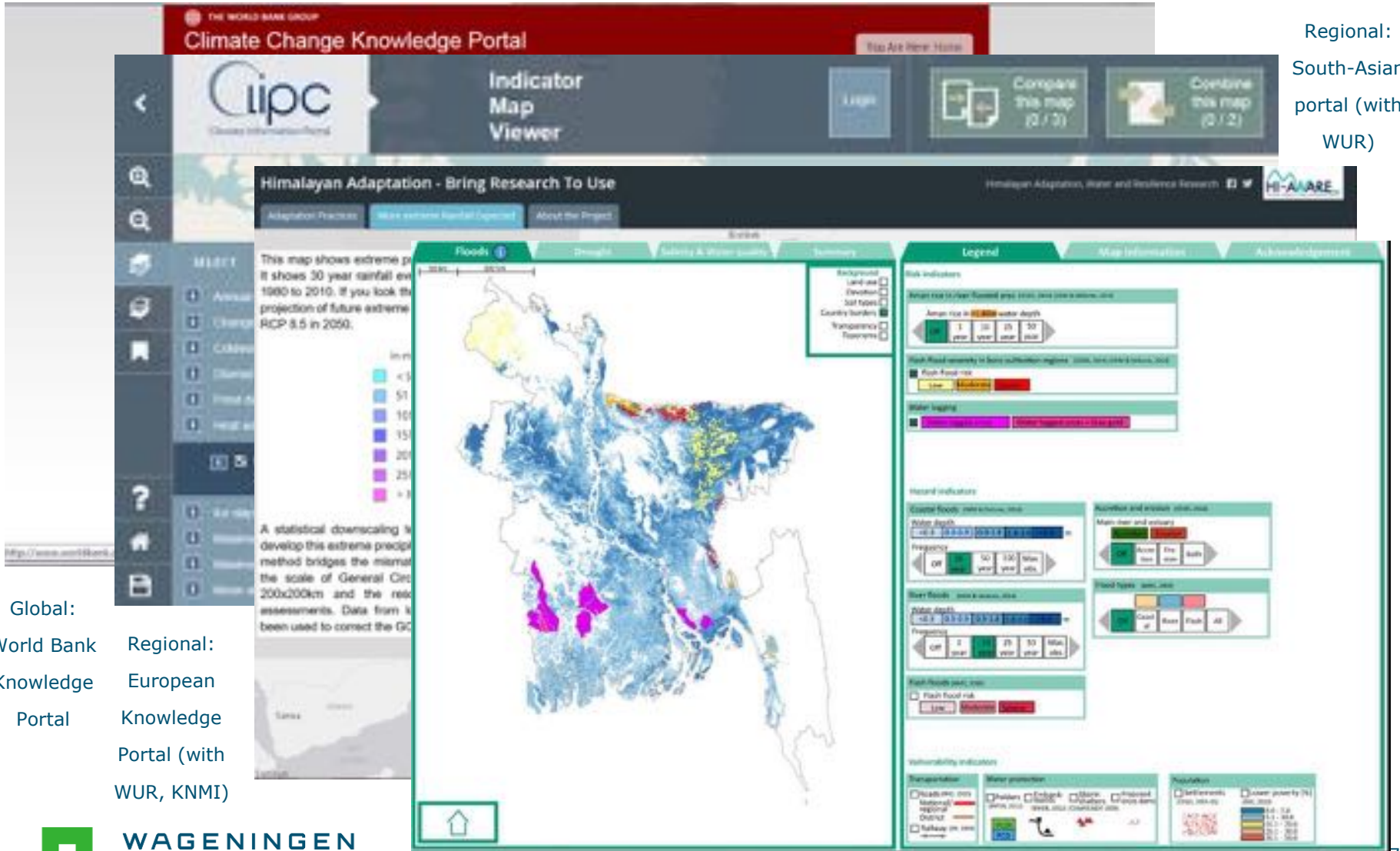
Climate adaptation atlas

Climate Adaptation Atlas

Could my area be flooded? Are there any hospitals or evacuation routes in the flood-prone area? Should I expect soil subsidence? How many days a year will I expect heat stress in the future? The "Climate Adaptation Atlas" is a tool that provides insights into these kind of questions. The interactive atlas shows (future) threats of coastal and river floods, drought and heat stress on a map. Researchers are working on such an atlas for Indonesia and Bangladesh.



