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COVER NOTE

Subject:	European Committee of the Regions : Opinion on European Missions - Powerpoint presentation (Research WP meeting 03.02.2022)

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#EUGreenDeal #Regions4Climate

Green Deal Going Local

European Committee of the Regions

French EU Council Presidency

3 February 2022

Vice-President of the EU Committee of the Regions

President of Helsinki Region

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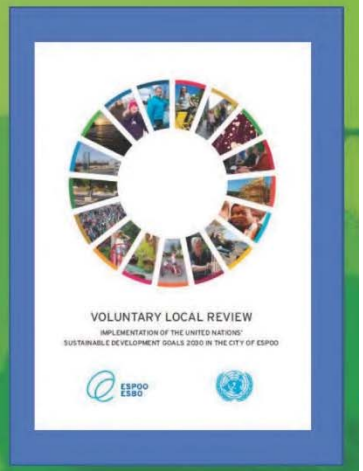

Implementing SDGs
Voluntary Local Review
Look from espoo.fi7vlr

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The CoR opinion on European Missions

The CoR acknowledges that **the EU Missions are a "NEW" and "VITAL" instrument** as stated by the European Commission: "EU Missions are a new way to bring concrete solutions to some of our greatest challenges by delivering concrete results and impact **by 2030 by putting research and innovation into a new role, combined with new forms of governance and collaboration**, as well as by engaging **citizens**".

Based on the European Research Area Policy Agenda – Overview of actions for the period 2022-2024, European Commission 2021.

The CoR Opinion, table of content:

- The EU Missions as ambitious new instrument to tackle grand societal challenges
- The role of cities and regions in EU Missions
- Guidelines for more influential EU Mission implementation
- Foresight and societal innovation are crucial for and by the five EU Missions
- New approach to technology and R&D policy by EU Missions
- The CoR's experience: Synergies between EU Missions and other main policy instruments
- The CoR's role in supporting a European and worldwide transformation
- The CoR's role in supporting a European and worldwide transformation
- Summing-up of the critical success factors

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The EU Missions in the Light of the Conference of Europe

The CoR emphasises that, **in the light of the Conference on the Future of Europe**, the European Missions, as a new and vital instrument in tackling burning societal challenges, are **a real test of the EU's impact and credibility**. They need to have widespread legitimacy and acceptance. As the European Commission has highlighted, the role of cities and regions with all their stakeholders and citizens is crucial in achieving the ambitious targets of the EU Missions.

Based on the CoR Plenary 27 January 2022, Resolution on the Conference on the Future of Europe

- **Orchestration**
  - Roadmaps & Portfolios of actions
- **Bench-learning**
  - European partnerships
- **Innovation ecosystem**
  - Local and regional collaboration
- **Intelligent assets**
  - Human, structural and relational capital
- Climate Footprint & Handprint
  - Not only urban and rural planning and implementation
  - Business life making active RDI investments and renewal

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European Committee of the Regions

Joint Action Plan

between the European Committee of the Regions and the European Commission Directorate General for Education and Culture, Directorate General for Research and Innovation, and the Joint Research Centre

The instruments based on the CoR & EC agreement are in the use of cities & regions

Evidence-based policymaking in the Regions:

- The Knowledge Exchange Platform Work Plan (KEP 2.0);
- **Science meets Regions – beyond the pilot phase;**
- Regarding resilience, **JRC liaise with the CoR to understand the needs and offer support, especially accomplishing the Green Deal locally;**
- **The JRC Smart Specialisation Platform & Support for Smart Specialisation & Territorial Development;**
- **The Knowledge Centre for Territorial Policies & Provision of sub-national data relevant to regions and cities;**

implementation of the European Research Area (ERA), the European Education Area (EEA) and the Digital Education Action Plan (DEAP), Horizon Europe Missions:

- **Developing the ERA Hubs initiative;**
- European Universities closely linked to their regions and cities;
- "Education for Climate" Coalition;
- **Strong Collaboration with Horizon Europe's five Missions;**

Raising awareness and dissemination of funding opportunities. Exchange of best practices:

- EU action coordinated with regional and local authorities with the European Institute of Innovation and Technology (EIT) model of place-based innovation;
- **The EIT and its KICs operate through a network of over 60 co-location centres across the EU;**

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What does the NEW and VITAL instrument mean?

