























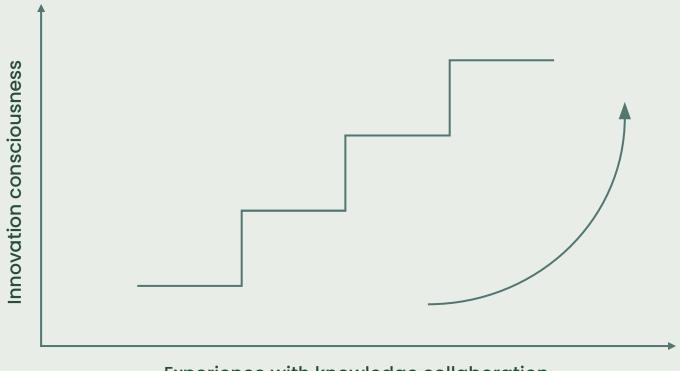


President TCI Network, Merete Daniel Nielsen

www.foodbioglobal.com

It's all about innovation and change

Company's innovation journey







Why clusters matter



The challenges of tomorrow demands new ways of collaborating and new business models



No single company, municipality, organisation or university can solve the future challenges alone. Cooperation is key. Clusters address challenges that no sole actor can handle on their own



Clusters, networks, partnerships are the future way of collaborating



Clusters are neutral platforms for collaboration



Was green transition a possibility during the pandemic?



FOREWORD: CIRCULAR TRANSITION AS RECOVERY

THE IMPACTS OF CLUSTERS WORKING WITH CIRCULAR TRANSITION

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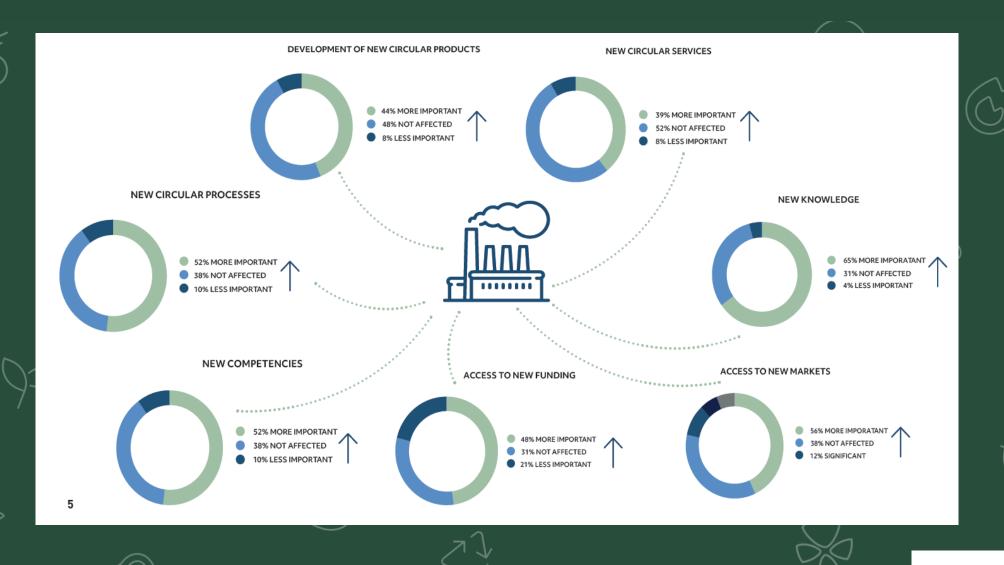
How the pandemic has changed priorities around green transition

Global survey with almost 50 cluster organisations from 17 countries across the world responding

Cases showing how clusters are working with green transition in different sectors and with different methods



How the pandemic affected SME'S needs for green and circular support?

