Evidence Based Policy Cases Track 2: Climate Change

What can we do to slow down Climate Change?

9 December 2021

Agenda

- **Introduction. What can we do to slow down Climate Change?** Panagiotis Kokkinakos (NTUA, DECIDO)

- **A sustainable Blue Economy for climate neutrality by 2050 in the European Green Deal** - Phoebe Koundouri (ATHENA RC, IntelComp).

- **Event-based Policy making and co-creation in the disaster risk management** - Antonio Filograna (Engineering Ingegneria Informatica, DECIDO)

- **Data-driven policy making for green routing in Athens** - Ilia Christantoni (DAEM, DUET)

- **Discussion panel on what can we do to slow down Climate Change.**

Co-organised by: Policy Cloud — Cloud for Data-Driven Policy Management Decido AI4PublicPolicy DUET intelcomp

Save the date!

9-10 December 2021

EVIDENCE BASED POLICYMAKING IN EUROPE 2021

USE CASES AND DIGITAL TOOLS FOR IMPROVED DECISIONS

Evidence Based Policy Cases
Track 2: Climate Change

We are in the midst of a climate crisis.Governments need to reduce and eliminate emissions fast. **Environmental policies exist but have largely failed to make a difference** as measures have mainly focused on making emission reductions profitable for business, think carbon credits, energy saving bulbs.

For more sustainable outcomes which make cities happier and healthier places to live for all, **creative and innovative policies and tools need to be co-created by the whole value chain**.

Digital enablers such as IoT, Cloud and Big Data ensure stakeholders can work together with a common view of the situation so they can **simulate and predict the impact of differing policy choices**

Preparatory Living Lab Workshops on Climate Change and Blue Growth

ATHENA Research and Innovation Centre

- **Phoebe Koundouri,** Professor, Athens University of Economics and Business, Unit Director SDU ATHENA RC
- **Nikos Theodosiou,** Professor, Aristotle University of Thessaloniki, Researcher SDU ATHENA RC
- **Haris Papageorgiou**, Research Director, ATHENA RC
- **Ioanna Grypari**, Senior Reseacher, ATHENARC
- **Lydia Papadaki,** Researcher SDU ATHENA RC
- **Charis Stavridis,** Researcher SDU ATHENA RC

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

Director: Professor Dr. Phoebe Koundouri, www.phoebekoundouri.org
President-elect, European Association of Environmental and Resource Economist
Fellow, World Academy of Art and Science

International Cluster for Research on Sustainability Transition
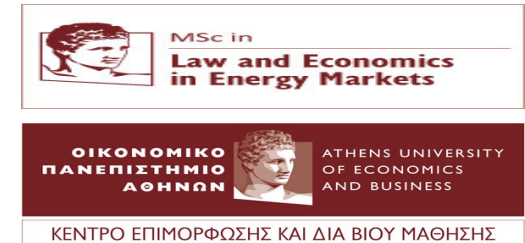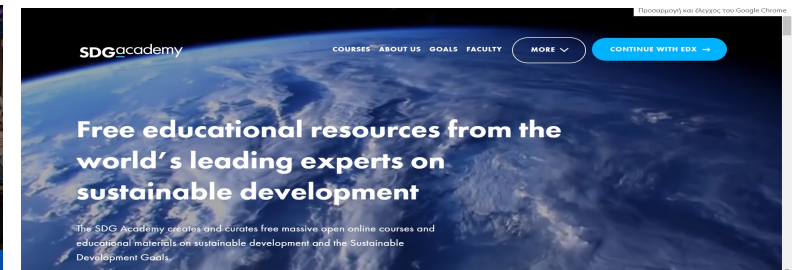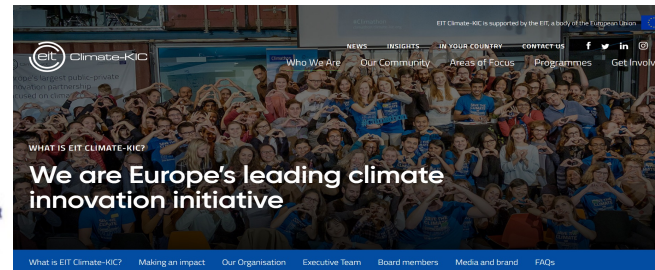## Director: Prof. Phoebe Koundouri

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!
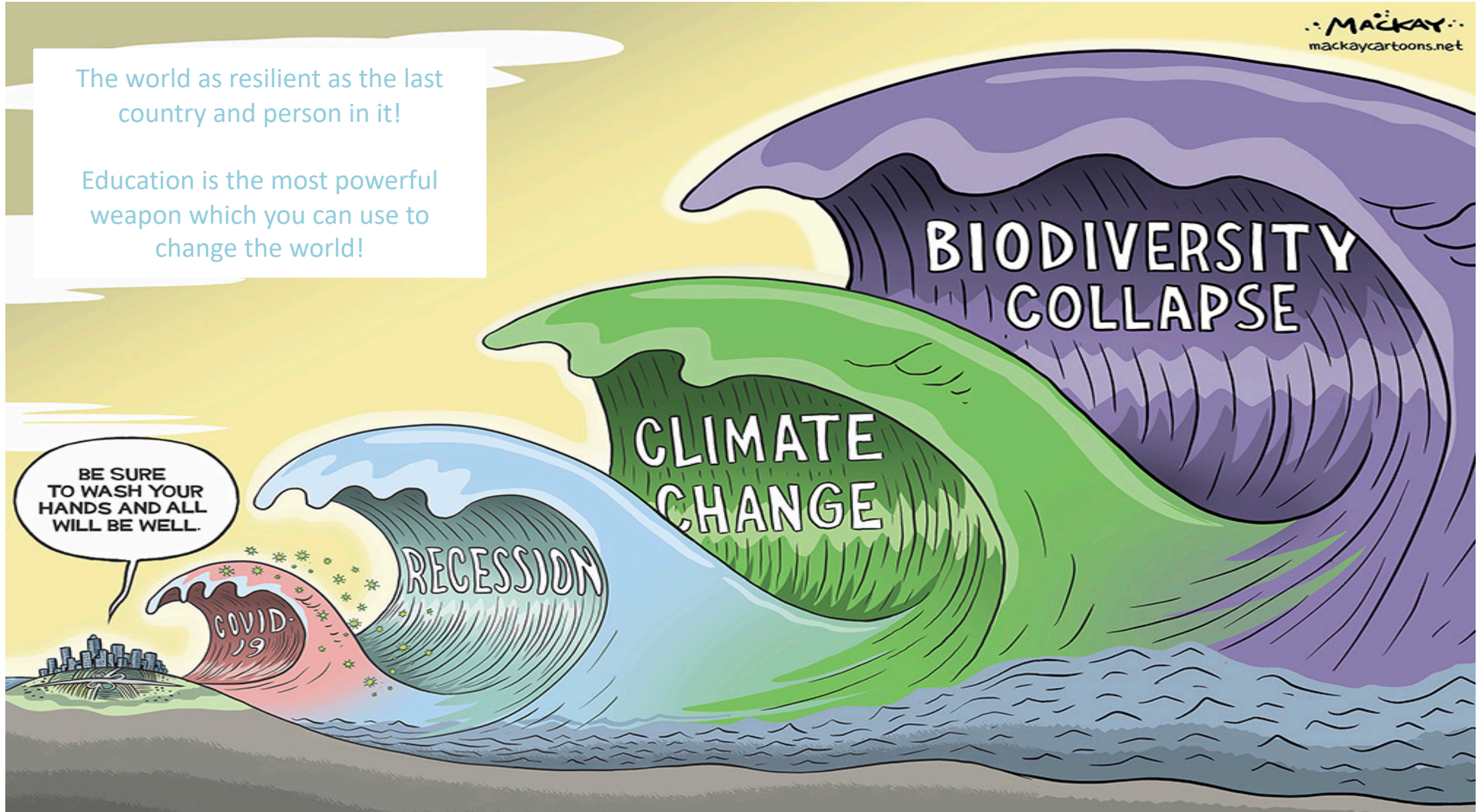
The Policy Framework for the "Transition to Sustainability"

