Innovation and the green transition

Anne-Marie Levy Rasmussen, CEO
We build bridges between research and society – with a strong focus on societal impact, job creation & economic growth

Universities / Research

Companies / Public Institutions / hospitals etc.
Innovation Fund Denmark

- Headquarter in Aarhus
- Offices in Odense, Aalborg and Copenhagen
- Regional presence throughout Denmark – and strong corporation with the newly established regional business hubs
Our 2025 Strategy

PURPOSE
The Innovation Fund accelerates research and innovation into solutions that strengthen the competitiveness and sustainability of the Danish society.

VISION
The Innovation Fund will realize the potential of the Danish innovation system.

MISSION
The Innovation Fund actively invests in ideas, knowledge and technology and catalyzes collaboration and partnerships between researchers, entrepreneurs and companies with the aim of creating value and jobs.

STRATEGIC PRINCIPLES
Customer orientation | Professionalism | Partnerships

STRATEGIC AREAS OF FOCUS
- CREATE A MEANINGFUL ORGANIZATION
  A strong and meaningful community for efficiency and high-performance
- PROMOTE INTERNATIONALIZATION
  International view in thought and action to increase Denmark’s impact
- ASSEMBLE THE INNOVATION SYSTEM
  Trusting collaborations in a unified innovation- and research ecosystem that solves societal challenges
- DEVELOP THE TALENT BASE
  All talents and ideas support strengthened strategic research and knowledge-based innovation

TRUST DEED
[... provide grants for research, knowledge-based innovation and entrepreneurship, leading to the strengthening of research areas and the development of technology and innovative solutions for the benefit of growth and employment throughout Denmark. Innovation Fund Denmark must in particular support solutions to concrete policy-prioritized societal challenges.]

### Innovation Fund Denmark in numbers

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active portfolio</td>
<td>7.7 B DKK</td>
</tr>
<tr>
<td>Active investments</td>
<td>3.300</td>
</tr>
<tr>
<td>Invested in 2020</td>
<td>2.2 B DKK</td>
</tr>
<tr>
<td>Annual applications</td>
<td>5.000 +</td>
</tr>
<tr>
<td>Grants for International Collaborations</td>
<td>478</td>
</tr>
<tr>
<td>Agile and user-friendly entrance</td>
<td>1</td>
</tr>
</tbody>
</table>
Innovation Fund Denmark programmes

**Partnerships**
Between researchers and companies / regions / hospitals / municipalities

- Grand Solutions
- International cooperation
- Industrial Researcher

**Start-ups**
Maturation of research ideas, entrepreneurship and business start-up

- Innofounder
- Innoexplorer

**SME-boost**
Of established companies - special focus on SMEs

- Innobooster

Innomissions (Green Research and Innovation Partnerships)
Danish Innovation System

Value chain

Basic research

Applied research

Development

Commercialisation & implementation

Public system

Independent Research Fund Denmark

Danish National Research Foundation

Vækstfonden (The Danish state’s investment fund)

Development and demonstration programmes

Regional business hubs

Private system

Private funds

Non-financial businesses

Financial investors/institutions
From Climate Act to mission-partnerships

Climate Act
70 percents reduction in 2030 compared to 1990-level and towards climate-neutrality in 2050

International evaluation
Need for bigger strategic efforts and partnerships

Future green solutions
Proposal of four green missions and a new partnership program

Research Reserve
700 mill. DKK. set aside for investment in four green missions / new partnership program under IFD
Goal of the missions

The goal of the missions is twofold:
1) contribute to achieve the target of **70% reduction of greenhouse gas emissions in Denmark** by 2030 and net-zero emissions by 2050, and safeguarding our environment and nature,
2) contribute to **increased competitiveness of Danish business and industry**.

The investments in mission-driven partnerships shall accelerate the development of cutting-edge green solutions through strategic and coherent green research ranging all the way from strategic research to commercialisation.

The four missions:

- Capture and storage or use of CO₂
- Green fuels for transport and industry (Power-to-X, etc.)
- Climate and ecofriendly agriculture and food production
- Circular economy with focus on plastic waste and textiles
A new strategic partnership-instrument ("Innomissions")

Key new characteristics of Innomissions:
(a) Politically defined areas – coherent with The Green Research Strategy
(b) Defined overarching goals
(c) Investment of DKK 700 mill. in four missions – very large investments
(d) Partnerships based on long term roadmaps covering the whole value chain
(e) Broad partnerships with focus on impact and value creation within the partnership and ability to facilitate and engage in external private and public initiatives

Focusing research and innovation resources to achieve maximum impact on green transition
Synergies in Innomission-partnerships

Gearing and investments from private and public investors

Mission- partnerships

Mission-roadmaps

Focus on barriers for implementation – eg. regulatory or behaviour
The Nature and Role of Roadmaps

Four each of the identified innovation areas, the roadmap should outline:

| Vision | Overarching goals for climate  
70% reduction of carbon emissions by 2030  
Carbon neutrality in 2050 |
|---|---|
| Pathway towards the vision | A sequence of key interrelated steps / challenges / actions that define the path ahead to realise the vision  
1) technology development roadmap  
2) implementation roadmap  
3) financial roadmap. |
| State of the Art | Current international status, including Danish strongholds, in relation to the mission vision  
1) Landscape of technology development.  
2) Implementation status.  
3) Financial landscape. |

The roadmap provides the backbone of which the partnerships and individual activities will be developed and assessed.
Process for Innomission roadmaps and partnerships

- Announcement of the process
- Call for roadmaps
- Deadline roadmaps
- IFD selection of roadmaps
- Call for partnerships
- Deadline partnerships
- IFD selection of partnerships
- Funds reserved. Investment negotiation
Mission 1: Capture and storage or use of CO₂ (CCUS)

Roadmap highlights:

- Strong participant and stakeholder set-up taking the danish strongholds incl. links to other missions into account (> P2X)
- Multiple technology paths presented at different TRL levels: There is a need for prioritizing roadmap activities to secure both short-term impacts and long-term innovation efforts.
- Identified inflection points indicating the need for looking into the regulatory framework to handle CO₂ and the influence of the CO₂ price tag for developing the CCUS related business and engaging the private sector.
- A need for involvement of the whole value chain covering CO2 capture, intermediate / permanent storage, infrastructure/ transport and sector coupling activities