Water in Horizon Europe
1st draft WP 2021-22

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#HorizonEU

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DG Research & Innovation
Horizon Europe - Structure

**Pillar 1**  
Excellent Science  
- European Research Council  
- Marie Skłodowska-Curie Actions  
- Research Infrastructures

**Pillar 2**  
Global Challenges and European Industrial Competitiveness  
- Health  
- Culture, Creativity and Inclusive Society  
- Civil Security for Society  
- Digital, Industry and Space  
- Climate, Energy and Mobility  
- Food, Bioeconomy, Natural Resources, Agriculture and Environment  
Joint Research Centre

**Pillar 3**  
Innovative Europe  
- European Innovation Council  
- European innovation ecosystems  
- European Institute of Innovation and Technology

**Widening Participation and Strengthening the European Research Area**  
- Widening participation and spreading excellence  
- Reforming and Enhancing the European R&I system
HORIZON EUROPE STRATEGIC PLAN
‘a Europe that leads the global transitions’

Key policy questions: Where should the EU invest in R&I to achieve its political priorities? What should be our targets?

- identify the orientations for future EU R&I investments in line with the political priorities of the Commission
- define which impacts to target in the long term

Strategic planning response: key strategic orientations and expected impacts to guide the programming of Horizon Europe towards a green, digital and resilient Europe – focusing on:

- European Green Deal
- Digital Transition and Industrial Transformation
- Development of a more Resilient, Healthy and Just Society
## GLOSSARY – Horizon Europe key concepts & intervention logic

### DEFINITION

| **EC POLICY PRIORITY** | Based on the Political Guidelines for the European Commission 2019-2024 with a focus on three key priorities: Green Deal, Europe fit for a digital age, Economy that works for people |
| **KEY STRATEGIC ORIENTATIONS FOR R&I** | Set of strategic objectives within the EC policy priorities where R&I investments are expected to make a difference |

### EXPECTED IMPACTS ⇒ DESTINATIONS

- **General objectives**
  - Strategic Plan & Work Programme: R&I contribution to seamless, smart, inclusive and sustainable mobility services
  - Project’s impact: contribution to increased maximum passenger capacity and passenger average throughput, while reducing airport infrastructure expansion costs

### EXPECTED OUTCOMES ⇒ TOPICS

- **Specific objectives**
  - Work Programme: Innovative accessibility and logistics solutions applied by the European Transport sector
  - Project’s outcome: Advanced forecasting system for proactive airport passenger flow management deployed in European airports

### EXPECTED OUTPUTS

- **Operational objectives**
  - Project’s outputs (by the end of its implementation): Demonstration in a large-scale trial with 3 airports of an advanced forecasting system for proactive airport passenger flow management

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**EXAMPLE**

- Project’s outputs (by the end of its implementation): Demonstration in a large-scale trial with 3 airports of an advanced forecasting system for proactive airport passenger flow management
CLUSTER 6 - we work together…

IA1: Environmental Observation
IA2: Biodiversity and Natural Resources
IA3: Agriculture, Forestry and Rural Areas
IA4: Seas, Oceans and Inland Waters
IA5: Food Systems
IA6: Bio-based innovation systems in the EU Bioeconomy
IA7: Circular Systems

7 Intervention Areas (IAs)

…and across clusters
What? Six targeted long-term impacts

- Climate neutrality and adaptation to climate change
- Preservation and restoration of biodiversity and ecosystems
- Sustainable and circular management and use of natural resources as well as prevention and removal of pollution
- Food and nutrition security for all within planetary boundaries
- Governance models enabling sustainability
- Rural, coastal, peri-urban and urban areas developed in a sustainable, balanced and inclusive manner
Cluster 6 – European Green Deal

The European Green Deal

- Promoting Clean Energy
- Protecting Nature
- From Farm to Fork
- Leading the Green Change Globally
- Making Homes Energy Efficient
- Financing Green Projects
- Investing in Smarter, More Sustainable Transport
- Striving for Greener Industry
- Eliminating Pollution
- Ensuring a Just Transition for All
1\textsuperscript{st} draft WP 2021-22 of Cluster 6

Water related aspects

✓ Biodiversity and ecosystems services
  ✓ Water ecosystem restoration.
  ✓ Assessing the interlinkages (nexus) among biodiversity, water, food and health in the context of climate change
  ✓ Observing and mapping biodiversity and ecosystems

✓ Fair healthy and environmental friendly food systems
  ✓ Primary production and nutrients
  ✓ Nature-based solutions for nutrient management
  ✓ Integrated and sustainable freshwater bioeconomy

✓ Circular economy and bio-based systems
  ✓ Circular Cities and Regions Initiative circular systemic solutions
  ✓ Marginal lands and climate-resilient crops
Clean environment and zero pollution

- Preventing groundwater contamination
- Regional nitrogen and phosphorus load reduction approach within safe ecological boundaries and innovative governance solutions to limit N/P emissions
- Preventing and managing diffuse pollution in urban water runoff
- Securing drinking water quality, innovative monitoring and treatment solutions and ensuring safe distribution.
- Environmental sustainability criteria for biological feedstock production and trade in bio-based systems
- Achieving zero polluted seas and oceans
- Improved bioremediation and revitalization strategies for soil and water
- Biosensors and user-friendly diagnostic tools for environmental services
- Assessment of environmental impacts and trade-offs of alternative fertilising products
1st draft WP 2021-22 of Cluster 6
Water related aspects

✓ Land, ocean and water for climate action
  ✓ Improved understanding, observation and monitoring of water resources availability.
  ✓ Climate sensitive water allocation systems and economic instruments.
  ✓ Agroforestry to meet climate, biodiversity and farming sustainability goals

✓ Innovative governance, environmental observation, digital solutions
  ✓ Water governance, economic and financial sustainability of water systems.
  ✓ EU wide interactive knowledge reservoir to support knowledge exchange between all AKIS actors in MS
1st draft WP 2021-22 of Cluster 6 European Partnerships

✓ Rescuing Biodiversity to Safeguard Life on Earth (co-funded, 2021)

✓ A climate neutral, sustainable and productive Blue Economy (co-funded, 2022)

✓ Water4All – Water Security for the Planet (co-funded, 2021)
Five Mission Areas

- Adaptation to climate change, including societal transformation
- Healthy oceans, seas, coastal and inland waters
- Climate-neutral and smart cities
- Cancer
- Soil health and food
# Horizon Europe Implementation Initiatives

<table>
<thead>
<tr>
<th>Short Title</th>
<th>Planned Adoption Date</th>
<th>Type of Act</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Plan of Horizon Europe</td>
<td>4th quarter 2020</td>
<td>Commission Implementing Decision</td>
</tr>
<tr>
<td>Adoption of the Horizon Europe Work Programme for 2021-2022</td>
<td>1st quarter 2021</td>
<td>Commission Implementing Decision</td>
</tr>
<tr>
<td>Adoption of the ERC Work Programme 2021</td>
<td>4th quarter 2020</td>
<td>Commission Implementing Decision</td>
</tr>
</tbody>
</table>

... and many other: JUs, Missions, Infrastructures, International arrangements, Executive Agencies, ...
Thank you