MARCO

MArket Research for a Climate services Observatory

Market Research for a Climate Services Observatory (MARCO)

Wednesday 26th September 2018, Berlin

2nd General Assembly of the Copernicus Climate Change Service (C3S)

Thanh-Tâm Lê

(Climate-KIC)

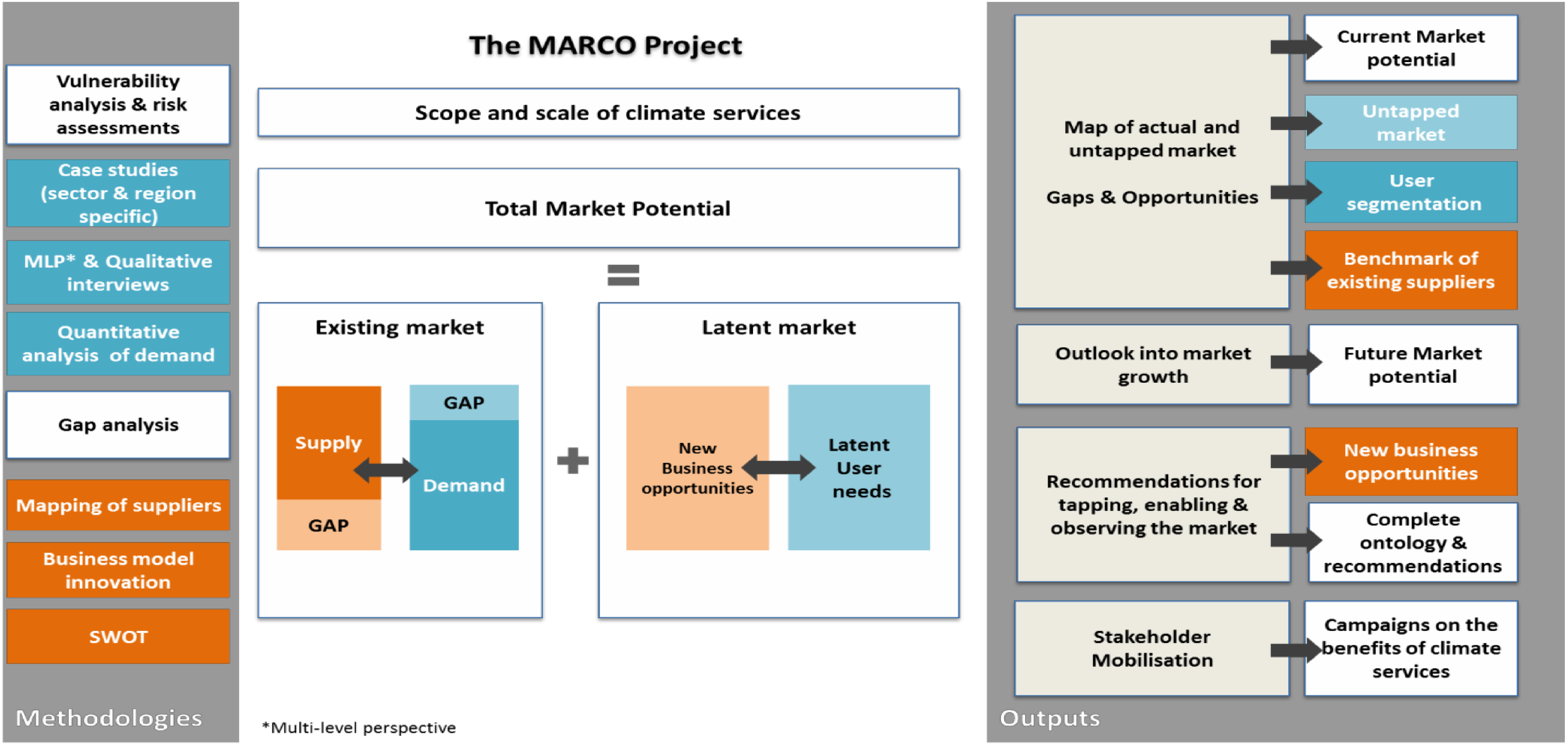
This project has received funding from the EU’s Horizon 2020 research and innovation programme under Grant Agreement No 730272.

MARCO main objectives

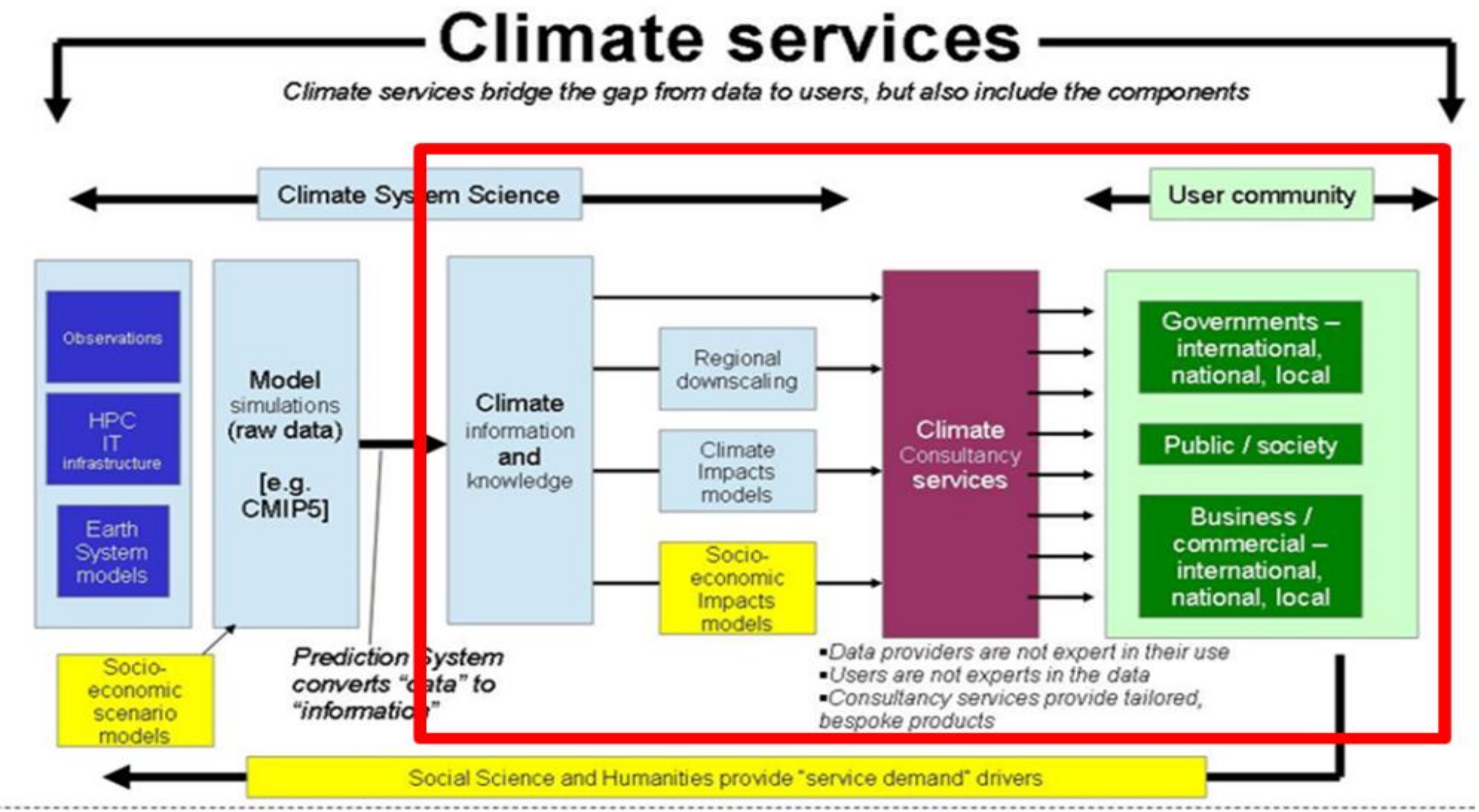
Gathering a consortium of market research firms, climate scientists, climate services practitioners, and innovation actors, to

- Assess the EU CS market with an integrated approach
  - Benchmark existing suppliers and their business models
  - Quantify and qualify CS needs at EU level
  - Investigate case studies for validation
- Forecast future user needs and assess market growth
- Lead to market opportunities and promote market growth
  - Identify market opportunities and new potential CS
  - Raise awareness and connect CS providers and users
  - Make recommendations on CS market structuration & observation
- Project to be completed by end 2018

