



Eastern Mediterranean and Middle East Region Climate Change Initiative (EMME-CCI)

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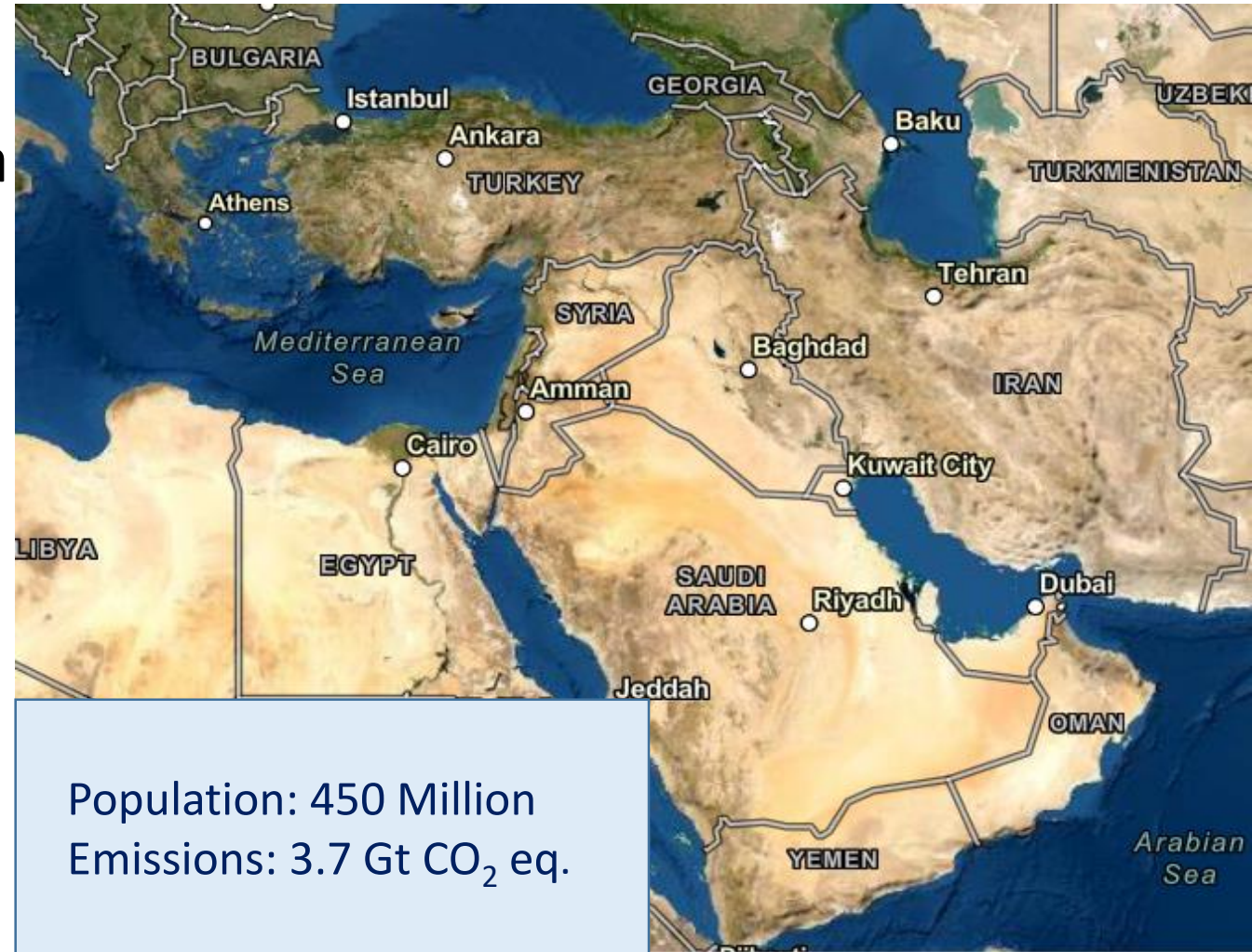
COP 26 Glasgow Nov 2, 2021

Climate Change in the EMME Region

The EMME region is recognized as a climate crisis “**hot spot**”: Climate impacts will manifest themselves in a most intense way in a geopolitically sensitive and populous area.