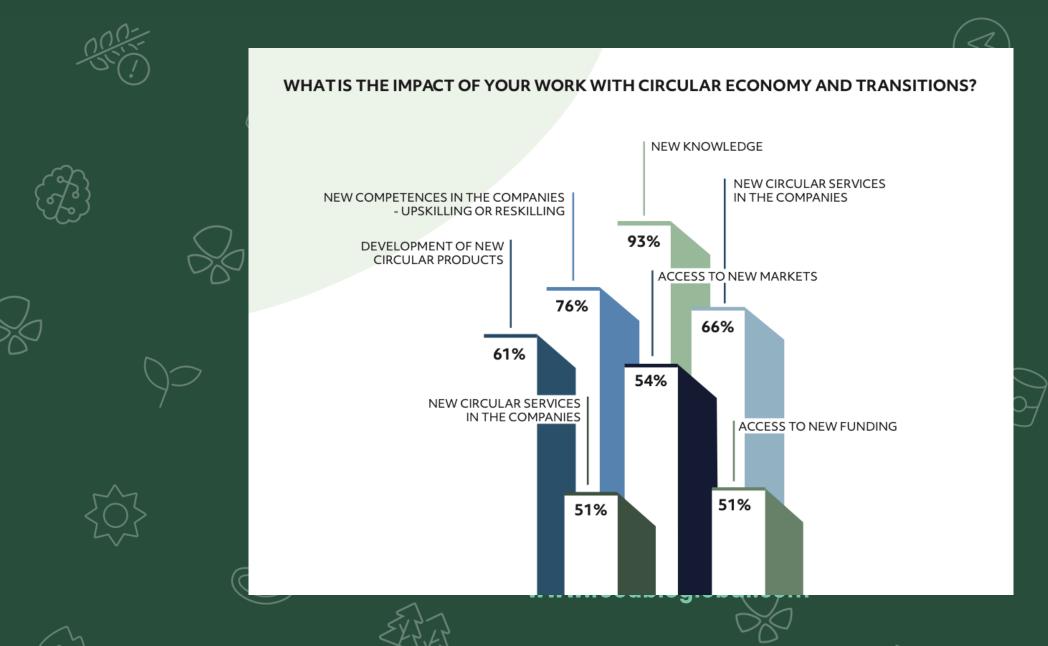








Impact of clusters on green transition











Impact of clusters on green transition



Spanish case on pork meat

GREEN ECONOMY IN THE SLAUGHTERHOUSE

As the global meat business has been attracting growing scrutiny for its climate change consequences in recent years, a Spanish pork industry cluster committed to promote the reduction of greenhouse gas emissions among its members and implemented projects on waste reduction, sustainable packaging, water and energy efficiency and local and ecological food products.

The Spanish cluster – Catalan Association for Innovation in the Pork Sector (INNOVACC) – organize 100+ members.

Due to the first Catalan Climate Act the cluster initiated a project on recovery of protein of low commercial value from pig slaughterhouse co-products and by-products.

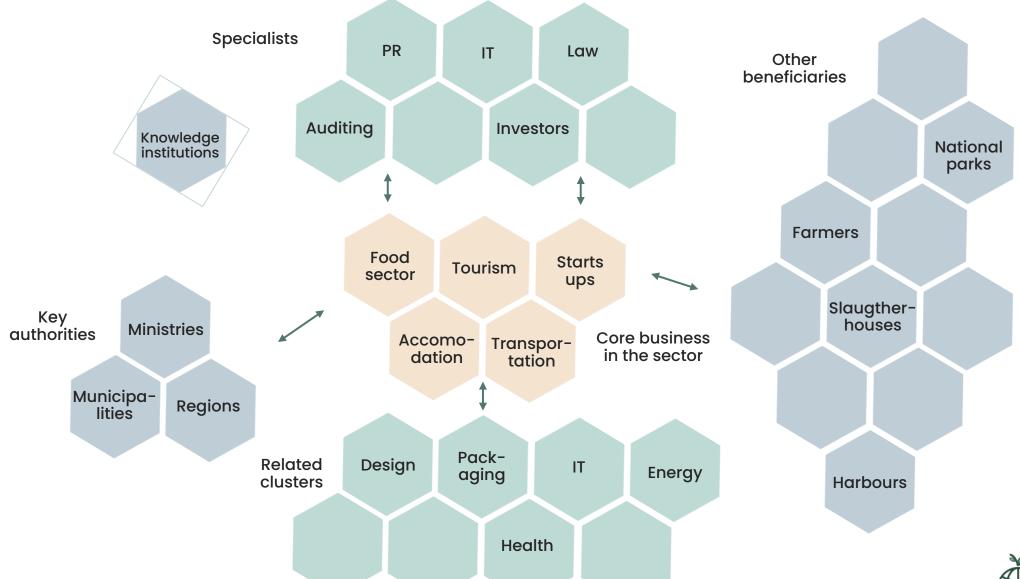
Cluster members learnt how to obtain and wash protein fractions from various pork viscera, such as livers, hearts and spleen, and use them as ingredients in the food industry.

