

Introduction to Horizon Europe Research Infrastructures

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Alexander Keeler, BEIS

Dr Alice Chadwick, STFC, RI NCP

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Housekeeping

- All participants will be muted for the duration of the webinar.
- A chat function is available and will be monitored.
- Please use the Q&A function to submit questions.
- You can 'up vote' your favourite questions.
- We will be recording this session.
- Slides will be shared after the webinar on the event page.



Outline

- **Welcome and introduction**
Phil Holliday, UKRO
- **UK Association to Horizon Europe**
Alexander Keeler, BEIS
- **Introduction to Horizon Europe**
Phil Holliday, UKRO
- Q&A
- **Research Infrastructures Work Programme 2021-22**
Alice Chadwick, STFC, RI NCP
- Break (5 minutes)
- **Case study and next steps**
Alice Chadwick, STFC, RI NCP
- Q&A



UKRO

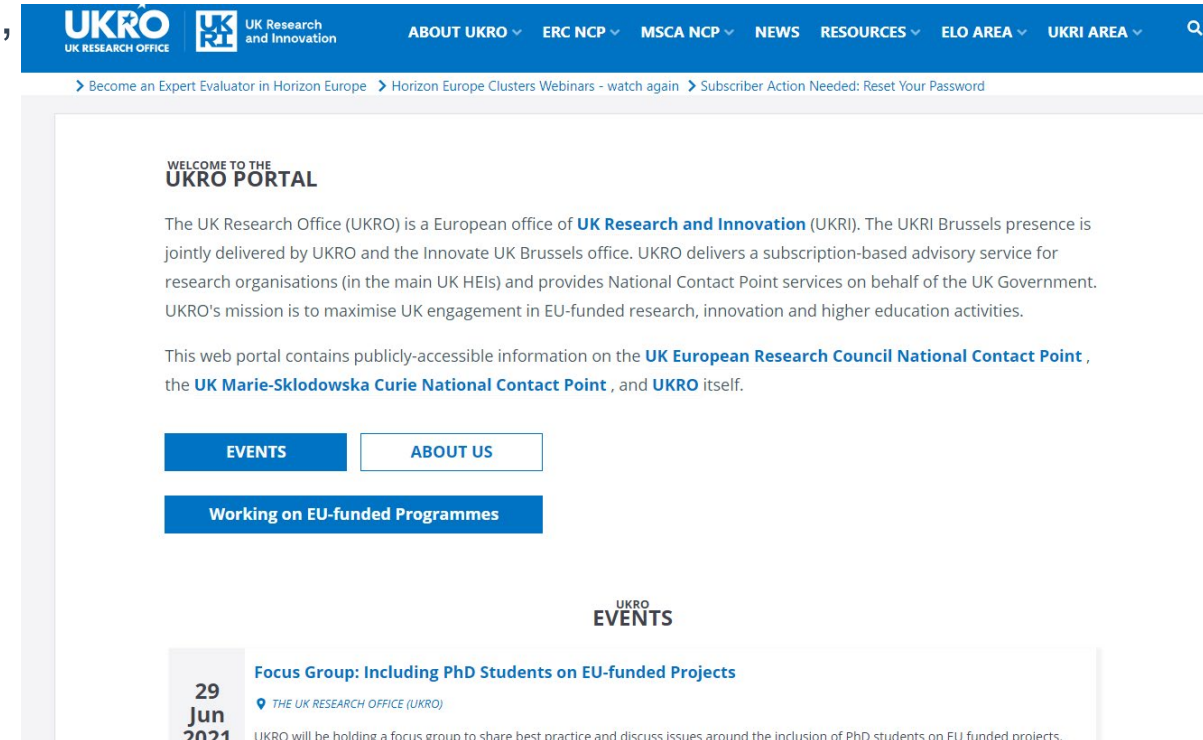
UKRO

- **Mission**

- Maximise UK engagement in EU-funded research, innovation and higher education activities

