Ministero dell'Università e della Ricerca

APRE
Agenzia per la Promozione della Ricerca Europea

LA SETTIMANA HORIZON EUROPE 2021

LE MISSIONI

Mattia Ceracchi, APRE

15 Luglio 2021

#HorizonEU #2021horizoneurope

Perché le missioni?

Lezioni apprese da Horizon 2020

- Sostenere le innovazioni pionieristiche
- Moltiplicare l'impatto attraverso un approccio orientato alle missioni e il coinvolgimento dei cittadini
- Intensificare la cooperazione internazionale
- Rafforzare l'apertura
- Razionalizzare il panorama dei finanziamenti
- Incoraggiare la partecipazione

Novità principali di Horizon Europe

- Consiglio europeo per l'innovazione
- Missioni di R&I
- Possibilità di associazione estese
- Politica della scienza aperta
- Nuovo approccio ai partenariati
- Diffondere l'eccellenza

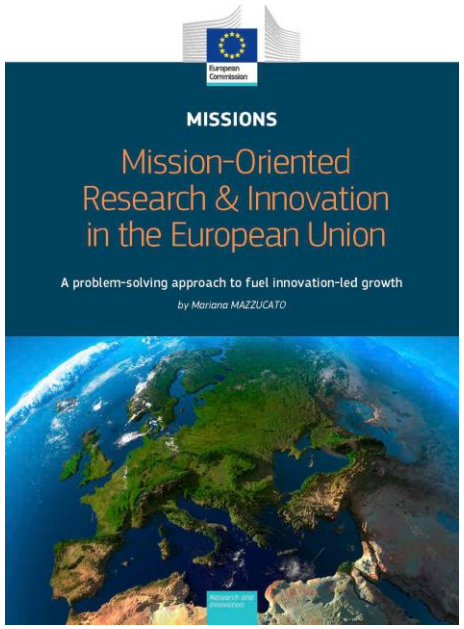
Il modello

- *We choose **to go to the Moon**. We choose to go to the Moon...We choose to go to the Moon **in this decade** and do the other things, not because they are easy, but because they are hard; because that goal will serve to **organize and measure the best of our energies and skills**, because that challenge is one that we are willing to accept, one we are unwilling to postpone, and one **we intend to win**, and the others, too.*

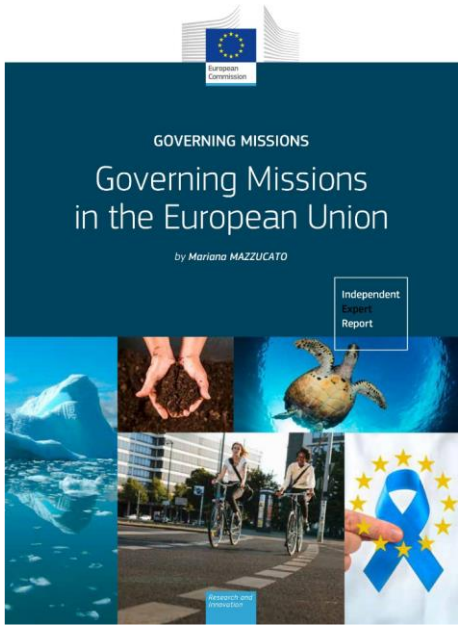
JFK, Address at Rice University on the Nation's Space Effort, 12/9/1962

La base teorica

2017



2018



2019

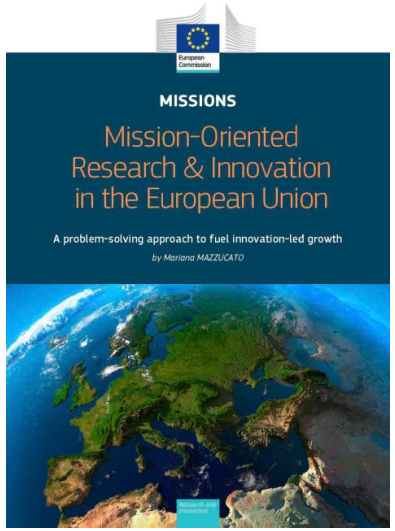
«*A direction for change*»