MARCO main objectives



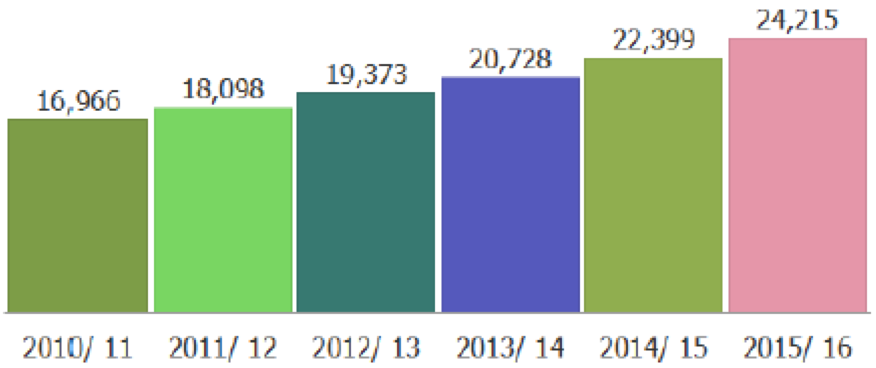
EU Roadmap & MARCO



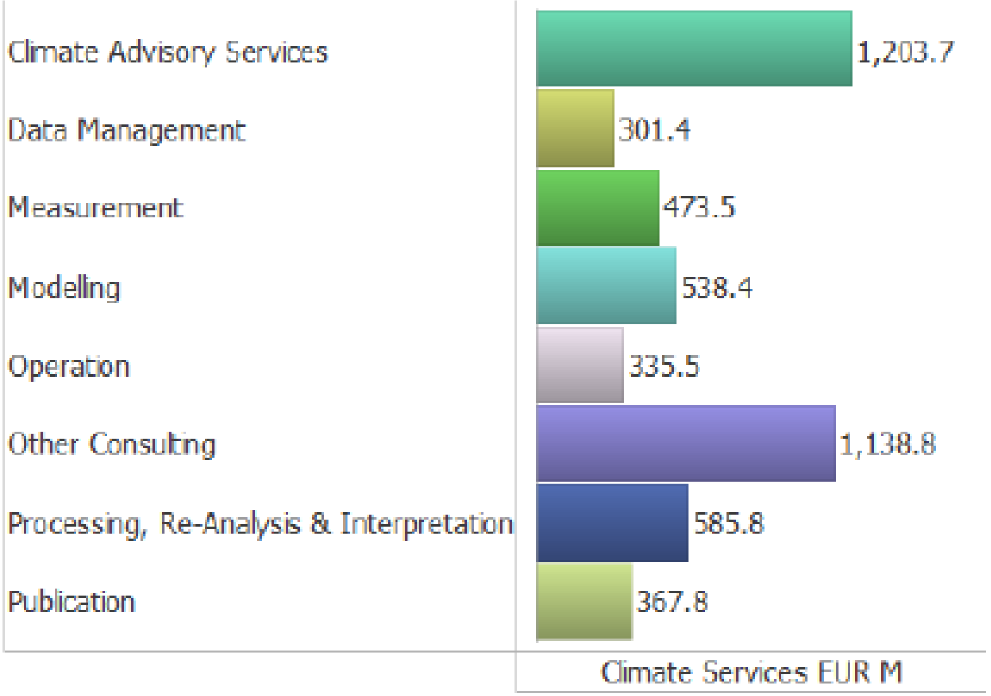
MARCO highlights: summary of project achievements

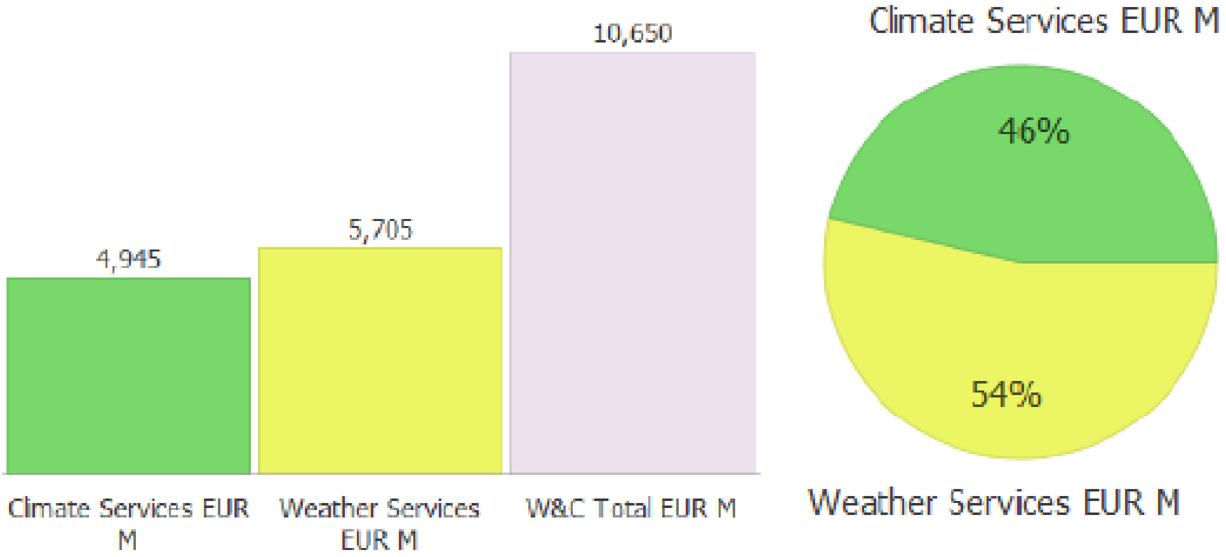
Identifying market opportunities	9 case studies + Market size assessment + Qualitative demand analysis (trends, needs, competitors, uses, advantages…)
Providers' Database	1 supplier database with 500+ entries
New business models, market intelligence	Mapping of business models + Innovation models
Resilience monitoring & Forecast	Forecast and market potential on sectors
Raising awareness	Posters + 5 infographics on case studies + 1 video

MARCO highlights:
scope and scale of Climate Services



Climate Services was first estimated to be £12.3bn or EUR 17bn in 2010/ 11. This has increased to EUR 24.2bn by 2015/ 16.





MARCO highlights: current landscape of European-based CS providers

Database consists of +500 entries, collected from surveys, by desk research and identified by kMatrix's transactional analysis

Market still dominated by public and research-oriented providers (compared with private / commercial providers)

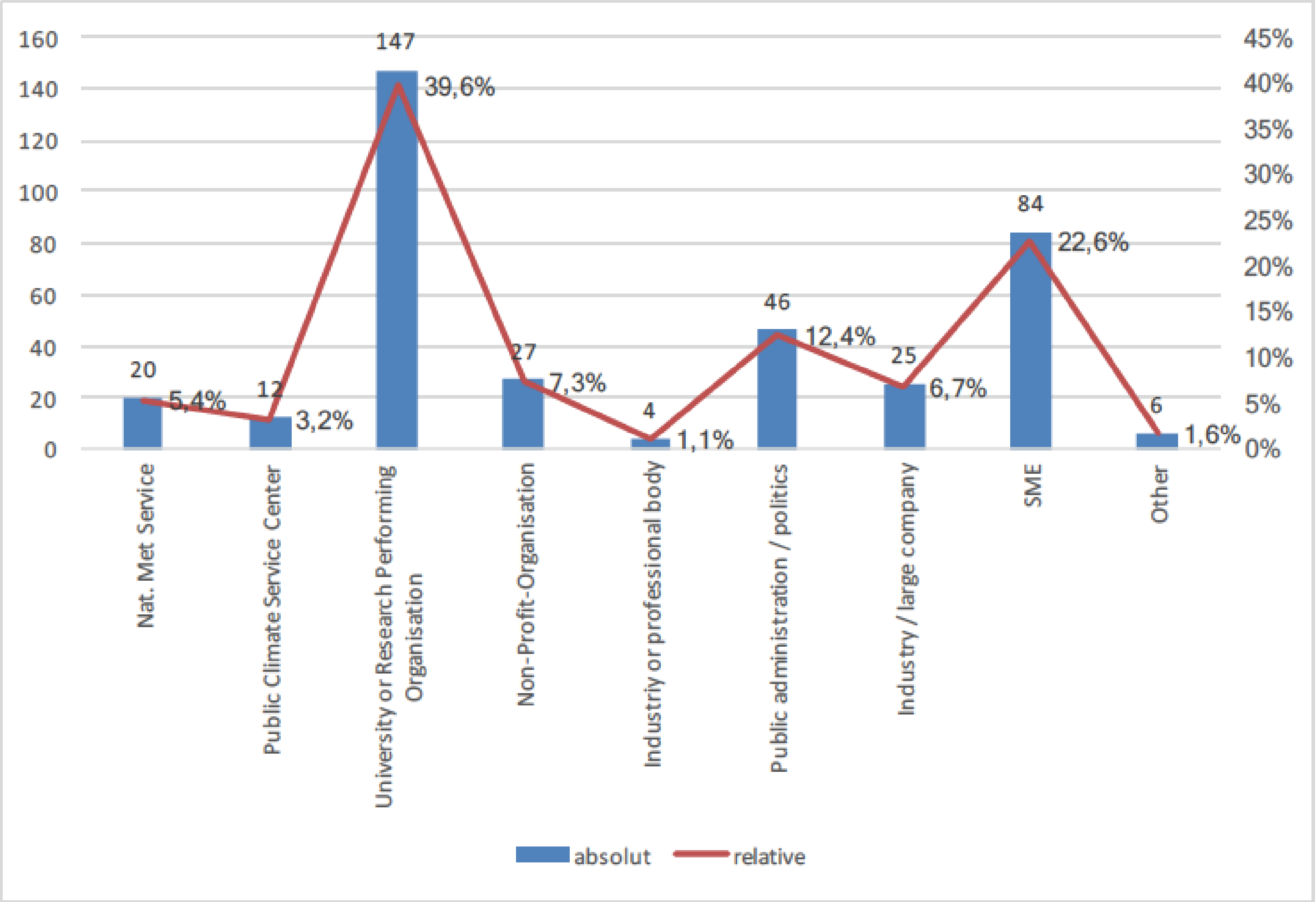


Figure 5: Absolute numbers of types of CS providers and relative share of total sample