- Each EU Mission should define a clear roadmap and create a systemic new multi-governance approach and **methodologies on experimenting, prototyping, monitoring, and scaling-up activities on all governance levels.**
- Special attention is needed for creating portfolios of actions both at the EU and regional/local levels and disseminating these effectively in all phases of the planning and implementation.
- The development requires all the actors to learn new competencies by **integrating technology and research with a human-centric approach**, committing to implement joint green and digital transformation processes.
- The CoR urges that the EU Missions can and should integrate the existing number of EU initiatives and programmes to operate in synergy. Systemic change requires co-creation of transformational ecosystems based on learning and RDI with interdisciplinary scientific and operational synergy across all five EU Missions.

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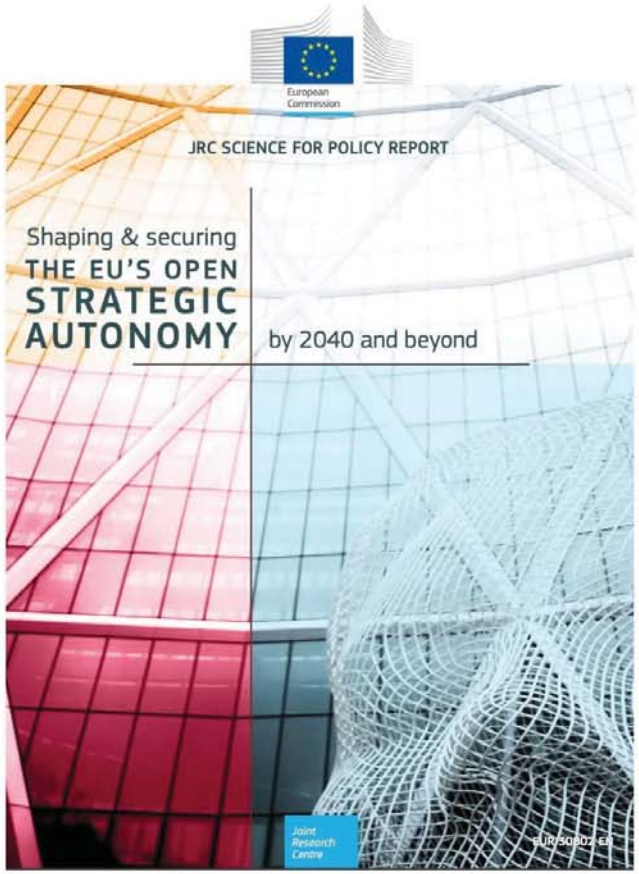
Regional and Local Levels Make the Change a Reality:

EU Moves to Action & Technological Progress

2021 Strategic Foresight Report "The EU's capacity and freedom to act":
Among the 10 'Areas of Action to boost the EU's open strategic autonomy', nearly all are directly or indirectly linked to technological change, and many of them touch directly and indirectly on local or regional competencies:

1. Ensuring sustainable and resilient health and food systems
2. Securing decarbonised and affordable energy
3. Strengthening capacity in data management, artificial intelligence and cutting edge technologies
4. Securing and diversifying supply of critical raw materials
5. Ensuring first-mover global position in standard-setting
6. Building a resilience and future-proof economics and financial systems
7. Developing and retaining skills and talent matching EU ambitions
8. Strengthening security and defence capacities and access to space
9. Working with global partners to promote peace, security and prosperity for all
10. Strengthening the resilience of institutions

→ **Tailored learning processes are the basic requirement for policy-makers**



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Foresight and Evidence-informed decision-making

- The challenges are complex, and only part of the necessary scientific and technological knowledge exists. Reaching the targets is possible with extensive foresight activities, increasing R&D investments, real-world prototyping, experimenting, and scaling-up of the results;
- Political decision-making, in general, is not sufficiently evidence-based, research-supportive, and not targeted enough on creating favourable conditions for societal innovations and implementing those fast enough in real-life practice and processes.
- The CoR highlights the importance of moving to action, based on the main statements in European R&D and technology policy as defined in the EU Strategic Foresight 2021 report.
- The CoR proposes increasing the EU interinstitutional collaboration on foresight with special roles of the JRC, European Parliament Research Services and the CoR. The CoR proposes considering on national, regional and municipality levels special participatory citizen science activities for youth, especially university and secondary school students, and for political decision-making by establishing committees for the future focusing on foresight and technology assessment.