- *The ambition to achieve a **particular type of economic growth** is an admission that the underlying rate of technical change bringing about productivity growth has **not only a rate but also a direction**. Not all smart growth is inclusive, nor sustainable… it requires a **new justification of government intervention** that goes beyond the usual one of the state as "repair shop"*

ESIR Memorandum

Towards a Mission-Oriented Research and Innovation Policy in the European Union

An ESIR Memorandum



*Mission-oriented policies can be defined as **systemic public policies** that draw on frontier knowledge to attain **specific goals** or "**big science deployed to meet big problems**". Missions provide a solution, an opportunity, and an approach to address the numerous challenges that **people face in their daily lives.***

Mariana Mazzucato

Le Missioni in Horizon Europe

Missioni di R&I

Impatto = maggiore efficacia degli investimenti in R&S nel medio-lungo termine
Visibilità = migliore correlazione tra la R&I europea, la società e le esigenze dei cittadini

Una missione è un portafoglio di azioni **interdisciplinari** volte a conseguire entro un **periodo prestabilito** un **obiettivo audace**, **stimolante** e misurabile, che abbiano un **impatto sulla società** e sull'elaborazione delle politiche e siano rilevanti per una parte significativa della **popolazione** europea e un ampio spettro di cittadini europei.

Horizon Europe definisce le caratteristiche della missione e gli elementi di *governance*. Le missioni specifiche saranno **programmate nell'ambito del pilastro II** "Sfide globali e competitività industriale europea" (attingendo ai contributi di altri pilastri)

I cinque settori

Adaptation to climate change, including societal transformation

Healthy oceans, seas, coastal and inland waters

5 Mission areas

Cancer

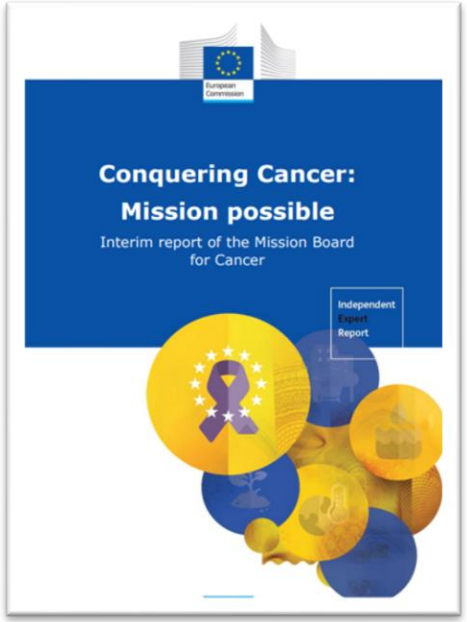
Climate-neutral and smart cities

Soil health and food

Missioni in Horizon Europe – altre caratteristiche

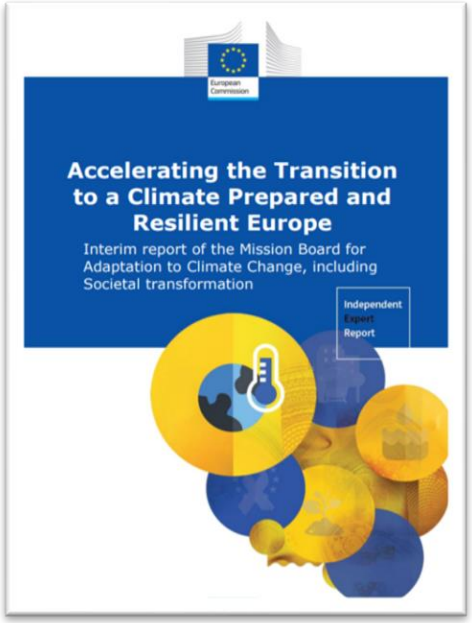
- Ispirazione agli Obiettivi di Sviluppo Sostenibile
- Inserimento in un quadro di policy europeo più ampio (*Green Deal, Industrial Strategy, Beating Cancer Plan, Biodiversity strategy…*)
- Influenzare le politiche nazionali degli Stati membri e dei paesi terzi (dimensione internazionale)
- Sinergie con altri strumenti di Horizon Europe e ulteriori finanziamenti da altri programmi europei, nazionali e regionali (e.g. Recovery fund)
- **Budget dedicato in HE** - Massimo il 10% del bilancio del pilastro II fino al 2023 (possibile aumento dal 2024 se valutazione positiva)