MARCO highlights: current landscape of European-based CS providers

Upstream activities (provision of climate information and regional downscaling) dominated by public organisations,

while the number of private providers is steadily increasing towards further **downstream activities** (impact modelling and climate consultancy services)

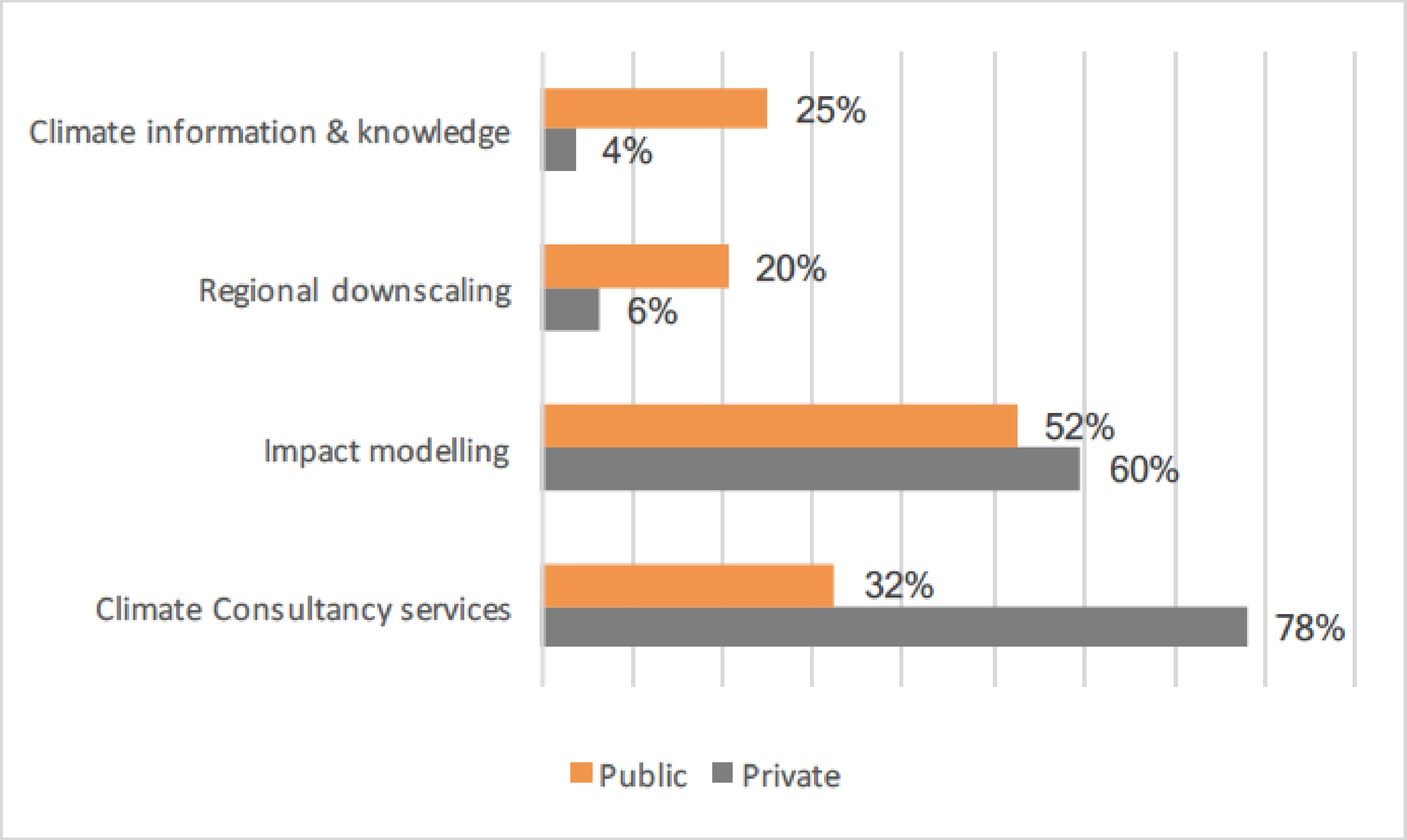
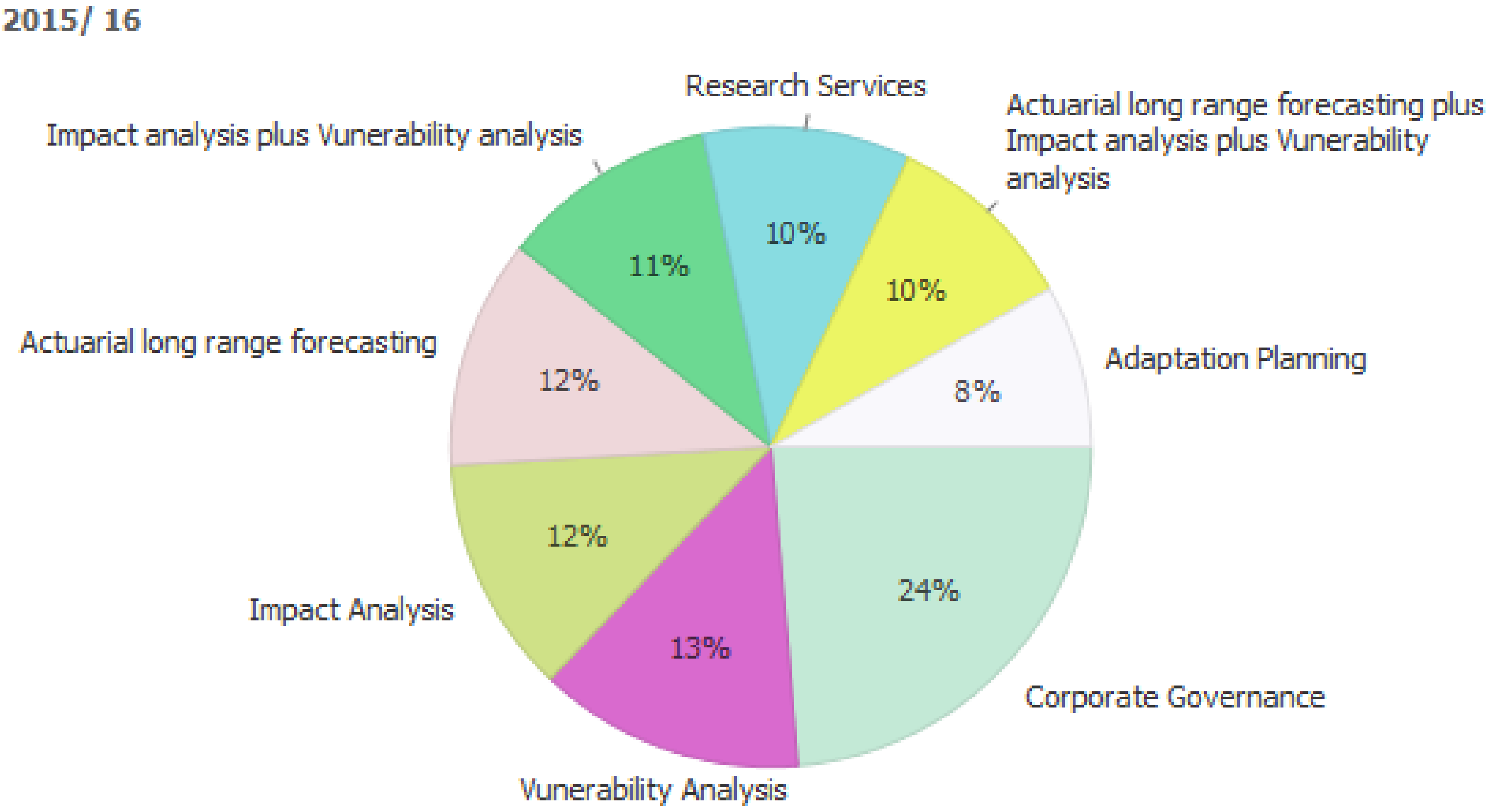


Figure 9: Relative share of public and private CS providers engaged in CS related activities

