



Preparatory Living Lab Workshops on Climate Change and Blue Growth

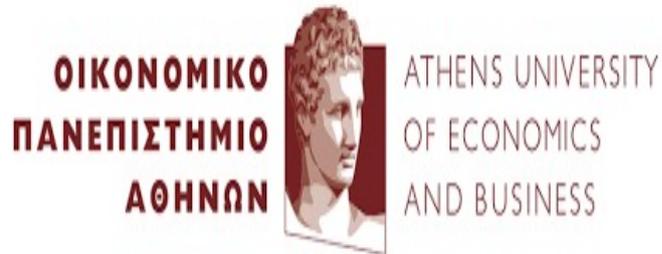
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International Cluster for Research on Sustainability Transition (ICRE8) Transforming Research and Innovation into Sustainability Action

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Fellow, World Academy of Art and Science



Sustainable Development Unit



International Cluster for Research on Sustainability Transition

Director: Prof. Phoebe Koundouri

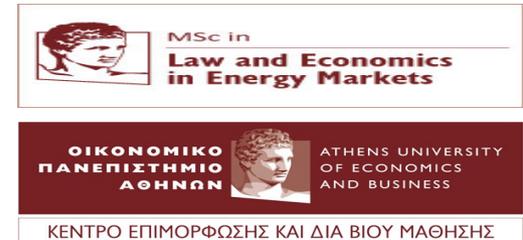
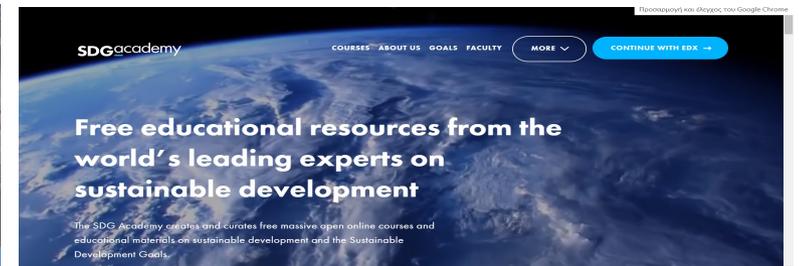
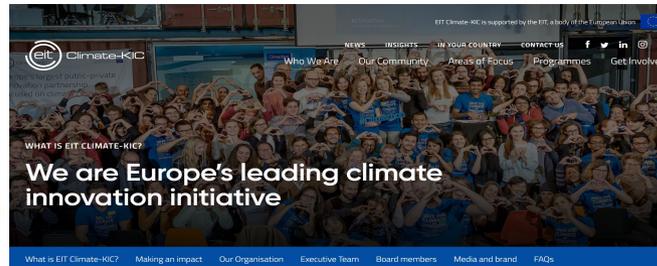
Research and Innovation Projects
Global Initiatives

Innovation Acceleration
Deep Demonstration

Education & Training & Policy Interface



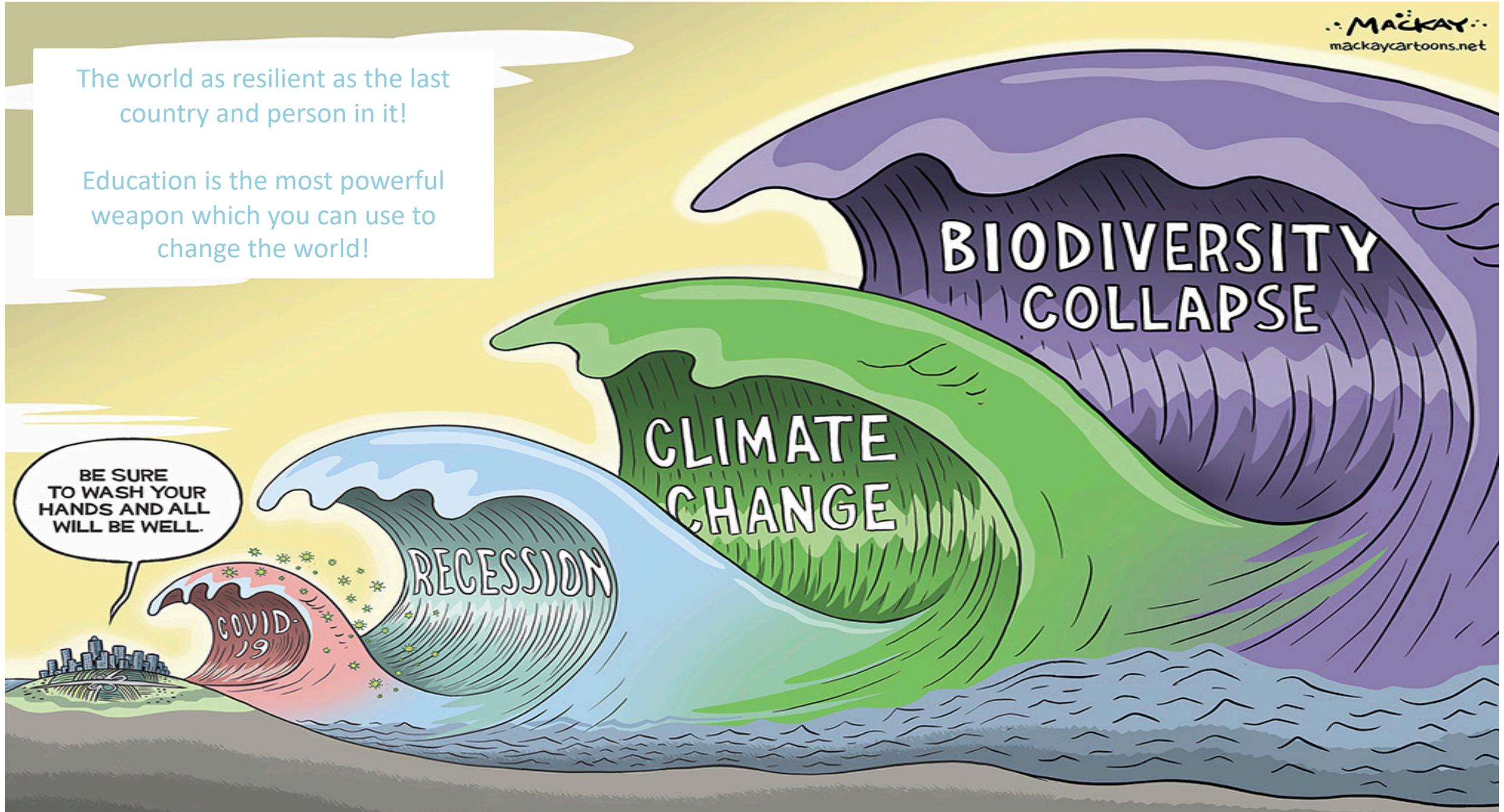
Smart Water Futures:



The world as resilient as the last
country and person in it!

Education is the most powerful
weapon which you can use to
change the world!

BE SURE
TO WASH YOUR
HANDS AND ALL
WILL BE WELL.



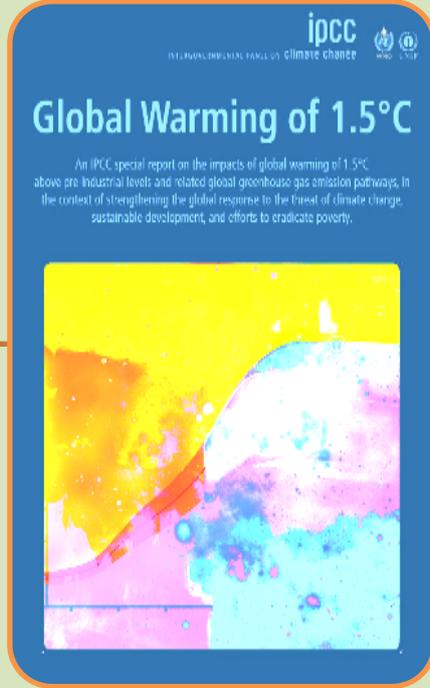
The Policy Framework for the "Transition to Sustainability"

2015

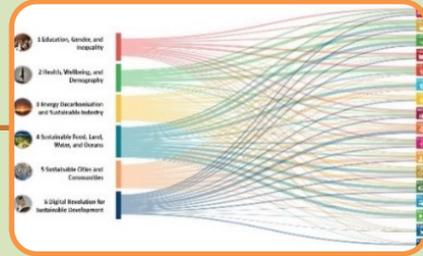


Limiting global temperature to well below +2°C

2018



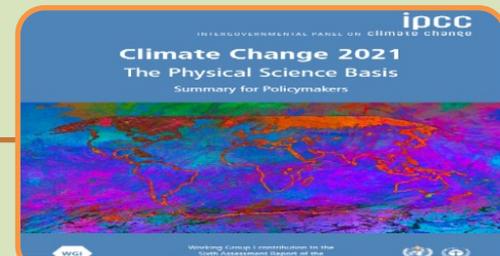
2019



2020



2021





SEAS



SUSTAINABLE EURO - ASIAN SEAS
A UN SDSN INITIATIVE



A Competitive Intelligence Cloud/High Performance Computing Platform for AI-Based Science Technology & Innovation Policy Making

New and innovative AI services to public administrators and policy makers across Europe for a co-creation ecosystem that allows for data- and intelligent-driven policy design, implementation and making in the field of STI.