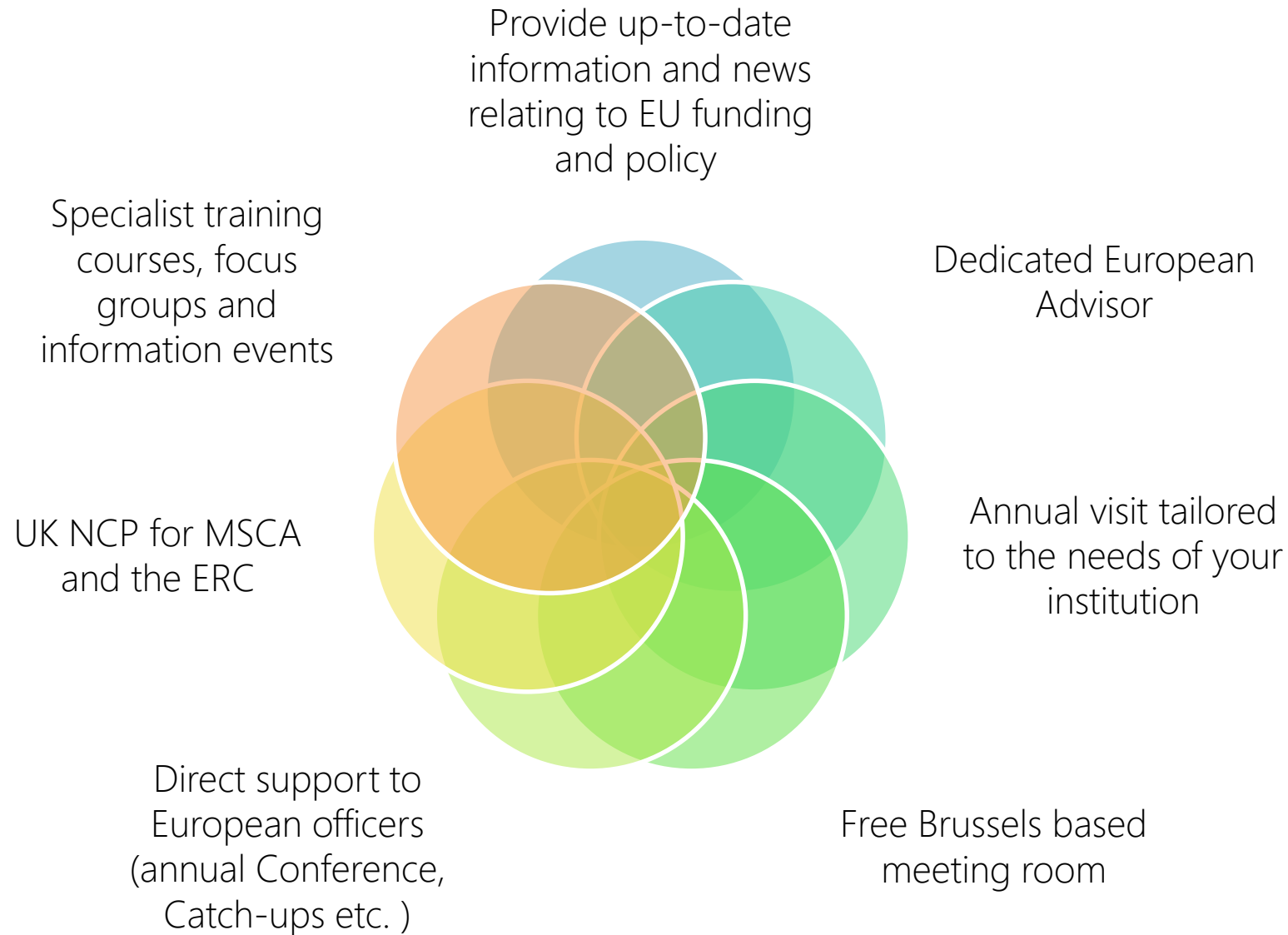
- **Our office**

- Based in Brussels
- European office of UK Research and Innovation (UKRI)
- Delivers subscription-based advisory services for around 140 research organisations in the UK and beyond
- Provides [ERC](#) and [MSCA](#) National Contact Point services on behalf of the UK Government



<https://www.ukro.ac.uk/>

Our suite of services

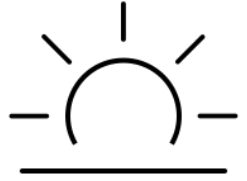


UK Association to Horizon Europe

Alexander Keeler, BEIS

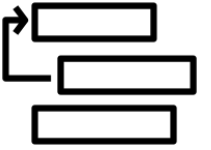
Introduction to Horizon Europe

What is Horizon Europe?