MARCO highlights: analysis of CS market transactions

Eight Categories of Procurement across the EU %



MARCO highlights: case studies and infographics

REAL ESTATE
DENMARK

CRITICAL ENERGY INFRASTRUCTURES
GERMANY & POLAND

FORESTRY & AGRICULTURE
FRANCE

TOURISM
AUSTRIA

WATER & SANITATION
CATALONIA

MINING SECTOR
EU

LEGAL SERVICES
UK

RENEWABLE ENERGY
DENMARK

URBAN INFRASTRUCTURE
GERMANY

MARCO partnership

Identifying market opportunities

Providers' Database

New business models, market intelligence

Resilience monitoring & Forecast

Raising awareness

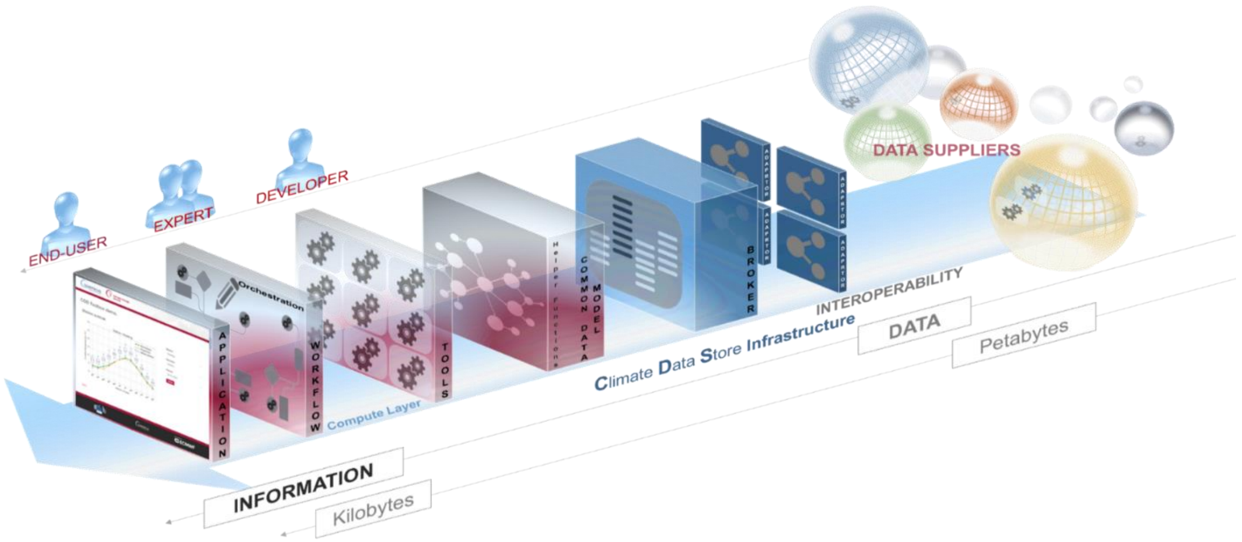
MARCO
towards an observatory/collaboratory

MARCO Observatory/ Collaboratory

1. Data Hub
2. Identifying market opportunities
3. Stimulating the market, matchmaking
4. Education/Training
5. Consulting
6. Raising awareness
7. Standardisation of CS
8. Identifying framework conditions
9. Resilience monitoring & Forecast
10. Networking
11. New business models, market intelligence
12. Helpdesk
13. Suppliers' Database
14. Policy recommendations

MARCO and C3S:
Climate Data Store infrastructure

- Science-focused:
  - Web Portal
  - Toolbox
  - Brokering component
- MARCO to integrate socio-economic aspects, including market growth mechanisms



MARCO and C3S: Community building

- Bridging the gap between climate science, policy and practice for adaptation decision-making and disaster resilience
- Identifying diversified **climate services' brokers** in ensuring high quality climate guidance

Thank you!

Join the side-event workshop on Friday 28th September

Steigenberger Hotel Am Kanzleramt, 5 Ella-Trebe Strasse, Berlin
Time : 9.00 to 16.15

Get in touch for more information

All of the reports produced in the project will be available for download on the MARCO website

Project coordinator: Thanh-Tâm Lê, EIT Climate-KIC
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Visit our website: www.marco-h2020.eu

Follow us on Twitter!
@marco_h2020

Highlights from the EU-MACS project

obstacles to the uptake of climate services

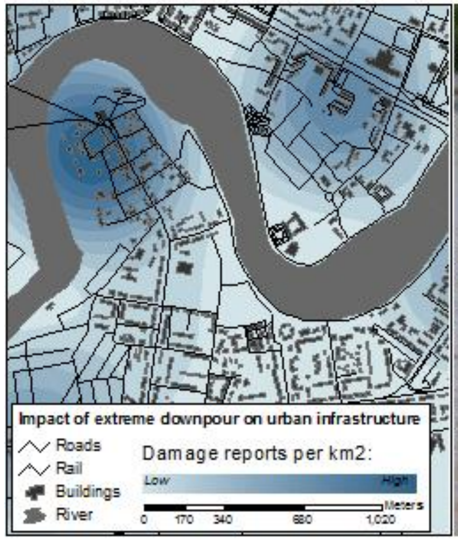
and how to resolve them

Adriaan Perrels
Finnish Meteorological Institute (FMI)

COPERNICUS Climate Change Services
2nd General Assembly,
Berlin 25 – 27 September 2018

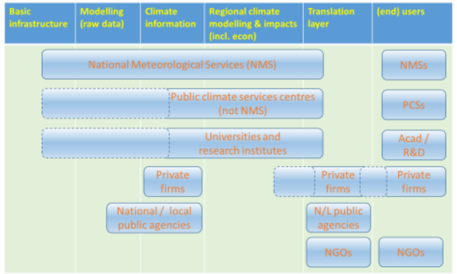
Main features of EU-MACS

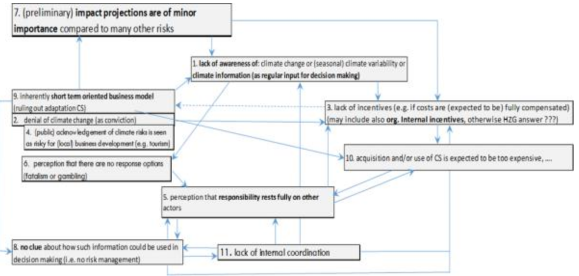
- Assesses **drivers, obstacles and enablers** for climate service market development
- … including the role of *innovation*
- Aims to promote **better matching** of supply options and user needs
- Engages with stakeholders from **finance, tourism and urban planning**
- Produces recommendations on policies and measures
- Offers tools and guidance for users and providers
- joint Deliverable with MARCO on market prospects



Key building blocks

- Identifying & analyzing structural factors
  - Regulation
  - Market structure
  - Benefits
  - Risk scope
- Interaction formats
  - In the project – stakeholders
  - In climate services provision & use
- Guidelines & Tools
  - Policy briefs
  - Living Labs
  - FAQ