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DIGITALISATION ROADMAPS & LOCAL PLATFORMS TO BOOST DIGITAL TRANSFORMATION

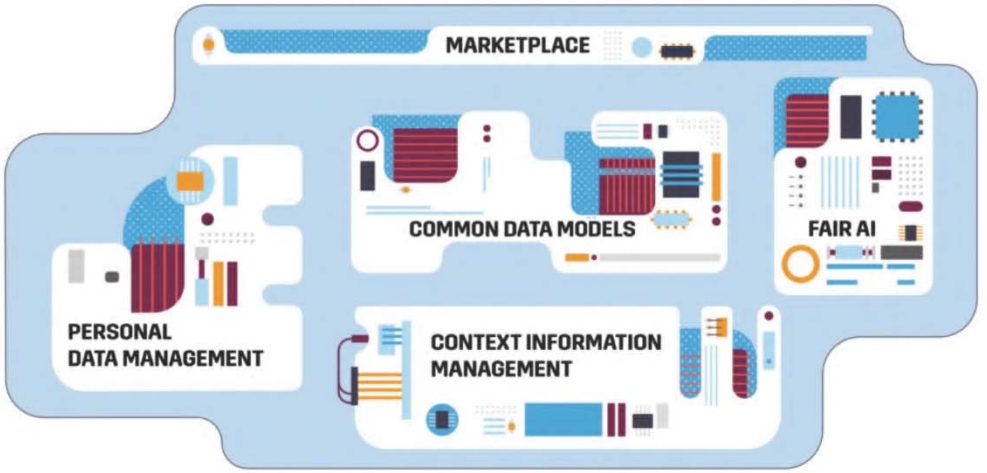
LEADING THE DIGITAL DECADE

EDIH
GEARING UP TOWARDS
EUROPEAN DIGITAL INNOVATION HUBS

Sign, Support, Like ... the Join, Boost, Sustain political declaration
LIVING-IN.EU
Join the movement !

Principles:

- A citizen-centric approach
- A city-/community-led approach at EU level
- The city/community as a citizen-driven and open innovation ecosystem
- Ethical and socially responsible access, use, sharing and management of data
- Technologies as key enablers
- Interoperable digital platforms based on open standards and technical specifications, Application Programming Interfaces (APIs) and shared data models



INTELLIGENT CITIES CHALLENGE

Humans and Societies in the Age of Artificial Intelligence

A report by Vladimir Šucha and Jean-Philippe Gammel

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More synergy between different EU and other programmes

- The CoR proposes giving special attention to the steps in the EU Missions' implementation by the cities and regions with the supporting role of the CoR, including multi-level governance, funding, and successful execution on how the ambitious targets can be achieved by integrating them effectively to EU research and innovation policies, especially Smart Specialisation Strategies (S3/S4), ERA Hubs, New European Bauhaus, and other most relevant initiatives, programmes and instruments provided by the EU multilevel policies.
- **The proposes different ways to use the EU Mission Label to add synergy with other relevant EU and other related initiatives and the use of financing instruments**, such as InvestEU Fund, Recovery and Resilience Facility, Interregional Innovation Investments I3, Interreg Europe, the Connecting Europe Facility, Digital Europe, EU4Health, EIB and EIT.
- The CoR is committed to organising learning activities in collaboration with the JRC to support the EU Mission activities under the headings "City Science and Science Meets Regions" by boosting broad-scale impact activities and sharing the results of the EU Missions. Short-term measures are not an adequate response for addressing what is really needed. A useful activity is to support creating the network of regional Future Centres to stimulate creativity and an entrepreneurial mindset and link these to the New Bauhaus, the UN SDG work and the UNESCO's Futures Literacy Labs to ensure both the short- and long-term sustainability of the initiatives undertaken.

