

| Source      | ERA Communication; Updated Industrial Strategy; Zero Pollution Communication  |   |
|-------------|---|---|
| Description | The Commission will, in cooperation with Member States and stakeholders support the implementation of the New Industrial Strategy by jointly developing common industrial technology roadmaps by the end of 2022 to align and link key partnerships under Horizon Europe with industrial ecosystems.  |   |
|             | European business expenditure in R&D lags behind the EU's main competitors and public investment stagnated since 2012 and even decreased in several Member States. This reduces the capacity of the EU to keep pace with the speed of industrial innovation at global level.  |   |
|             | Investments in research and innovation are often risky and require long-term commitments. Industrial technology roadmaps developed with Member States and industry will include R&I investment agendas from basic research to deployment helping to de-risk investment by industry. They shall sketch out the way forward to support development and promote the deployment of technologies with a high potential to contribute to achieving EU policy objectives for a more sustainable and circular, digital, resilient and competitive economy, across and in Member States. |   |
|             | Their approach shall be fact-based, making best use of research and innovation results from Horizon partnerships and projects, breakthrough innovation supported by the European Innovation Council and outreach to the European Institute of Innovation and Technology (EIT).  |   |
| Criteria    | Relevance   | <p>The roadmaps will inform Member States about R&amp;I results, priorities and options to support the industrial transition in their countries, also through cross-border cooperation, and for a faster technology spill over across industries and industrial ecosystems.</p> <p>The roadmaps will link Strategic Research and Innovation Agendas (SRIAs) of Horizon Europe partnerships with the main EU and national support programmes to support the uptake of new industrial technologies. The roadmaps will provide input to the Industrial Strategy's transition pathways for industrial ecosystems, developed by the Commission starting 2021. Therefore, the roadmaps are a valuable R&amp;I driven policy tool that underpins the EU's industrial ecosystems' green and digital transformation.</p> <p>The first ERA roadmap will address low carbon technologies for energy intensive industries, i.e. an industrial eco-system for which one of the first transition pathways under the updated Industrial Strategy will be developed.</p> <p>In the session reCO2very at the R&amp;I Days 2021, the industry representatives saw technology roadmaps as a link from R&amp;I to regulation and investment agendas, which themselves need coherence across EU and Member States. Coordinated investments could be a tool to support the greening of energy-intensive industries.</p>   |
|             | Viability   | <p>Key milestones:</p> <ul style="list-style-type: none"> <li>- Selection of areas: <ul style="list-style-type: none"> <li>o Low carbon technologies for energy-intensive industries (steel, cement, chemicals, etc.)</li> <li>o Circular industrial technologies (scoping ongoing)</li> <li>o Further roadmaps TBD</li> </ul> </li> <li>- Deliverables and timelines <ul style="list-style-type: none"> <li>o Description of evidence on technologies and investments: <ul style="list-style-type: none"> <li>▪ Low carbon industrial technologies: <ul style="list-style-type: none"> <li>• Pilot Industrial Technology Prospect report on Industrial Low Carbon Technologies – published 18/06/2021</li> <li>• Final Industrial Technology Prospect report as part of the technology roadmap</li> </ul> </li> <li>▪ Circular industrial technologies <ul style="list-style-type: none"> <li>• Evidence collection for Technology Prospect report Q1 2022</li> </ul> </li> </ul> </li> <li>o Delivery of roadmaps (validated by the ERA Forum of Transition) <ul style="list-style-type: none"> <li>▪ Low Carbon Technologies for energy-intensive industries: April 2022</li> <li>▪ Circular Industrial technologies: autumn 2022</li> <li>▪ Others – TBD</li> </ul> </li> </ul> <p>Consultation and co-creation with:</p> <ul style="list-style-type: none"> <li>- Member States, through a dedicated sub-group within the ERA Forum of Transition (Q1/2021), with first meeting scheduled on 15/07/2021;</li> <li>- Input from industry, RTOs, universities, EIT, partnerships) will be delivered through workshops (at least 2/roadmap) and consultations (web-based consultation to be launched in July 2021 for the low-carbon industrial technologies roadmap)</li> </ul> </li></ul> |
|             | Commitment  | <p>So far, 17 Member States have nominated participants to the sub-group to the ERA Forum of Transition.</p> <p>Meetings with Horizon Partnerships showed industry interest to contribute, building on the Strategic Research and Innovation Agendas of the partnerships. EARTO explicitly supports common industrial technology roadmaps in their position papers on the ERA as well as on the updated industrial strategy.</p>  |