Le proposte dei *Mission board*



Conquering Cancer: Mission Possible

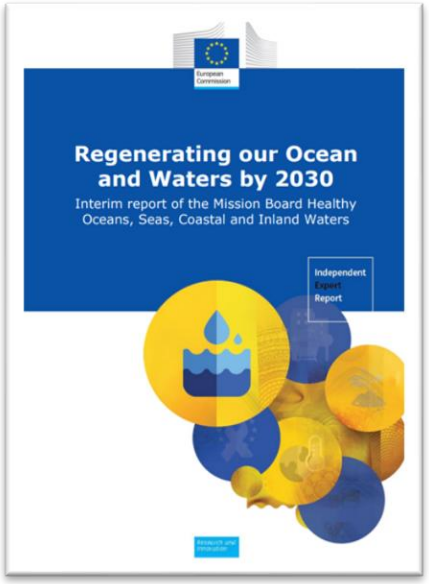
Targets by 2030: more than 3 million lives saved, living longer and better: achieve a thorough understanding of cancer, prevent what is preventable, optimise diagnosis and treatment, support the quality of life of all people exposed to cancer, and ensure equitable access to the above across Europe.



A Climate Resilient Europe - Prepare Europe for climate disruptions and accelerate the transformation to a climate resilient and just Europe by 2030

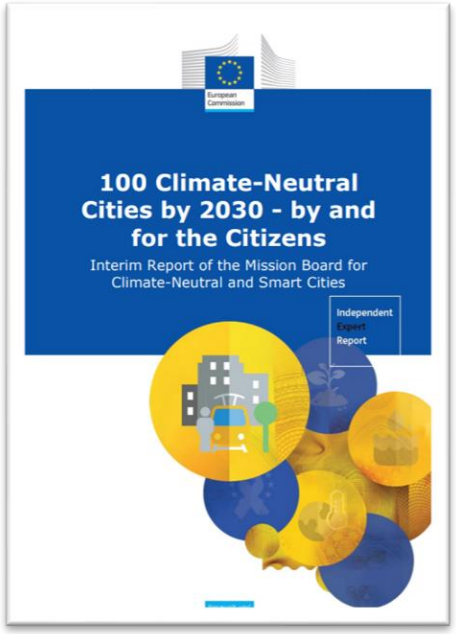
Targets by 2030: prepare Europe to deal with climate disruptions, accelerate the transition to a healthy and prosperous future within safe planetary boundaries, and scale up solutions for resilience that will trigger transformations in society.

Le proposte dei *Mission board* (2)



Mission Starfish 2030: Restore our Ocean and Waters

Targets by 2030: filling the knowledge and emotional gap, regenerating marine and freshwater ecosystems, zero pollution, decarbonising the blue economy, and revamping governance. These mutually supportive objectives will enable the regeneration of the water cycle as a whole.



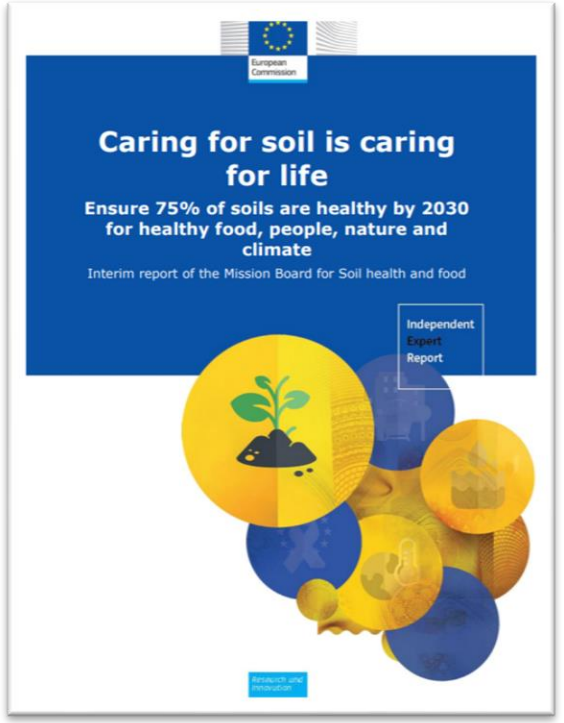
100 Climate-Neutral Cities by 2030 - by and for the citizens

Targets by 2030: support, promote and showcase 100 European cities in their systemic transformation to climate neutrality by 2030 and turn these cities into innovation hubs for all cities, benefitting quality of life and sustainability in Europe.