2015

THE GLOBAL GOALS For Sustainable Development

PARIS 2015 UN CLIMATE CHANGE CONFERENCE COP21·CMP11
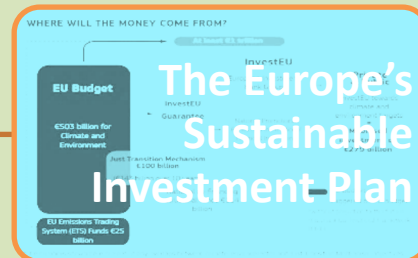
Limiting global temperature to well below +2o C

2018

ipcc INTERGOVERNMENTAL PANEL ON climate change WMO UNEP

Global Warming of 1.5°C

An IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.

2019

1 Education, Gender, and Inequality
2 Health, Wellbeing, and Demography
3 Energy Decarbonisation and Sustainable Industry
4 Sustainable Food, Land, Water, and Oceans
5 Sustainable Cities and Communities
6 Digital Revolution for Sustainable Development

The European Green Deal #EUGreenDeal

WHERE WILL THE MONEY COME FROM?

EU Budget
€503 billion for Climate and Environment
Just Transition Mechanism €100 billion
EU Emissions Trading System (ETS) Funds €25 billion

The Europe's Sustainable Investment Plan

EUROPEAN SEMESTER 2020

2020

COVID-19

NEXT GENERATION EU #NextGenerationEU #EUBudget

The Green-Digital Transition

2021

EUROPEAN CLIMATE LAW 2050

FINANCING A SUSTAINABLE EUROPEAN ECONOMY The EU Taxonomy

The Fit-for-55 Package

Figure 1: Net zero targets - 126 countries have set goals to decarbonize their economies
■ Target under discussion ■ In policy document ■ Achieved ■ Proposed legislation ■ In law

Source: BNEF (Bloomberg New Energy Finance), Climate Action Tracker, Climate Change News, and PIMCO as of October 2020

ipcc INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE
Climate Change 2021 The Physical Science Basis Summary for Policymakers
Working Group I contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change

intelcomp

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.
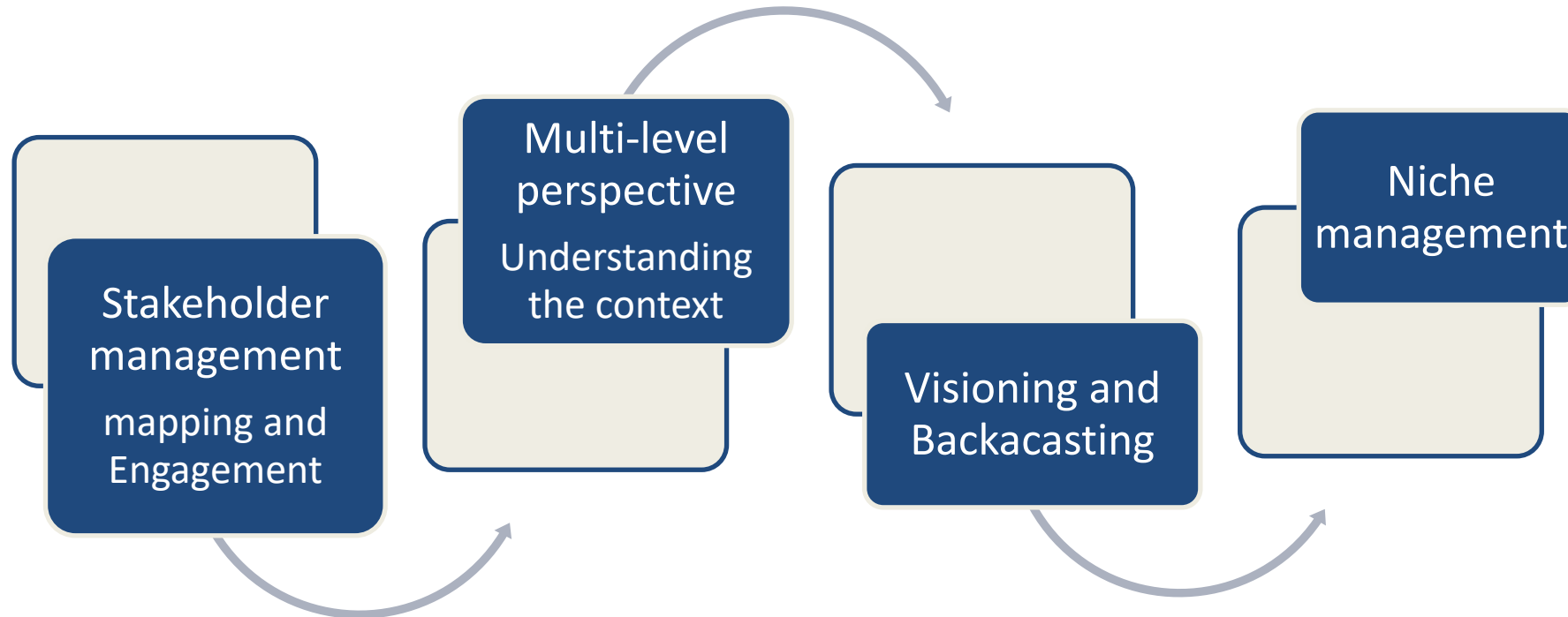
Reductionist Thinking   Systems Thinking