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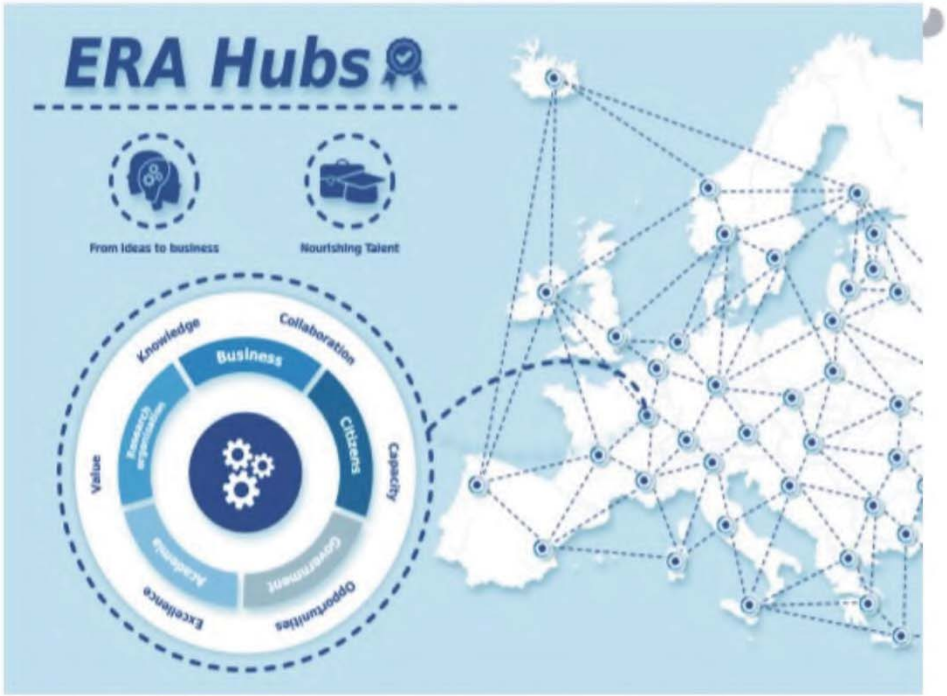
ERA HUB CONCEPT

ERA Forum for Transition, 8 October 2021

Objectives:

- Strengthen territorial cohesion, **place-based growth** and regional development
- Create **a networking framework** to collaborate and exchange of best practice
- Interconnect ecosystems to make them interoperable and compliant with common criteria
- **Stimulate excellence** and incentivize less developed ecosystems
- Better attract and retain talent in countries/regions.



Christophe Clergeau
Rapporteur on Horizon Europe and the Renewed ERA
EUROPEAN COMMITTEE OF THE REGIONS

European Committee of the Regions

Apostolia Karamalli
RTD.A.3 - R&I Actors and Research Careers
DG Research and Innovation
EUROPEAN COMMISSON