Reductionist Thinking

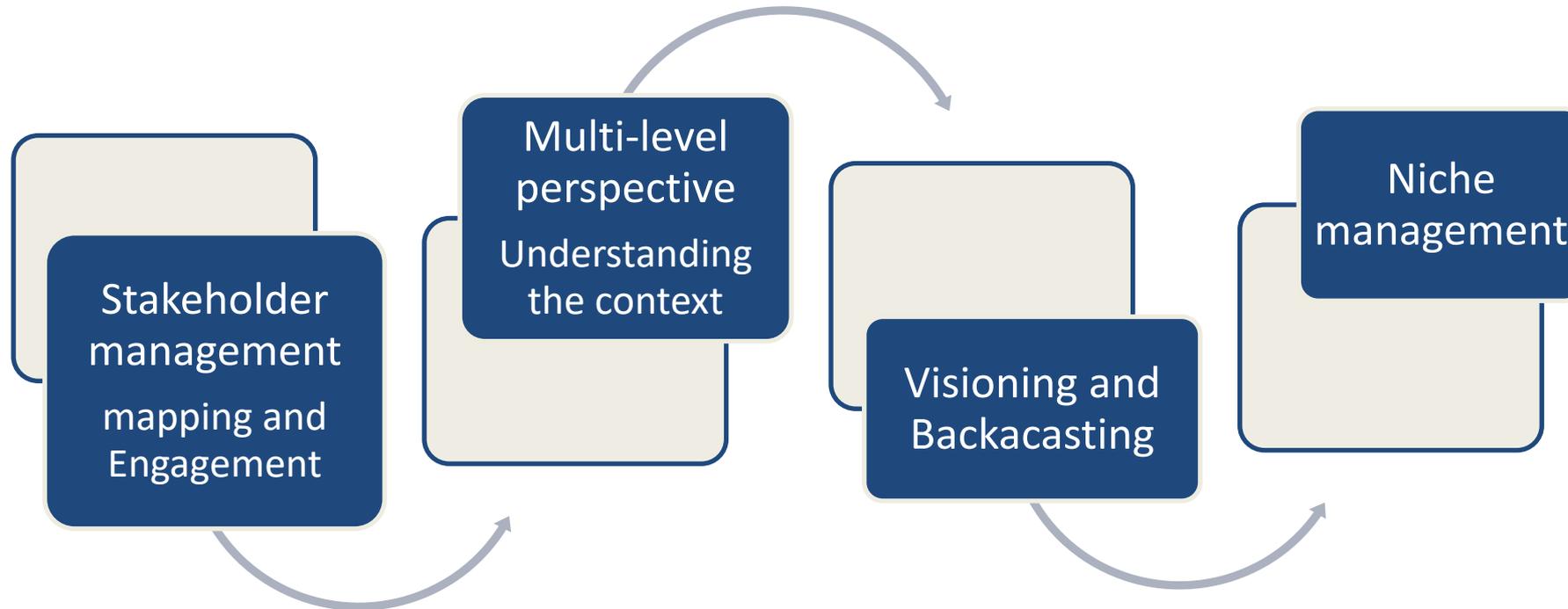


Systems Thinking



Systems Innovation can be understood as a combination of systems thinking and the process of innovation so as to enable transformative change within complex systems