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

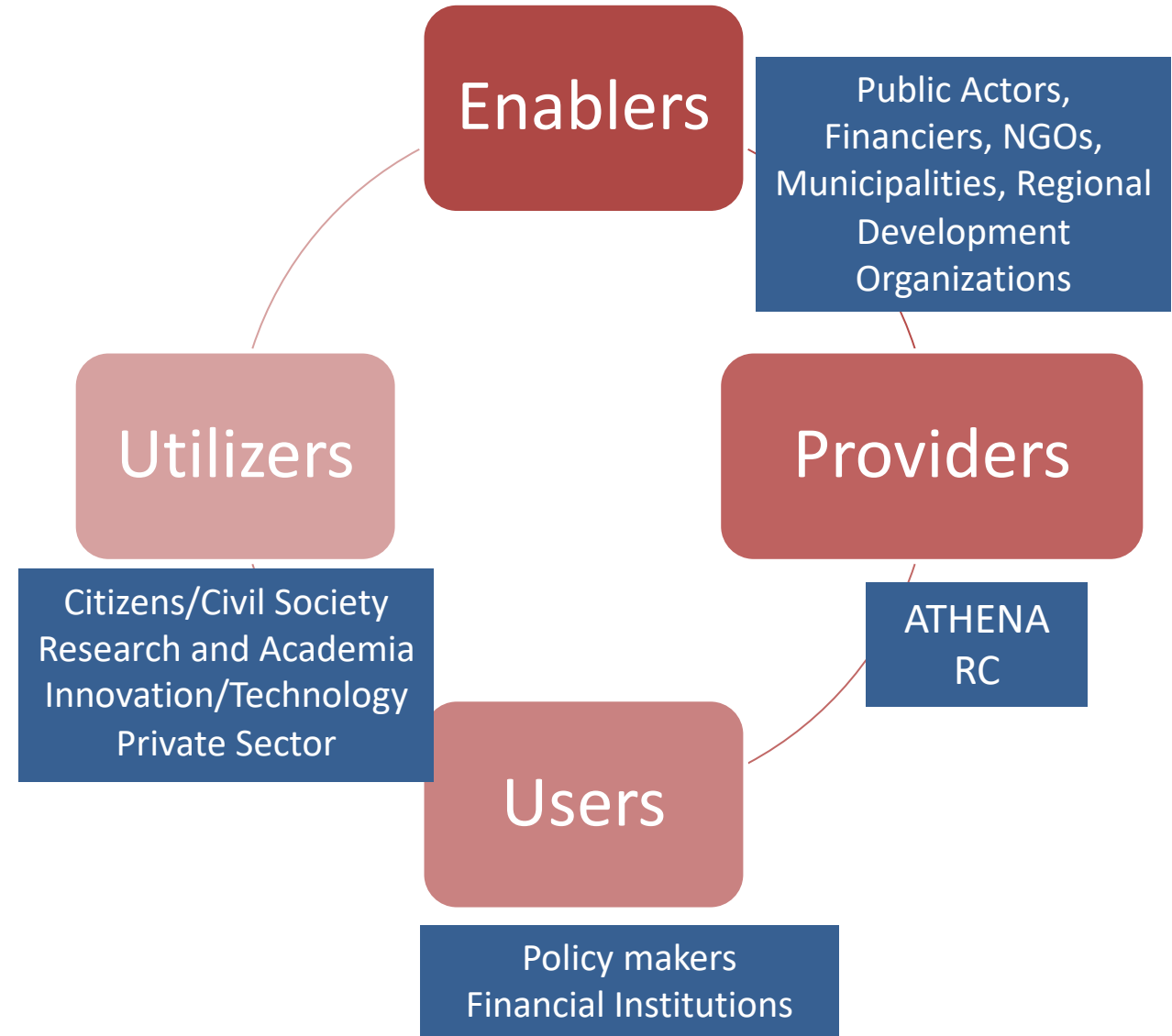# The Systems Innovation Approach

Matti, C., Martín Corvillo, JM, Vivas Lalinde, I., Juan Agulló, B., Stamate, E., Avella, G., and Bauer A. (2020). Challenge-led system mapping.
A knowledge management approach. Transitions Hub series. EIT Climate-KIC, Brussels

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

Enablers

Public Actors, Financiers, NGOs, Municipalities, Regional Development Organizations

Providers

ATHENA RC

Utilizers

Citizens/Civil Society
Research and Academia
Innovation/Technology
Private Sector

Users

Policy makers
Financial Institutions

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.	Politikos	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	Triantafillou	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 Econmic Studies of Moldova	DR.	Eugenia	Busmachiu	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			
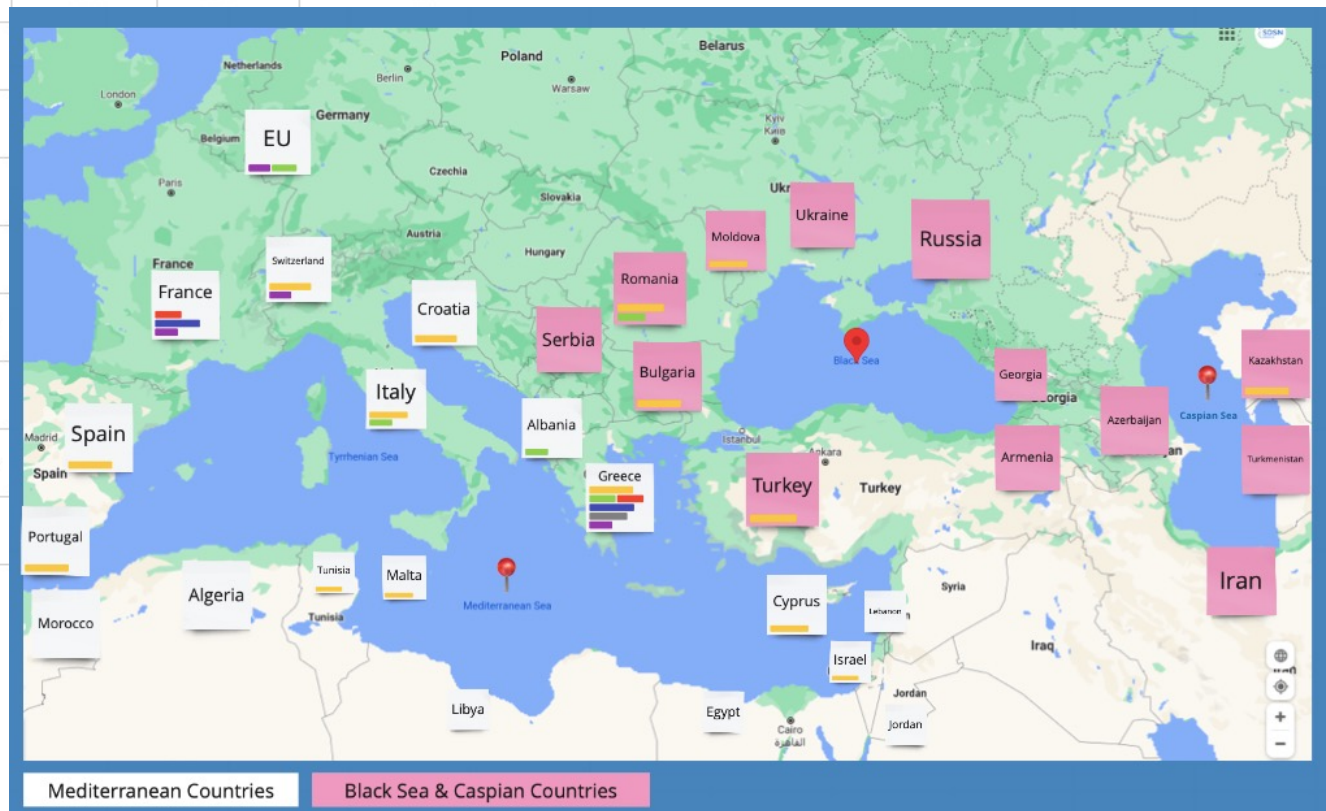
II. Stakeholder engagement (1)

