



Til Kunnskapsdepartementet
v. Forsknings- og høyere utdanningsministeren

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Tematiske innspill til EUs kommende rammeprogram for forskning og innovasjon – 24/5497

1. Hvilke tematiske områder er det spesielt viktig at vi samarbeider om på europeisk nivå i det kommende rammeprogrammet? Begrunn forslagene og forklar hvordan de vil bidra til europeisk merverdi.

Aging population: A thematic area of importance for European collaboration is the impact of aging populations on business and the economy. The number and proportion of older and elderly people in most (if not all) European countries is growing. The consequences of this demographic change are vast. People live longer, remain healthy and active longer, and older people have more disposable income than ever. They also occupy homes and jobs for longer, thereby reducing opportunities for younger citizens. Both advances in healthcare and technological developments allow older people to be active consumers, active investors, and remain longer in the workforce; however, they are under-researched as consumers, as investors, and as workers. Research programmes focusing on the elderly as economic actors will involve economists, management and marketing scholars, working with social scientists, psychologists, and medical researchers. A better understanding of how elderly citizens (can) contribute to value creation, while not restricting the potential of the succeeding generation, will allow for policy developments that reduce the burden of aging populations on the welfare systems in European countries.

Mitigation and adaptation to climate change: European collaboration on addressing the environmental effects and the social, economic, and health impacts of climate change is crucial given the transnational nature of the phenomenon. There is thus a clear European added value in continued investment in research and innovation (R&I) activities that focus on both mitigating the impacts of climate change and reducing Europe's contribution to it. This includes improving Europe's ability to rapidly respond and adapt to the effects of climate change, continuing to reduce Europe's greenhouse gas emissions, promoting renewable energy sources, and facilitating a sustainable green energy transition and a circular economy. R&I focused on how particular industries, such as transportation and tourism, can be made more environmentally sustainable while continuing to serve as a source of economic growth is also relevant in this context. Perspectives from the social sciences and humanities, including historians, resource- and behavioural economists, and consumer researchers, amongst others, will be essential in research on the energy transition.

The promotion of democratic values and the regulation of Big Tech: With the increasing influence of technology and digital platforms, it is necessary to establish appropriate frameworks and regulations that defend European values, safeguard democratic processes from manipulation, combat online disinformation, and ensure the right to privacy, particularly in today's polarized political climate. Collaboration on a European level is essential in developing common standards and policies to ensure that tech companies operate within ethical boundaries and contribute to promoting fair and inclusive digital environments that respect democratic norms and fundamental rights. It is also vital to protect Europe's digital infrastructure from attack.

The use and regulation of AI: AI has the potential to revolutionize sectors, including research and education, healthcare, transportation, finance, culture, amongst others, while also introducing new ethical, economic, legal, and social challenges. The research and education sector, for example, is both benefitting and facing an existential threat from the proliferation of AI tools. Education, especially higher education, is facing increasing challenges to its traditional model. In addition, the scholarly record is being corrupted by the increasing number of publications authored in whole or in part by AI. Scholarly publishers, whose business models rely on perpetual growth in the volume of publications, are unlikely to police this – and are instead pivoting their businesses to produce their own AI systems based on work produced by the research community, but that is

either stored behind their paywalls or available open access. Distinguishing works produced by experts from content generated by large language models requires extensive collaboration across the European higher education and research sector. Collaboration on the use and regulation of AI in higher education is also essential to drive innovation, enhance learning experiences, and adapt to the digital age. In the cultural sector, AI is also having a transformative effect, both in terms of how content is created and consumed, and on how cultural institutions (museums, theatres, galleries, etc.) operate. While on the one hand, the use of AI can facilitate content creation and improve accessibility and personalize experiences, on the other hand, issues such as privacy, biases in algorithms, intellectual property, and the impact of AI on the role of artists and cultural workers need to be addressed to ensure responsible and ethical use of AI. Across all domains there is a need for European collaboration to ensure common guidelines for the development of ethical and human-centric AI systems, to harmonise regulation, and to establish responsible AI governance.