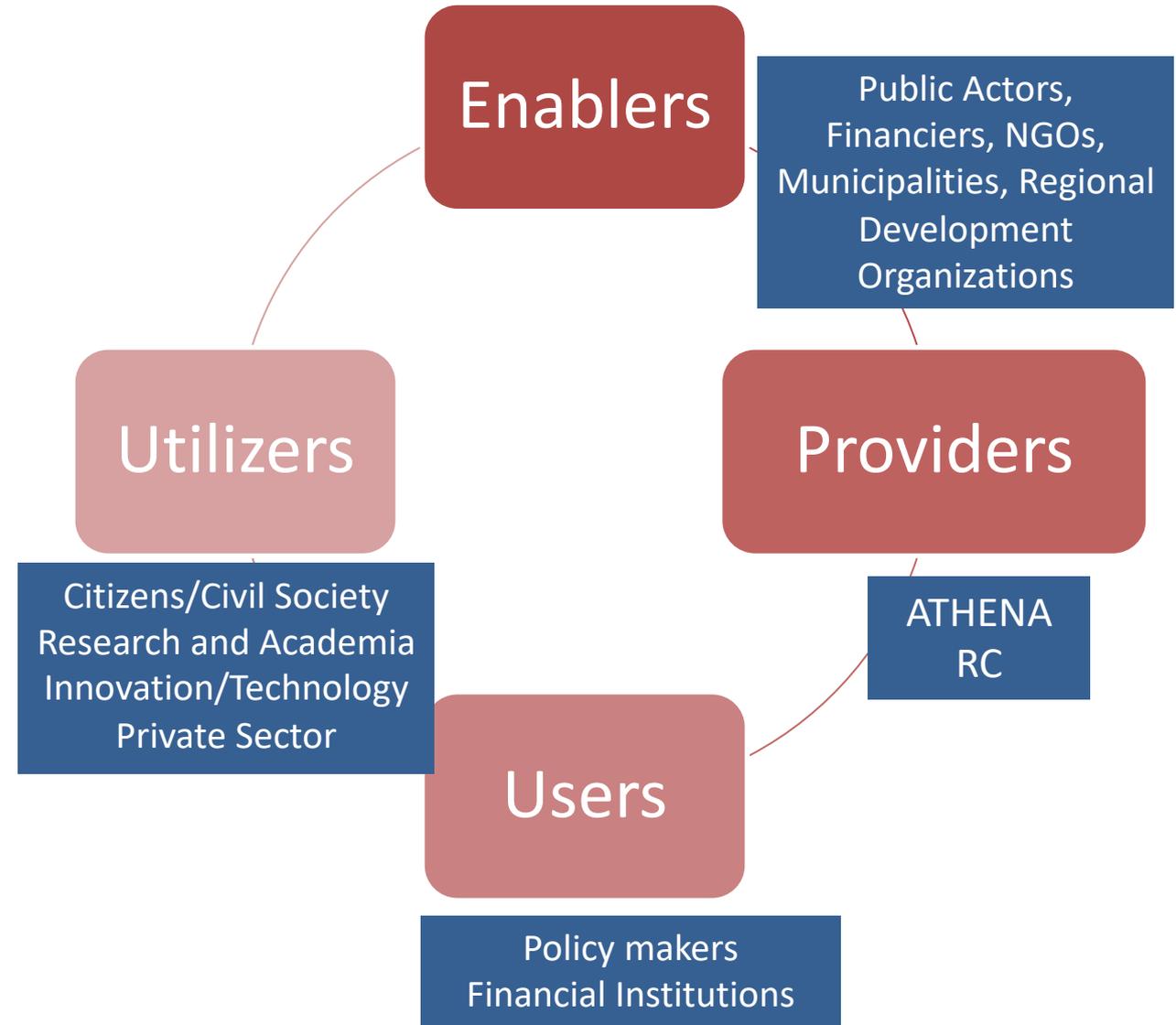
The Systems Innovation Approach



I. Stakeholder mapping (1)

Preparatory Living lab workshops comprise four key actors*:

- A) Enablers refer to the organizations that make it all possible, those that enable the activities of living labs and support them by promoting them or allocating financial backing or space for living labs. Enablers could be public actors, financiers, or non-governmental organizations (such as towns), municipalities, and regional development organizations.
- B) Providers, meanwhile, are development organizations such as educational institutes, universities, or consultants that bring knowledge and expertise, as well as innovation support activities
- C) Users represent the citizens or end customers, and they are active or passive actors that participate in living labs in various roles.
- D) Utilizers are the public or private organizations that will benefit from the results of innovation activities in many ways