- 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	***Goal of these workshops: Introduction to the climate change challenge and to the Blue Growth***
	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** ✓ *What data platforms exist in your country? How do you get informed? What is missing?*
#3a 29 October 2021 – Med **#3b 17 December 2021 – BS+CS**	**Climate Change and Energy** ✓ *Briefly discuss the risks and uncertainties per area (environment, economy, society, policy, technology, innovation, science).* ✓ *Examples of solving this challenge (mitigation or adaptation)*
#4a January 2022 – Med **#4b January 2022 – BS+CS**	**Climate Change and Industry** ✓ *Briefly discuss the risks and uncertainties per area (environment, economy, society, policy, technology, innovation, science).* ✓ *Examples of solving this challenge (mitigation or adaptation)*
#5a March 2022 – Med **#5b March 2022 – BS+CS**	**Climate Change, Agriculture and Food** ✓ *Briefly discuss the risks and uncertainties per area (environment, economy, society, policy, technology, innovation, science).* ✓ *Examples of solving this challenge (mitigation or adaptation)*
#6a May 2022 – Med **#6b May 2022 – BS+CS**	**Climate Change, Forests and Land Use** ✓ *Briefly discuss the risks and uncertainties per area (environment, economy, society, policy, technology, innovation, science).* ✓ *Examples of solving this challenge (mitigation or adaptation)*
#7a July 2022 – Med **#7b July 2022 – BS+CS**	**Climate Change and Transport** ✓ *Briefly discuss the risks and uncertainties per area (environment, economy, society, policy, technology, innovation, science).* ✓ *Examples of solving this challenge (mitigation or adaptation)*
#8a October 2022 – Med **#8b October 2022 – BS+CS**	**Climate Change, Buildings and Cities** ✓ *Briefly discuss the risks and uncertainties per area (environment, economy, society, policy, technology, innovation, science).* ✓ *Examples of solving this challenge (mitigation or adaptation)*

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/istitute
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
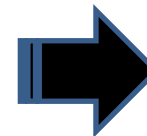
DATASETS

World Bank – Climate Change Knowledge Portal	https://climateknowledgeportal.worldbank.org/
the Agency for Strategic Planning and reforms of the	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" (	https://www.cawa-project.net/
National Institute of Statistics of Romania	https://insse.ro/cms/en
The National Bank of Romania – Statistics	https://www.bnr.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

intelcomp | 16

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
	https://ec.europa.eu/energy/topics/energy-strategy-and-energy-union_en
Electricity Markets (Prices, Mix)	https://www.globalpetrolprices.com/electricity_prices/
	https://www.energylive.cloud/
	https://ec.europa.eu/eurostat/cache/infographs/energy/bloc-2a.html
Energy Consumption	https://www.eea.europa.eu/ims/primary-and-final-energy-consumption-1
	https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Energy_statistics_-_an_overview
	https://ec.europa.eu/eurostat/web/energy/data/database
	https://ieecp.org/

| New Technologies | https://ieecp.org/ |
	https://explore.openaire.eu/search
	https://iea-wind.org/
	https://www.iea.org/
Newspapers & Websites	energypress.eu
	energylivenews.com
	https://ec.europa.eu/energy/news_en
	https://www.rechargenews.com/
	https://windeurope.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
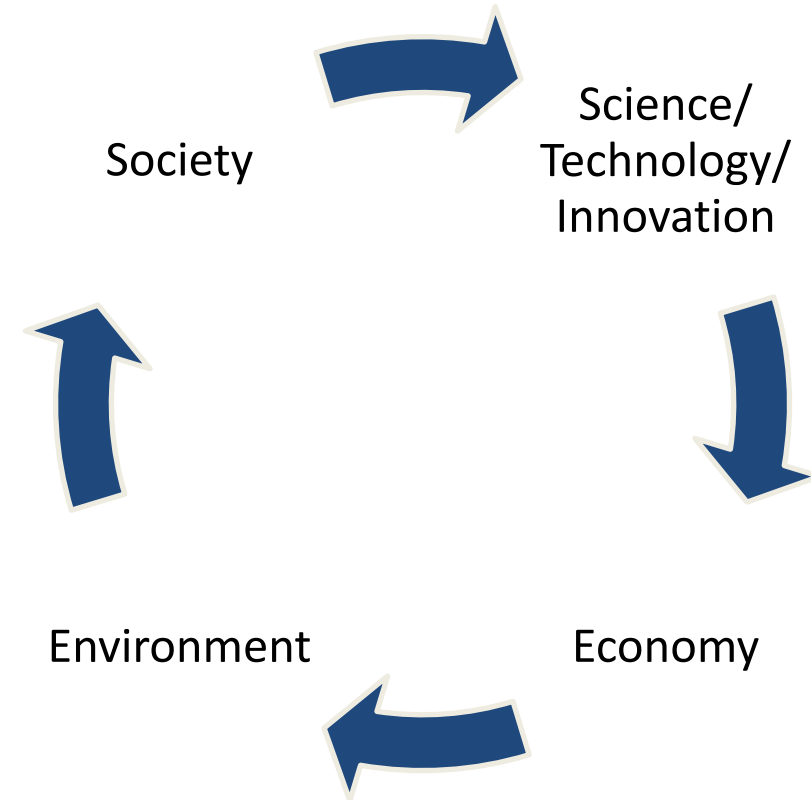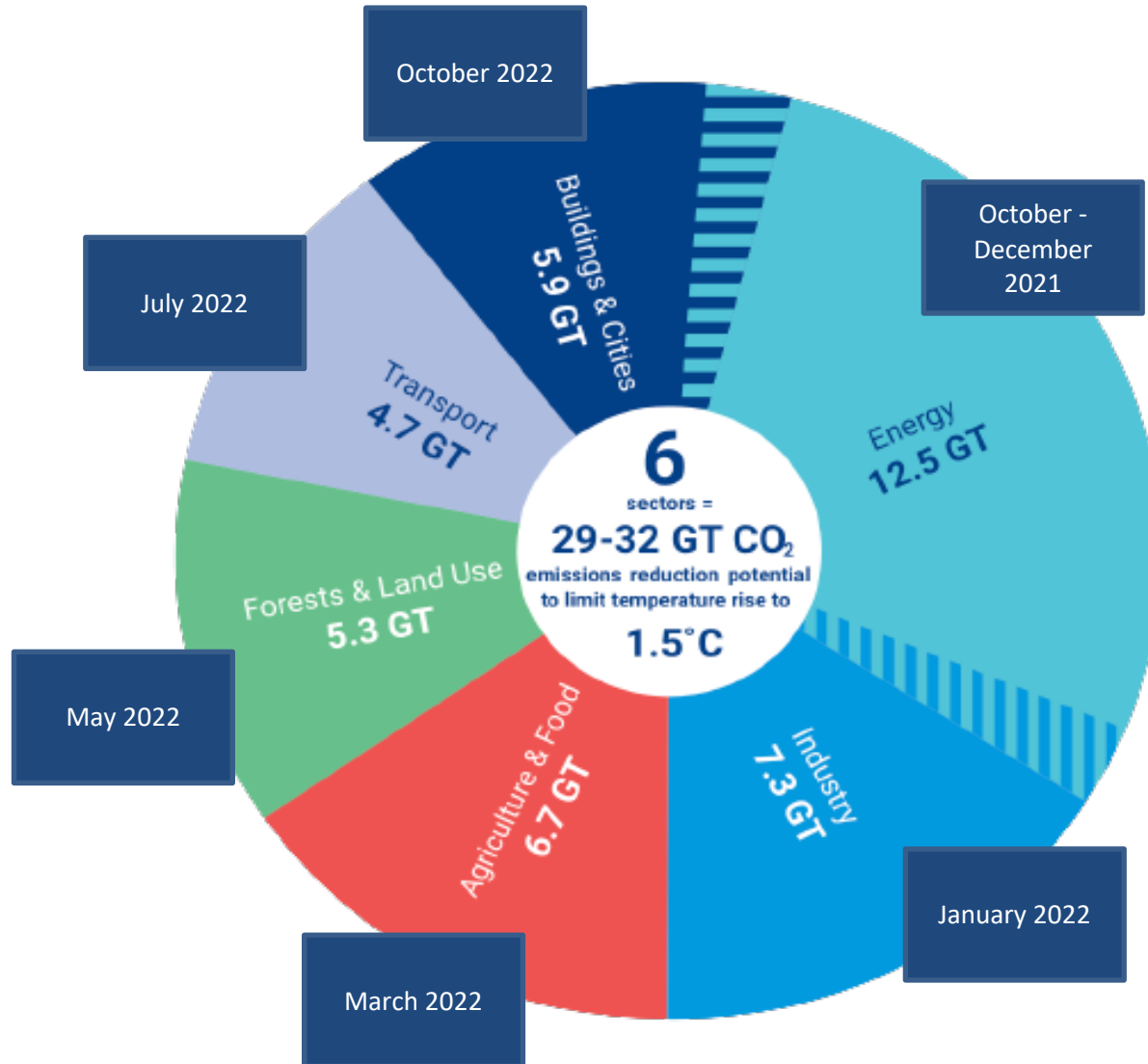
Thank you!