- Extreme heat waves; Shortage of water
- Collapse of Agriculture
-
- Migration

The **EMME countries** are Bahrain, Cyprus, Egypt, Greece, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, Syria, Turkey, United Arab Emirates and Yemen

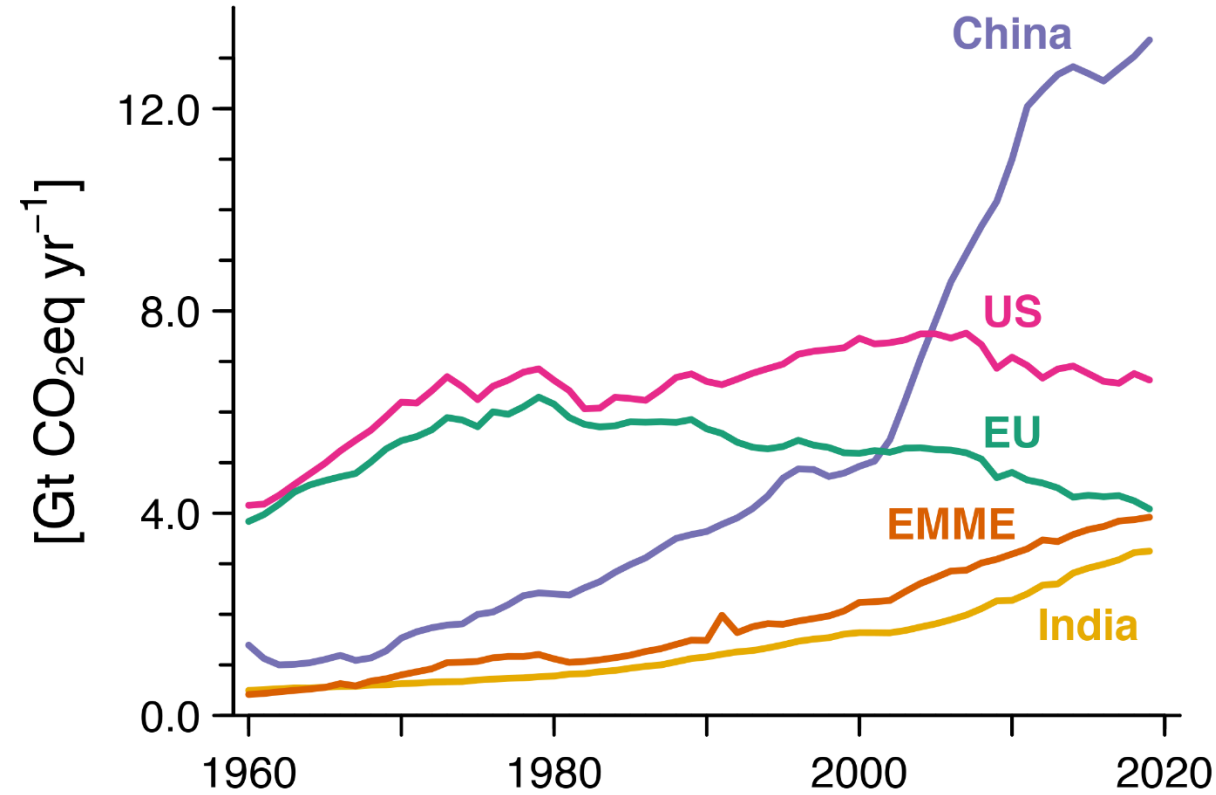


Population: 450 Million
Emissions: 3.7 Gt CO₂ eq.