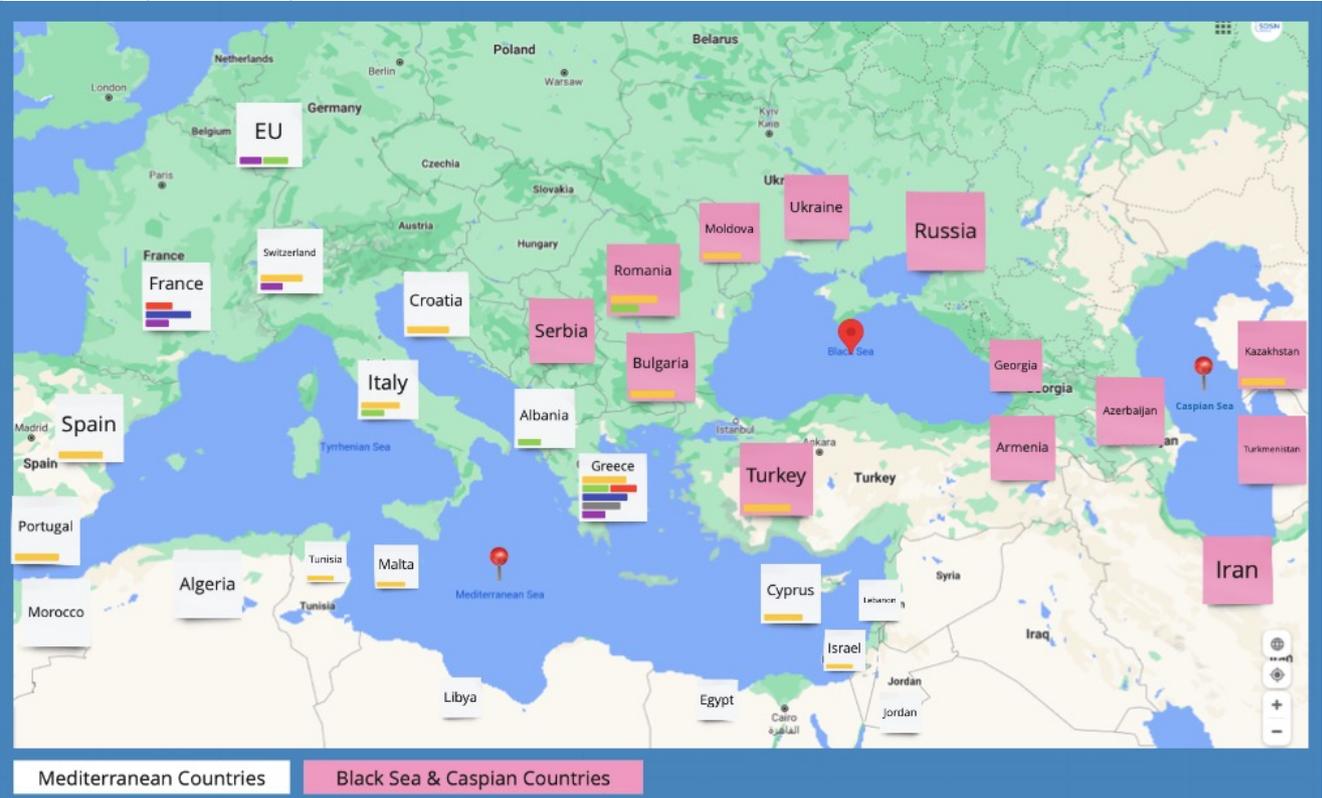


* Leminen, S., Nystro€m, A.G., Westerlund, M., Kortelainen, M.J., 2016. The effect of network structure on radical innovation in living labs. J. Bus. Ind. Market. 31 (6), 743-757.

I. Stakeholder mapping (2)

Sector	Organization	Preface	Surname	Name	Position	Country	Notes	Workshop 15.06.2021
Research and Education	Basque Centre for Climate Change (BC3)	Dr	Pascual	Marta	Associated Researcher	Spain	SEAs	invited
Policy Making	Carpathian Euroregion	Mr	Lasek	Dawid	Secretary General	Carpathian	SEAs	invited
Policy Making	European Commission	Mr	LIOGKAS	Vasileios	Policy Officer	Belgium	SEAs	invited
Research and Education	Hellenic Centre for Marine Research - HCMR	Dr.	Magoulas	Antonios	HCMR Director	Greece	SEAs	invited
Research and Education	Hellenic Centre for Marine Research - HCMR	Dr.	Paličkas	Dimitris	Research Associate	Greece	SEAs	invited
Research and Education	Hellenic Centre for Marine Research - HCMR	Dr.	Kotoulas	Georgios	Researcher			
Civil Society	Hellenic Marine Environment Protection Association (Helmepa)	MR	Triantafyllou	Constantinos	Head of Strategy & Development			
Civil Society	Hellenic Society for the Protection of Nature	Mrs	Vourdoumpa	Dareia-Nefeli	National Blue flag Director			
Policy Making	Parliamentary Assembly of the Mediterranean	Ms.	Cornali	Sofia	Junior Political Researcher			
Policy Making	Regione Campania	Dr	Giugliano	Fulvio	Referente Cluster Blu Italian Growth			
Research and Education	Academy of Economic Studies of Moldova	DR.	Eugenia	Buzmachiu	Associate Professor			
Research and Education	ARION-Cetacean Rescue and Rehabilitation Research Center	Dr.	Drougas	Aimilia	Biologist, Geologist-Oceanographer			
Research and Education	ATHENA RC	Prof	Emiris	Ioannis	President and General director			

- Public Administration / Policy Makers
- Citizens and Civil Society
- Research and Education
- Innovation & Technology
- Private Sector
- Financial Institutions





II. Stakeholder engagement (1)

- Frequency: Once every two months
- Participants: representative stakeholders from each country/region
- 2 Regional Stakeholder groups: Mediterranean; Black Sea and Caspian Sea
- Duration: 1.5-2 hours
- Location: Online (most of the workshops)
- Online tool: MIRO
- Target audience: 15-20 participants
- Facilitators: 2
- Extensive Follow-up, recording and feedback form after each workshop

II. Stakeholder engagement: Workshops planning

#1 28 June 2021 - everyone	<i>Goal of these workshops: Introduction to the climate change challenge and to the Blue Growth</i>
UNDERSTANDING THE CURRENT STATUS OF OUR SEAS	
#2a 30 July 2021 – Med #2b 8 October 2021 – BS+CS	Understanding the gap between Knowledge and Action ✓ <i>What data platforms exist in your country? How do you get informed? What is missing?</i>
#3a 29 October 2021 – Med #3b 17 December 2021 – BS+CS	Climate Change and Energy ✓ <i>Briefly discuss the risks and uncertainties per area (environment, economy, society, policy, technology, innovation, science).</i> ✓ <i>Examples of solving this challenge (mitigation or adaptation)</i>
#4a January 2022 – Med #4b January 2022 – BS+CS	Climate Change and Industry ✓ <i>Briefly discuss the risks and uncertainties per area (environment, economy, society, policy, technology, innovation, science).</i> ✓ <i>Examples of solving this challenge (mitigation or adaptation)</i>
#5a March 2022 – Med #5b March 2022 – BS+CS	Climate Change, Agriculture and Food ✓ <i>Briefly discuss the risks and uncertainties per area (environment, economy, society, policy, technology, innovation, science).</i> ✓ <i>Examples of solving this challenge (mitigation or adaptation)</i>
#6a May 2022 – Med #6b May 2022 – BS+CS	Climate Change, Forests and Land Use ✓ <i>Briefly discuss the risks and uncertainties per area (environment, economy, society, policy, technology, innovation, science).</i> ✓ <i>Examples of solving this challenge (mitigation or adaptation)</i>
#7a July 2022 – Med #7b July 2022 – BS+CS	Climate Change and Transport ✓ <i>Briefly discuss the risks and uncertainties per area (environment, economy, society, policy, technology, innovation, science).</i> ✓ <i>Examples of solving this challenge (mitigation or adaptation)</i>
#8a October 2022 – Med #8b October 2022 – BS+CS	Climate Change, Buildings and Cities ✓ <i>Briefly discuss the risks and uncertainties per area (environment, economy, society, policy, technology, innovation, science).</i> ✓ <i>Examples of solving this challenge (mitigation or adaptation)</i>