DECIDO PROJECT OVERVIEW

Author(s): Antonio Filograna

Affiliation: Engineering Ingegneria Informatica S.p.A.

Event: Evidence Based Policymaking in Europe Summit

Date: 09 December 2021

Decido

eviDEnce and Cloud for more InformeD and effective pOlicies

SUSTAINABLE CITY · VOL.TO VOLONTARIATO TORINO · CITTA' DI TORINO · tecnalia Inspiring Business · the Lisboncouncil think tank for the 21st century · K · EGI

PEOPLE · ibercivis · Kajaanin kaupunki · Fraunhofer FOKUS · EY Building a better working world · ENGINEERING · dss lab

DECIDO at glance

Title

eviDEnce and Cloud for more InformeD and effective pOlicies

Topic

DT GOVERNANCE 12-2020

Innovation Action

Duration

36 months

Start Date 1st March 2021

Costs

EUR 4,327,255

Consortium

14 PARTNERS

Key Words

#cloud
#evidence-based
#policy-making
#EOSC
#co-creation

Consortium as whole

14 Partners:

- **PA**: KAJ, CTO
- **LE**: ENG
- **Consulting**: EY

- **Research & Academia**: FOKUS, KPRF, KAMK, NTUA, TECNALIA
- **NGO**: EGI, LC, Vol.TO, SCN, Ibercivis

PARTNER/ COMPETENCE	ENG	TECNALIA	LC	FOKUS	KPRF	KAJ	NTUA	KAMK	CTO	SUSTAINABLE CITY	EGI.eu	EY	ARAGON	VOL.TO
POLICY MAKING			X	X		X	X		X	X			X	X
EVIDENCE-BASED POLICY MAKING			X	X		X	X		X	X				X
DATA ANALYTICS	X	X		X			X	X			X			
BIG DATA	X	X		X				X			X			
CLOUD	X	X		X				X			X			
ICT	X	X		X			X				X			
ETHICS/LEGAL	X				X						X			
STAKEHOLDER ENGAGEMENT		X	X		X	X			X	X			X	X
BUSINESS	X											X		
DISSEMINATION & COMMUNICATION	X	X	X		X						X	X		X
TRANSFER & EXPLOITATION	X	X	X	X	X			X			X			
EOSC SERVICES											X			

Scope of the project

The mission of DECIDO is to demonstrate the groundbreaking impact of the adoption of innovative methodologies, tools and data enabling the effective development of better **evidence-based policies** by public authorities.

DECIDO will serve as an intermediary between the **public sector, the citizen science world** and the European Cloud Infrastructure (ECI) through the direct collaboration with **EOSC** and will provide storage capacity and processing power through **EGI infrastructure**.

Creation of a **BRIDGE** between Public Authorities and
European Open Science Cloud

Objective 1

EOSC

Objective 2

to widen the use of the
**European Cloud
Infrastructure** services
and data to Public
Authorities

Objective 3

FACTS

to enable and encourage Public
Authorities to use appropriate
infrastructures, services, data and
methodologies to apply a more
evidenced informed approach to
policies

Identification of **a set of
pathways,
recommendations** and a
sound **business plan**...

...addressing Public Authorities through the
transition towards the use of the European
Cloud Infrastructure and the application of
evidence and co-creation in the policy
lifecycle.

Objective 4

Outputs of DECIDO

SCOPE

DECIDO will serve as an intermediary between the **public sector, the citizen science world** and the European Cloud Infrastructure (ECI) through the direct collaboration with **EOSC** and will provide storage capacity and processing power through **EGI infrastructure**.

Out 1: WEB PORTAL

An easy to use portal will be released to **define**, **manage** and **evaluate PA policies** in a collaborative manner leveraging services offered by EOSC (Catalogue and Marketplace), external services/tools to EOSC, data made available by EOSC (mainly through services B2Find and EGI DataHUB) and by other data providers (e.g. European Data Portal), including Public Administrations themselves.

Out 3: BUSINESS PLAN

A robust and realistic **business plan** will be developed backed up by a detailed cost-benefits analysis of ex-ante (not using DECIDO results) and ex-post (using DECIDO results).

Out 2: CITIZEN ENGAGEMENT

The focus for the **involvement of local actors** will be on: (1) the **methodological** side (e.g. co-creation of indicators), (2) the identification of **needs** and priorities, and (3) the **data generation** (e.g. through citizen science experiments where applicable).

