

ecoSERVICES

Co-Chairs: Elena Bennett and Wolfgang Cramer
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ecoSERVICES assesses the links between biodiversity, ecosystem services and human well-being and their role in achieving equity and sustainability.

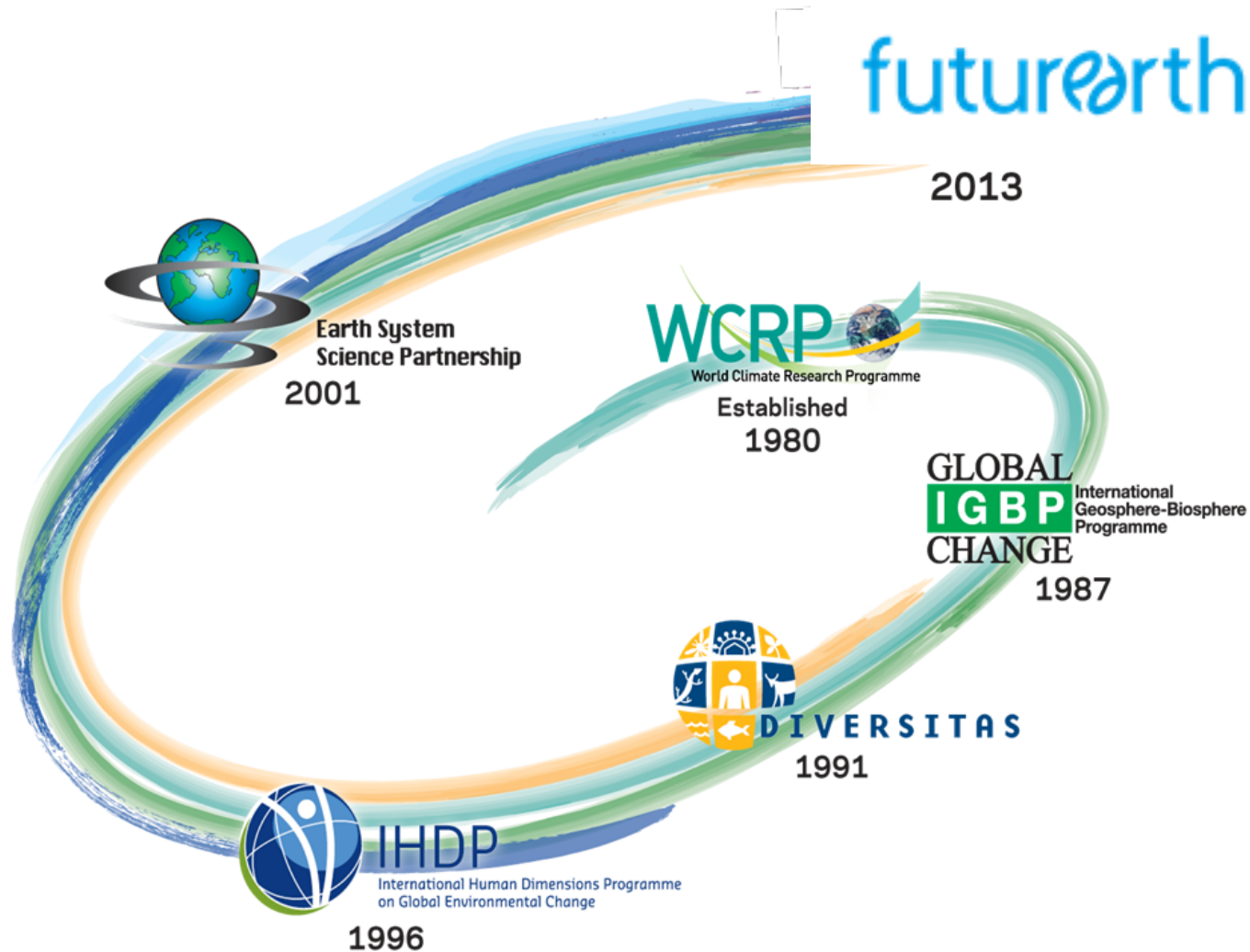


What is Future Earth?