Positive economic impact:

- Slaughterhouses can better value the viscera
- Meat transformers can use the new by-products to prepare their meat products.
- Producing more sustainable products and enforcing circular economy in the pork sector.



Complexity of clusters are increasing





Clusters – wide range of related activities

MATCHMAKING

Companies & knowledge Companies & off. b2b Companies and capital

KNOWLEDGE DISSEMINATION

Knowledge sharing Knowledge bridge building

BRANDING

Agenda setting dissemination and visibility Technology and trend scouting

TRANSFORMATION

Digitization
Circular economy
Industry 4.0
SDGs
Climate
Etc.

ACCESS TO FINANCING

Private and public funding Procurement of capital

INNOVATION PROJECTS

Research projects Preliminary projects Feasibility studies Bubble projects

COMPETENCE DEVELOPMENT

Development of targeted courses and education

QUALIFIED LABOR

Attraction Separation Recruitment

INTERNATIONA-LISATION

Bridge building to global markets, leading knowledge hubs and value chains

ENTREPRENEURSHIP

Incubation
Entrepreneurial support
Sparring and mentors

OPERATOR FOR PROGRAMS



Why clusters can help – organizing ecosystems and acting as gateways to other ecosystems

Clusters - and supporting organisations - are all over the world. On a world basis around 7.000

Quite many of them have initiated cross border collaboration – either regionally or across the world



Using this collaboration as a tool of intelligence: New trends, inspiration and testing of potential for new projects.

The pandemic has accelerated this

 easier with digital collaboration and support for disrupted value chains is still needed





TCI Global Trends: Thinking globally and bigger



Globalization of economic corridors

Rules of specialisation still applies



Link between big companies and SME's going global together and involving public organizations



Merging of clusters

Scale is needed to tackle challenges



Creating new networks of clusters

more and more cross clustering



Looking at superclusters and their strategies



Why should clusters help to globalise?



Born global



Innovative barriers for the cluster members



Knowledge and research is global



Clusters have an impact for SME internationalisation



Globalisation is matching the needs of the cluster



Often the companies expect to get help to internationalisation. Rarely this comes from the cluster policy side.



Why internationalization through clusters?

Normally, the degree of internationalization for SMEs is 5-6 pct. When participating in clusters, it is 14 pct. of the companies, have international activities

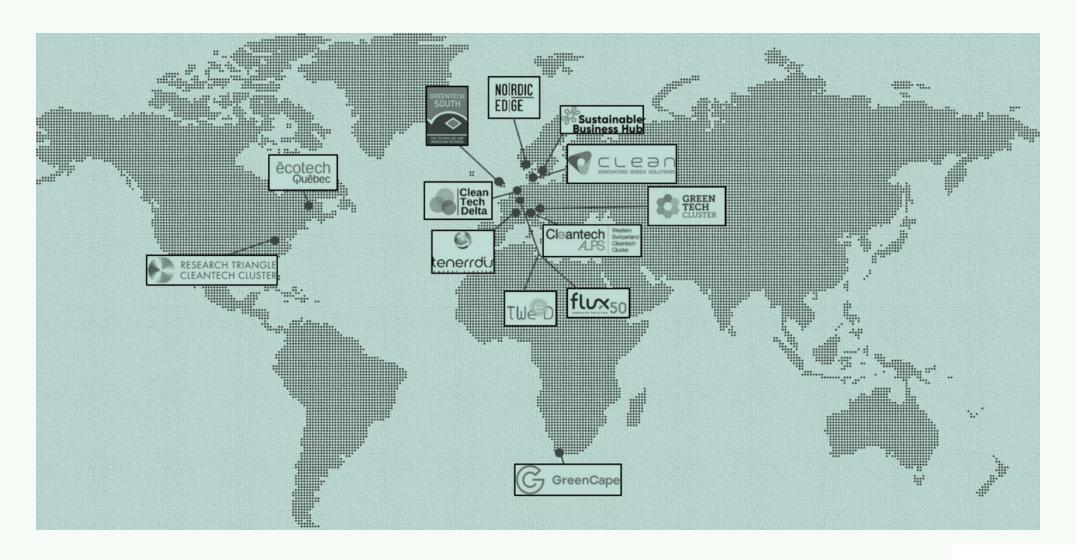
Source: Professor Philip Schrøder, University of Aarhus, 2014