Brief example of the use of DECIDO

Data

Data Collection

Data Analysis

Evidence-based facts

Co-creation Activities

Feedback

Policy Making
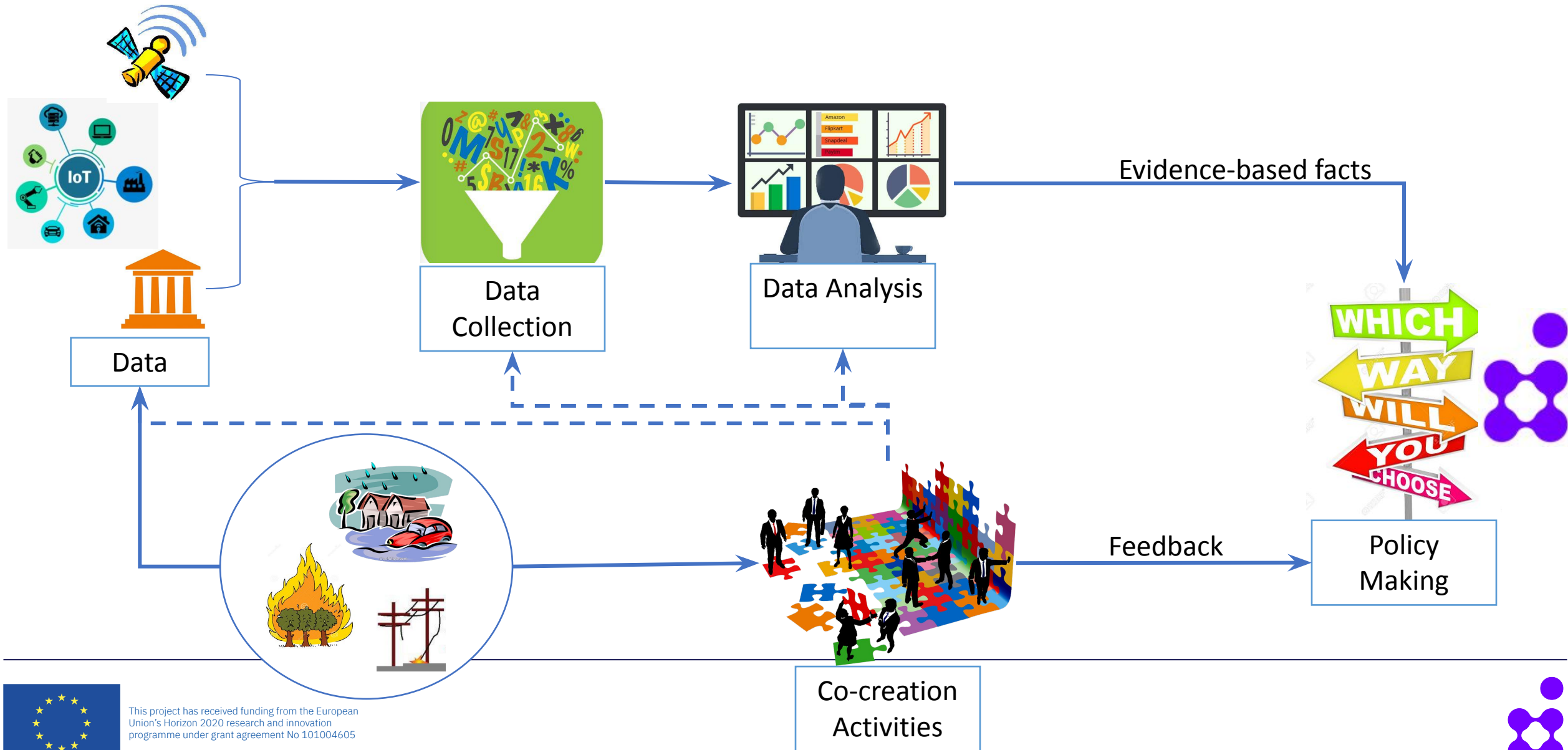
Pilots in a natshell

Kajaani
Finland

Forest fire

Turin
Italy

Flood

Greek Municipalities

Power Outage
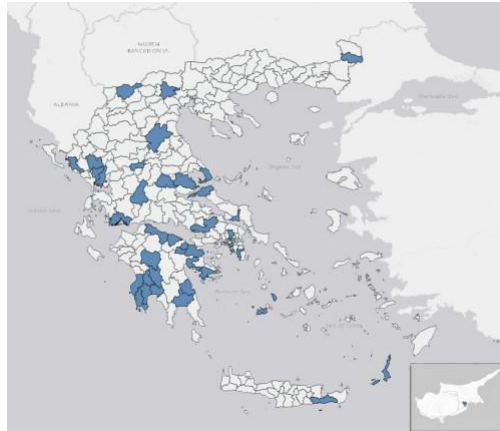
Aragon Region
Spain

Wildfires

Pilot Overview

1.Finland

Pilot on Forest fires in Kajaani, Finland

Prevention and protection against forest fires; Procedures to mitigate damage to nature, infrastructure and life

Pilot Overview

2.Italy

Pilot on Floods in Turin, Italy

Improve design of emergency policies related to floods and weather alerts.

The confluence between the River Po and the River Stura at Meisino Park

Map of the pilot site with locations of the NGOs in the area

Pilot Overview

3.Greece

Pilot on Power Outage in Greek Municipalities – Greece

Power outage management of public infrastructure and cultural assets of Greek municipalities via emergency response mechanisms.
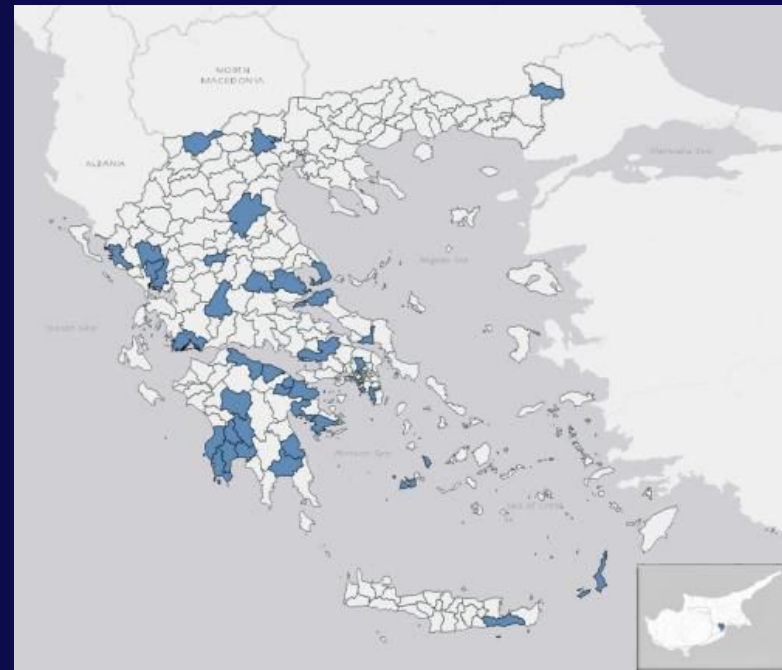
Pilot Overview

4.Spain

Pilot on Wildfires in the Aragon Region – Spain

Improve the design of emergency policies related to wildfires and management of controlled fires.