In green are the realised workshops

II. Stakeholder engagement: Workshops planning

DEFINING WHERE WE WANT TO GO	
#9a December 2022– Med #9b December 2022 - BS+CS	Understanding various stakeholders perspectives ✓ “What are themes in common between the actors of the blue growth ecosystem in your country? What are observed concentration patterns?” ✓ “Are actors of the ecosystem collaborating? What are forms of collaboration?”
#10 January 2023 - everyone	Bringing together all stakeholder groups and discuss the findings of the challenges
#11a March 2023 - Med #11b March 2023 – BS+CS	Macro-level, Meso-level, Micro-level perspective
#12a May 2023 – Med #12b May 2023 – BS+CS	Vision development
HOW WE WILL GET THERE	
#13a July 2023 - Med #13b July 2023 – BS+CS	Trajectories of change - Finding out the way & Ideation of the suggested trajectories opportunities
#14a October 2023 – Med #14b October 2023- BS+CS	Co-creation of the Socio-technical roadmap
#15 November 2023 - everyone	Final workshop

PREPARATORY LIVING LAB WORKSHOPS ON CLIMATE CHANGE AND BLUE GROWTH NO.1 | 28.06.2021

Stakeholders were introduced to:

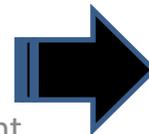
- the climate change challenge and its impacts on the Seas
- The international and regional political framework for the sustainable development
- the main goals and ambitions of IntelComp H2020 project
- the upcoming PLLs and their involvement

PREPARATORY LIVING LAB WORKSHOPS ON CLIMATE CHANGE AND BLUE GROWTH – THE MEDITERRANEAN GROUP NO.2 “UNDERSTANDING THE GAP BETWEEN KNOWLEDGE AND ACTION” | 30.07.2021

- Breaking down the knowledge and action gap in the STI triangle (science, technology, innovation) in the Mediterranean Sea
- Exploring the international and national datasets that are most used in research projects and policy making, and
- Deriving the major data issues faced by the community today.

Issues faced regarding the suggested data sources:

- Lack of common file structures
- Lack of data validation
- Insufficiency of geospatial data
- Lack of data on port facilities
- Not enough people specialized in collecting and analysing relevant data
- Absence of adequate systems that can easily collect and communicate the results in a central database
- Lack of easily crawled data



DATASETS

Data/Dataset	url
Hellenic Statistical Authority	https://www.statistics.gr/en/home/
Italian National Institute of Statistics (ISTAT)	https://www.istat.it/en/
Central Commission for the Navigation of the Rhine	https://www.ccr-zkr.org/
Equasis	https://www.equasis.org/EquasisWeb/public/HomePage
SeaDataNet	https://www.seadatanet.org/
the Hellenic National Oceanographic Data Centre (HCNODC)	https://hnodc.hcmr.gr/
the International Oceanographic Data and Information Exchange (IODE) site of the IOC of UNESCO	https://www.iode.org/
Bank of Greece	https://www.bankofgreece.gr/en/homepage
Spanish National Institute of Statistics	https://www.ine.es/en/index.htm
Spanish National Institute of Statistics	https://www.ine.es/en/index.htm
Turkish Statistical Institute	https://data.tuik.gov.tr/
Centro Euro-Mediterraneo sui Cambiamenti Climatici (CMCC)	https://www.cmcc.it/
Italian National Institute for Environmental Protection and Research (ISPRA)	https://www.isprambiente.gov.it/en/istituto
Global Carbon Atlas	http://www.globalcarbonatlas.org/en/CO2-emissions
Food and Agriculture Organization of the United Nations (FAO)	https://www.fao.org/statistics/en/
European Policies	https://ec.europa.eu/info/policies_en
Eurostat	https://ec.europa.eu/eurostat/data/database
World Bank	https://data.worldbank.org/topic/climate-change
OECD	https://data.oecd.org/
UN STATS	https://unstats.un.org/sdgs/unsdg
SDSN Index and Monitoring	https://www.unsdsn.org/sdg-index-and-monitoring

PREPARATORY LIVING LAB WORKSHOPS ON CLIMATE CHANGE AND BLUE GROWTH – THE BLACK AND CASPIAN SEA GROUP NO.2 “UNDERSTANDING THE GAP BETWEEN KNOWLEDGE AND ACTION” | 08.10.2021

- Breaking down the knowledge and action gap in the STI triangle (science, technology, innovation) in the Mediterranean Sea
- Exploring the international and national datasets that are most used in research projects and policy making, and
- Deriving the major data issues faced by the community today.