- The EU's flagship programme for research and innovation running from 2021-2027
- **Overall budget of €95.5 billion**
- **Ambition:** To shape the future of Europe and making Horizon Europe the most ambitious research and innovation programme ever introduced
- **Aim:** To create opportunities for the world of tomorrow from the challenges of today and:
 - Strengthen the European Research Area (ERA)
 - Boost Europe's innovation capacity, competitiveness and growth
 - Deliver on citizens' priorities

Horizon and EU policy priorities



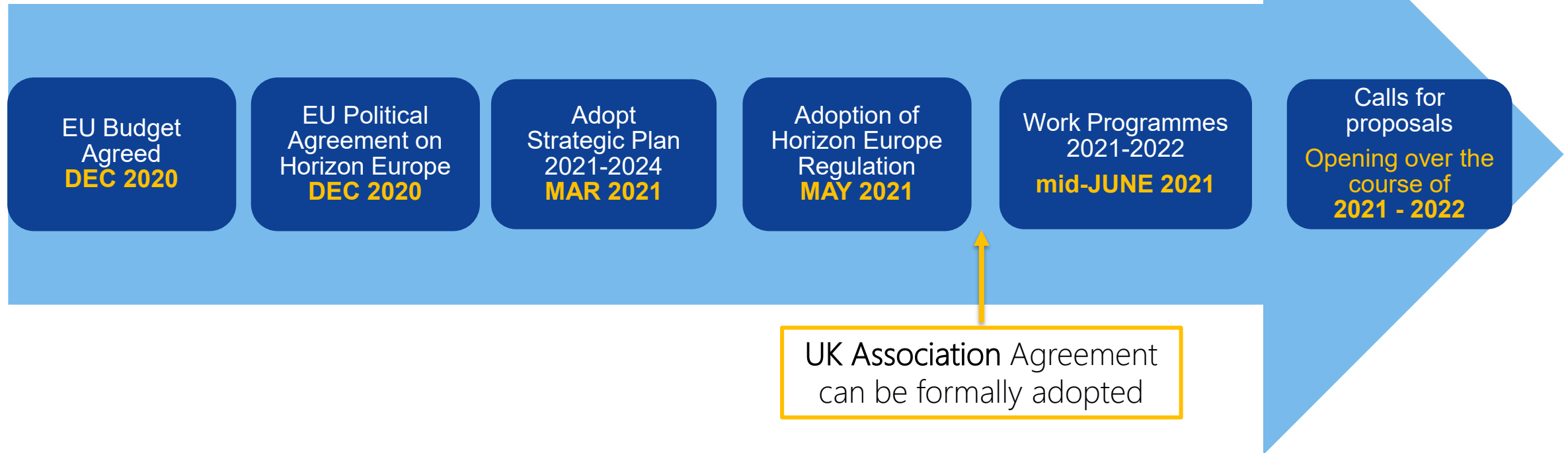
- Horizon Europe will include actions that support the wider political objectives of the European Commission, including the green and digital transition and a sustainable **recovery from the COVID-19 pandemic**
- Specifically, it will support the ambition to make **Europe the first climate-neutral continent by 2050**, directing a minimum of 35% of the funding available to climate objectives (7.5% on biodiversity)
- It will contribute to making 2021-2030 **Europe's digital decade** and further support the objectives of the **European Green Deal**
- It will establish clear links between R&I activities and the **UN Sustainable Development Goals (SDGs)**, as well as work to ensure the Union helps fulfil its role as signatory to the **Paris Agreement**

What's new in the Horizon Europe?