A **global platform** for scientific collaboration

- Enabling **integrated research** on grand challenges and transformations to sustainability
- Strengthening **partnerships** between researchers, funders and users of research
- **Solutions-oriented**, building knowledge needed to accelerate transformations to sustainability
- **Communicating** science to society and society to science

Evolution of GEC Programmes



Future Earth's Sponsors: The Alliance

BELMONT
FORUM



ICSU

International Council for Science



**UNITED NATIONS
UNIVERSITY**

futureearth
research for global sustainability

ISSC

international social science council



**United Nations
Educational, Scientific and
Cultural Organization**

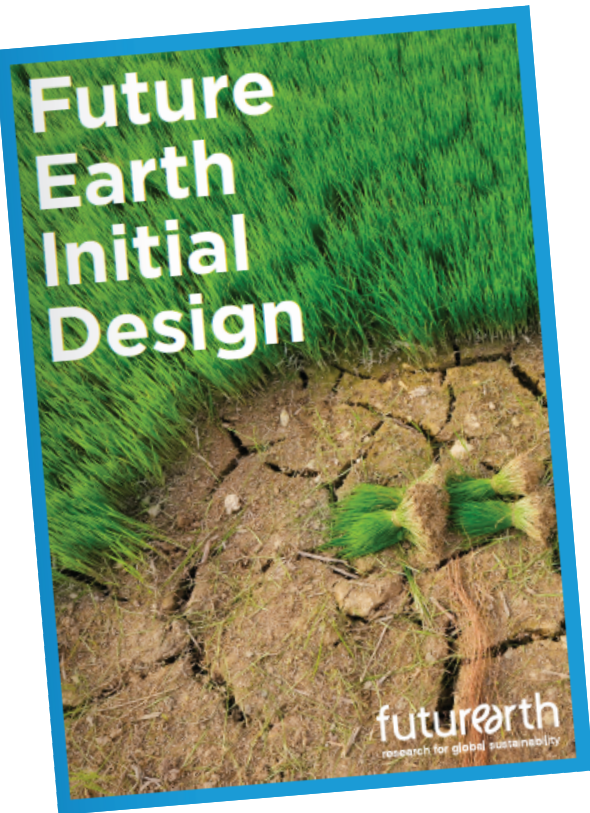
IGFA

INTERNATIONAL GROUP OF
FUNDING AGENCIES FOR
GLOBAL CHANGE RESEARCH



futureearth

B. Advancing science



- **2025 vision:** Success Factors for Future Earth

Publish October 2014

- **Strategic Research Agenda 2014:** Agenda-setting for funders

Launch October 2014

- **Short-term initiatives:** Fast track initiatives and cluster activities

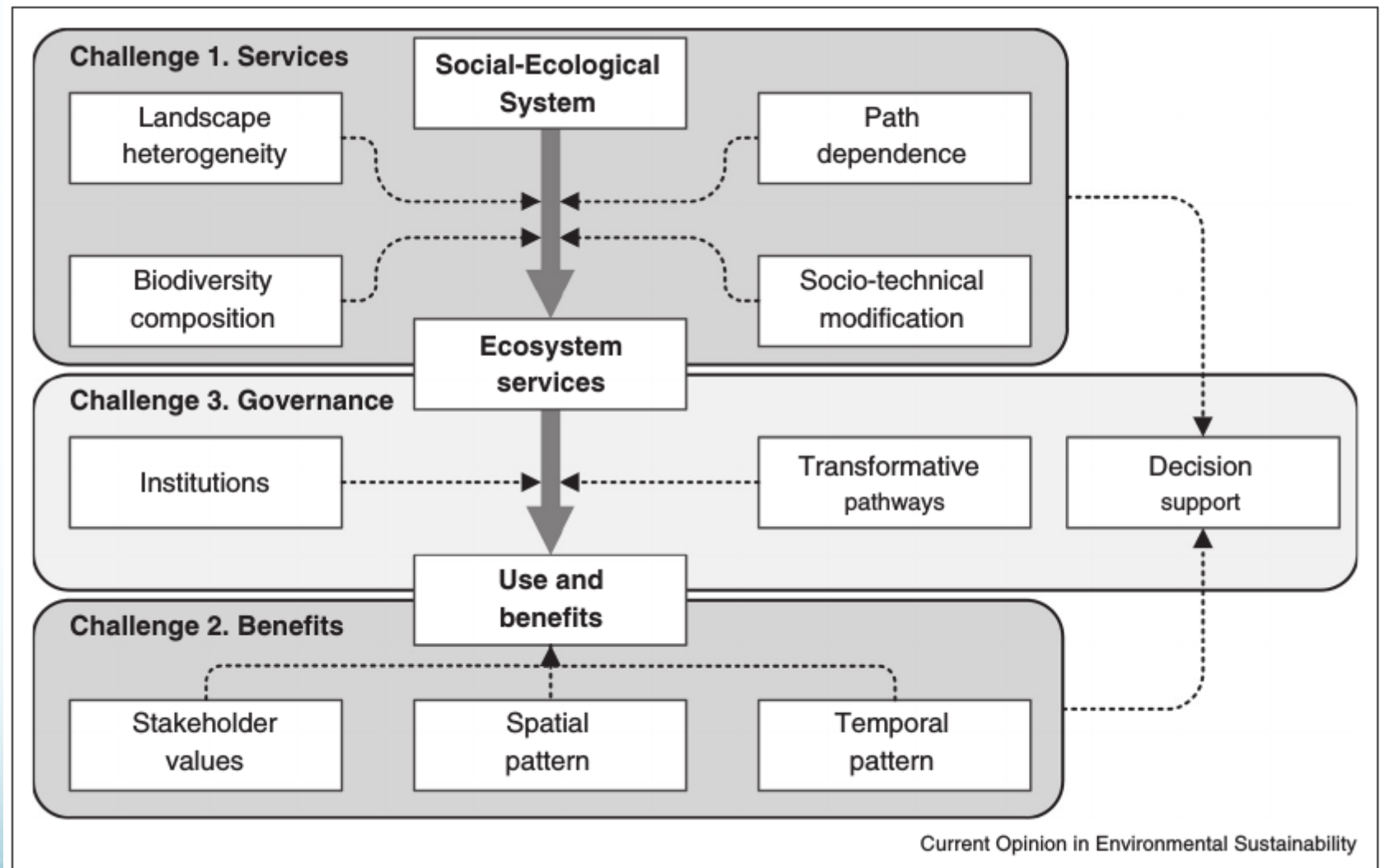
Announced July 2014

ecoSERVICES mission (draft)

Despite a great deal of interest in ecosystem services, and a profusion of studies, very little of the information or knowledge about services is synthesized into a clear understanding of how services are produced, how benefits are distributed, or how ecosystems can best be governed to support societal transitions to more equitable and sustainable societies

We aim to mobilize, co-produce, and synthesize knowledge about **biodiversity, ecosystem services**, and **human well-being** that is required to respond to global environmental challenges and promote social justice and sustainability.

To do this, we engage with other scientists, research networks, policy fora, and other decision makers to support collaborative learning and ecosystem governance at multiple scales.





Linking biodiversity, ecosystem services, and human well-being: three challenges for designing research for sustainability[☆]

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3 Working Groups

(based on key challenges for ES research,
Bennett et al. COSUST 2015)

1. How, when and where are ecosystem services co-produced by social-ecological systems?

Lead SSC member: Guy Woodward

2. Who benefits from the provision of ecosystem services?

Lead SSC member: Jeanne Nel

3. What are the best practices for governance of ecosystem services?

Lead SSC member: Unai Pascual

Next steps for each WG

Working group 1: Special session at the British Ecological Society annual meeting on the production of ecosystem services

Working group 2: Symposium planned 2016; manuscript on ecosystem service benefit flows

Working group 3: Survey on the most compelling questions in ecosystem service governance, to become a manuscript and point direction forward for this group.

