



Skåne
European
Office

The Mapping of Regional Innovation Ecosystems

Working together under
the Industrial Modernisation Platform

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Presentation overview

- The regional context
- Smart specialisation in Skåne
- Regional innovation ecosystem
- Experiences from Skåne's engagement in Vanguard Initiative
- Lessons learned

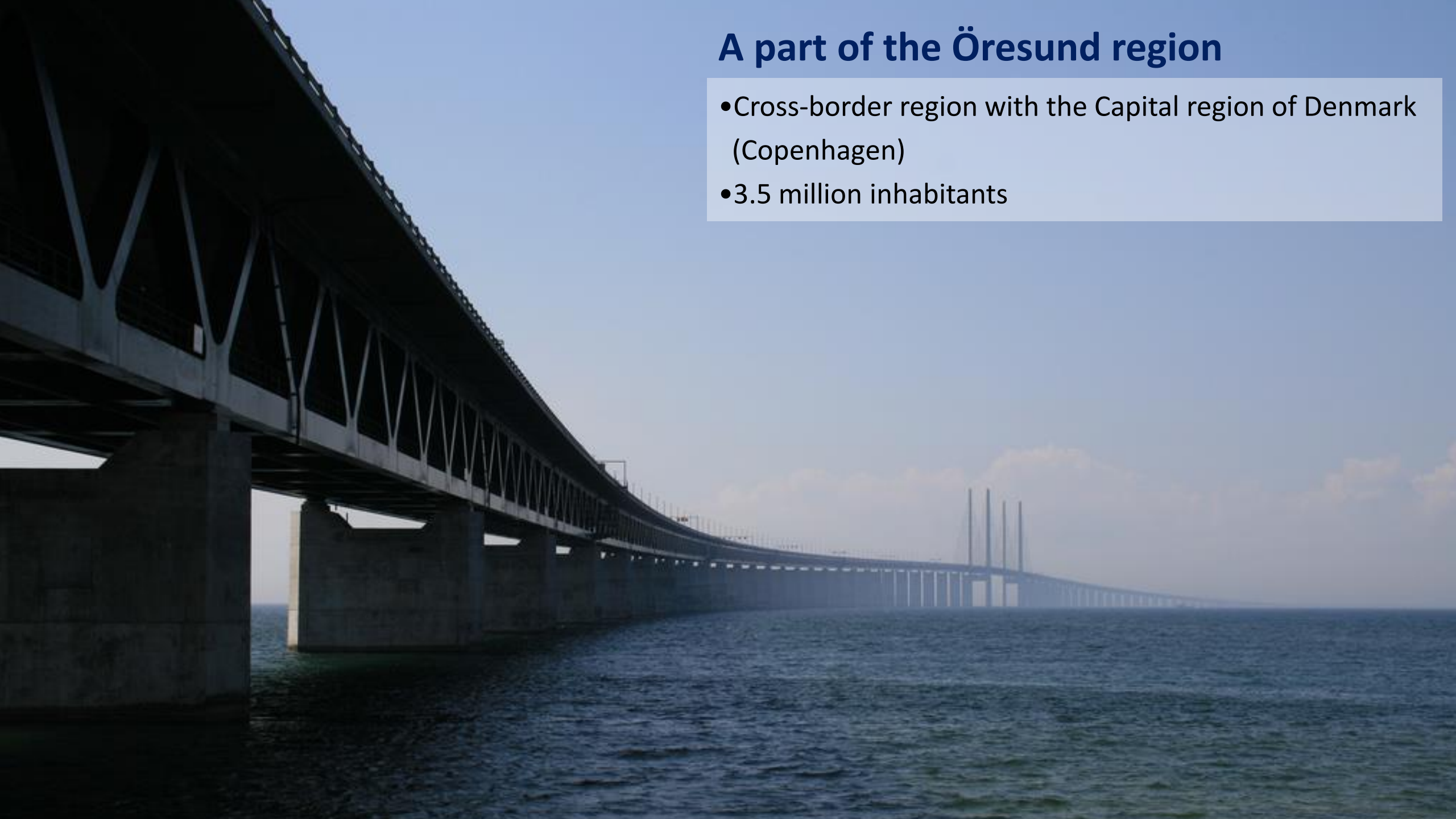
Skåne

- Sweden's southernmost county
- 1.3 million inhabitants



A part of the Öresund region

- Cross-border region with the Capital region of Denmark (Copenhagen)
- 3.5 million inhabitants