SMEs usually experience many barriers to internationalisation: lack of time, capacity, funding, partners and skills. Furthermore, they experience that geographical distances, languages and cultures are barriers to cooperation

Source: Nordic Council of Ministers, 2015

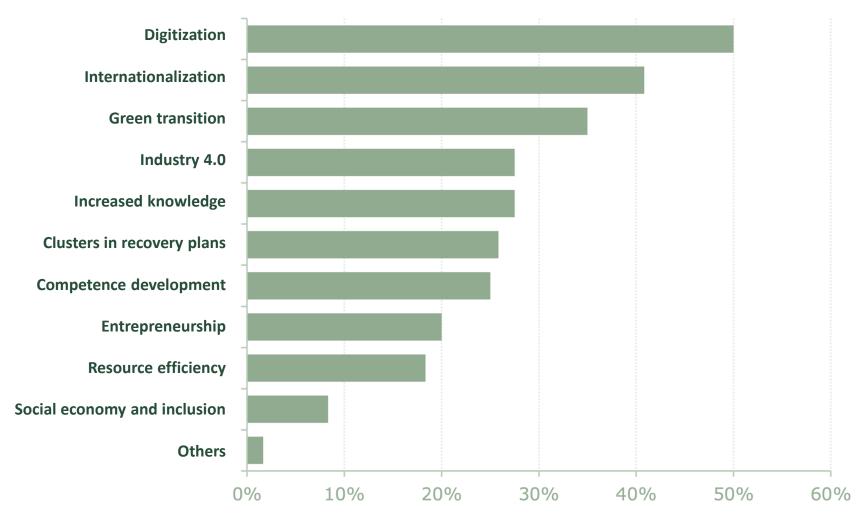


Global superclusters – International Cleantech Network



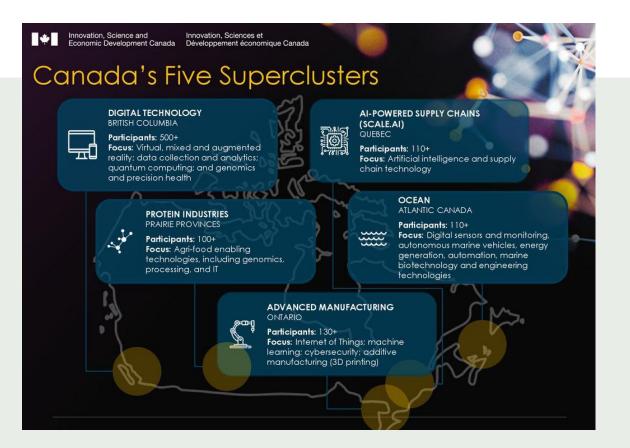


Key strategic priorities for European clusters in 2021





Source: ECCP 2021, Needs Survey.



- National cluster program 2018-2028.
- Accelerate growth and development of superclusters to translate the strength of Canadas innovation eco-systems into new commercial and global opportunities
- Focus on foster partnerships and collaboration, accelerate innovation, develop innovation eco-systems, promote global ambitions
- Funding up to \$1000M for a ten years period







TCI Global Trends: Building cross-sector bridges



Linking clusters across different sectors



Cross-cluster
collaboration based
on sustainability,
and digital
transformation



Cross-sectoral
initiatives in smart
specialization

moving beyond

strongholds



Digital bridge between clusters new digital opportunities for collaboration



New names – innovation platforms/hubs/nodes

for collaborative and system innovation, addressing societal challenges



Iceland - Ocean Cluster

Mission is to create value by connecting entrepreneurs, businesses and knowledge in the marine industries.

To serve this mission we provide a range of services and invest our resources in new marine spin-offs and projects.

What is new in this cluster:



100 pct fish project



Bringing entrepreneurs in the center



Hack the Ocean



Iceland Eco Business Park – co-locations of energy, water and food companies.



Private investments



Helping to create new clusters - also in Denmark

QUALITY SEAFOOD









Taking global clusters to the next level?

Cluster governance on a global level

- have professional boards
- have clear structures for decision making
- ensure collaboration across the clusters

Sustainability as a core driver:

- Is this part of the strategies?
- Do each of the partners have own climate goals?
- Supporting companies in doing climate accounting?
- What about your own?

Diversity (a key driver for innovation):

- How are the boards doing on diversity?
- Two female chairpersons in clusters ... around 30 pct. of the board members are women... and some less



Merete Daniel Nielsen

President, TCI Network a see you in Iceland