- Mission-oriented funding:
 - Portfolios of activity to contribute to 5 high-level, impactful and global objectives
- European Innovation Council:
 - Formalising the EIC and building upon its pilot phase under H2020
- Open to the World:
 - Enhanced association opportunities for Third Countries
- Open Science policy:
 - Extending the use of open access and further developing the European Open Science Cloud (EOSC)
- New approach to European Partnerships:
 - Consolidating the use of public-public and public-private partnerships
- Spreading Excellence:
 - Increase of emphasis and funding for 'widening' activities

Horizon Europe Steps Towards Funding Calls Open



- A footnote has been added to individual (draft) Work Programme parts to clarify that countries in the process of associating can apply, and formal association needs to be concluded before grant agreements can be signed
- European Commission's [Q&A on UK participation in Horizon Europe](#)

Three Pillar Structure



- Aims at maximising the effects of European research and innovation investments
- Ensure a sustainable, fair and prosperous future for people and planet based on European values
- Boosting the Union's competitiveness and growth

Pillar 1 – Excellent Science



Overview of the European Research Council

- Established to fund **high calibre researchers in any research area** including the Arts and the Humanities.
- Supports and encourages truly creative and excellent scientists, scholars and engineers **to be adventurous and take risks in their research**
- Encourages researchers to **go beyond established frontiers of knowledge** and undertake multidisciplinary, highly ambitious, innovative research.
- No mobility or nationality requirements
- No need for multi-national partnerships or consortium
- One host organisation must be located in an EU Member State (MS) or Associated Country (AC)

Overview of the Marie Skłodowska-Curie Actions (MSCA)



MSCA Doctoral Networks (DN)

- formally Innovative Training Networks (ITN)



MSCA Postdoctoral Fellowships (FP)

- Formally Individual Fellowships (IF)



MSCA Staff Exchanges (SE)

- Formally Research and Innovation Staff Exchange (RISE)



MSCA Co-funding of regional, national and international programmes (COFUND)

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MSCA and Citizens

- Formally Researchers' Night (NIGHT)

Pillar 2 – Global Challenges & Industrial Competitiveness

Pillar 2 - Global Challenges and European Industrial Competitiveness

- Clusters

Cluster	Areas of Intervention	
1) Health	<ul style="list-style-type: none"> • Health throughout the life course • Non-communicable and rare diseases • Tools, technologies and digital solutions for health and care, including personalised medicine 	<ul style="list-style-type: none"> • Environmental and social health determinants • Infectious diseases, including poverty-related and neglected disease • Health care systems
2) Culture, Creativity & Inclusive Society	<ul style="list-style-type: none"> • Democracy and Governance • Social and economic transformations 	<ul style="list-style-type: none"> • Culture, cultural heritage and creativity
3) Civil Security for Society	<ul style="list-style-type: none"> • Disaster-resilient societies • Protection and Security 	<ul style="list-style-type: none"> • Cybersecurity
4) Digital, Industry and Space	<ul style="list-style-type: none"> • Manufacturing technologies • Advanced materials • Next generation internet • Circular industries • Space, including Earth Observation • Emerging enabling technologies 	<ul style="list-style-type: none"> • Key digital technologies, including quantum technologies • Artificial Intelligence and robotics • Advanced computing and Big Data • Low-carbon and clean industry
5) Climate, Energy & Mobility	<ul style="list-style-type: none"> • Climate science and solutions • Energy systems and grids • Communities and cities • Industrial competitiveness in transport • Smart mobility 	<ul style="list-style-type: none"> • Energy supply • Buildings and industrial facilities in energy transition • Clean, safe and accessible transport and mobility • Energy storage
6) Food, Bioeconomy, Natural Resources, Agriculture & Environment	<ul style="list-style-type: none"> • Environmental observation • Agriculture, forestry and rural areas • Circular systems • Food systems 	<ul style="list-style-type: none"> • Biodiversity and natural resources • Seas, oceans and inland waters • Bio-based innovation systems in the EU Bioeconomy

Pillar 3 – Innovative Europe

Pillar 3 – Innovative Europe – European Innovation Council (EIC)

- Provides a coherent and connected system of innovation funding that supports projects with market potential
- Principally targeted at Small- and Medium-sized Enterprises (SMEs) and industry
- EIC will serve as a ‘one-stop shop’ for European innovators
- Channel funding through three main schemes

Pathfinder

- Based on the FET Open
- Support international consortia working on establishing future and emerging breakthrough technologies through collaborative research and innovation projects