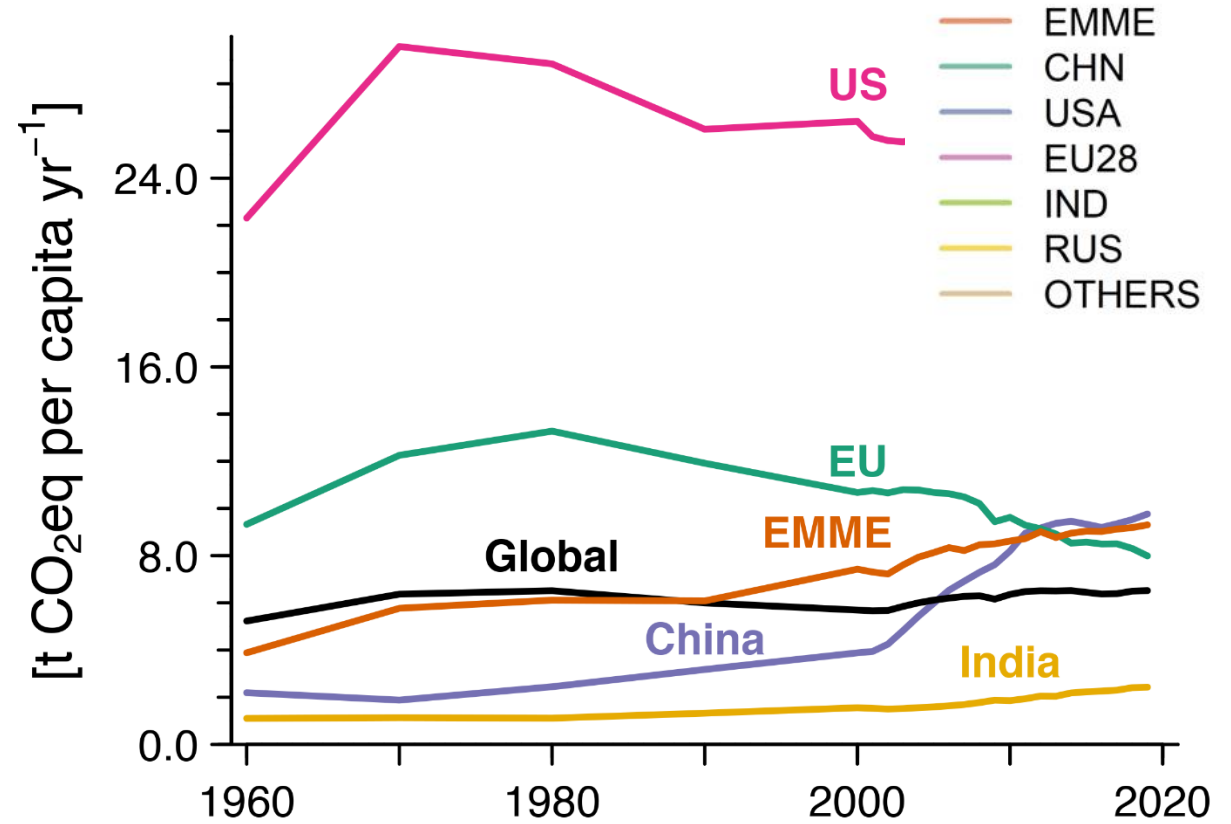


Emissions of EMME region large and growing

GHG Emissions



Per Capita GHG Emissions