European Commission

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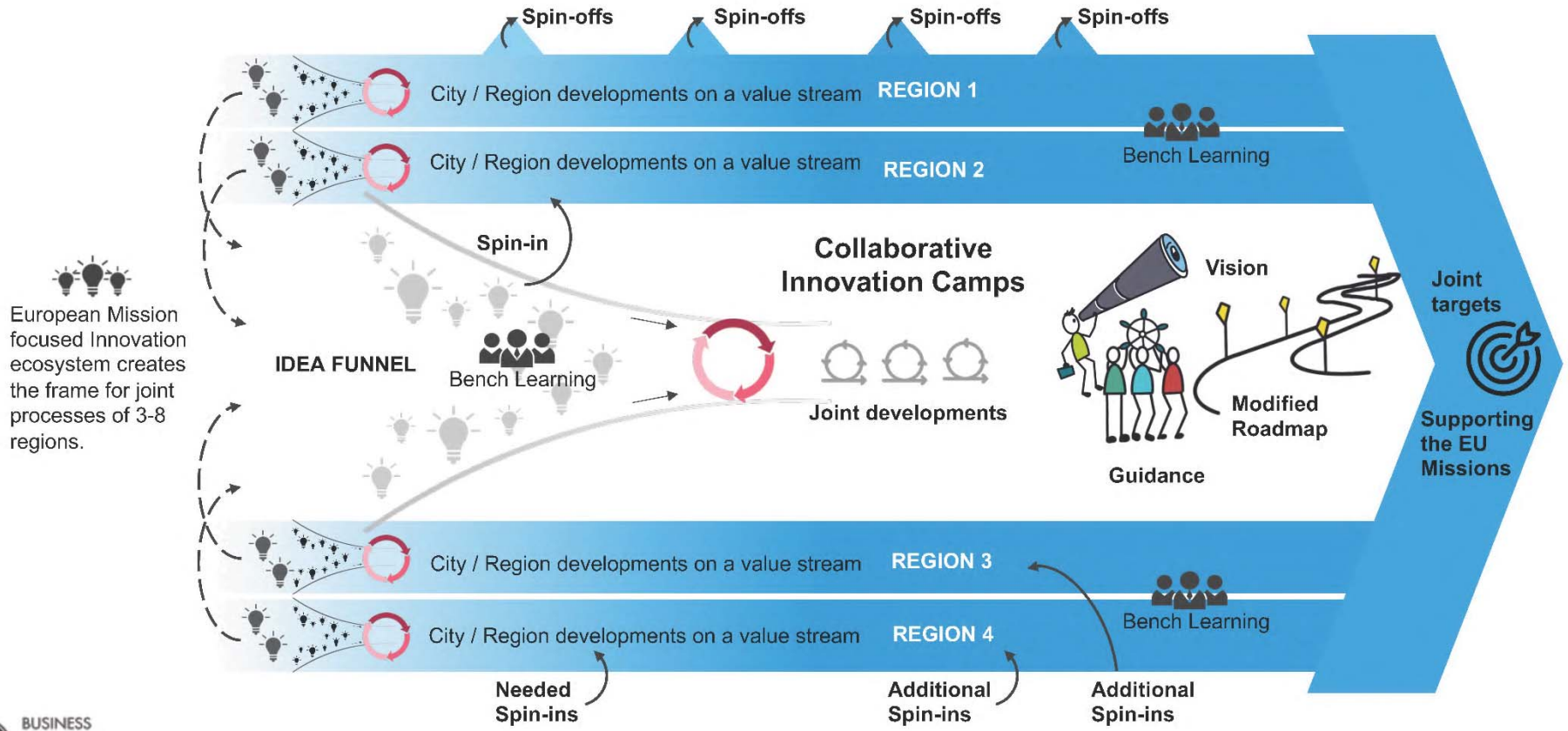
ORCHESTRATING BOTTOM-UP PARTNERSHIPS



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ERA Hubs & More partnerships between regions

- The European Commission has launched the piloting phase of the ERA Hubs initiative to facilitate regional RDI collaboration and exchange of best practices, with the incentive of maximising the value of knowledge production, circulation, and use. **The CoR encourages the EU Missions to actively partner with local and regional decision-makers in piloting the ERA Hubs.**
- The CoR highlights that the key questions are how the cities and regions learn to orchestrate necessary activities and how the activities attract private industrial and other investments. The ERA Hubs network ideally ensures that local and regional RDI ecosystems become an integrated part of the European-wide RDI ecosystem.

