

# **Horizon Europe Missions**

# **Climate Neutral and Smart Cities**

#HorizonEU #MissionCities

Paul (Harry) Tuinder– European Commission, Cities Mission Secretariat



**R&I Missions** 

- Be bold and inspirational, with wide societal relevance;
- Indicate a clear direction: targeted, measurable and time-bound;
- Be ambitious but realistic research and innovation actions;
- Spark innovation across disciplines, sectors and actors;
- Be based on a bottom-up approach of multiple solutions
- Engage citizens in co-designing, cocreating, co-implementing and co-assessing missions





## **Why Missions**

- Answering to today's most pressing societal challenges
- Formulating a clear goal, objectives and timeline, that is easy to communicate and capture the imagination of people
- A tool to provide concrete, transformational and systemic responses
- Bringing together R&I actions with financial support for their deployment and supporting policy and legislative environment
- Full involvement of citizens, to create broad support and narrow their perceived distance to the EU



### What are Missions (Horizon Europe Regulation, art. 7)

- A clear goal, objectives and timeline, that is easy to communicate and capture the imagination
- Full involvement of citizens, to create broad support and narrow their perceived distance to the EU
- Portfolio approach measure impact through a sum of actions, not only by individual projects
- material competitiveness is programmed within the Pillar II 'Global Challenges and European Industrial Competitiveness is put may also benefit from actions carried out within other parts of the Programme as well as complementary actions carried out under other Union funding programmes......
- ...defined and implemented ensuring the active and early involvement of the Member States and extensive exchanges with the European Parliament.



### Missions Criteria (Horizon Europe Regulation, art. 7)

- EU-added value, and contribute to reaching Union priorities and commitments
- Cover areas of common European relevance, encouraging broad engagement and active participation of various types of stakeholders from public and private sectors
- Be bold and inspirational
- Be targeted, measurable, time-bound and have a clear budget frame;
- Centred on ambitious, excellence-based and impact-driven but realistic goals
- Have the necessary scope, scale and mobilization of the resources to deliver the mission outcome;
- Stimulate activity across disciplines and encompassing activities from a broad range of TRLs
- Be open to multiple, bottom-up approaches and solutions
- Benefit from synergies

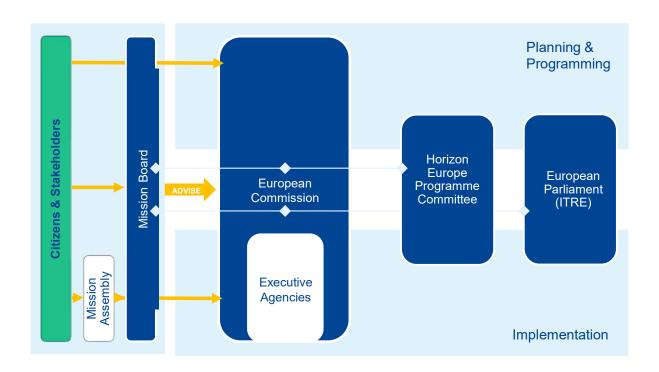


# Adaptation to climate change, including societal transformation





# **Actors in Missions Co-Design**





### Implementation – Policy coherence

# 1) Missions much more than R&I: delivery instruments for EU policy priorities

- the Recovery Package
- the European Green Deal
- the EU industrial strategy
- Europe's Beating Cancer Plan

- the Farm to Fork strategy
- Shaping Europe's Digital Future
- Smart cities
- NextGenerationEU

#### 2) Holistic policy approach

Mission objectives to be achieved by a supportive policy/regulatory framework



# Implementation - financing

#### Financing along the innovation value chain

- Funding from Horizon Europe for R&I actions
- Deployment actions funded through other MFF instruments
- National/regional financial support for implementation
- De-risking private investments
- Etc.



# Implementation – cooperation with pubic and private actors

- European Partnerships and other EU instruments
- Member States
- Regions
- Cities/municipalities
- Foundations
- Civil society
- International cooperation



#### 'Cities' Mission Board

- High-level independent experts from research and academia, industry, innovation and business, policy, public sector...
- Advise the European Commission on the identification of one or more missions in the respective mission area, with input from stakeholders and citizens

















LENZ

















# Climate Neutral and Smart Cities – Issues at stake





# Climate Neutral and Smart Cities Issues at stake

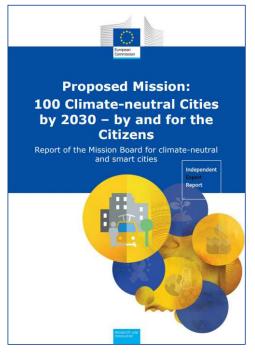
- Cities occupy 2% of the planet's landmass but consume over 65% of the worlds energy and account for more than 70% of the global CO<sub>2</sub> emission
- 75% of the European citizens live in cities and expected to raise to 85% by 2050
- Paris Agreement and Agenda 2030
- European Green Deal: Europe first climate neutral continent by 2050, more ambitious target for 2030







# Proposed mission 100 CLIMATE-NEUTRAL CITIES BY 2030 - BY AND FOR THE CITIZENS



"Support, promote and showcase 100
European cities in their systemic
transformation towards climate neutrality
by 2030 and make these cities into
experimentation and innovation hubs for
all cities, thus leading on the European
Green Deal and on Europe's efforts to
become climate neutral by 2050."