Le proposte dei *Mission board* (3)

Caring for Soil is Caring for Life

Targets by 2030: at least 75% of soils in the EU are healthy for food, people, nature and climate. The proposed mission combines research and innovation, education and training, investments and the demonstration of good practices using "Living labs" (experiments and innovation in a laboratory on the ground) and "Lighthouses" (places to showcase good practices).



La governance

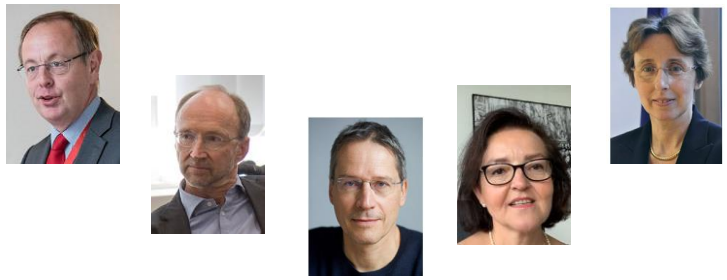
5 Mission Board + 5 Assemblee di esperti

European Commission

STATI MEMBRI

Comitato di Programma di Horizon Europe - Configurazione Strategica

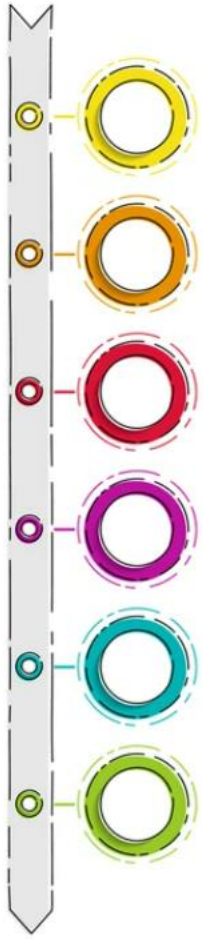
Coinvolgimento dei cittadini



5 Mission Manager

5 sottogruppi / working group del Comitato di Programma

Cos'è successo negli ultimi mesi



- Proposte dei Mission board (settembre 2020, R&I days)
- Eventi nazionali e internazionali, coinvolgimento dei cittadini
- Da novembre 2020, fase preparatoria necessaria ad elaborare un **piano di implementazione** dettagliato per ciascuna missione (obiettivi, logica di intervento, azioni chiave da sostenere, strategia di investimento, indicatori di performance, ecc.)
- Alla fine della fase preparatoria (12 mesi) la Commissione deciderà quali missioni entreranno nella fase di piena implementazione (criteri di valutazione)
- Pubblicazione del Programma di lavoro (giugno 2021) – versione molto molto parziale

Il Programma di Lavoro – Missions (v. giugno 2021)

- Programma di lavoro molto molto parziale
- Budget complessivo al momento: 57,65 milioni
- 5 Missioni + 2 Destinazioni
- (Solo) azioni di supporto alla fase preparatoria: 7 CSA sulle missioni + 1 CSA da 25 milioni sul New European Bauhaus
- Scadenze: 14 settembre 2021 (Missioni) e 25 gennaio 2022 (NEB)
- Obiettivo dei progetti finanziati: gettare le basi per le missioni