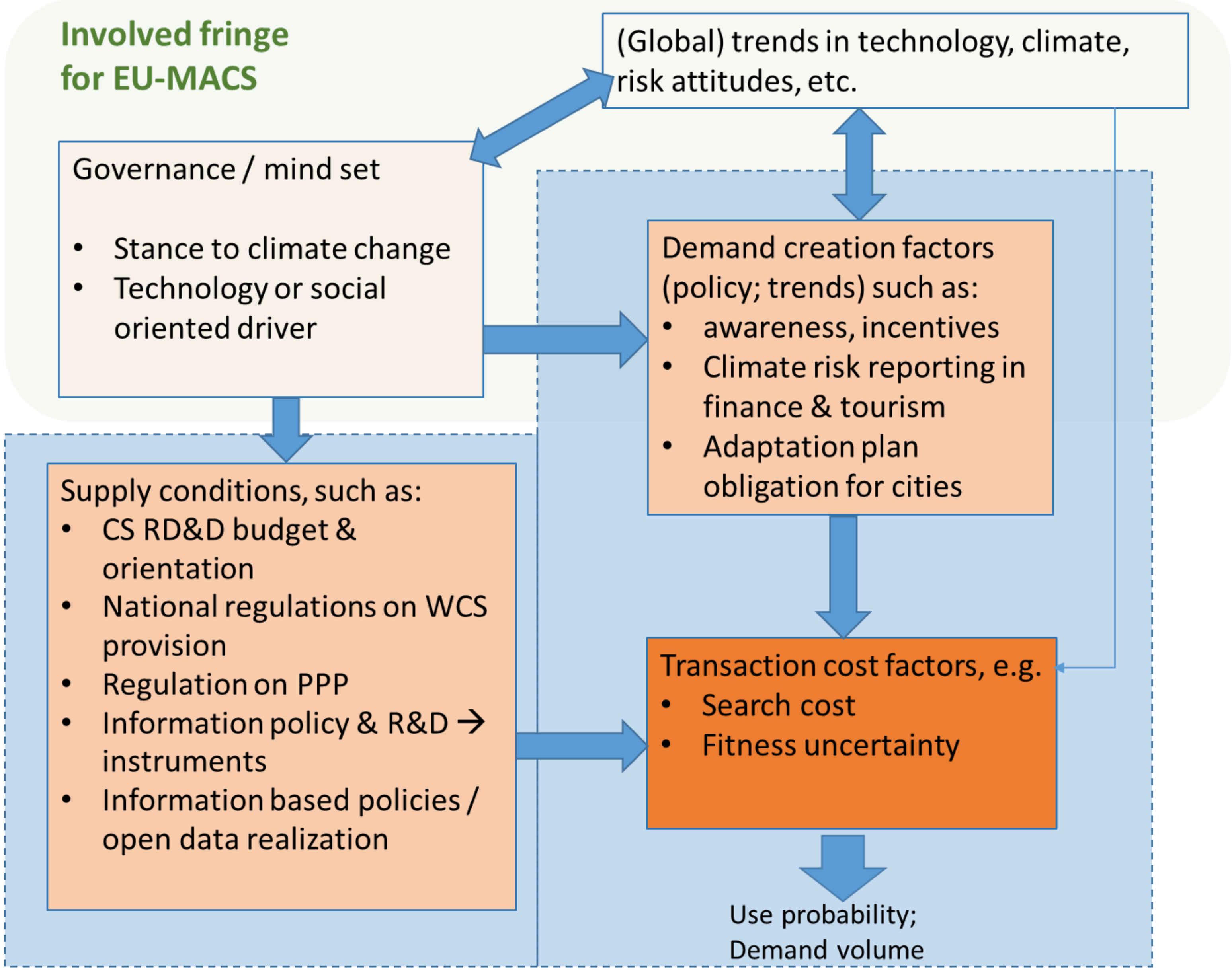


	Generic	*Customised*
Focused	**Maps & Apps:** • Generic climate services • Freely or cheaply available … • … to all users	**Expert Analysis:** • Scientific, professional, commercial, monodisciplinary climate services • Tailored to specific decisions and decision-makers
Integrated	**Sharing Practices:** • Mutual services on … • … adapting and mitigating climate change in specific environments • Available to all users	**Climate-inclusive Consulting:** • Professional, commercial and … • … transdisciplinary climate services • Tailored to specific decisions and decision-makers

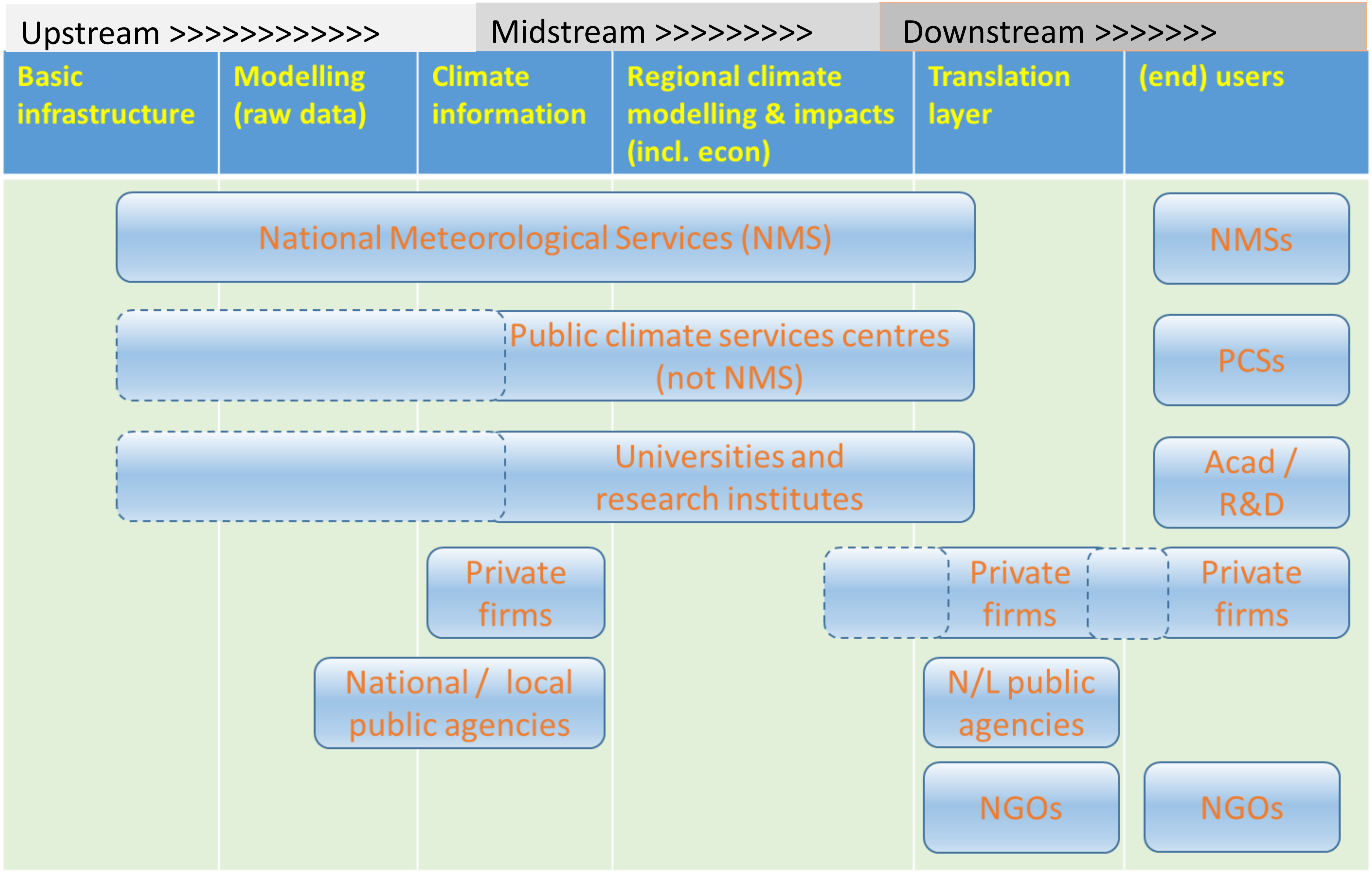
Structuring obstacle domains

Obstacles and drivers can be arranged in 3 domains:

- **Demand** (for climate services)
- **Supply** (of climate services)
- **Matching** of offers and needs



Value chain segments of climate service provision

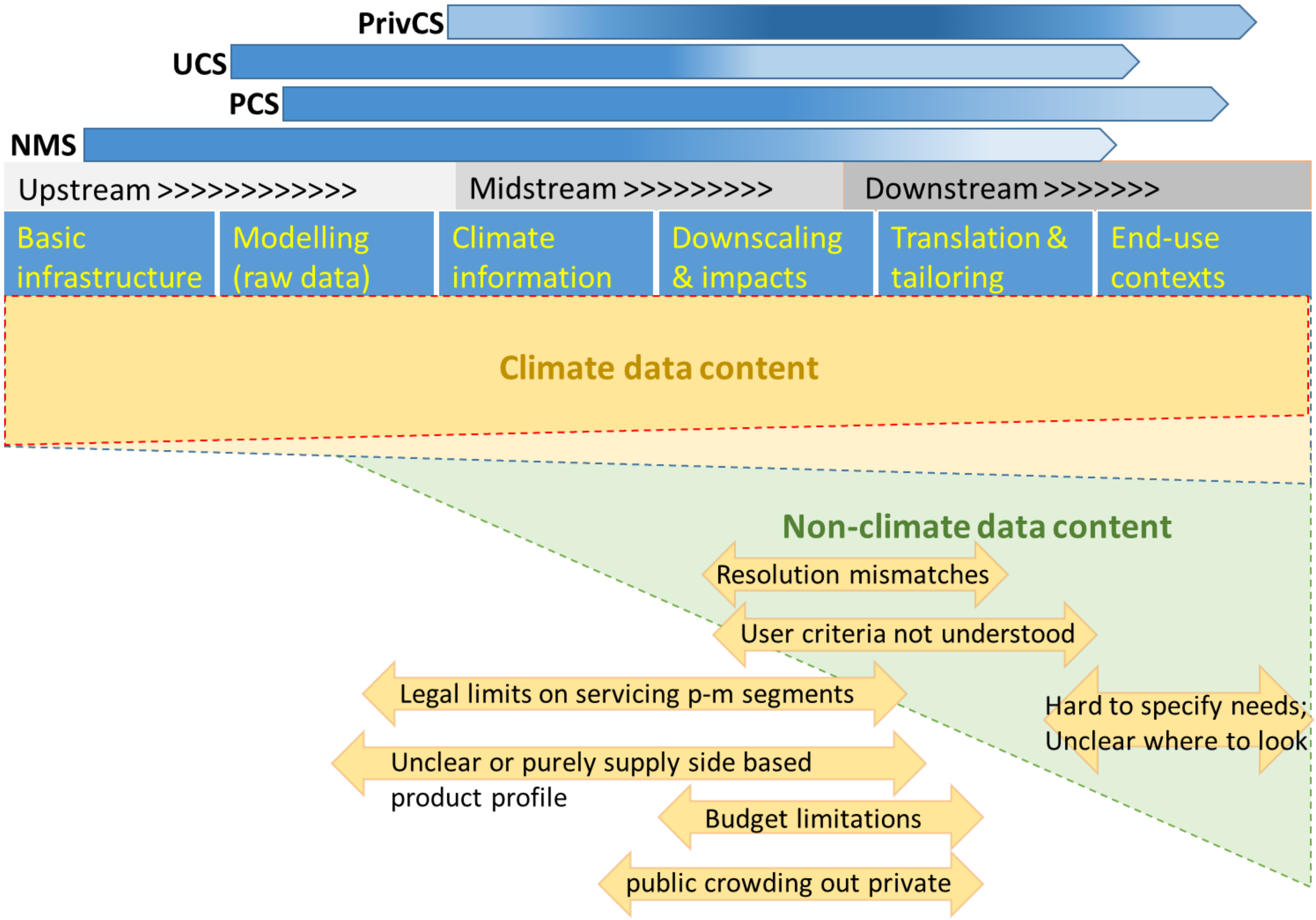


Most prominent obstacles

Demand:
(preliminary) impact projections are of minor importance compared to many other risks
inherently short term oriented business model (ruling out adaptation CS)
no clue about how such information could be used in decision making (i.e. no risk management)
lack of awareness of climate change or (seasonal) climate variability or climate information (as regular in for decision making)
Supply:
available CS information is not really packaged as service (but e.g. rather as R&D project output)
CS product portfolio is totally or largely out of scope for the user group
insufficient resourcing of CS product development and delivery
Matching:
mismatch of provider's and user's 'language' and conceptions
uncertainty about the eventual relevance of the CS for the user's decision process ('fit for purpose')
temporal and/or spatial resolutions do not match with other user's data
insufficient guidance and/or embedded consultancy