Participants utilize data from the following services:

- the World Bank – Climate Change Knowledge Portal
- the Agency for Strategic Planning and reforms of the Republic of Kazakhstan – Bureau of National Statistics
- the Deutsches GeoForschungs Zentrum (GFZ) Potsdam
- the International Centre for Water Cooperation (ICWC)
- Regional research Network “Central Asian Water” (CAWA)
- National Institute of Statistics of Romania
- The National Bank of Romania – Statistics



DATASETS

World Bank – Climate Change Knowledge Portal	https://climateknowledgeportal.worldbank.org/
the Agency for Strategic Planning and reforms of the Republic of Kazakhstan – Bureau of National Statistics	https://stat.gov.kz/
Deutsches GeoForschungs Zentrum (GFZ) Potsdam	https://www.gfz-potsdam.de/startseite/
International Centre for Water Cooperation (ICWC)	https://www.siwi.org/what-we-do/international-centre-water-cooperation/
Regional research Network “Central Asian Water” (CAWA)	https://www.cawa-project.net/
National Institute of Statistics of Romania	https://insse.ro/cms/en
The National Bank of Romania – Statistics	https://www.bnrr.ro/Statistics-3229.aspx
The Regional environmental Centre for Central Asia	https://carececo.org/en/main/
World Bank	https://data.worldbank.org/topic/climate-change

PREPARATORY LIVING LAB WORKSHOPS ON CLIMATE CHANGE AND BLUE GROWTH – THE MEDITERRANEAN GROUP NO.3 “CLIMATE CHANGE AND ENERGY” | 29.10.2021

In this PLL, the stakeholders focused on the energy sector discussing the following aspects:

- what someone needs to know on renewable sources of energy and LNG to make a decision, and
- or what are the major risks for smart grid applications

DATASETS

In terms of the project, data that would be useful include:

- Typical subsidies
- CFD prices for different technologies for all countries of Europe and beyond that
- Direct market prices
- Power Purchase Agreements (PPAs)
- Comparative data to see where the market is going and when there is something high or low you can flag it and see where it goes. We need a comparison tool.



Renewable Energy Sources (RES) Policies	https://www.iea.org/reports/20-renewable-energy-policy-recommendations	New Technologies	https://ieecp.org/
	https://ec.europa.eu/energy/topics/energy-strategy-and-energy-union_en		https://explore.openaire.eu/search
Electricity Markets (Prices, Mix)	https://www.globalpetrolprices.com/electricity_prices/	Newspapers & Websites	https://iea-wind.org/
	https://www.energylive.cloud/		https://www.iea.org/energypress.eu
Energy Consumption	https://ec.europa.eu/eurostat/cache/infographs/energy/bloc-2a.html		energylivenews.com
	https://www.eea.europa.eu/ims/primary-and-final-energy-consumption-1		https://ec.europa.eu/energy/news_en
	https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Energy_statistics_-_an_overview		https://www.rechargenews.com/
	https://ec.europa.eu/eurostat/web/energy/data/database		https://windeurope.org/
	https://ieecp.org/		https://www.powermag.com/