Integrating migrants into the workforce: Integrating migrants into the workforce is a crucial aspect of successful migration management and social inclusion. European collaboration in this domain can facilitate the alignment of migrants' skills and qualifications with the needs of the labour market, enhance the access of migrants to employment opportunities, and support the entrepreneurship potential of migrants and encourage their participation in innovation and economic growth. A topic of particular interest in this context is how social entrepreneurship can be leveraged to better utilize the talents of migrants and encourage them in their entrepreneurial activities.

2. **De europeiske partnerskapene og samfunnsoppdrag (missions) er virkemidler EU benytter i tillegg til regulære utlysninger. De brukes kun der regulære utlysninger ikke forventes å gi samme utbytte. I partnerskapene bidrar næringsliv og offentlig sektor aktivt, også med finansiering. I samfunnsoppdragene er målet å løse globale utfordringer. Begge de to virkemidlene legger vekt på at kunnskapen skal tas i bruk. På hvilke områder er det særlig viktig for Norge at disse virkemidlene benyttes? Begrunn forslagene.**

Renewable energy and carbon capture: Norway has expertise and resources in renewable energy, especially in hydropower and offshore wind, and a strong energy sector with both public and private actors. Norway is also a big exporter of fertilizer, with the company Yara being at the frontline of producing climate-neutral fertilizer, and in 2025, Norway will begin producing the world's first climate-neutral cement using carbon capture technology. While carbon capture of offshore oil does not show similar progress and significant carbon reductions in oil production are unlikely to be achieved, these onshore industries hold promise. Norway is thus well-positioned to play a leading role in European partnerships and missions focused on transitioning to a low-carbon onshore economy and on promoting renewable energy on a scale that can reduce Europe's climate footprint.

Oceans and fisheries: As a maritime nation with a vast coastline, Norway relies heavily on the sustainable management of its ocean resources. With expertise in marine research, fisheries, and the sustainable development of marine resources, Norway can play an active role in partnerships and missions aimed at protecting and preserving marine ecosystems, combating pollution, and promoting sustainable fishing practices, helping to ensure responsible ocean governance.

The construction industry and green infrastructure: The construction industry and environmentally sustainable construction are vital areas for collaboration in European partnerships and social missions. With Norway's expertise in green building practices, Norway can play an instrumental role in contributing to partnerships and missions focused on green building innovations, energy-efficient and low-carbon practices, and circular economy business models in the construction industry.

3. Er det andre forhold det er viktig å få fram i et nasjonalt tematisk innspill?

Investment in basic research: Basic and groundbreaking research plays an essential role in addressing societal challenges by laying the foundation for long-term innovation and research-based policy and should continue to be prioritized in the new framework programme. The Marie Skłodowska-Curie Actions (MSCA) and European Research Council (ERC) funding plays a pivotal role in attracting highly skilled researchers to Europe. The funding available under these two schemes, however, has changed marginally over the course of the past 10 years, and it is necessary to increase investment in these schemes if Europe is to continue to attract top talent and facilitate world-class research.

Supporting entrepreneurship through innovation and groundbreaking research: Funding and support for small- to medium-sized enterprises (SMEs) is crucial for fostering innovation, job creation and economic growth in Europe, and for maintaining a competitive advantage against other markets. As such, SMEs should have greater opportunity to participate in R&I projects at less risk than is the case today. Currently SMEs are often obliged to set aside large sums of money to be able to participate in EU projects and wait many months before they are paid. This makes it less attractive for SMEs to get involved and contribute with their innovative ideas, perspectives, and expertise. Funding and support for SMEs and increased possibilities for cross-sectoral collaboration and knowledge transfer will contribute to enhancing Europe's competitive advantage and positioning Europe as a hub for innovation and entrepreneurship.