European Commission

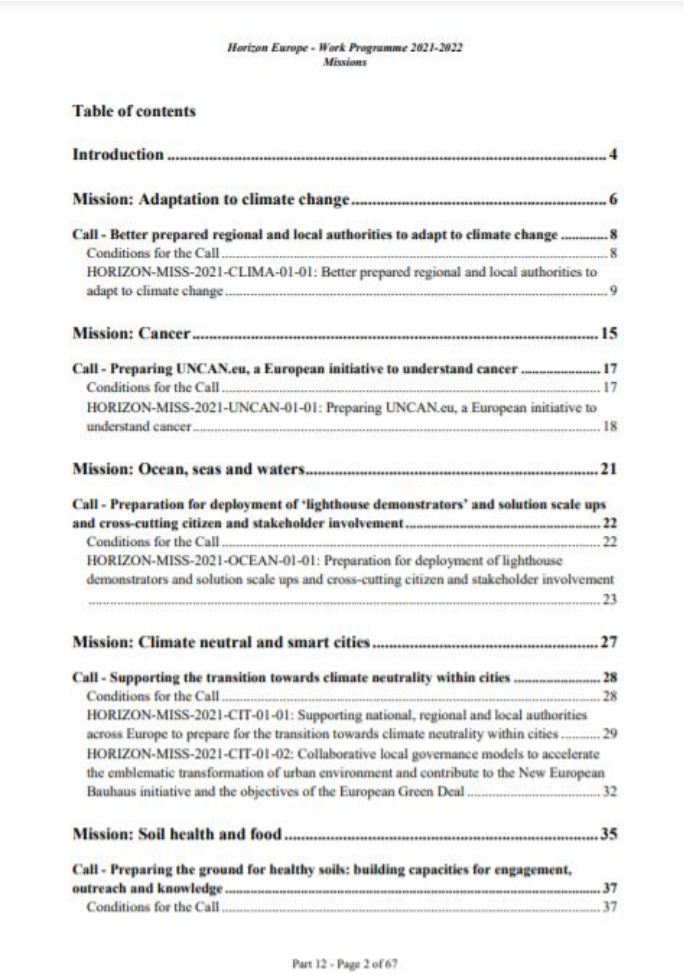
EN

Horizon Europe

Work Programme 2021-2022

12. Missions

(European Commission Decision C(2021)4200 of 15 Jun



Horizon Europe - Work Programme 2021-2022
Missions

Table of contents

Introduction 4

Mission: Adaptation to climate change 6

Call - Better prepared regional and local authorities to adapt to climate change 8
Conditions for the Call 8
HORIZON-MISS-2021-CLIMA-01-01: Better prepared regional and local authorities to adapt to climate change 9

Mission: Cancer 15

Call - Preparing UNCAN.eu, a European initiative to understand cancer 17
Conditions for the Call 17
HORIZON-MISS-2021-UNCAN-01-01: Preparing UNCAN.eu, a European initiative to understand cancer 18

Mission: Ocean, seas and waters 21

Call - Preparation for deployment of 'lighthouse demonstrators' and solution scale ups and cross-cutting citizen and stakeholder involvement 22
Conditions for the Call 22
HORIZON-MISS-2021-OCEAN-01-01: Preparation for deployment of lighthouse demonstrators and solution scale ups and cross-cutting citizen and stakeholder involvement 23

Mission: Climate neutral and smart cities 27

Call - Supporting the transition towards climate neutrality within cities 28
Conditions for the Call 28
HORIZON-MISS-2021-CIT-01-01: Supporting national, regional and local authorities across Europe to prepare for the transition towards climate neutrality within cities 29
HORIZON-MISS-2021-CIT-01-02: Collaborative local governance models to accelerate the emblematic transformation of urban environment and contribute to the New European Bauhaus initiative and the objectives of the European Green Deal 32

Mission: Soil health and food 35

Call - Preparing the ground for healthy soils: building capacities for engagement, outreach and knowledge 37
Conditions for the Call 37

Part 12 - Page 2 of 67

Il Programma di lavoro (2)

Mission: Adaptation to climate change 6

Call - Better prepared regional and local authorities to adapt to climate change 8
Conditions for the Call 8
HORIZON-MISS-2021-CLIMA-01-01: Better prepared regional and local authorities to adapt to climate change 9

Mission: Cancer 15

Call - Preparing UNCAN.eu, a European initiative to understand cancer 17
Conditions for the Call 17
HORIZON-MISS-2021-UNCAN-01-01: Preparing UNCAN.eu, a European initiative to understand cancer 18

Mission: Ocean, seas and waters 21

Call - Preparation for deployment of 'lighthouse demonstrators' and solution scale ups and cross-cutting citizen and stakeholder involvement 22
Conditions for the Call 22
HORIZON-MISS-2021-OCEAN-01-01: Preparation for deployment of lighthouse demonstrators and solution scale ups and cross-cutting citizen and stakeholder involvement 23

