

Climate Communication: the science – public opinion interface

Mauro Buonocore

ESMH Summer School 2022: 'Journalism and climate change: how to tell complex stories?'

June, 8, 2022



cmcc

Centro Euro-Mediterraneo
sui Cambiamenti Climatici

Climate change *in the* future
fast changing world

www.cmcc.it



MISSION

To investigate and model our climate system and **its interactions with society** to provide reliable, rigorous, and timely scientific results to stimulate sustainable growth, protect the environment and develop science driven adaptation and mitigation policies in a changing climate.

To develop foresights and quantitative analysis of our future planet and society.



OFFICES

CMCC is organized in the form of a network distributed throughout Italy.

The network connects public and private entities working together on multidisciplinary studies concerning issues of interest to the climate sciences.





MEMBERS AND INSTITUTIONAL PARTNERS

National Institute of Geophysics and Volcanology (INGV)

University of Salento

Italian Aerospace Research Center

Ca' Foscari University Venice

University of Sassari

University of Tuscia

Polytechnic University of Milan

Resources for the Future (RFF)

University of Bologna



Università
Ca' Foscari
Venezia



uniss
UNIVERSITÀ DEGLI STUDI DI SASSARI



**UNIVERSITÀ
DEGLI STUDI DELLA
Tuscia**



POLITECNICO
MILANO 1863



RESOURCES
for the **FUTURE**

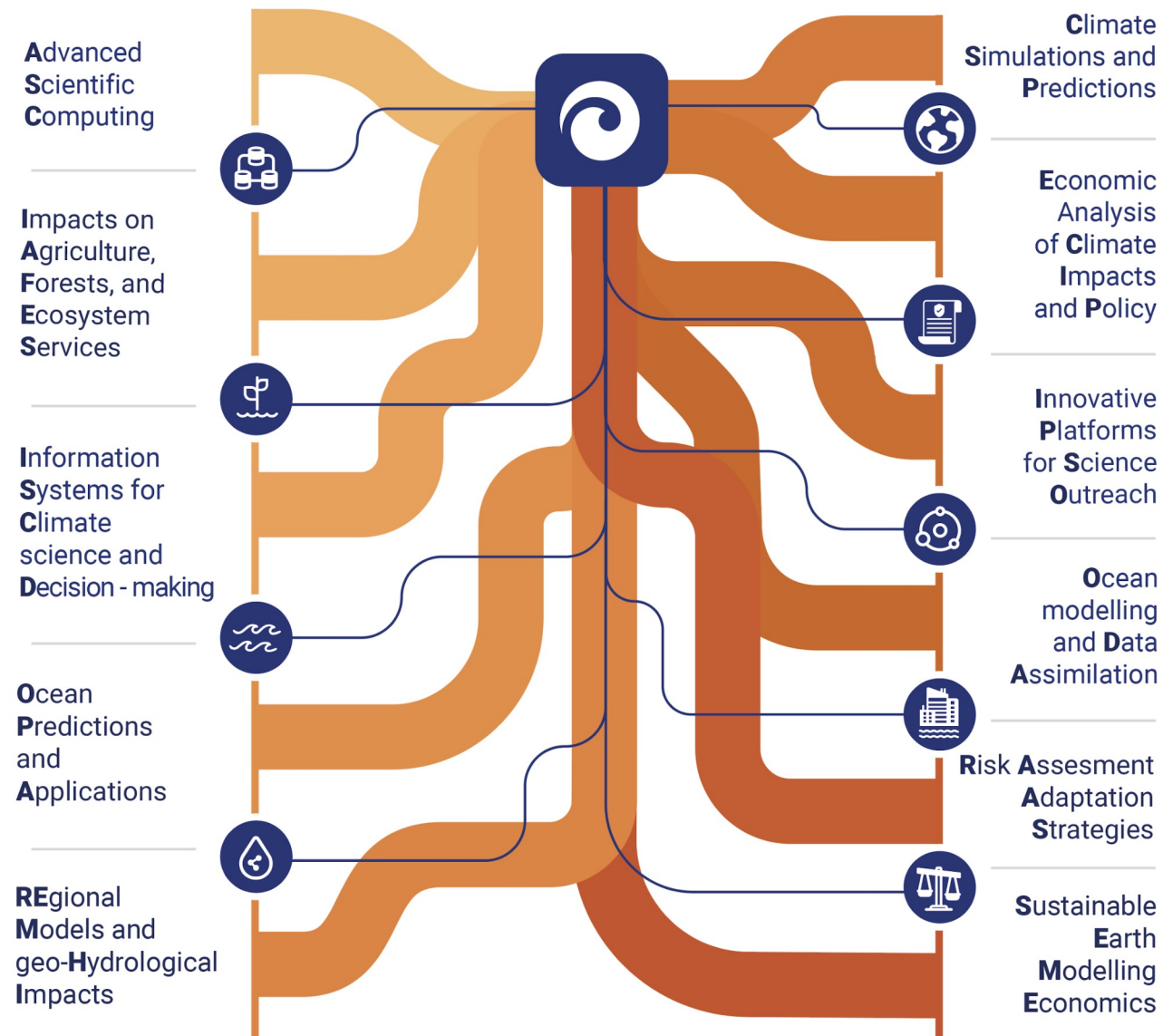


ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA



INTERDISCIPLINARY RESEARCH

The scientific organization enhances the integration and collaboration among interdisciplinary skills needed to deal with climate sciences related topics.