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CLIMATE CHANGE

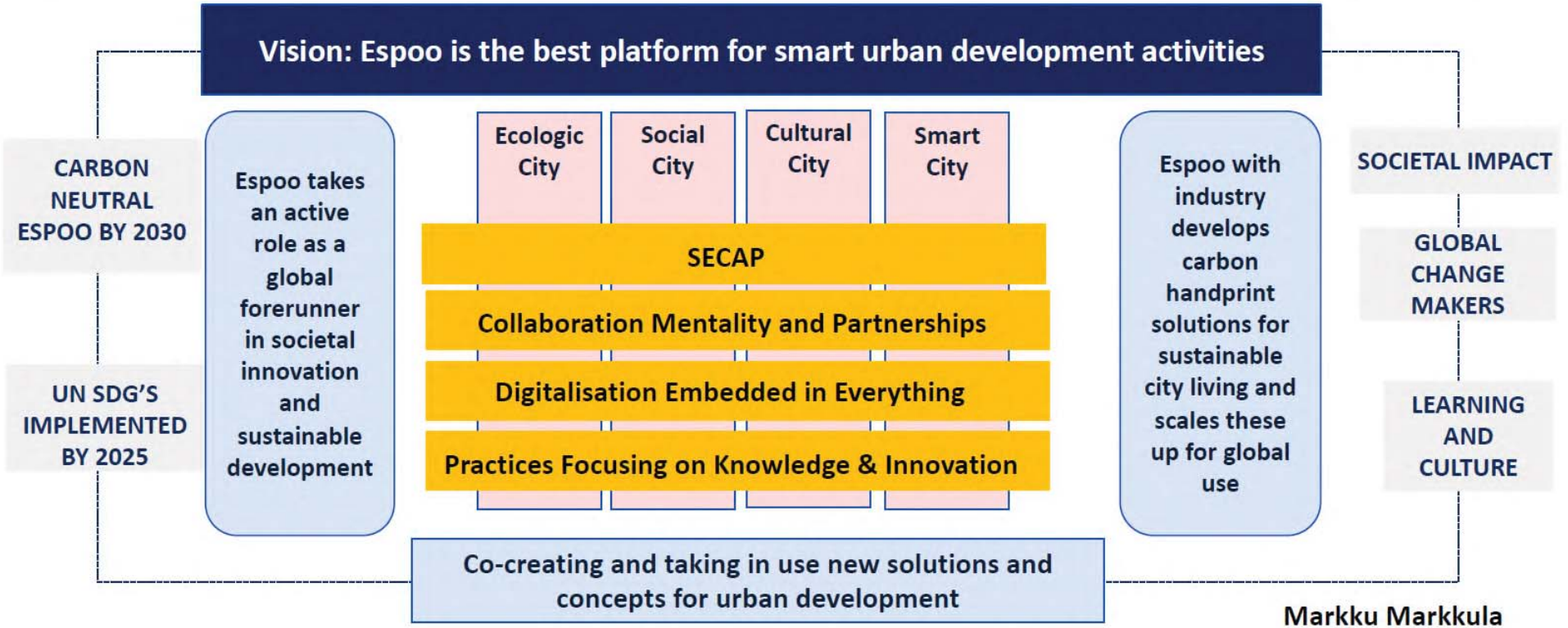
WHAT IT IS | WHAT WE CAN DO ABOUT IT

Life Adaptate Conference

life adaptate

ESPOO ESBO

→ Sharing Best Practices, the Case Espoo: City as a Forerunner in Economic, Ecologic, Social and Cultural Sustainability



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CASE ESPOO – FORERUNNER IN EU SUSTAINABILITY MISSIONS

1. EU Commission has defined **European Green Deal** and **Europe Fit for Digital Era** as key priorities.

2. Espoo City commits to implement actions related to the European Mission on **Climate Neutrality 2030** and **Smart City.**

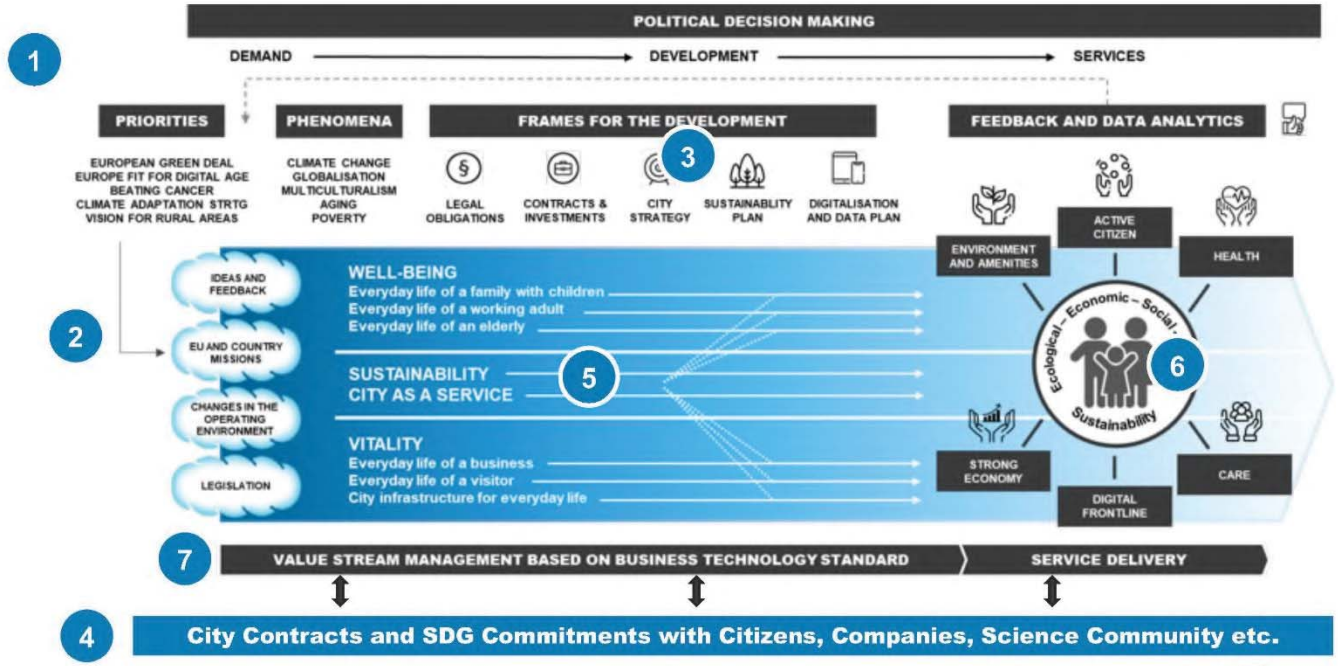
3. Espoo City defines **Sustainability and Smart City Roadmap** with concrete actionable topics