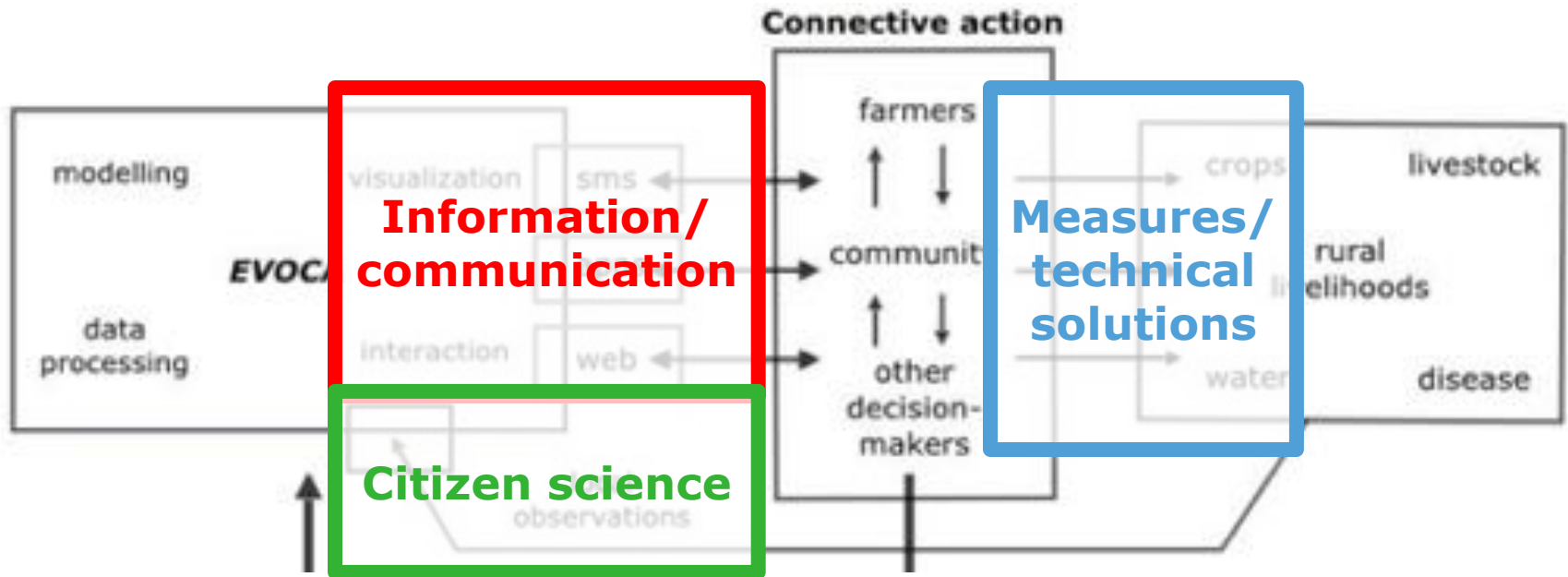
International tools to support climate risk assessment