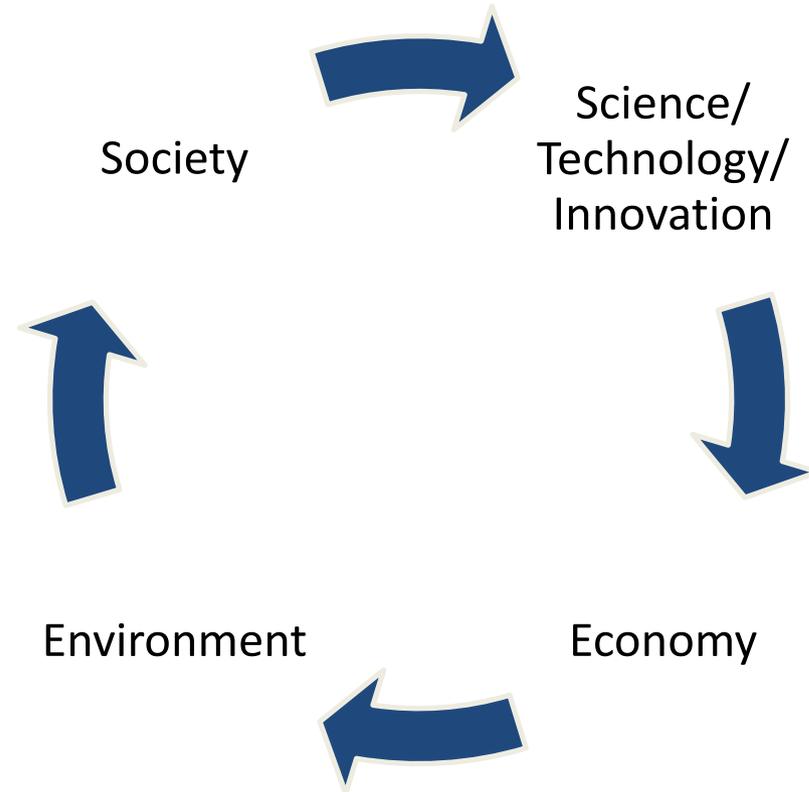
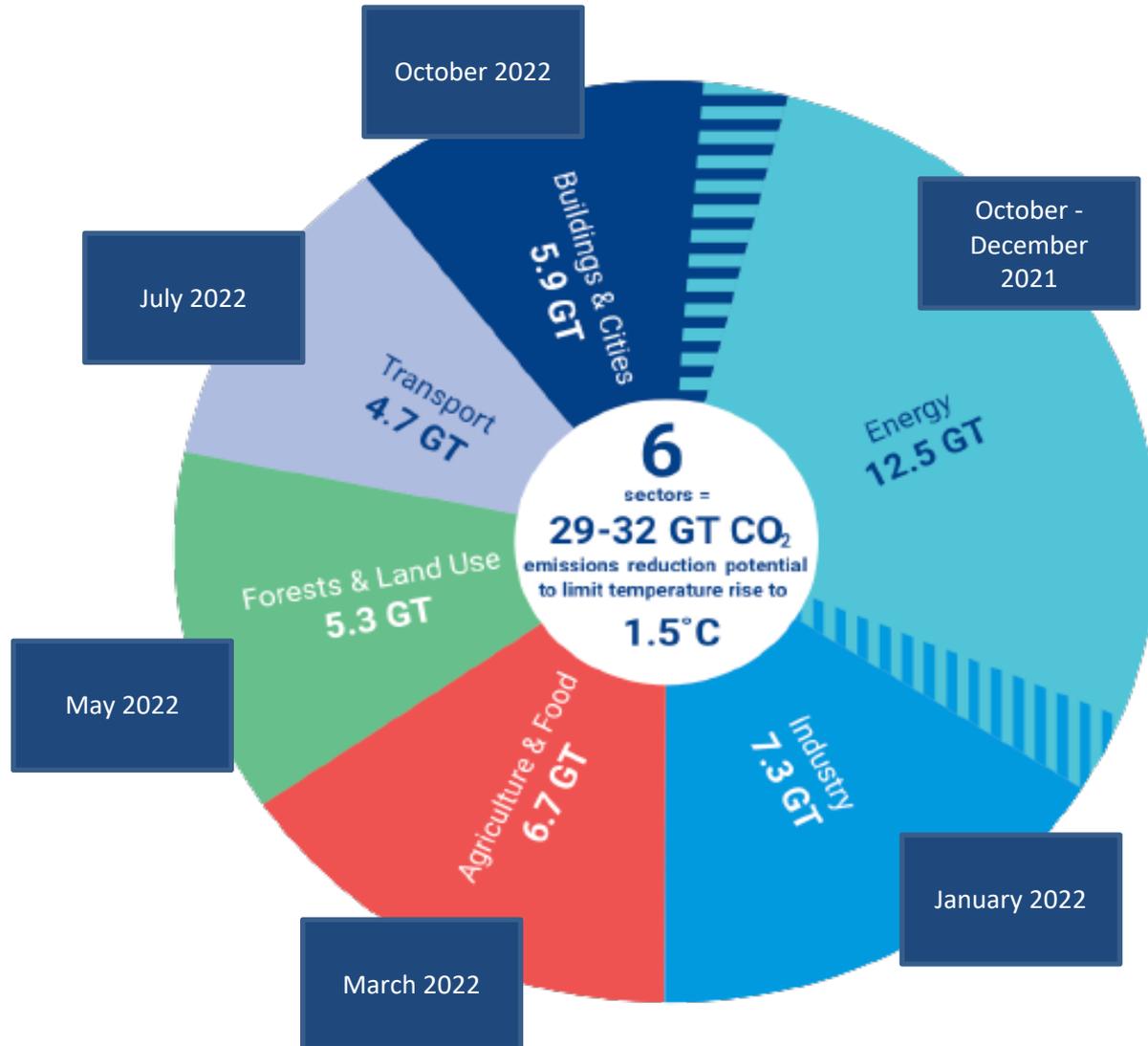
NEXT PREPARATORY LIVING LAB WORKSHOPS ON CLIMATE CHANGE AND BLUE GROWTH – THE BLACK AND CASPIAN SEA GROUP NO.3 “CLIMATE CHANGE AND ENERGY” | 17.12.2021

Focus on energy sector discussing:

- what someone needs to know on renewable sources of energy and LNG to make a decision, and
- or what are the major risks for smart grid applications

II. Stakeholder engagement: Workshops planning (4)

Plan of the six thematic preparatory living labs





Thank you!



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