4. Espoo cooperates with **Aalto University, VTT, companies, and others** in several **EU RDI programs** for fact-based planning and decision making.

5. Espoo City models actionable mission topics by using **unified model for vitality and well-being**.

6. **Sustainability Value Stream coordinates** implementation of **aggregated outcomes** and reports achievements.

7. Stakeholders have been trained in Business Technology Academy to lead value streams efficiently and with **common practices**.



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ESPOO ESBO

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The role of CoR & regions/cities to strengthen bottom-up

- The CoR urges the need to co-finance and support the daily work of cities and regions in their value-creation and bench-learning to scale up the best processes and actions for the everyday well-being of citizens. **The role of the demonstrator communities is to act as pioneers, developers, and frontline testers of systemic change for all the others.**
- The CoR points that the EU Mission experiments and demonstrations should focus on orchestrating activities to push further the frontiers of science, mastering deep technologies, and combine digital, physical, environmental, and biological innovations – and regularly review and share the outcomes at the forefront level. **The Smart Specialisation Strategies as concepts for regional collaboration with industry and research should have a high profile in the EU Missions.**

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RDI Industrial Investments Play a Crucial Role

THE MOST NEEDED INSTRUMENTS FOR A FASTER CLIMATE TRANSITION

- Carbon pricing through taxes or emission trade scheme.
- Higher climate requirements in public procurement.
- Binding and transparent methodology on companies' climate reporting.
- Phase out fossil fuel subsidies.

https://www.youtube.com/watch?v=QcK22VLnOrE

https://www.hagainitiativet.se/files/2022-01/1641892485_report-nordic-ceos-view-of-raised-climate-ambitions.pdf

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Private industry should play the key role

- The CoR endorses industrial RDI carbon handprint measures in creating new extended products, systems, and other innovative solutions playing an essential part in reaching the climate targets and points out that without a significant acceleration in clean energy innovation, net-zero emissions targets will not be achievable.
- The IEA report (Energy Technology Perspectives 2020) shows analytical evidence that 25% of the reduction in carbon emissions needed to put the Earth's climate on a sustainable path will come from mature technologies. In comparison, 41% of the necessary tech will come from new technologies in the early adoption phase, and **34% will come from technology at the demonstration stage, the prototype stage, or those not even conceived yet.**

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Applications of Quantum Computers

Quantum computing will enable unprecedented computing power in search and optimization problems

Pharma Biology
- Drug discovery
- Genomics
- Enzyme design
- Patient diagnostics

Finance
- Asset pricing
- Risk analysis
- Portfolio optimization

Materials
- Materials simulation
- New materials design

Transport
- Traffic simulation
- Logistics
- Autonomous driving

Industry
- Process optimization
- Weather forecasting
- Smart grid

→ Technology needs to be considered as an enabler of transformation: a crucial requirement for change, a driver of change, and a product of change.

→ We need to take the European RDI knowledge in active use

→ RDI enables Europe to fulfill our global responsibility

→ the European Institutions are pushing for a twin transition, as the *digital and green transitions* go hand-in-hand. For this, we should increase the collaboration with the research organisations and the EARTO nework

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Need for more RDI & technological progress

- The core of the EU Missions is research and innovation. The complex societal challenges can only be tackled through increasing RDI investments. Both ERA and industrial studies give clear evidence that the EU is lagging behind its main global competitors in business R&D intensity, particularly in high-tech sectors, and in scaling-up innovative SMEs, which yields negative effects on productivity and competitiveness.

Based on COM(2020) 628 final – A new ERA for Research and Innovation.

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