THE SUPER COMPUTING CENTER (SCC)

Since 2008, CMCC operates its own Supercomputing Centre (SCC) located within the University of Salento Campus in Lecce.

The CMCC Supercomputing Center is among the most advanced in Europe and the most powerful computational facility in Italy fully dedicated to Climate Change research.

CMCC is currently building a new supercomputing center at the new CMCC headquarters in Lecce. This also includes the upgrading of the computing and storage facilities.

24,769
cores

2,400
TFlops

Theoretical peak performance
(1TFlop = 1,000 billion operations per second)

32 PetaBytes *over* Storage
system capacity

40 PetaBytes Tape Library
(archiving system)





The science-based
game for confronting the
challenges of climate change

Based on a
real climate model

Multiuser and interactive

Your actions and choices
impacts the lives of others

The poorest the most
vulnerable



www.changegame.org/

Change Game: science and serious gaming

www.changegame.org

In 2022 it is applied in professional training contexts

It is used to test and evaluate soft skills such as the ability/attitude to collaborate, adapt to the context, update own skills, plan strategies and solutions, and assess situations and problems.

As a systemic issue, the climate awareness process benefits the soft skill acquisition process.



Ciao

ecco qualche dettaglio riguardo le competenze trasversali che hai dimostrato gestendo la tua città nel corso della partita.

I punteggi che hai ottenuto sono frutto del confronto con un **campione di circa 2.360 giocatori**: utilizza questo report per confrontarti con formatori e professionisti del settore risorse umane, per capire come puoi sviluppare le tue competenze!