*Smart Specialisation
Innovation Areas*

Smart
Materials

Vision
Europe's most
innovative
region
2020

Personal
Health

Smart
Sustainable
Cities







Vanguard Initiative

Vanguard is a coordinated effort of 30 EU–regions for better alignment of regional specialisation strategies through “Smart Specialisation Platforms”

New nano-enabled products

- **Second generation** pilot project in Vanguard Initiative
- VI Pilots follow a **common methodology** of 4 steps:



- The final goal is **full scale commercialisation**
- Focus on **cross-regional demonstration** for projects which are **close to market**

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Organisation

of the network

Common vision & objective

- An interregional nanotechnology infrastructure and ecosystem
- All parts of the value chain – basic research to market uptake
- Reproducibility of application

Matrix approach

- Identify and promote joint-demonstration activities
- Organise transversal support (across cases)

Management model

- Network meetings
- Steering Group
- Network Manager
- Support group

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Mapping

Identifying cases for joint-demonstration

July – September 2015: **One extensive survey**, mapping:

- Key players
- Demonstration initiatives
- Domains of applications
- Challenges and missing capabilities

14 regions involved

10 application domains

3

Prioritisation

6 interregional networks for joint demonstration

| Joint demonstration case | Description | Leading region |
|--|---|-----------------|
| Nano Wires for ICT and Energy Applications | <p>Nanowires for ICT applications include device integration of nanowire-seeded platelets for high frequency power devices as well as new generation of sensors based on nanowires.</p> <p>Nanowires for energy harvesting and efficient energy conversion proposal comprises of nanowire transistor structures for modulating the light output of nanowire based LED structures for indoor illumination.</p> | Skåne |
| Manufacturing Nano-enabled Microsystems for Food, Biotechnology and Medical Laboratory Analytics | <p>Integration of nano-materials and nano-structuring techniques into state-of-the-art micro-bio-system manufacturing enables new, competitive, customer-specific instrumentation solutions for the food, biotechnology and medical laboratory analytics industry.</p> | Flanders |

| Joint demonstration case | Description | Leading region |
|--|--|--|
| Nanomedicine | Infrastructures and projects to support the efficient implementation of nanotechnologies into innovative and connected healthcare products and their quick and safe translation into the market. | Nordrhein-Westfalen Rhône-Alpes |
| Industrial Pilot Production of Nanomaterials - Establishing New Value Chains | Scalable modular manufacturing and processing technologies for novel nanomaterials, functional supramolecular systems and composites addressing the markets of the future - from Lab to Fab! | South Netherlands Nordrhein-Westfalen |

| Joint demonstration case | Description | Leading region |
|---|---|--------------------------|
| Printed Nanoelectronics: Integrated Energy Harvesting | The Integrated Photovoltaics in Construction and Buildings aims to facilitate the use of photovoltaics (PV) in environments not suited for conventional PV systems, such as windows and facades. | Baden-Württemberg |
| Printed Nanoelectronics: Cross-Technology Application Platform | The Printed Electronics (PE) Cross-Technology Platform is concerned with integrating existing PE technologies such as energy harvesting & storage, sensors, OLED, passives in one functional prototype that comprises a high degree of all-printed integration and multi-functionality. | Baden-Württemberg |

Lessons learned

- Engagement
- Timing: phasing in and out
- Cross-learning
- Financing
- Contributing to re-industrialization
- Skills and competences



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Thank you!

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