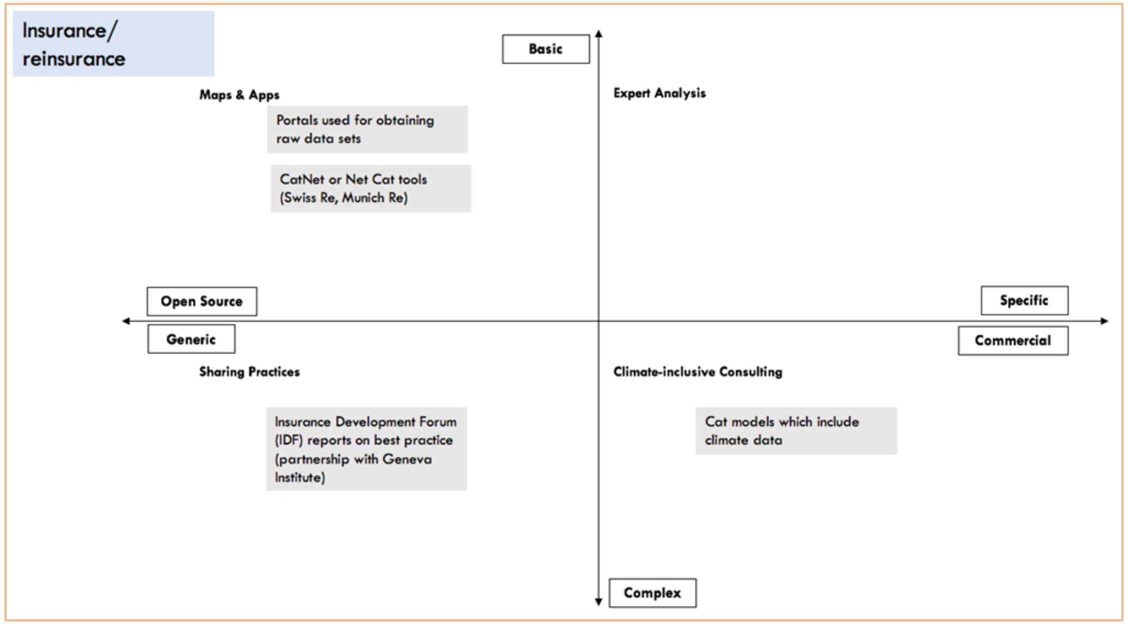
Value chain, providers, value added, obstacles

- It is very hard to combine skills for all 3 segments in one organization
- Seasonal and adaptation oriented climate services are largely separate w.r.t fitting interactive formats
- Market volume depends also on market structure
- Innovations in downstream and impact CS especially important