G20 Climate Risk Atlas

Impacts, policy and economics

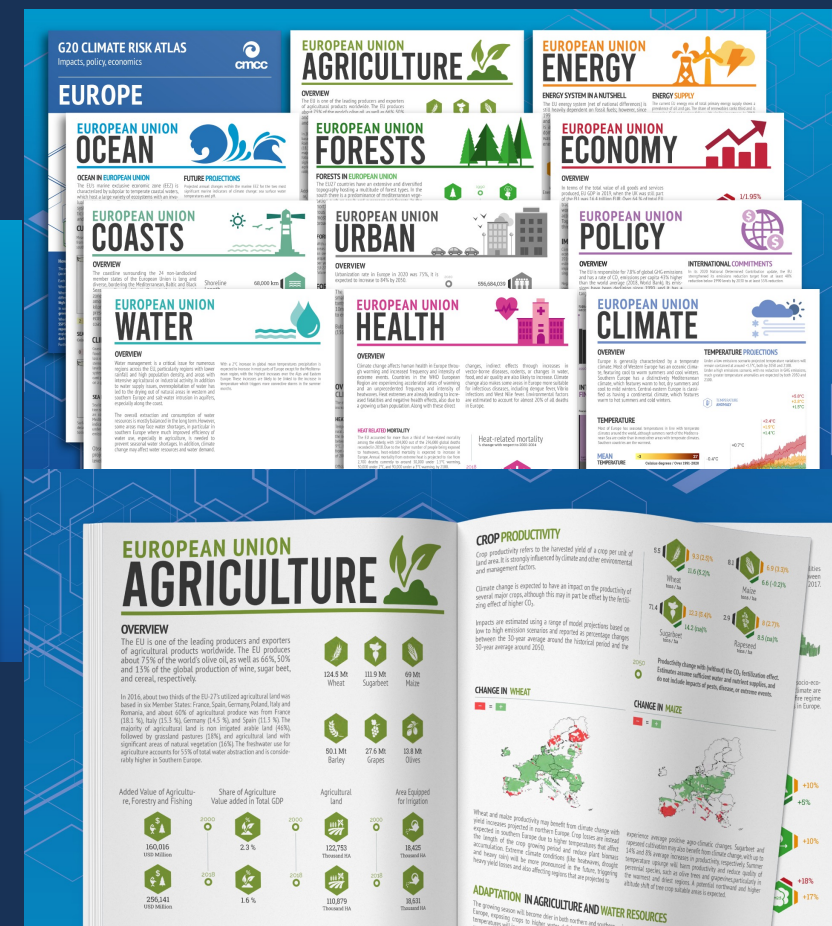
20 Countries

11 Sectors

41 Authors

1,000 + references

<https://www.cmcc.it/g20>





Podcast

Deep Into the Future Planet: The Trailer

Join us on a planetary journey that goes deep into the future of innovation, technology, nature, and humanity in search of the best ways [...]



Interviews

Science in the Post-Truth Era: Lies, Facts and Deniers

From vaccine skeptics to climate change deniers, acclaimed author Lee McIntyre, walks us through "How to Talk to a Science Denier" [...]



Articles

Food: The Story of Climate Change is Written in our Changing Menus

Flavours of wine will be different, chocolate prices will rise, nutritional quality and yields of several crops will decline. Food [...]

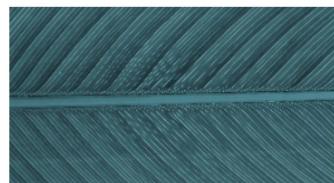
Featured



Articles

Interwoven Crises at the World Economic Forum

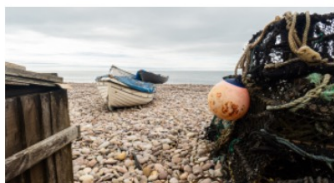
Environmental, Social, and Governance, carbon markets and unfolding global crises were at the core of the agenda as leaders juggled [...]



Seeds

Decoupling (Emissions From Economic Growth)

Is it possible to build a zero-carbon world and, at the same time, guarantee sustainable development and well-being prospects? The [...]



Articles

The Green Deal Dives into the Blue Economy

Oceans will play a key part in the ongoing transition: they are an invaluable resource for the climate-neutral world, providing [...]