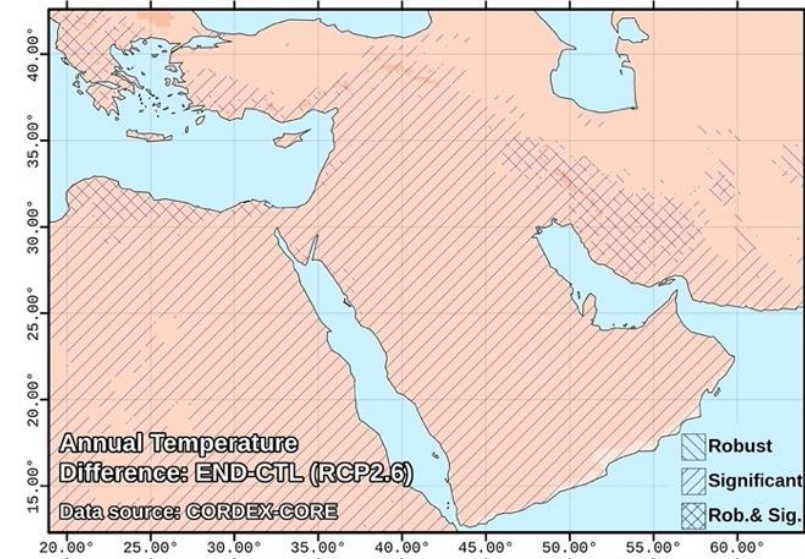
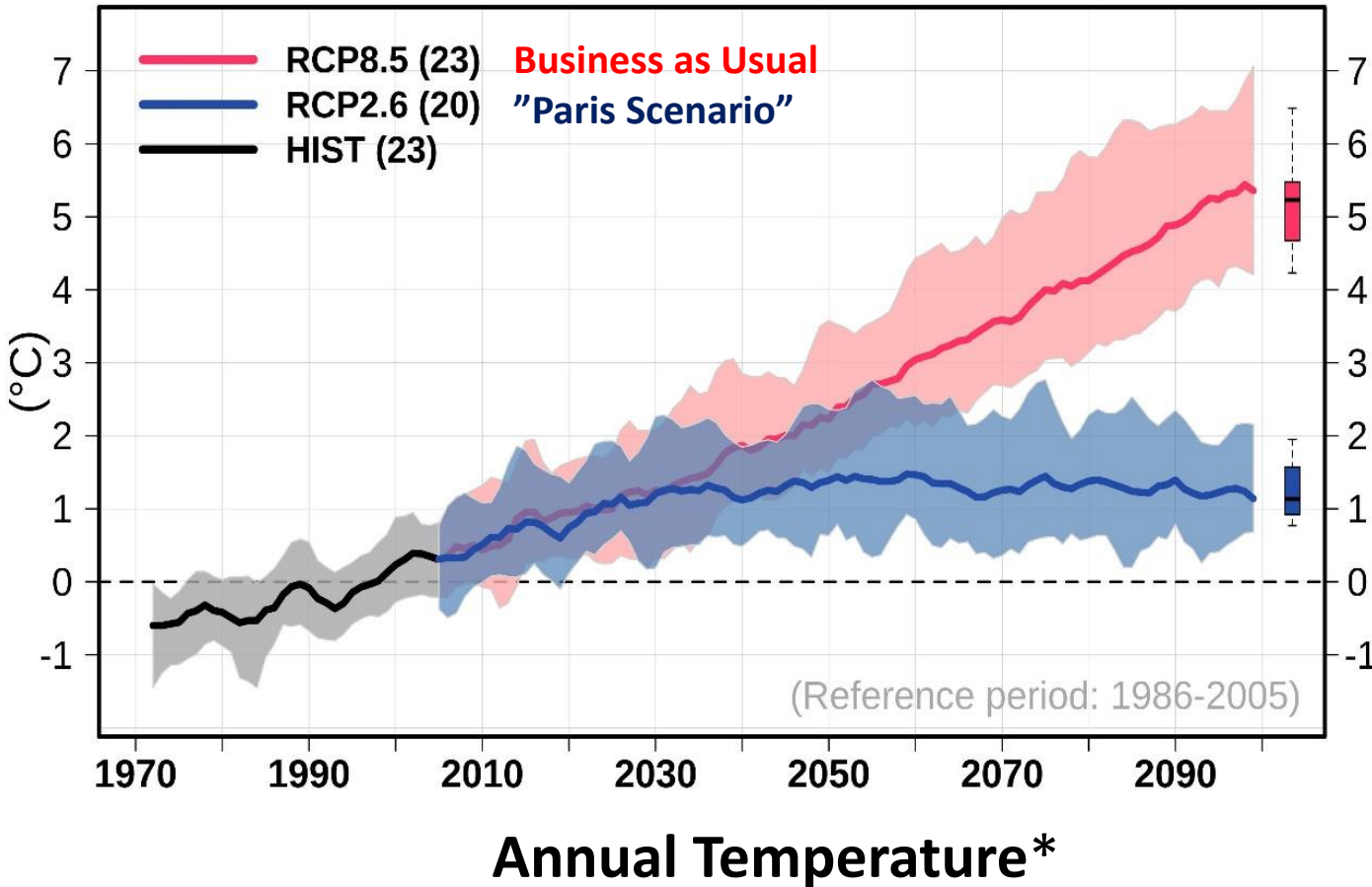
Anthropogenic GHG emissions in EMME have increased fivefold over the past five decades