#### **Elements of the proposed mission**

- A new model of city governance based on three principles:
  - > A holistic approach fostering innovation and deployment
  - > A matrix of integrated and multi-level governance
  - > A deep and continuous collaboration between all stakeholders
- A new role for citizens in their different roles as political actors, users, producers, consumers or owners of buildings and transport means. At least 1% of the funding granted by the EU to cities should be devoted to support citizens for the implementation of climate actions
- A Climate City Contract as a new delivery mechanism signed by the Mayor, by the regional and national government and by the Commission
- A new integrated form of funding and financing: Lending & Blending Facility for Climate Cities, up to 10% of MMF to be geared towards the objective of the mission, structural and investment funds, EIB, "mission label", green budgeting





# The selection process

#### **APPLICATION PROCESS**

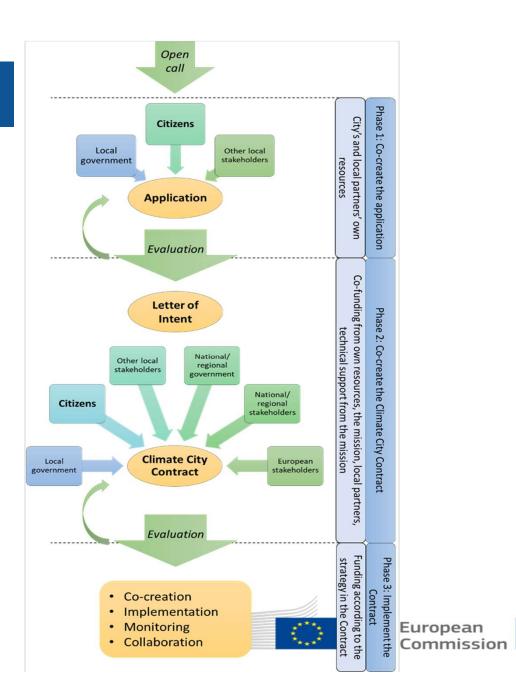
- Open, flexible and inclusive
- Based on co-creation

#### **SELECTION OF CITIES**

- Cities of all sizes, contexts and types
- Wide and balanced geographical coverage
- Commitment to engage the citizens in all phases

#### **MONITORING PROGRESS**

- Endpoint: mitigate and offset all GHG emissions
- Quantitative and qualitative indicators





#### Leaving no one behind

Entry level 1: Beginner

Preparedness: low

#### What you lack

- Complete strategy
- Capacity
- Partnerships
- Financial means

#### What you have

- Great ambition
- Small-scale pilots
- Limited international network

### Entry level 2: Experienced

Preparedness: medium

#### What you lack

- Complete strategy
- Strong capacity
- Strong partnerships
- Financial means

#### What you have

- Great ambition
- Large-scale pilots
- First-hand experience
- International network

#### Entry level 3:

#### Frontrunner

Preparedness: high

#### What you lack

- Financial means for deployment

#### What you have

- Complete strategy including governance
- Strong partnerships
- Strong capacity
- Wide international network.



## State of Play - Missions

<u>Based</u> on the advice provided by the Mission Boards, the five missions are inserted in the proposal for the Strategic Program of Horizon Europe:

- Cancer,
- Adaptation to Climate Change,
- Ocean Seas and Waters,
- Climate Neutral and Smart Cities,
- Soil Health and Food.

They will enter into a (max 12 month) preparatory phase during which detailed draft plans, including objectives, budget and indicators, will be developed.



## State of Play - Missions

- Preparatory actions up to €5m per mission are to be included in the Horizon Europe Work Programme with a separate work programme part.
- For the Cities Mission WP specific topics are being discussed with MS dealing with support to national, regional and local authorities across Europe to prepare for the transition towards climate neutrality within cities; the possible inclusion of the New European Bauhaus dimension within the framework of the European Green Deal; the development of a 'Self-assessment toolkit for cities' climate-neutrality pathway'; the mapping of European cities' preparedness level and ambition and the mapping of proved R&I solutions and conditions enabling their transferability.
- At the same time the preparation of the implementation plan for a Cities Mission has started that is to be submitted by May/June to the responsible Commissioners



## **THANK YOU!**

ec.europa.eu/mission-cities

#EUmissions #HorizonEU

#MissionCities

Watch a <u>short video</u> on our vision for the mission