www.climateforesight.eu

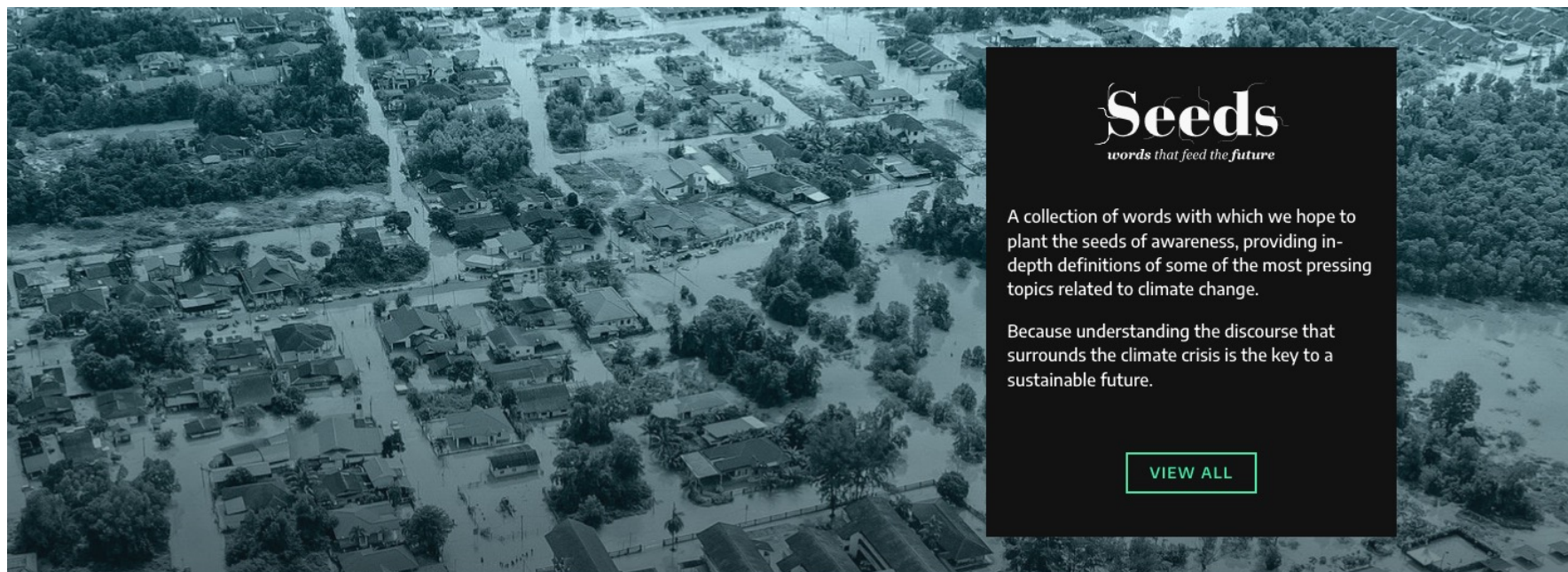
Interviews with experts
(not exclusively
scientists)

Articles

International press
reviews

Glossary

Podcast



Seeds

words that feed the future

A collection of words with which we hope to plant the seeds of awareness, providing in-depth definitions of some of the most pressing topics related to climate change.

Because understanding the discourse that surrounds the climate crisis is the key to a sustainable future.

[VIEW ALL](#)

Digital Twin

By connecting the real and virtual worlds digital twins help create, test and deploy the disruptive technologies and ideas needed to respond to the climate crisis at an unprecedented pace. A look at how experts such as Peter Bauer, Director of Destination Earth at the European Center for Medium-Range Weather Forecasts, are using digital twins to help plan and define the future.

Climate Overshoot

Is it possible and what are the consequences of exceeding a given global mean temperature threshold and then bringing warming back down again? Although a limited and temporary climate overshoot is better than reaching a peak temperature and staying there, some of its impacts may be irreversible and could push ecosystems towards dangerous tipping points.

Climate Justice

The impacts of a changing climate on people and communities are taking center stage, leading to an increasing focus on both the theoretical and practical implications of climate justice.

A glossary of keywords with definitions, quotes from experts, resources

www.climateforesight.eu



Foresight Staff | May 30, 2022

Deep Into the Future Planet: The Trailer

Join us on a planetary journey that goes deep into the future of innovation, technology, nature, and humanity in search of the best ways to forge a sustainable future.



Trailer



00:00

01:58

Privacy Policy



www.climateforesight.eu



**CLIMATE CHANGE
COMMUNICATION AWARD**
Rebecca Ballestra

*The world's **best initiatives**
raising awareness on **climate change***

FIND OUT THE OUTCOMES OF THE 2021 EDITION!



Over 150 proposals
108 admitted candidates
32 countries
5 continents

www.cmccaward.eu

IPSO – Innovative Platforms for Science Outreach

- **Established in April 2021**

3 Full Time Equivalent (staff shared with Communication Office) working in Communication/Dissemination/Exploitation and Stakeholders/Citizen Engagement WPs in 11 projects.

