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Executive Agency for Small and Medium-sized Enterprises

The Climate Services related Project landscape in H2020 (SC5)

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Climate services at work, 29 November 2017, Brussels

Content

- ❑ Climate services research in Horizon 2020, SC5
- ❑ H2020 SC5 contribution to implementing the European research and innovation Roadmap for Climate Services
- ❑ The H2020 project landscape and sectors
- ❑ Beyond H2020- exploiting synergies
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Horizon 2020 budget (2014-2020)

Societal challenges	€ 29.7 B
1. Health, demographic change & well-being	€ 7.5 B
2. Food security, sustainable agriculture & forestry, marine maritime & inland water research & the Bioeconomy	€ 3.8 B
3. Secure, clean & efficient energy	€ 5.9 B
4. Smart, green & integrated transport	€ 6.3 M
5. Climate action, environment, resource efficiency & raw materials	€ 3.1 B
6. Europe in a changing world – Inclusive innovative & reflective societies	€ 1.3 B
7. Secure societies – Protecting freedom & security of Europe & its citizens	€ 1.7 B



Supporting a sustainable and resilient Europe

The EU is leading the global efforts to:

- Limit global warming to +2C
- Minimize the adverse effects of climate change
- Seize the opportunities of a global transition to a low-carbon economy

➤ **Evidence-based decisions are key to support this challenge**



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*A European research
and innovation*

Roadmap

for Climate Services



- Climate knowledge needs to become actionable, to support the transition to a **climate-resilient and low-carbon society**.
- R&I policy and investments can stimulate this shift and facilitate the emergence of a **climate services market**
- **Focus moves from supply (climate research) to demand (innovative solutions)**

H2020 projects contribution to implementing the CS Roadmap

Key challenge:

Enabling the market growth

- Assessing CS market and market foresight
 - Users requirements and business models
- SC5-03-2016 Climate services market research
- ➔ **EU-MACS, MARCO**

Key challenge:

Enabling the market growth

- Demonstrating the added value of climate services
 - SC5-01-2016-2017 Exploiting the added value of climate services
 - 2016 Demonstration of climate services (IA) ➔ **CLARA, CLARITY, H2020_Insurance, PROSNOW, PUCS, VISCA**
 - 2017 From climate service concepts to piloting and proof-of-concept (RIA) ➔ **MEDGOLD, SECLI-FIRM, S2S4E**

And also

- SC5-02-2015. ERA for Climate Services ➔ **ERA4CS** (Topic A), 18 projects

Key challenge:

Building the (market) framework

- Developing a viable climate services community that engages users, purveyors, providers and researchers
SC5-05b-2015. Earth-system modelling and climate services
➔ **Climateurope** (Coordination and support action)

And also

- SC5-02-2015. ERA for Climate Services ➔ **ERA4CS** (Topic B), 8 projects

Key challenge:

Enhancing the quality and relevance of climate services

➤ Improving modelling and prediction capacity

SC5-01-2014. Advanced Earth-system models

➔ **CRESCENDO, PRIMAVERA**

SC5-02-2017. Integrated European regional modelling and climate prediction system ➔ **EUCP**

And also

SC5-30-2017. ERA-NET on Climate Services Roadmap: Cross-sector impact assessments (evaluation, comparison and integration) ➔ **AXIS**



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Other topics and linkages to CS

*Scientific basis and
information
frameworks*

FP7 results
**EUORIAS, SPECS,
NACLIM**
Other H2020
pillars/SCs

**Disasters resilience and
climate change**
**PLACARD, EU-CIRCLE,
RESIN, BRIGAD, RESCCUE**

*Observations, IT
infrastructure and access
to data*

Earth Observation and GEOSS

NextGEOSS (EO data hub)

Atlantos (In situ Atlantic Ocean
Observation)

ECOPOTENTIAL, SWOS (EO for
ecosystem services)

**LANDSENSE, GroundTruth 2.0,
SCENT** (Citizen Observatories)

GEO-CRADLE (North African,
Middle East and Balkan CSA)

AfriCultuRes (EO services for
food security in Africa)

*Developing tools,
applications and
supportive resources*

**Water cycle
under the future
climate**

2014 Water 2a
IMPREX, BINGO

**Air quality and
climate change**
**ICARUS, CLAIR-
CITY, iSCAPE**

Arctic research
INTAROS (Arctic observation)
Blue-Action, Applicate
(Impact of Arctic changes)

*Innovation in user
interface and
visualization tools*

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*Building and widening
capacity*



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	Domain	Case studies	End
RESCCUE	U I W	ES, PT, UK	2020
EU-MACS	U T I	EU, IT, AT, FI	2018
MARCO	U I A W E T I	EU, DE, AT, UK, FR, PL, ES, DK	2018
EU-CIRCLE	I	DE, FR, PL, UK	2018
IMPRES	A W E	DE, EL, ES, IT, SE, UK	2019
CLARA	U H A W E	ES, IT, NL, SE	2020
PUCS	U H E ch	BE, ES, CZ, IT, AT, CH	2019
CLARITY	U H I E	SE, IT, AT, ES	2020
H2020_insurance	U H A I	DE, RS, TZ, CN, USA, AU	2020
VISCA	A	PT, ES, IT	2020
MED-GOLD	A	IT, UK, ES, BE, EL, PT, CO	2021
PROSNOW	T	FR, DE, AT, IT, CH	2020
S2S4E	E	DE, SE, UK, IT, NO, FR	2020
SECLI-FIRM	W E	UK, IT, ES, NL	2021
BLUE-ACTION	T A W H	FI, RU, Arctic	2021

Urban U
Water W
Infrastruct. I
Agriculture and fisheries A
Tourism T
Cultural heritage ch
Insurance and finance I
Energy E
Health & AQ H



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Exploiting synergies – Frameworks, Programmes, Initiatives



WG for the CS Roadmap
implementation



ERA4CS
AXIS



*Regional and national
Climate Services
centers*



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Key expectations

providing added-value for the decision-making process addressed by the project

offering concrete solutions to overcome barriers hampering deployment of climate services in the specific area of application

facilitating rapid deployment and market uptake of climate services

mobilize end users communities in areas where climate services show potential for being developed

Cross-cutting topics for cooperation

Users engagement
(co-design, users requirements, feedback and outreach)

Users assessment and validation
(Methods and metrics for CS assessment)

Go to market
(addressing market barriers, business models, good practices)

Sharing resources – platforms, tools and data
(accessibility, use of C3S products and input to C3S, interoperability)

Dissemination and exploitation of projects results (innovation, replicability, legacy)




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FOR YOUR ATTENTION**

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