

Structure for Innomission-roadmap content

An Innomission-roadmap should comprise the whole pathway from today's State of the Art towards realisation of the vision for each mission as described in the call text. The Innomission-roadmap should deal with all aspects of how the vision be realised. A vision is your view of a desired future state, and the Innomission-roadmap describes the path to reach the desired state.

The first part of the Innomission-roadmap should include (a) a description of where the field is globally with regards to the key challenges in this area, (b) Denmark's relevant assets and capabilities, and (c) relevant international efforts that Danish activities should relate to.

Based on this analysis, the second part of the Innomission-roadmap is concerned with proposed specific paths of action and effort needed (both with regard to technology, implementation and financing) to achieve specific goals, critical milestones and inflection points within the mission. Thus, the Innomission-roadmap may be divided into three specific segments highlighting 1) the technology development roadmap; 2) the implementation roadmap and 3) the financial roadmap.

Key elements in Innomission-roadmaps:

- **Vision, goals, milestones and scope**
 - Innomission-roadmaps should be aligned with the political long-term objective of 70% reduction of carbon emissions by 2030 and a net-zero CO₂e-emissions in 2050 as well as the strategic goals for the specific mission areas as shown below.
 - The focus of the specific Innomission-roadmap actions should be 2030 and Innomission-roadmap targets and milestones should therefore primarily relate to the short- and mid-term goals (2030). Back-tracking from 2050 and 2030 the Innomission-roadmap should describe key challenges, inflection points and gaps within the specific mission.
 - Ambitious long-term goals that can be back-tracked to the actual project-activities.
- **Measurement of specific impact of Innomission-roadmap on the goals for the mission**
 - Climate, nature, environment, growth and innovation. Innomission-roadmap should include a choice of standard for measuring each goal and supply this with a reference point. Also included should be a discussion and argument of possible trade-offs in the choices made, and if the vision interacts with or influences other mission-areas.
- **Timeline and success criteria for goals – main Innomission-roadmap**
 - Describe success criteria for the milestones and goals depicted on a time line for the main Innomission-roadmap, both in writing and visual presentation. Milestones should be in such a format that they serve as go/no go decision points.
- **Detailed outline of key workstreams and activities in the first year of the Innomission-partnership period.**
 - The investments in Innomission-partnerships are split in two steps. First step focuses on the foundation of the partnership, including management, governance, capacity-building, infrastructure, communications, relations and the primary research workstreams (activities within the first year). Therefore a detailed outline of key workstreams and activities in the first year of the Innomission-partnership period is needed.

- **Stakeholder and resource overview – Danish current and potential strongholds**
 - Innomission-roadmaps should include an in depth overview of current Danish strongholds within the missions, and a well-argued international analysis of which desired strongholds need to be strengthened or developed in order to achieve the vision in the most effective way.
 - Description of the methods of increasing innovation, e.g., a strategy for integrating start-ups and utilising the talent pool should also be included.

- **Risk management and alternative routes – sub-roadmaps**
 - In attachment to the main Innomission-roadmap will be a number of sub-roadmaps for specific milestones, where multiple solutions or technologies can apply.
 - Each back-track of goals shall be well-argued with inflection points, how to overcome barriers, what specific elements of infrastructure and capacity-building is necessary and how the innovations are commercialised/financed and thus can create specific transitional impact.

- **International links and financial aspects**
 - Describe the Innomission-partnership strategy for attracting additional public and/or private investments to gear the IFD investment (e.g. private investors, business angles, private Danish and international funds, and public investments such as EUDP, GUDP, and The Danish Green Investment fund).
 - Describe the strategy for participation in relevant international networks, including CSA networks under the EU's new Horizon Europe Partnership Programs, The International Energy Agency, IEA, bilateral networks in countries where Denmark has Innovation Centres (ICDK) and European business-oriented networks under the EU and EUREKA.
 - Describe aspects of using and integrating international competences and financial resources in the Innomission-roadmap.

Innomission goals

Beside the Evaluation criteria mentioned in the call text, the Innomission-roadmaps will be evaluated on their ability to reach the Danish strategical goals based on the framework described in the “Green Solutions of the Future”, the visions and recommendations described in the “13 climate partnerships” reports as well as the “Climate plan for Waste, water and circular economy”. Evaluation of Danish strategical goals for strengthening nature and biodiversity will be based on the overall “EU Biodiversity strategy 2030”:

Overarching goals for climate

- 70% reduction of carbon emissions by 2030 compared with 1990 levels
- Carbon neutrality no later than 2050

Strategical goals for climate

- Reduction of methane and nitrous oxide gasses emissions from livestock production to contribute to the overall climate objective.
- Reducing nitrous oxide gasses from agricultural soils
- Reduction of black carbon

Strategical goals for environment

- 24 % reduction of ammonia emissions by 2030 compared with 2005 levels
- 55% reduction of PM2,5 emissions by 2030 compared with 2005 levels
- Improved air quality in cities
- Reduction of pressures on the aquatic and marine environment, including discharges of nutrients, hazardous substances and hydromorphological impacts

Strategical goals for waste, water and circular economy

- Denmark to become world leading society within circular economy by 2030
- Energy- and- climate neutral water and waste handling sector in 2030.
- Reducing the Incineration of Danish plastic waste by 80% in 2030

Strategical goals for Nature and Biodiversity from the “2030 EU Biodiversity Strategy”:

- Turn 30% of land and Europe’s seas into protected areas
- Reduce the risk and use of pesticides by 50%
- Reverse the decline of pollinators
- Plant 3 billion trees