From Data to Decision-making: DECIDO methodology

Write the storytelling with pilot needs and challenges → Understand what services EOSC can provide → Definition of the DECIDO Data Catalogue

Data from co-creation activities

Definition of how to use the selected data

Implementation of algorithms to analyse those data → Visualisation of Dashbord to take decision → Improve policy based on evidence-facts

Policy Evaluation and feedback

DECIDO Data Catalogue

Data from EDP

Open Data from municipalities

Data from co-creation activities
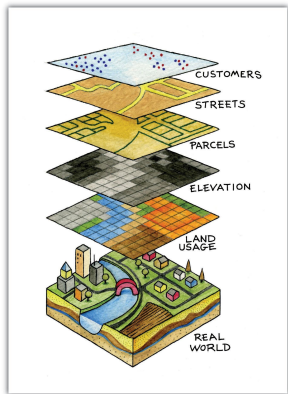
GIS data
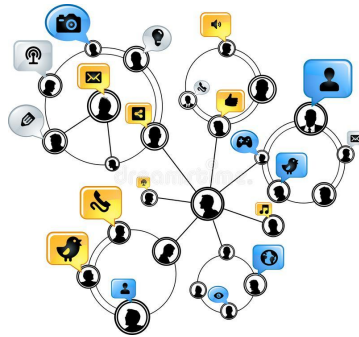
Crowdsourced data
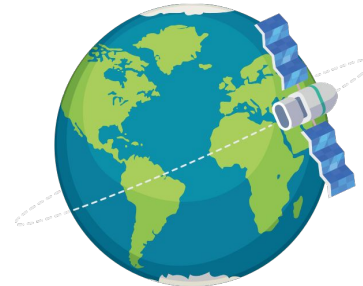
Satellite data from Copernicus or Corine

EOSC data

DECIDO Data Catalogue
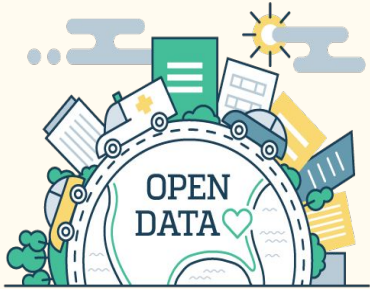
Open Data from municipalities
- Flood areas
- Main waterways
- Energy consumption
- Past power outages

EOSC data
- Climate data
- Earthquake data
- Calendar data
- Statistical data on the mental health
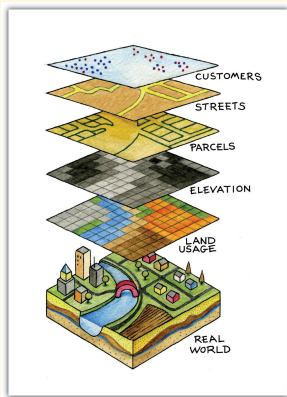
GIS data
- Flood probability
- Location and category of municipal buildings
- Local GIS
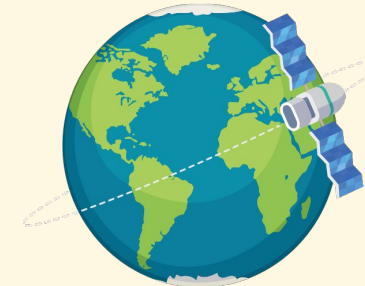
Satellite data from Copernicus or Corine
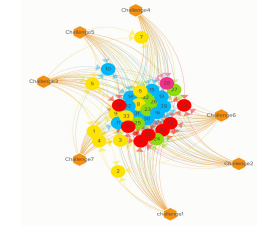- Land uses
- Vegetation index
- Satellite images

Policy-making needs & challenges

BPC BigPolicyCanvas · **SONNETS**

More than 100 publications released after 2019

22 interviews

Base of Needs' List

Needs & Challenges Identification

Needs & Challenges Identification & Validation

Needs & Challenges Mapping & Analysis

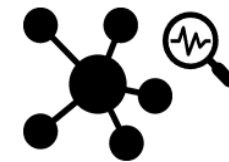**Background work** → **Desk Research** → **Qualitative Interviews** → **Content analysis**

28 needs

33 needs 3 challenges

34 validated & prioritised needs 7 challenges

Needs & challenges mapping & analysis

Policy-making needs & challenges

Desk Research

New Needs	
1	Promote teleworking
2	Open and transparent processes
3	Access services upon request
4	Availability of channels for consuming public services
5	Establish activity measurement/assessment procedures

New Challenges	
1	Employees might be resistant to change
2	"Digital divide" of senior employees who may be less familiar with new technologies
3	Be competent at readiness factors

Policy-making needs & challenges

Interviews

- 22 interviews conducted
  - 9 horizontal interviews:
    - 6 Greek public administration representatives
    - 2 interviews with EU policy experts
  - 14 pilot-specific interviews

- Objective:
  - validate & prioritise the so far identified needs
  - identify new needs

- Interviews analysis:
  - 34 validated & prioritised **needs**
  - 7 **challenges**

Policy-making needs & challenges

Interviews

	New Needs
1	Promote teleworking
2	Open and transparent processes
3	Access services upon request
4	Availability of channels for consuming public services
5	Establish activity measurement/assessment procedures
6	Development of digital skills

Policy-making needs & challenges

Interviews

	New Challenges
1	Employees might be resistant to change
2	"Digital divide" of senior employees who may be less familiar with new technologies
3	Be competent at readiness factors
4	Employees might not want to be trained in new Technologies
5	Lack of data
6	Be compliant with GDPR/legislation
7	Find available resources

Policy-making needs & challenges

Interviews

Interview Questions

- Are you aware of any Big Data or Cloud services technologies that may cover part of the needs & challenges you identified before?

  ⮚ **Only 33% of the interviewees answered that they use Big Data or Cloud services technologies in their professional activity.**

- Are you familiarised with the EOSC (European Open Science Cloud) services?

  ⮚ only **29%** answered that they are familiar with the term

  ⮚ **none of them have used any of these services**

Policy-making needs & challenges

Employees might not want to be trained in new Technologies

Be compliant with GDPR/legislation

Lack of data

Find available resources

Co-Creation of a Training Plan with stakeholders

Data Privacy Impact Assessment

DECIDO Data Catalogue
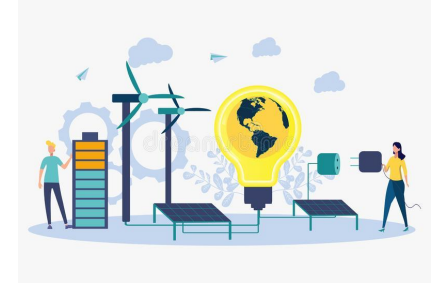
EOSC services & infrastructure

DECIDO solutions

Policy-making expected impact

Policy makers will be able to reduce the time needed to generate good quality services as well as improve policy making services

Citizens will actively participate and contribute to public policy making, have higher data access for better and informed decisions

Businesses will accelerate innovation and business development and reduce costs related to innovation generation

Research centres and scientists will access a large volume of data for scientific purposes

THANKS FOR YOUR ATTENTION

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Website: https://www.decido-project.eu

Evidence Based Policymaking in Europe Summit: 2021

DUET
Data-driven policy making for green routing in Athens

9 December 2021 | Ilia Christantoni (DAEM – City of Athens IT Company)

DUET Project – Digital Twins

Digital Twins

- Digital replicas or representations of a system, process or place which mimics its real-world behaviour
- Real-time updated collection of data, models and algorithms allowing for better real-time analysis of assets
- Originate from the private sector -> city administration

Benefits

- 3D interfaces makes city environments easier to understand
- Provides integrated view of the city
- Makes data easier to interpret
- Facilitates data driven decision making

Athens in DUET

- DT as a smart-hub for city green planning

- What-if analysis on green routing and alternative mobility

- Lack of unified and correlated data resources (traffic and environmental)

- Data-driven policy making on urban planning

- Citizens' active involvement as solution proposers, strategy testers and data sensors/providers

Athens pilot - Context & Challenges

- Digitally transform Athens
- Challenges of Athens: lack of open, accessible, usable, interconnected data sources
- Challenges of a metropolitan city: traffic, environmental issues, air-pollution, lack of green spaces/routes

ATHENS CASE - mapping shady areas in the city.

