The outcome was included in the Commission’s Horizon Europe proposal in 2018, which introduced a mission-oriented programme design expressed through five concrete missions (Box 9.4):

- Adaptation to climate change;
- Cancer;
- Climate-neutral and smart cities;
- Healthy oceans, seas, coastal and inland waters; and
- Soil, health and food.

The focus of the new EU policy on the green, digital transition opens up fresh opportunities for STI policy which have not yet been fully grasped. The EU policy experimentation with smart specialization and its more recent mission-oriented policy are a snug fit in a systemic and transformative innovation policy. The policy challenge for the coming years will be to bring these two approaches closer together at the right level of granularity and with the proper multilevel governance to turn Europe’s cultural diversity into greater economic value.

### SMART SPECIALIZATION

**A place-based industrial policy**

Besides Horizon Europe, the EU is orienting investment towards research and innovation through its Structural Funds, in general, and the European Regional Development Fund, in particular.

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**Box 9.4: The five characteristics of the EU’s mission-oriented research and innovation policy**

The EU’s new mission-oriented approach can be summarized by five principles: target-setting, a systemic mobilization of policy instruments, programme design, experimentation and multilevel governance.

Target-setting serves as the basis for determining in which direction the EU wishes to go, or, in other words, its directionality. The policy objective here is to achieve traction. For this, the mission must be meaningful to citizens, ambitious yet credible, measurable and, lastly, must contain the right level of granularity.

A good illustration of granularity is the proposed mission of achieving 100 climate-neutral cities in the EU by 2030; this mission is aligned with the overall target of a climate-neutral EU by 2050, while covering a different level of granularity, in that it avoids being too prescriptive. The mission does not specify any particular industrial sector, nor specific scientific disciplines or technologies. Achieving the target requires innovation in several sectors and even across sectors, such as by combining new solutions for transportation, digital management and electric vehicles. The mission of achieving 100 climate-neutral cities is also a target with a capacity for traction by having meaning for local policy and identity. The target is place-based, enabling different solutions and pathways to be chosen in different cities that will mobilize different combinations of policy instruments.

In other words, the target leaves room for entrepreneurial discovery.

The second characteristic of a mission-oriented policy is its systemic nature. Many cities in the EU are mobilizing both supply- and demand-side instruments to improve local climate or air quality. Investment in public infrastructure, urban planning and transport systems is being combined with energy-efficient procurement in public buildings, public-sector innovation, local public monitoring of pollution levels or science parks for local start-ups specializing in clean technology. Cities are joining forces and sharing best practices through national, European or broader international networks.

The third characteristic is policy design and, in particular, the way in which public STI investment programmes are structured and implemented. The European Commission’s proposal for Horizon Europe has been inspired by best practices from many national programmes. The last European Green Deal call of Horizon 2020 has already put this principle into practice. Calls for proposals are less prescriptive in technical terms, leaving a broader opportunity for applicants to propose innovative solutions combining technological and non-technological elements.

Moreover, the calls are open to a broader range of applicants ranging from producers to users and funding is available not only for the development of innovation but also its deployment and diffusion. In addition, projects are managed to a greater extent as part of a portfolio, to maximize synergies and spillover effects between projects. In short, a mission-oriented policy requires a revision of the criteria for participation, eligibility and management of STI funding programmes.

The fourth characteristic is an innovative experimentation and a system of continuous learning. A mission-oriented policy starts with the final target without prescribing the pathway for getting there. Since it is not possible to know beforehand which way is best, there has to be a system of continuous experimentation and learning, combined with flexibility in policy design. All actors are encouraged to participate in this learning process, in particular those with a stake in seeing the mission accomplished, including users and citizens.

The fifth characteristic of a mission-oriented policy is the need for pro-active governance and effective multilevel governance. No ambitious mission will be achieved without engagement at all levels of governance, from the large-scale traction of investment and regulations at the EU level to strategies and investment at national, regional and municipal levels. Everyone will strategically seek their own comparative advantage, so, in this sense, synergies with smart specialization strategies are obvious.

Source: compiled by authors; for details, see: https://tinyurl.com/EU-missions-Horizon-Europe

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UNESCO SCIENCE REPORT (2021)