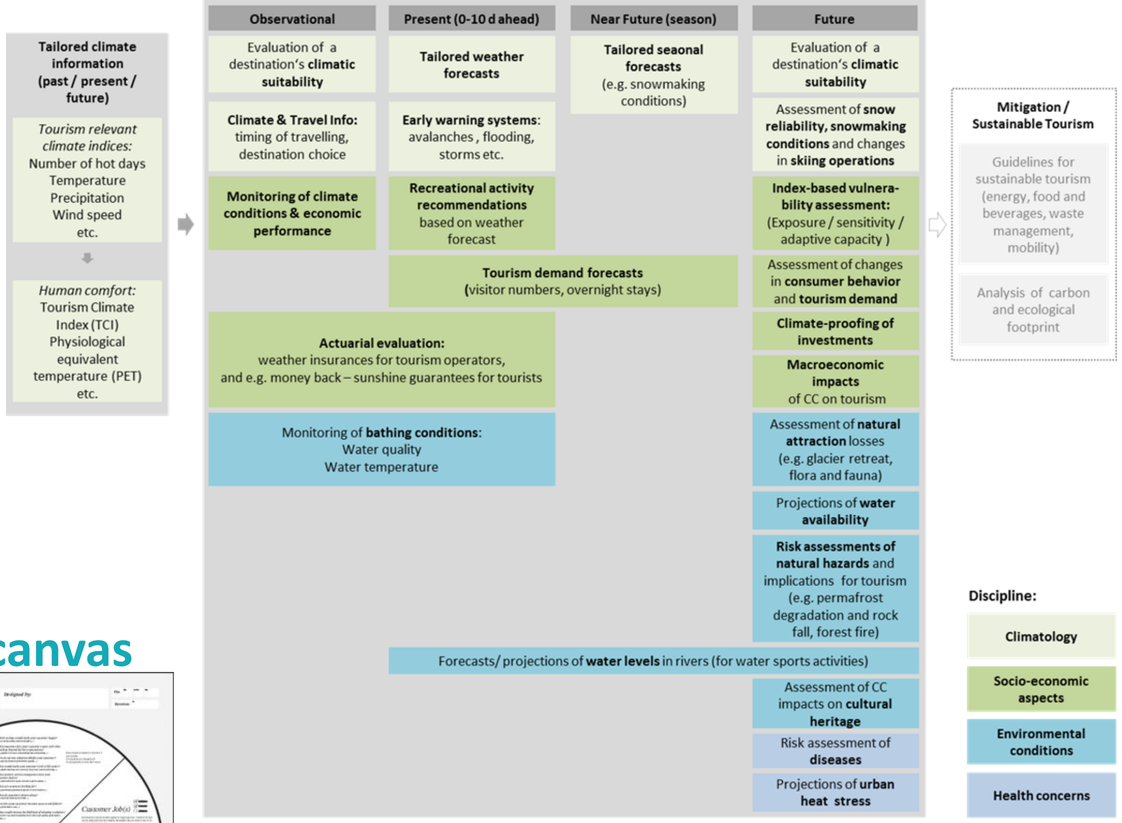


Exploration & interaction formats

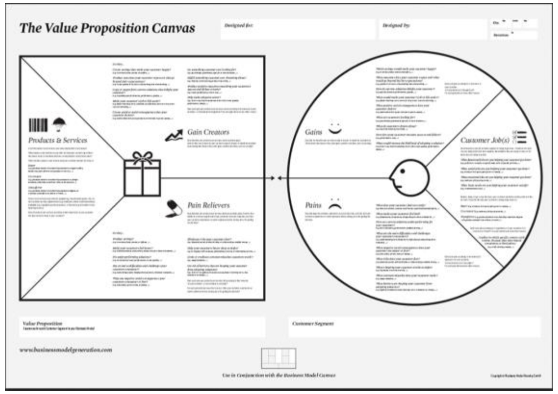
Product scenario matrix



Initial palette of CS for tourism

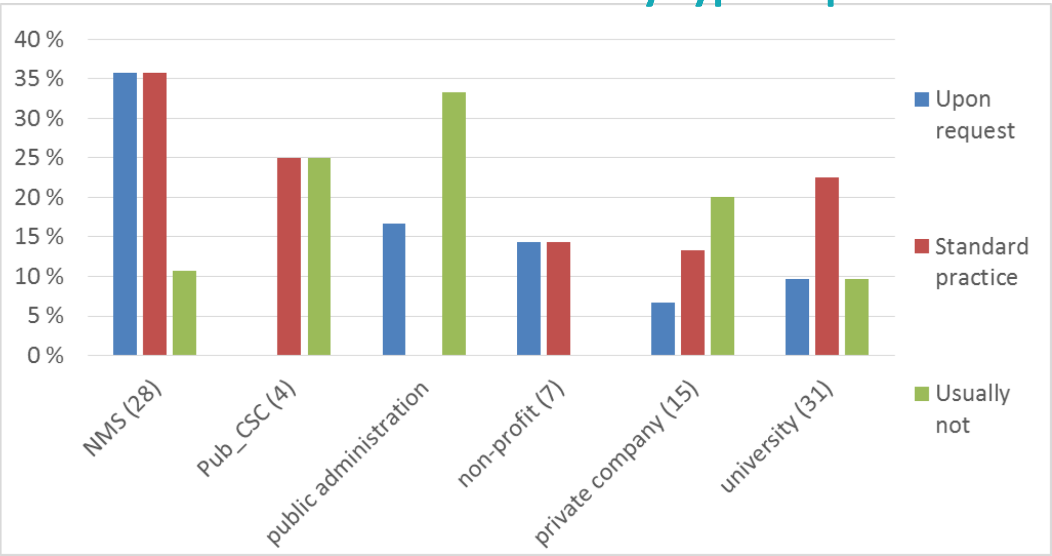


Business model canvas

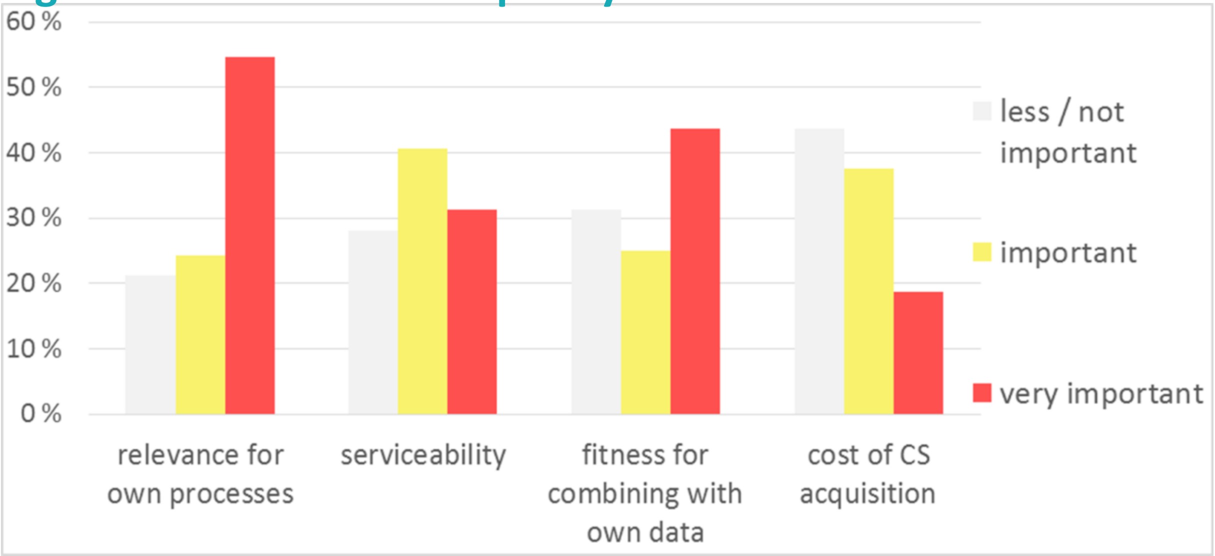


Quality assurance in user perspective

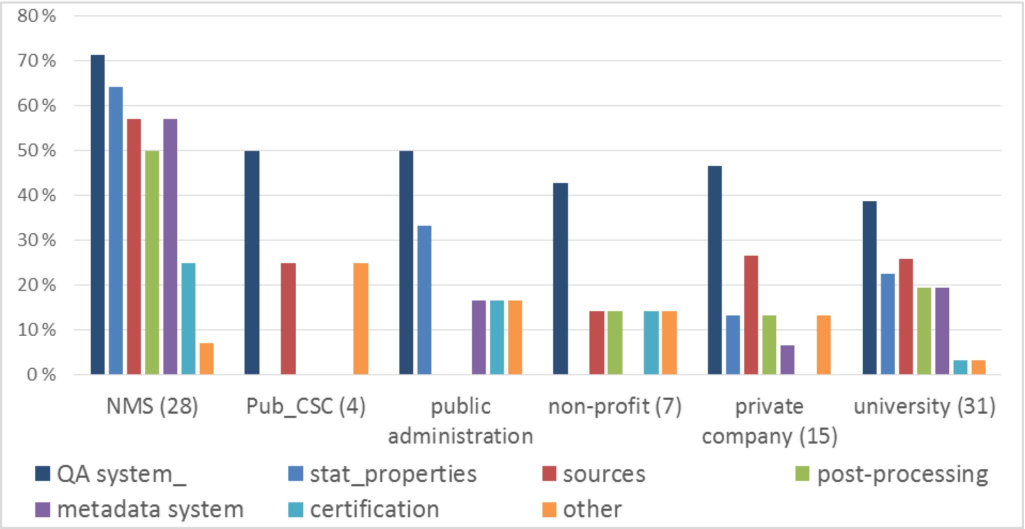
Provision of meta-information by type of provider



Significance of different quality criteria for users

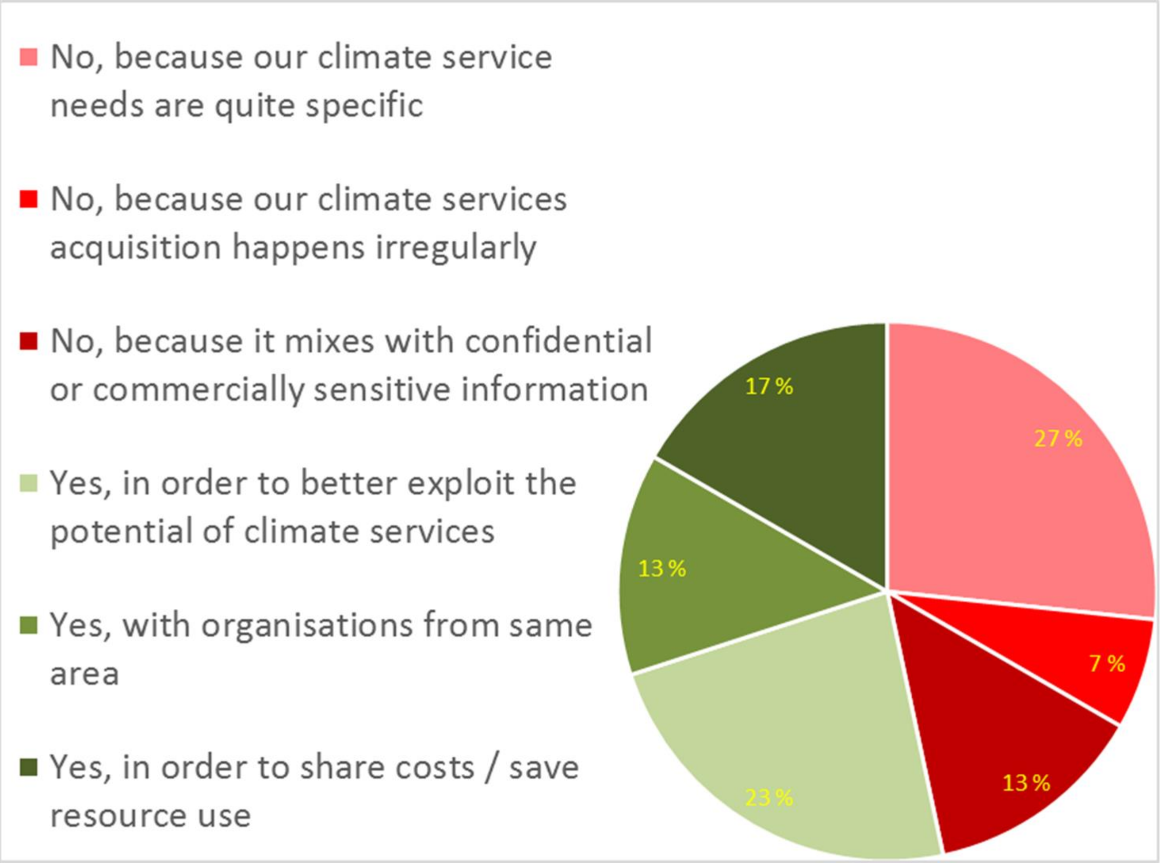


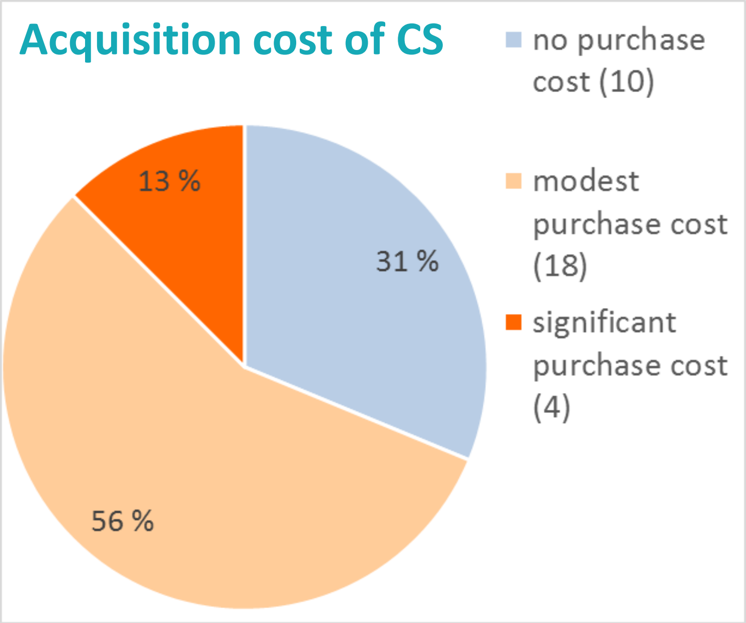
Engagement in quality assurance and its components