Datasets for Athens

Mobility

- Public transport itineraries
- Public transport timetables
- Public transport stops
- Traffic data from open sensors

Health & Environment

- Air quality sensor data
- Air quality map
- Air pollution report

Horizontal

- OSM
- Athens GIS Open Data
- Meteo info
- Maps and Map Layers

Spatial Planning

- Boundaries of the residential structure of the City of Athens
- Neighborhood limits of the Municipality of Athens
- Road network of the Municipality of Athens
- Points of services of the City of Athens
- Geographical determination of the traditional part of the city of Athens (Historical Center)
- Postal addresses
- Foreseen (not implemented) pedestrian streets

Athens pilot insights - DUET

- **Correlation** of traffic, transport and environmental **data** for green routing
- Development of **DT and dashboard** for green routing
- What-if scenario on **pedestrian roads** foreseen but not-implemented yet
- Visualization of proposed policies for **evidence-based decisions**
- **Citizens' contribution**: feedback, propositions

Athens Dashboard - DUET

- Traffic data from data.gov.gr - app. 400 sensors in Attica region.

- Measure the impact of changes made on traffic

- Selection of calendar periods for comparison of traffic data

- selection of sensor(s) for the visualization

- Visualization of

  – average number of cars/hour,

  – number of cars for the period(s)

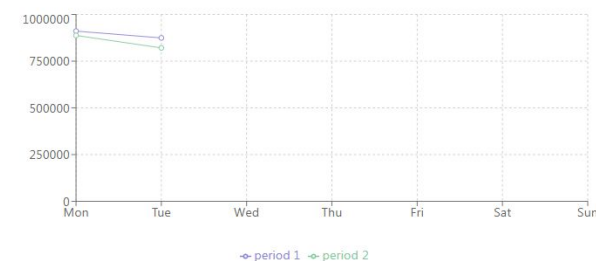 – average number of cars/day

Athens Dashboard - DUET
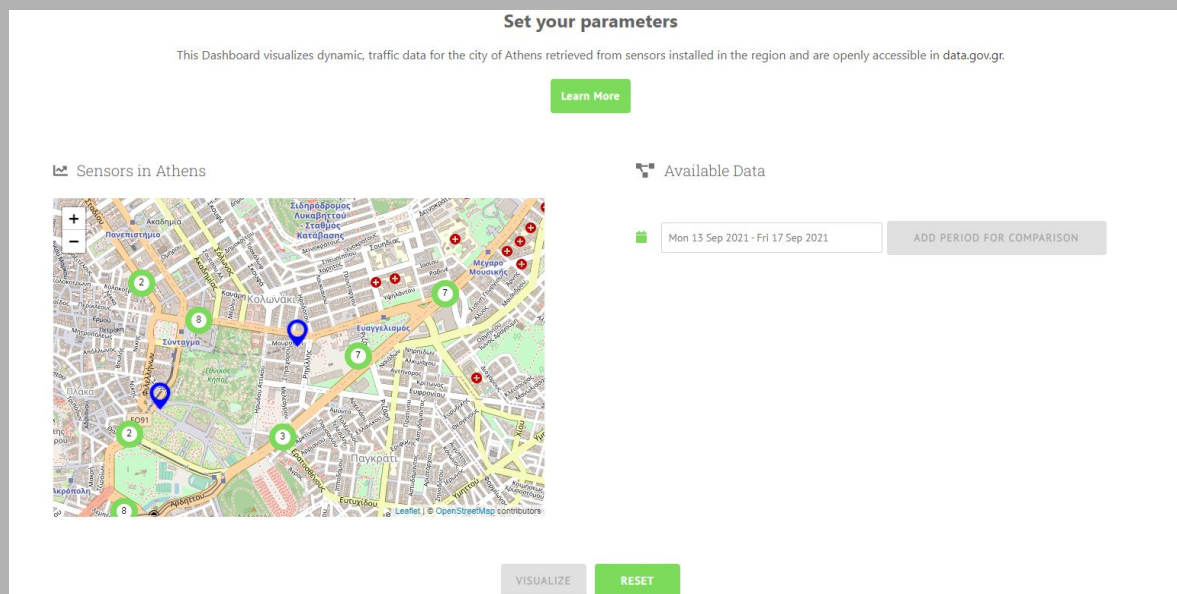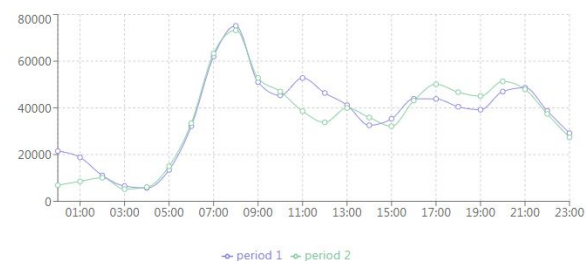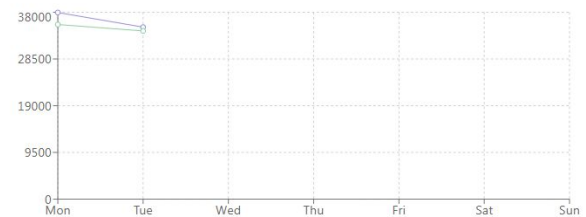
Athens pilot - Expected impact

Effective policy-making

- evidence-based urban planning
- **prediction** of impact of proposed measures
- **visualization** of proposed policies
- close to **real-time** response

Democratic policy-making

- inclusion of **citizens** in the decision-making processes
- citizens as solution proposers, strategy testers and data sensors/providers

Network of actors: citizens, data providers, city ecosystem (officials, employees)
Increase trust of citizens on city processes through the creation of an open and transparent Athens

Evidence Based Policymaking in Europe Summit: 2021

Thank you

Ilia Christantoni (DAEM – City of Athens IT Company)

Panel Discussion
What can we do to slow down Climate Change?

- What is the current situation of evidence-based policymaking in your field? And why is it important?

- Which are the needs to work towards evidence-based policymaking that you have identified in your field?

- Why is the work you are doing in your local pilot important for Europe?

- What is your recommendation to policymakers for evidence-based policymaking?

Data Driven Policy Cluster
Co-creating digital tools for better governance

Phoebe Koundouri
Athens University of Economics and Business
IntelComp

Antonio Filograna
Engineering Ingegneria Informatica
DECIDO

Ilia Christantoni
University of Athens
DAEM

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- policycloud.eu