Ph. Ciais 2021

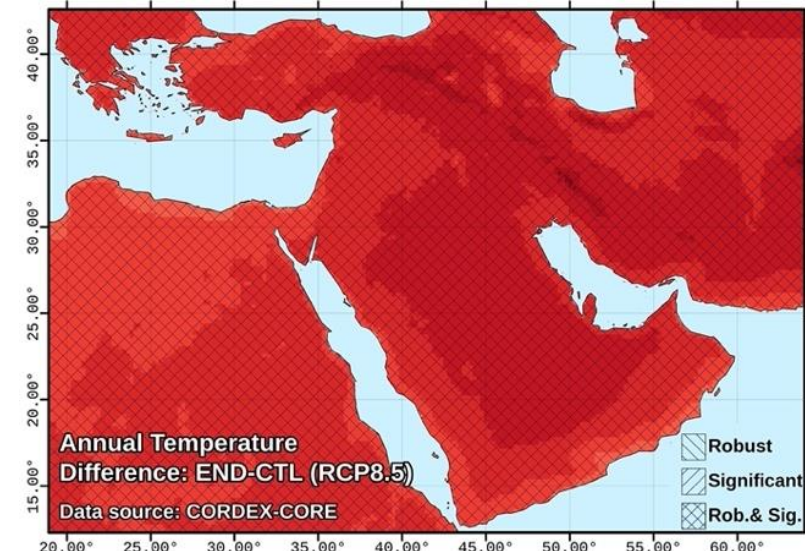


Climate Projections

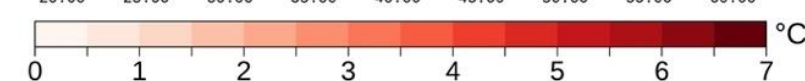
Mean annual temperature anomalies, EMME (land only)