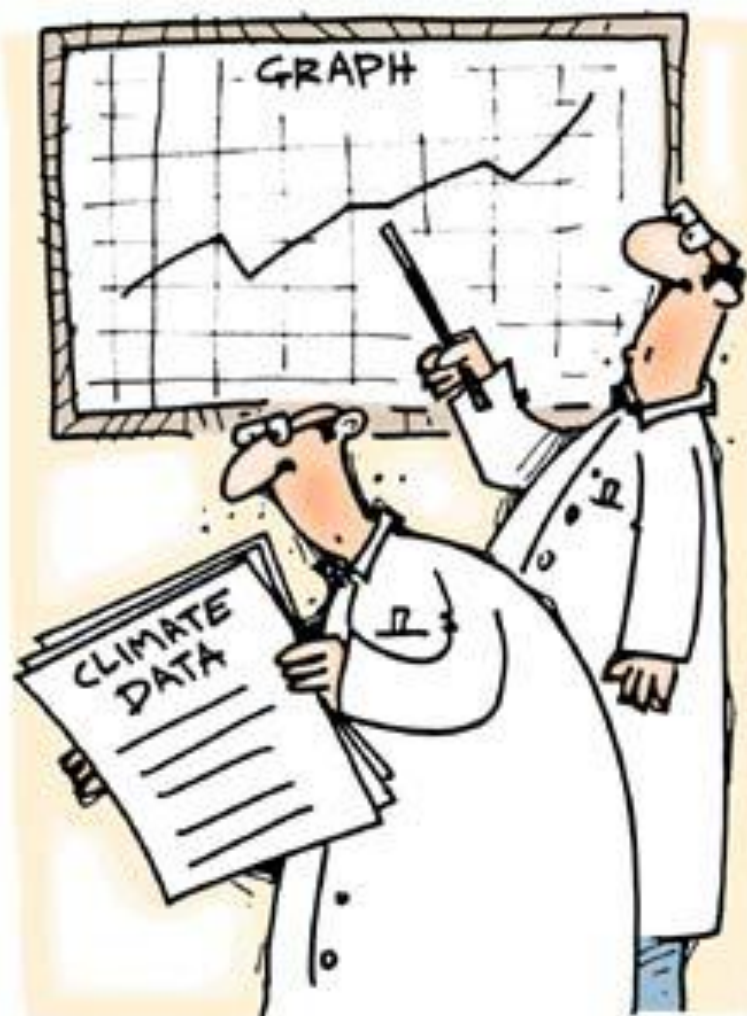
MedECC: Mediterranean Expert group on Climatic Change

Towards an improved scientific assessment of climate change and its impacts in the Mediterranean Basin

Joël Guiot & Wolfgang Cramer, CNRS, France
Laboratory of Excellence OT-Med

With the participation of Gen. Cat. (A. Queralta Assau), Plan Bleu (J. Le Tellier, A. Lafitte, H. Ravenel), AcTerra (S. Simonet), CMI World Bank (H. Levitte), IRD (B. Martimort-Asso, G. Chehbouni)

ASSESSING THE IMPACT OF CLIMATE CHANGE ...



THE SCIENTISTS



THE POLITICIANS

Why engage in a science-policy interface?

Without a proper dialogue between scientists and decision makers

- environmental decision making will be even worse
- the environment will degrade even quicker

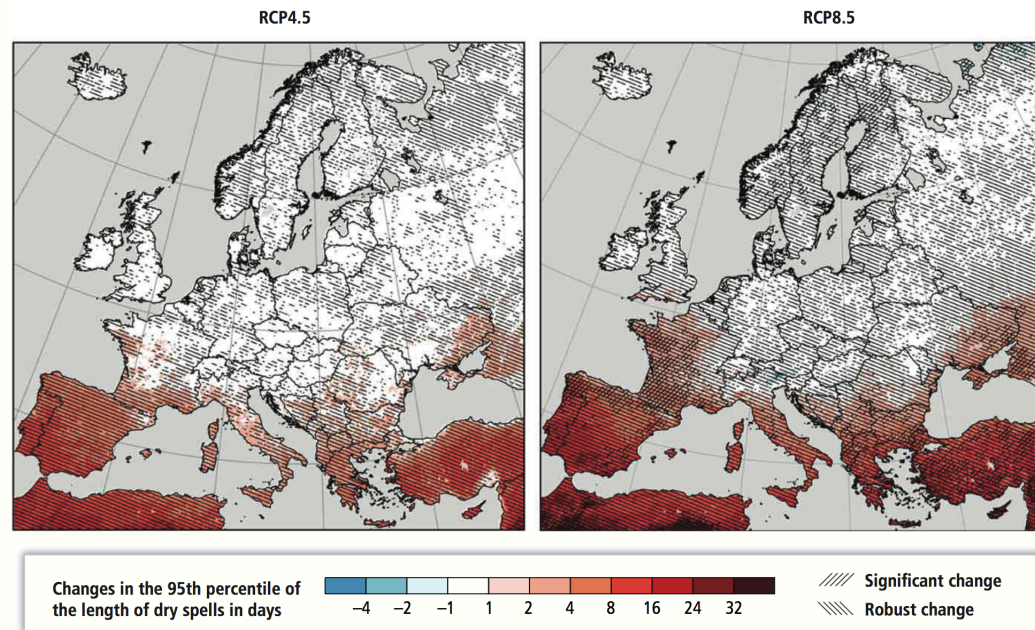
A proper dialogue between scientists and decision makers is not “something for the social scientists”

Why a specific group on the Mediterranean Basin?