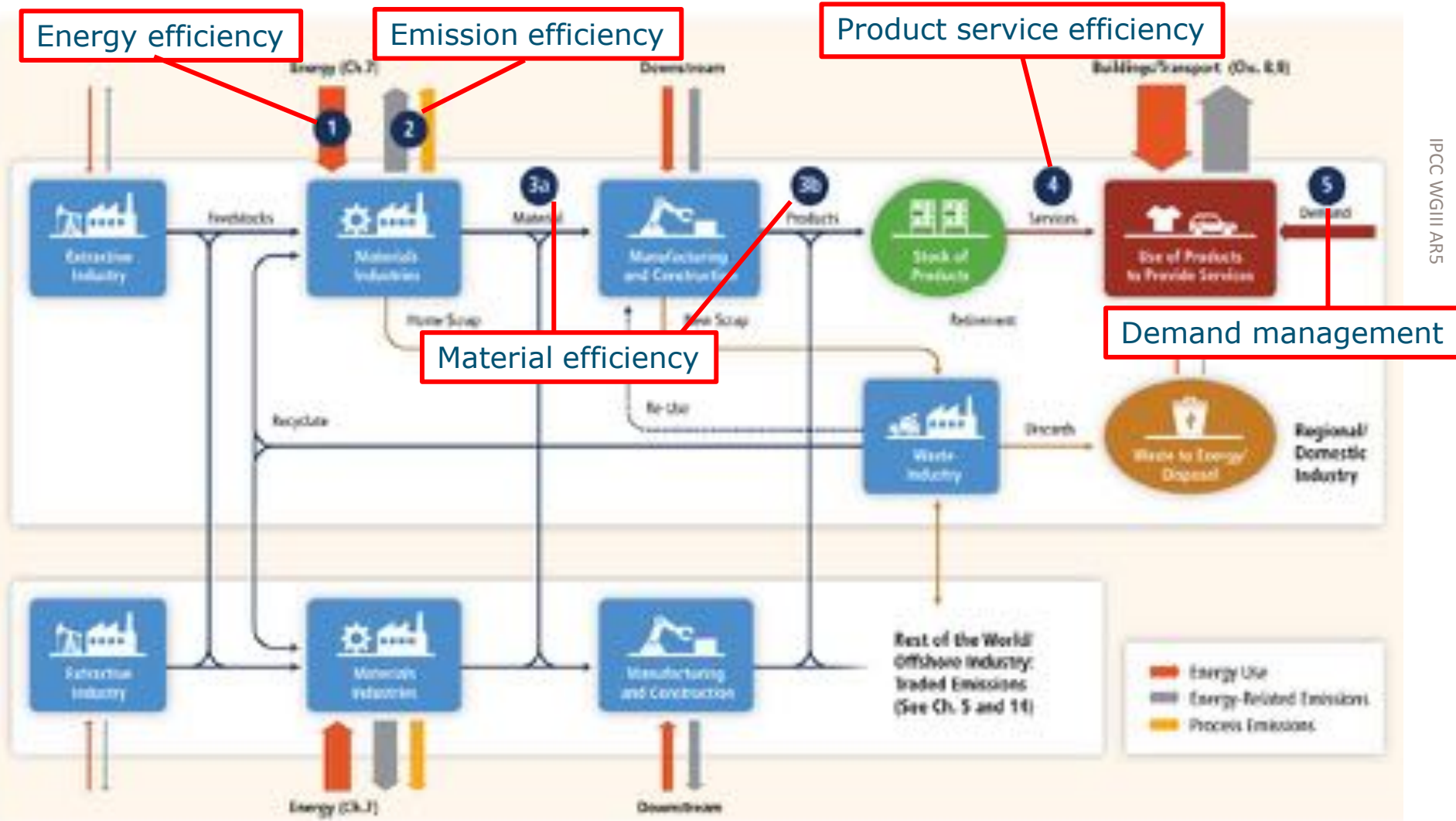
Global:
World Bank
Knowledge
Portal

Regional:
European
Knowledge
Portal (with
WUR, KNMI)

Climate Services: Business opportunities



Production/supply chain: efficiency improvement



Climate Services XXL: from Climate to Weather



Strong link to
user community
via
“operational”
services;



Policy support for
public and private
parties:

Regional Impact
Assessment Model



Figure 1: The user experience Design (Source: <http://www.randomresponse.com/assets/wheel-large.png>)



Climate Services XXL

- Do we need a business case for a sustainable development of climate services?
- What is the business case (Life after Copernicus)?
- Added value: Long term trends to operational information.

Thank you for your attention

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