RCP2.6



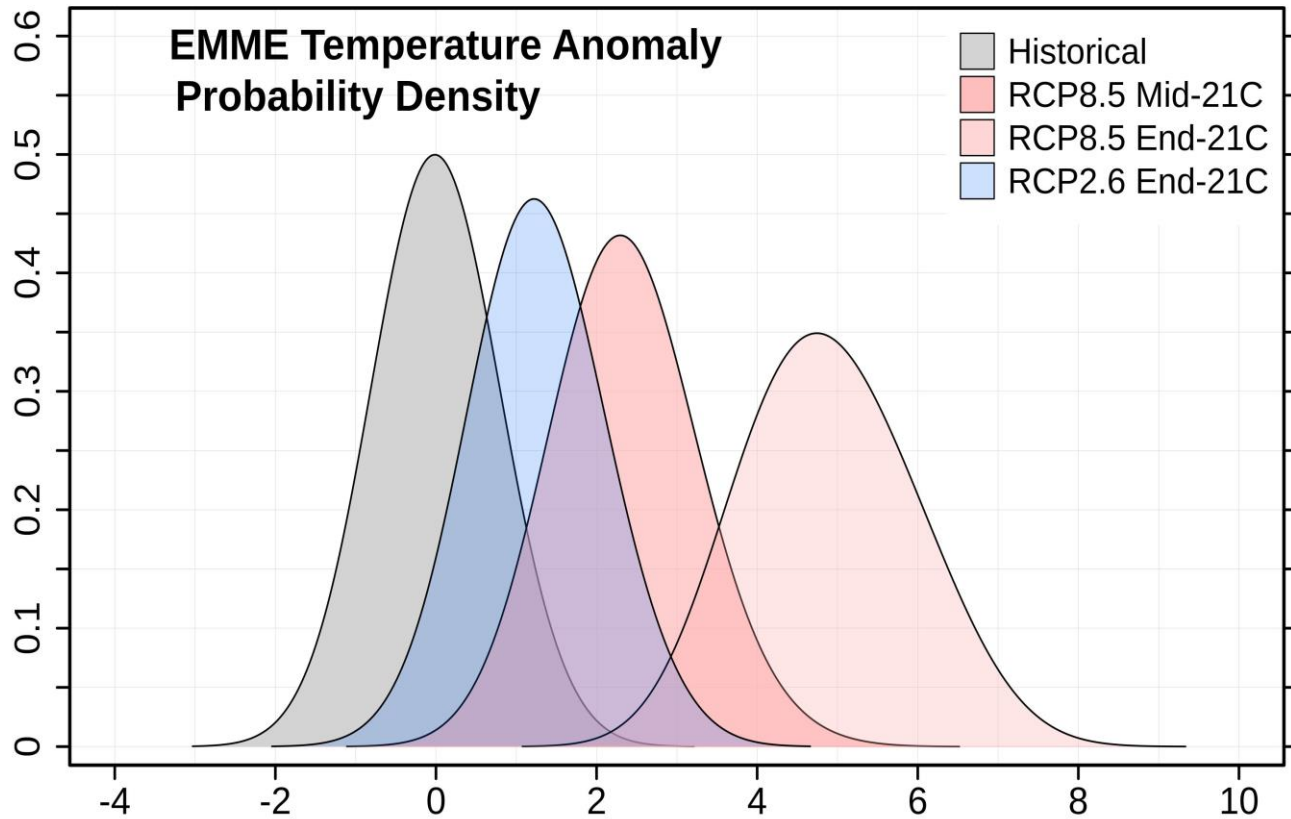
RCP8.5



*country level and seasonal information also provided



EMME Region - Climate Projections



Probability density curves of EMME region-averaged anomalies of annual temperature (w.r.t. 1986-2005 mean).

“under a business-as-usual scenario, by the end of the century the coolest years