- A common semi-closed sea
- A common history
- Similar environmental problems related to their dense human population, mainly on the coast, ecosystem degradation, and strong climate variability.
- Numerous gradients between north to south, west to east
- In IPCC, the Mediterranean region is considered together with Europe or distributed between Europe, North Africa and Asia

The vulnerability of the Mediterranean Basin

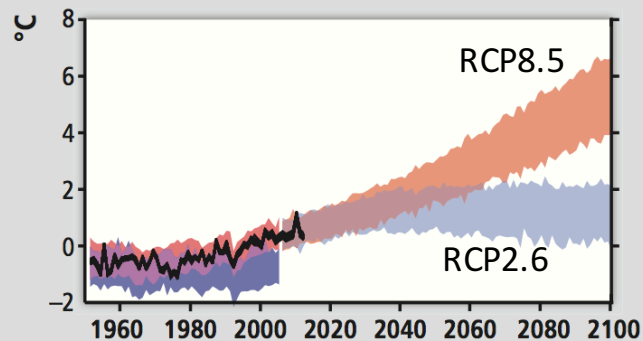
(d) Changes in the 95th percentile of the length of dry spells (days) 2071–2100 compared to 1971–2000



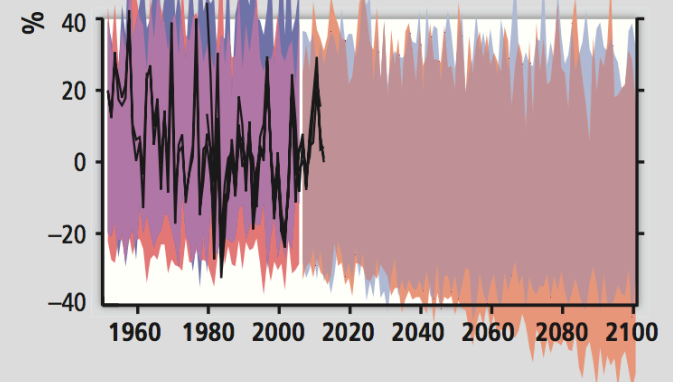
The Arab Maghreb Union

IPCC 2013

Annual land temperature



Annual land precipitation



Multiple drivers of change

Besides climate (itself multi-dimensional: temperature, rainfall, means, extremes etc.), there are other drivers of environmental change

- acidification
- invasive species
- pollutants
- urbanization

but also

- conservation, agricultural, forest and fisheries management

MedECC

- is an initiative by some people
- everything can be discussed
- we hope to be able to create an open and transparent process
- overarching criterion for any decision about MedECC should be science, involving all relevant disciplines