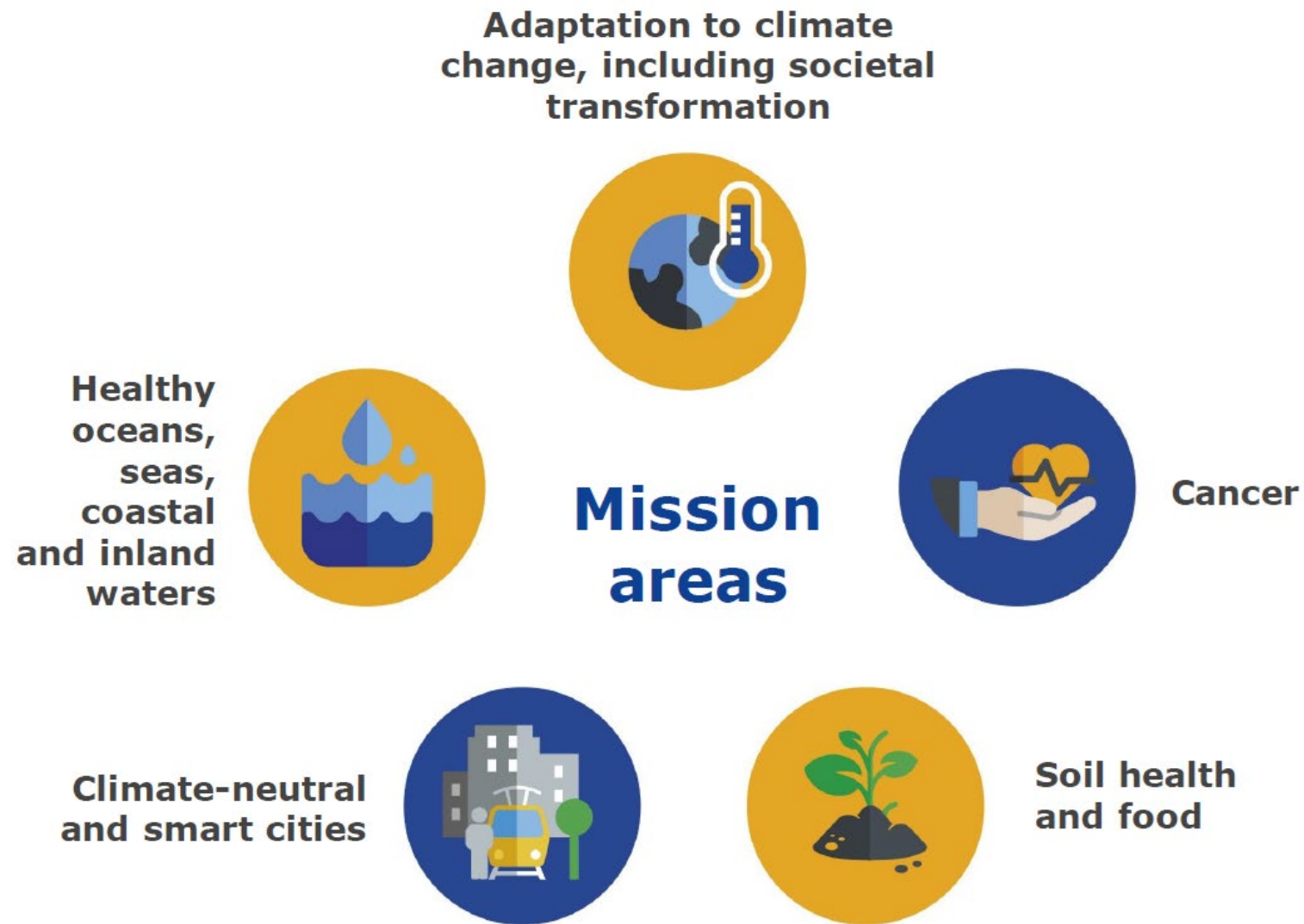
Transition

- For 2021, only open to ERC Proof of Concept grantees and EIC Pathfinder grantees
- Matures a novel technology and develops a business case to bring it to market

Accelerator

- Based on the SME Instrument
- Will bridge the financing gap between late stages of innovation activities and market take-up, to effectively deploy breakthrough market-creating innovation and scale up companies where the market does not provide viable financing

Horizon Europe Missions



Any Questions?