will be significantly warmer than the warmest years of the reference period”

“the EMME region will be subjected to unprecedented heat extremes”

G. Zittis, J. Lelieveld et al. 2021



Climate Change Initiative in the EMME Region

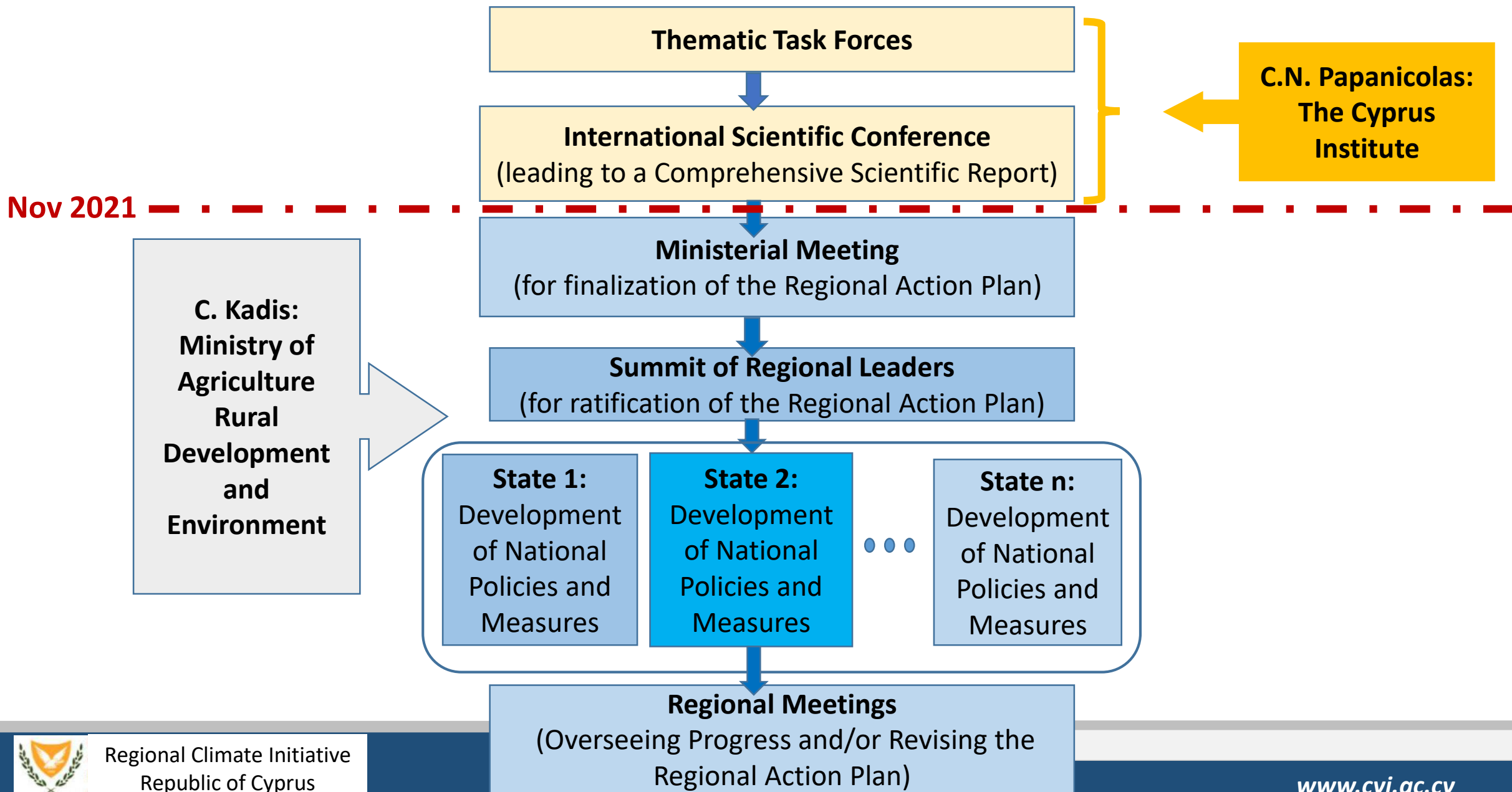
Approved by the Cy Council of Ministers of the Republic in March 2019:

To coordinate a concerted effort by the countries of the Eastern Mediterranean and the Middle East (EMME) Region

- To accelerate adherence to the stipulations of the Paris Agreement and
- To address and ameliorate the effects of climate change in the region



Work Programme



Thematic Foci for the Regional Scientific Task Forces

1. Physical Basis of the regional climate change (observations and projections)

8. Education and Outreach

2. Energy

9. Migration

3. Built Environment

10. Tourism

4. Health

11. Enabling Technologies

5. Water Resources

12. Development of Green Economy and Innovation

6. Agroforestry and Food Chain

13. Cultural Heritage

7. Marine Environment/Resources



Mandate of the EMME-CCI Task Forces

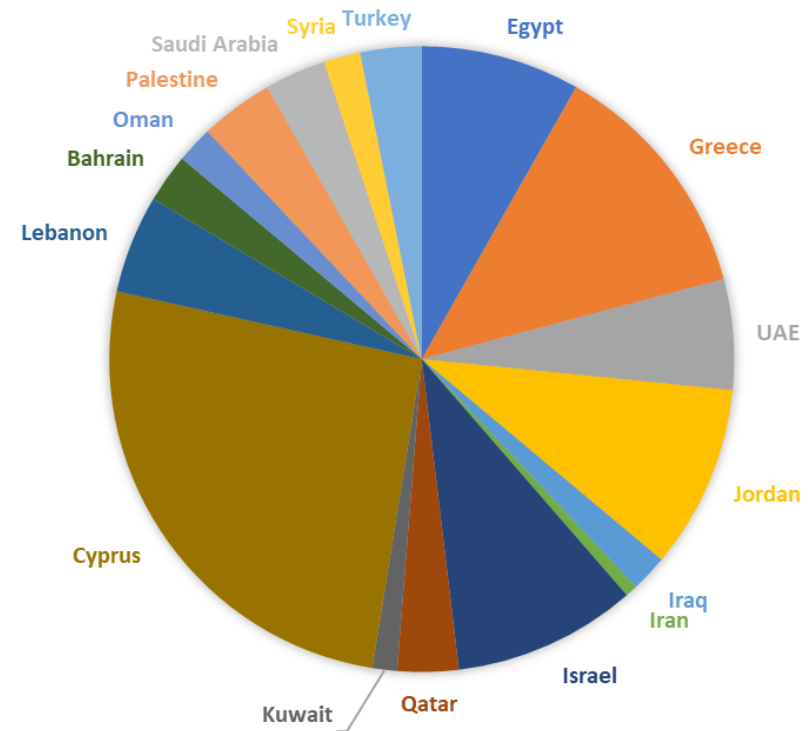
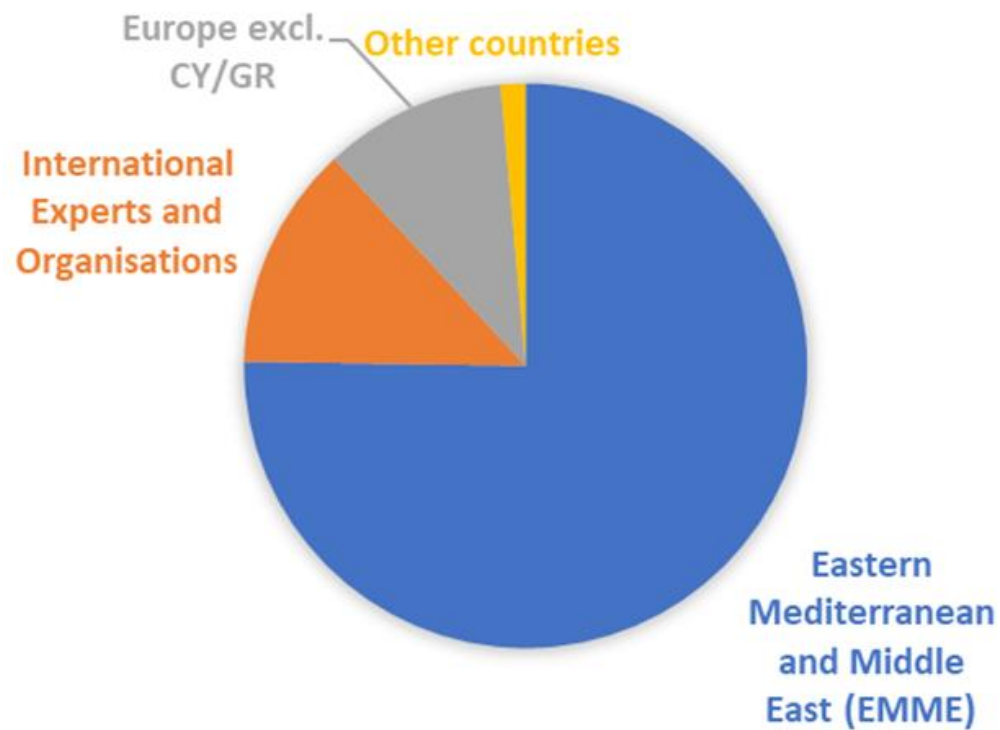
- Produce Thematic Reports (“White Papers”) in their respective areas of scientific focus.
 - Collect and organize existing knowledge in order to assess the current situation
 - Identify gaps in understanding, research and policy needs
 - **Provide a “toolkit” of possible actions to address the climate challenges in the region**
- ***Propose: technologically mature and affordable solutions for addressing the impacts of climate change in different sectors.***

The TF thematic Report was presented at the [2nd International Conference “Climate Change in the Eastern Mediterranean & Middle East”](#) on 13 & 14 October 2021.

The extensive reports will be sent to the Governments of the Region in January 2022.



International Participation in the TFs of the Initiative



- ***Collage of Pictures from the Conference.***



EMME-CCI Findings from the scientific - technological phase

- **The situation is bad and worsening. Business as usual scenario – would result in a collapse, no adaptation possible.**
- Inadequate specific quality data
- Low level of national & regional funding for climate research
- Insufficient utilization of digitalization and enabling technologies
- Absence of regional collaborative research, projects or policies
- Generally unprepared to face the challenge
- Regional Collaboration is anaemic although badly needed



The EMME CCI Policy Framework:

a system of six thrusts

- Research
- Observation networks
- Biodiversity
- Climate Services Hub
- Innovation and (Green) Development
- Education and Outreach



Climate Services Hub (EMME CSH)

Development of a system for the provision of Climate Services:

in support of climate-smart decisions in climate-sensitive sectors, for instance, agriculture, energy, tourism, food security, etc.

Support disaster risk management and resource management.



Moving to the Implementation Phase

- The findings from The Scientific – Technological phase are alarming
- A large number of scientific sound, technologically feasible and affordable policies have been identified.
- A policy framework organizing the “toolbox of actions” has been proposed
- **Urgent to discuss implementation and funding schemes.**



Next Steps

- Ministerial summit (February 2022)
- Leader's summit (Autumn 2022)
- Implementation (2022- 2030)

A most challenging Initiative, in a most sensitive area in the world. Its success (or failure) will have world wide repercussions.



EMME Climate Change Initiative

(<https://climatechange2021.org>)

THANK YOU!

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