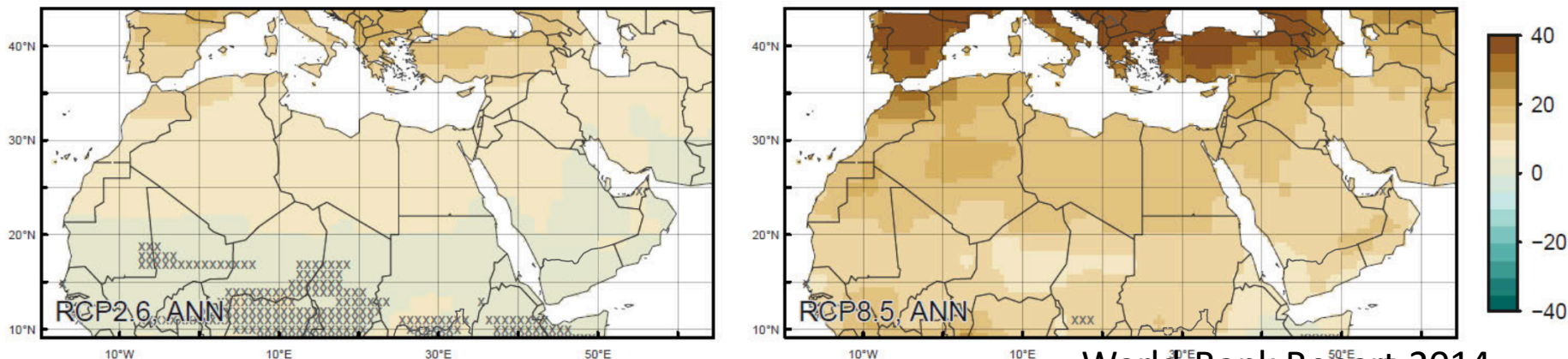
MedECC Aims

1. To gather the scientific community working on climate change and its impacts in the whole Mediterranean basin. This includes building a bridge between existing research structures and programs and facilitating data-sharing through existing or new platforms.
2. To update and consolidate the best scientific knowledge about climate and environmental change in the Mediterranean basin and render it accessible to policy-makers, key stakeholders and citizens.
3. To contribute to future IPCC, IPBES or related assessments in the Mediterranean basin.
4. To bridge the gap between research and decision-making, contributing to the improvement of policies at national, regional, and local level by providing consolidated scientific assessments on particular issues and by responding to requests by decision-makers.
5. To identify gaps in the current research on climate change and its impacts in the Mediterranean and interact with funding agencies for the development of new research programs to fill these gaps.

Scientific scope of MedECC

- Climate change, scenarios, impacts, mitigation, adaptation (see IPCC)
- Biodiversity and ecosystem services (see IPBES)
- Desertification (Convention on Biodiversity and Desertification)
- Freshwater quality and quantity
- Coastline changes
- Air and sea pollution
- ...

Figure 4.8: Multi-model mean of the percentage change in the annual-mean (ANN) of monthly potential evapotranspiration for RCP2.6 (2°C world, left) and RCP8.5 (4°C world, right) for the Middle East and North African region by 2071–99 relative to 1951–80.



MedECC possible outputs

1. Regular and comprehensive “state of the art” reports about climate and environmental change for the entire Mediterranean basin, including summaries for decision-makers for approval by government representatives.
2. Specific reports on demand by decision-makers on specific issues, sectors or scientific domains.
3. Scientific workshops co-hosted by MedECC and research institutions or MedECC supporting institutions.
4. Training for decision makers, professionals and other stakeholders involved in environmental change mitigation and adaptation.
5. Dialogue between the scientific community, decision makers and stakeholders on specific issues of environmental change in the Mediterranean basin.

MedECC Resources

- Funds: 0€ (but also the IPCC and IPBES operate on voluntary contributions only!)
- “Ad hoc” Steering Committee (Chehbouni, Cramer, Gattuso, Guiot, Lange, Lionello, Valentini, Xoplaki)
- Fast-growing community of interested experts from Algeria (2), Cyprus (1), Egypt (1), France (23), Greece (4), Israel (3), Italy (15), Lebanon (2), Monaco (1), Morocco (7), Portugal (3), Spain (21), Tunisia (2), Turkey (4) + Austria, US...
- Institutional support indicated from Plan Bleu, World Bank CMI, PACA, Gov’t Catalonia, IRD, Labex OT-Med...

Building a network

- Side event at “Our Common Future Under Climate Change”, Paris, July 2015
- 1-2 Oct 2015: UfM-CCEG meeting, Barcelona
- E-mailing our colleagues (still ongoing, *please do not be insulted if you have not been contacted yet, contact us if you like*)
- 22 Oct 2015: MISTRALS
- 26 November 2015: First ad hoc Steering Committee meeting
- Spring 2016: meeting of an extended group to produce first list of topics, functioning and initial products
- Finding financial support!
- During 2016, launch event, possibly at MEDCOP22 in Tangier, May 2016

My personal plea for MedECC

- Participation is voluntary, funds only for secretariat, meetings and reports
- Experts are chosen on scientific credentials
- Full coverage of region and all relevant disciplines always needed (IPCC often selects co-chairs “North-South” or for different disciplines)
- Policy side needs to constitute itself following some form of UN regulations

WE'RE
SLOWLY BEING
COOKED IN
A POT!!!!

WE'RE
SLOWLY BEING
BOILED IN
A POT!!!

SEE?
THERE'S NO
CONSENSUS...

SCIENTIST

SCIENTIST

DENIER

CLIMATE CHANGE

Greg
Perry