Mission: Climate neutral and smart cities 27

Call - Supporting the transition towards climate neutrality within cities 28
Conditions for the Call 28
HORIZON-MISS-2021-CIT-01-01: Supporting national, regional and local authorities across Europe to prepare for the transition towards climate neutrality within cities 29
HORIZON-MISS-2021-CIT-01-02: Collaborative local governance models to accelerate the emblematic transformation of urban environment and contribute to the New European Bauhaus initiative and the objectives of the European Green Deal 32

Mission: Soil health and food 35

Call - Preparing the ground for healthy soils: building capacities for engagement, outreach and knowledge 37
HORIZON-MISS-2021-SOIL-01-01: Preparing the ground for healthy soils: building capacities for engagement, outreach and knowledge 38

Destination: Complementing missions through national activities 42

Call - Coordination of complementary actions for missions 43
Conditions for the Call 43
HORIZON-MISS-2021-COOR-01-01: Coordination of complementary actions for missions 44

Call - Support the deployment of lighthouse demonstrators for the New European Bauhaus initiative in the context of Horizon Europe missions 49
Conditions for the Call 49
HORIZON-MISS-2021-NEB-01-01: Support the deployment of lighthouse demonstrators for the New European Bauhaus initiative in the context of Horizon Europe missions 50

Qualche bando dagli altri Programmi di lavoro (2021)

CLIMATE

HORIZON-CL3-2021-DRS-01-02: *Integrated Disaster Risk Reduction for extreme climate events: from early warning systems to long term adaptation and resilience building*
HORIZON-CL5-2021-D1-01-05: *Better understanding of the interactions between climate change impacts and risks, mitigation and adaptation options*

CANCER

HORIZON-HLTH-2021-DISEASE-04-01: *Improved supportive, palliative, survivorship and end-of-life care of cancer patients*
HORIZON-HLTH-2021-CARE-05-02: *Data-driven decision-support tools for better health care delivery and policy-making with a focus on cancer*

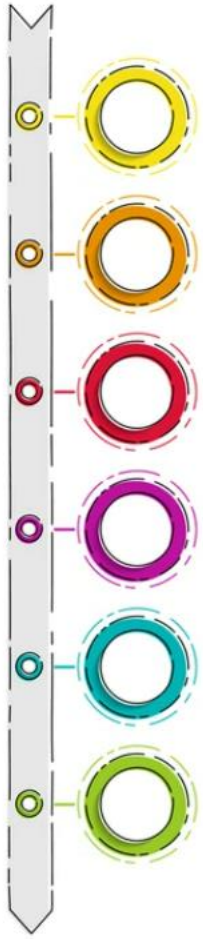
SOIL

HORIZON-CL6-2021-FARM2FORK-01-14: Microbes for healthy and sustainable food and diets
HORIZON-CL6-2021-CLIMATE-01-07: *International Research Consortium on (agricultural) soil carbon*

OCEAN

HORIZON-CL6-2021-GOVERNANCE-01-06: Environmental and social crosscompliance of marine policies
HORIZON-CL6-2021-COMMUNITIES-01-04: Socio-economic empowerment of the users of the sea

Prossimi passaggi



- Revisione dei 5 piani di implementazione a livello politico (luglio-agosto)
- Valutazione (positiva) dei piani e lancio delle missioni (dopo l'estate)
- Probabile iniziativa politica della Commissione per dare visibilità al lancio ufficiale (dopo l'estate)
- Aggiornamento del Programma di lavoro 2022 e pubblicazione delle prime azioni di R&I dedicate alle missioni (fine 2021)

Link utili

- Missions in Horizon Europe – Commissione europea
- Missions – sito APRE
- Studi e report sulle politiche mission-oriented
- FAQ - Frequently asked questions sulle missioni (febbraio 2021)
- Programma di lavoro 2021-22 (v. giugno 2021)
- Tutti gli eventi europei

CHIEDI SUPPORTO AI TEAM TEMATICI IN APRE

www.horizon-europe.it

PER NON PERDERTI GLI AGGIORNAMENTI

REGISTRATI A APRE MAILING

www.apre.it