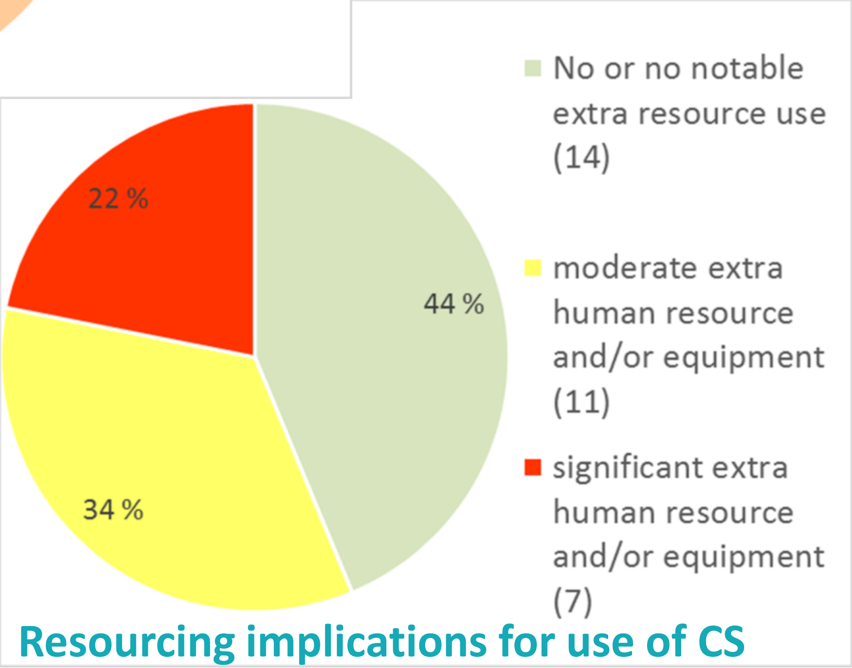


resource cost may be more in use than in acquisition even If climate service is charged

Preparedness for joint acquisition of climate services







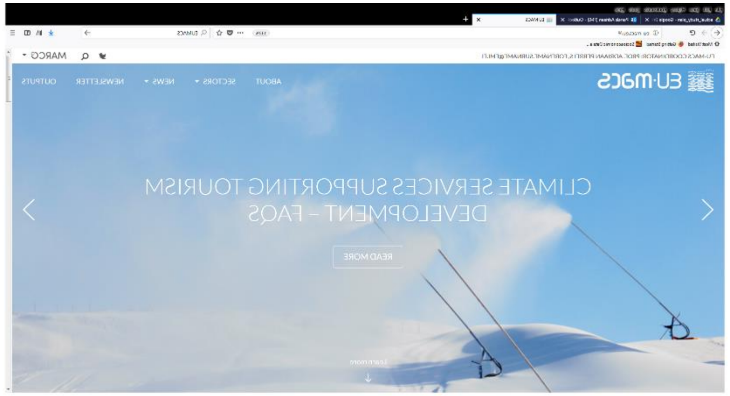
Preliminary Identified instruments

Instrument categories	**Public and sector policies**	**Measures at organisation level**
Financial incentives ○ subsidies ○ sanctions	Climate communication fund; Public service contracts on CS; Promoting / supporting brokerage services (e.g. start-up subsidy)	Sponsoring networking between business – experts – policy makers; Promoting / supporting brokerage services (e.g. start-up VF)
Obligations ○ Accountability ○ Disclosure ○ Minimum standards	Regulated climate proofing (incl. resilience level); Societal risk assessments; Public service contracts on CS;	Sectoral guidelines and standards (such as endeavoured in the TFCD process)
Information ○ Training ○ Campaigns ○ Open access ○ Communities of practice ○ Quality standards	Regulated climate proofing (incl. resilience level); CCIAVD as part of business education; Ambitious open data policy; W&CS marketing packages; CS Best Practice programmes	Sponsoring networking between business – experts – policy makers; W&CS marketing packages; CS Best Practice programmes
Hybrid ○ Feebates (performance dependent) e.g. related to progress in uptake ○ Sanctions combined with standards / open access / disclosure rate	Public service contracts on CS; Exploration of new business & resourcing models ('fremium'; P&U clubs; etc.); Promoting / supporting brokerage services;	Promoting / supporting brokerage services;

Conclusions (selection)

- The greater part of current climate services (CS) related activities is realized under ***non-market conditions***; yet there are signs of change
- Public CS providers and public-private partnerships for CS provision should pay sufficient attention to ***business model development,*** in connection with proper understanding of viable positions in the value chain (**role creativity!**)
- A ***layered market structure*** (up/mid/downstream) gets a more likely outcome
- ***Benefits*** of climate services need to be better demonstrated and communicated
- Consequent and comprehensive ***open data policy*** is key enabler, but needs careful reflection on ***charging*** and public-private domain delineation
- Given the novelty of CS for many users joint promotion of different CS (seasonal, adaptation oriented, …) is not helpful for CS uptake
- Well communicated and **harmonized standards and quality assurance** will promote uptake of CS; climate ↔ non-climate data?
- **Funding limitations** seem more crucial for **regular CS delivery** than for CS development

EU MACS media & contacts



Website: http://eu-macs.eu/#

TWITTER: http://eu-macs.eu/#

Further questions:
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European Market for Climate Services
EUMACS project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 730500
#3
NEWSLETTER March 2018

In this issue
Welcome
by Peter Stegmaier
The stakeholder perspective: interview with Esko Kivisaari
Reports from recent events
JPI Expert Workshop in Venice
Climate Services at work in Brussels
EU-MACS Workshop in tourism in Graz
Upcoming activities and call for papers
Updates on project activities
Recent publications

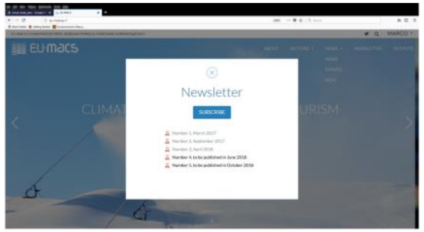
Welcome
By Peter Stegmaier, University of Twente

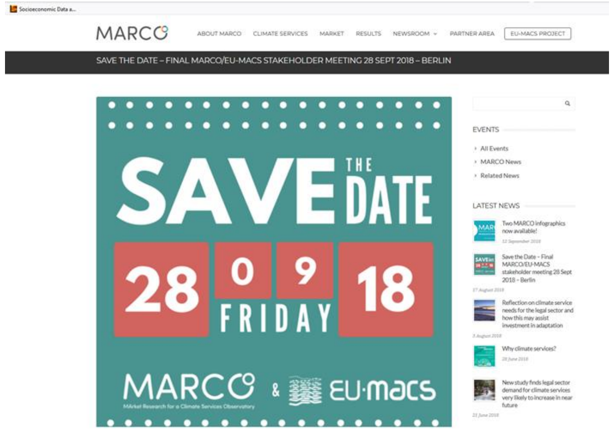
Climate services are still a niche phenomenon. Service innovations tend not to be utterly smooth in the beginning. There is still a lot of experimentation with user practices, business models, products, regulatory structures, infrastructure, and technology, which makes it hard for them to compete on the market against established services or forms of 'strategic intelligence' (the latter we call 'incumbent regime').

The specific market itself might even be not yet fully developed - or very small and already dominated by the few services that were able to establish themselves in their niches. Newcomers will thus hardly gain a share, but rather have to find their own niches. Especially when innovations include sustainability promises, market niches and user demands may not be ready yet, since the innovations may differ radically from the prevailing. Moreover, clever niche management will require to link niches at some point.

To explore climate services-related trends and processes that can have a potential to foster niche development, we carried out an explorative study (see next page) on the EU niche governance and procurement of innovation for climate services in global context, emerging (soft) standards, conventions, and ethical frameworks. We looked into neighbouring niche developments (e.g. ecosystem services, climate engineering, platform capitalism with FinTechs and InsurTechs), into relevant technological innovations (e.g. block chain, online information brokerage, internet of things, citizen sciences).

Newsletter:
[http://eu-macs.eu/....](http://eu-macs.eu/)





http://p4eabqd3.evenium.net

Steigenberger Hotel, Friday

EU MACS Consortium

Participant	Type of organisation	Country
FMI (coordinator)	Met-services; climate & adaptation research;	Finland
HZG-GERICS	Climate services & research	Germany
CNR-IRSA	Hydrological research & consultancy, incl. adaptation	Italy
Acclimatise	Climate services provider	United Kingdom
CMCC	Climate research and services	Italy
U_TUM	Market start-up support for innovations	Germany
U_Twente	Research in innovation mechanisms and policy	Netherlands
JR	Technical & social innovations for climate change issues	Austria
ENoLL	Promotion and support of Living Lab applications	Belgium

Thank you