- **Expertise**

- Journalism, multimedia storytelling and editing
- Climate/Ocean literacy
- Media literacy
- Graphic/Web design

IPSO – AIMS



- To be the **interface** between **scientific research** and **diverse target audiences** in the field of communication and dissemination of climate sciences
- To improve **the dialogue and the interaction** among **climate scientists** and with **other communities** to foster communication and dissemination of solid, reliable, up-to-date science knowledge (journalists, artists, media experts and analysts)
- To design, create and make available **platforms and tools to enhance public awareness and understanding** of climate change interaction with the society.

IPSO – KEYWORDS/TOPICS

Climate/Ocean/Media
LITERACY



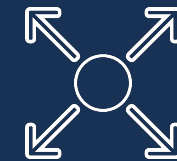
Science/Media
INTERFACE

Citizen/Stakeholders
ENGAGEMENT



Climate
NARRATIVES

MEDIA/JOURNALISM
analyses



**COMMUNICATION
DISSEMINATION
EXPLOITATION**

CLIMATE CHANGE AND JOURNALISM

Climate change in the newsroom is more than a topic:
it is a systemic issue addressing all desks (verticals)

How to address it?

With a CLIMATE HUB in the newsroom

- **accelerate integration in the newsroom**

WOLFGANG BLAU - Reuters Institute, Oxford University

- <https://wan-ifra.org/2021/09/covering-climate-change-requires-newsroom-change/>
- <https://www.niemanlab.org/2021/07/if-youre-not-a-climate-reporter-yet-you-will-be-covid-19-coverage-offers-lessons-for-reporting-on-the-climate-crisis/>

Climate Literacy

La comprensione della tua influenza
sul clima e dell'influenza del clima
su di te e sulla società



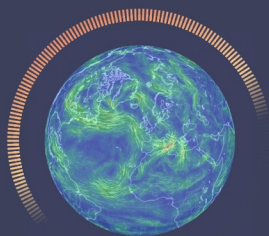
Dynamic Data Visualization

[Esplora](#)

Osservare i dati

Simulazioni e sistemi di predizione avanzati per scoprire il clima che verrà

Lorem Ipsum dolor sit Lorem Ipsum dolor sit Lorem
Ipsum dolor sit Lorem Ipsum dolor sit Lorem Ipsum
dolor sit Lorem Ipsum dolor sit.



Dynamic data
visualization



Dynamic data
visualization



Dynamic data
visualization

Dynamic data visualization

Lorem Ipsum dolor sit Lorem
Ipsum dolor sit Lorem Ipsum
dolor sit Lorem Ips.

Glossario

[Scopri](#)

L'adattamento dalla A alla Z

Definizioni e neologismi per comprendere
il cambiamento

Lorem Ipsum dolor sit Lorem Ipsum dolor sit Lorem
Ipsum dolor sit Lorem Ipsum dolor sit Lorem Ipsum
dolor sit Lorem Ipsum dolor sit.



Acquacoltura

Adattamento

Alluvione

Antropocene

Arretramento pianificato

Bilancio di carbonio

Ciclone tropicale

Clima

Consumo del suolo

Governance



Digital Handbook: a source for journalists?

Stand-alone digital environment to collect data, information,

Handbook capitalizes on the experience of the [Climate Risks Reports](#): it starts from research outputs and provides diverse levels of consultation for various target audiences through several kinds of contents that include: a glossary, infographics, storytelling for pilot/case, videos, artistic photographs.

The first application is in progress for ADRIACLIM PROJECT, the template is in Italian, but it is designed to be multilingual (English and Croatian in the case of ADRIACLIM).

First Release on June 2023.

The Handbook is a flexible tool that can be customized for diverse contexts to support stakeholders in navigating the project's results, exploiting their potential, and demonstrating their use in a range of applications (e.g., including sectors, types of organization, and geographies).

The Handbook is the product of the strict collaboration of IPSO team with scientists of CMCC Divisions and partner institutions.

SCIENCE/JOURNALISM INTERACTION

Climateurope 2 – Naturance – Aspect

- Enhance integration and collaboration among scientists and journalists
- Provide not only data, but also opportunities to understand how to use the data and what they mean for the society
- Collaborate with journalists as amplifiers of climate awareness



www.cmcc.it

