

Biogas2020

Building a Scandinavian
biogas platform in partnership



Interreg

Öresund-Kattegat-Skagerrak
European Regional Development Fund



EUROPEAN UNION

Biogas2020 – building a bright future for renewable energy

Biogas2020 is a partnership to develop the biogas industry in the Öresund-Kattegat-Skagerrak (ÖKS) region.

The goal is to build strong networks throughout the biogas value chain. To reach this goal, one objective of the project is to develop a Scandinavian biogas platform where industry players can grow in partnership.

The project starts with three countries and three regions taking a major step forward together, despite being in different situations and at different stages in developing their biogas industry. The 34 project partners will work on expanding biogas production, improving processes and creating infrastructure.

Biogas2020 also includes activities to underpin the Scandinavian biogas platform

such as networking, sharing experience and expertise, creating new business models, and gathering market intelligence.



BioGas2020



Biogas2020 is an EU-funded project under the Interreg Öresund-Kattegat-Skagerrak (ÖKS) program

● **The goal** is to build a shared platform for developing and deploying biogas in the ÖKS region ● **The project budget** is €11.9 million ● **34 partners** from Denmark, Norway and Sweden are involved ● **The project runs** from June 2015 to June 2018 ● **The national lead agencies** are Innovatum (Sweden), Skive kommune (Denmark) and Østfold fylkeskommune (Norway). Innovatum is the overall lead partner.

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Interreg Öresund-Kattegat-Skagerrak is an EU funding program for projects that bring together stakeholders from Denmark, Sweden and Norway to tackle common challenges in innovation, the green economy, transport and employment ● The program has a total budget of €143 million for the 2014–20 period.

What's the objective?

The goal of the Biogas2020 project is to reduce our environmental impact while creating economic growth and jobs.

Biogas2020 has three specific objectives intended to help build a sustainable society:

- **Create the conditions for more investment in biogas production**
- **Greater cooperation to develop new technology, tools and methods**
- **Increased use of biogas, chiefly in the transport sector**

Our long-term objective is to create a Scandinavian biogas platform and take it from the start-up phase to continuous operation. After the project concludes, we will continue to foster the relationships built through the platform, with a view to ongoing development activities and partnerships.

We expect Biogas2020 to pave the way for €100 million worth of investment in renewable energy over a 10-year period, while creating 1,000–1,500 jobs in the industry.

Why biogas?



By 2030, under the common targets set by EU member states, greenhouse gas emissions are to be cut by 40 per cent from their 1990 levels.

Our region boasts a unique mix of rural and urban, advanced industries, agriculture, food production, and an innovation-friendly climate. That puts us in pole position to be the world leader in using biogas as a fuel.

A Biogas2020 pilot project has shown that increased use of biogas offers major economic and environmental advantages, confirming that biogas has a key role to play in the transition from fossil fuels to renewables. The biogas industry can help us reuse resources and reduce our environmental impact.

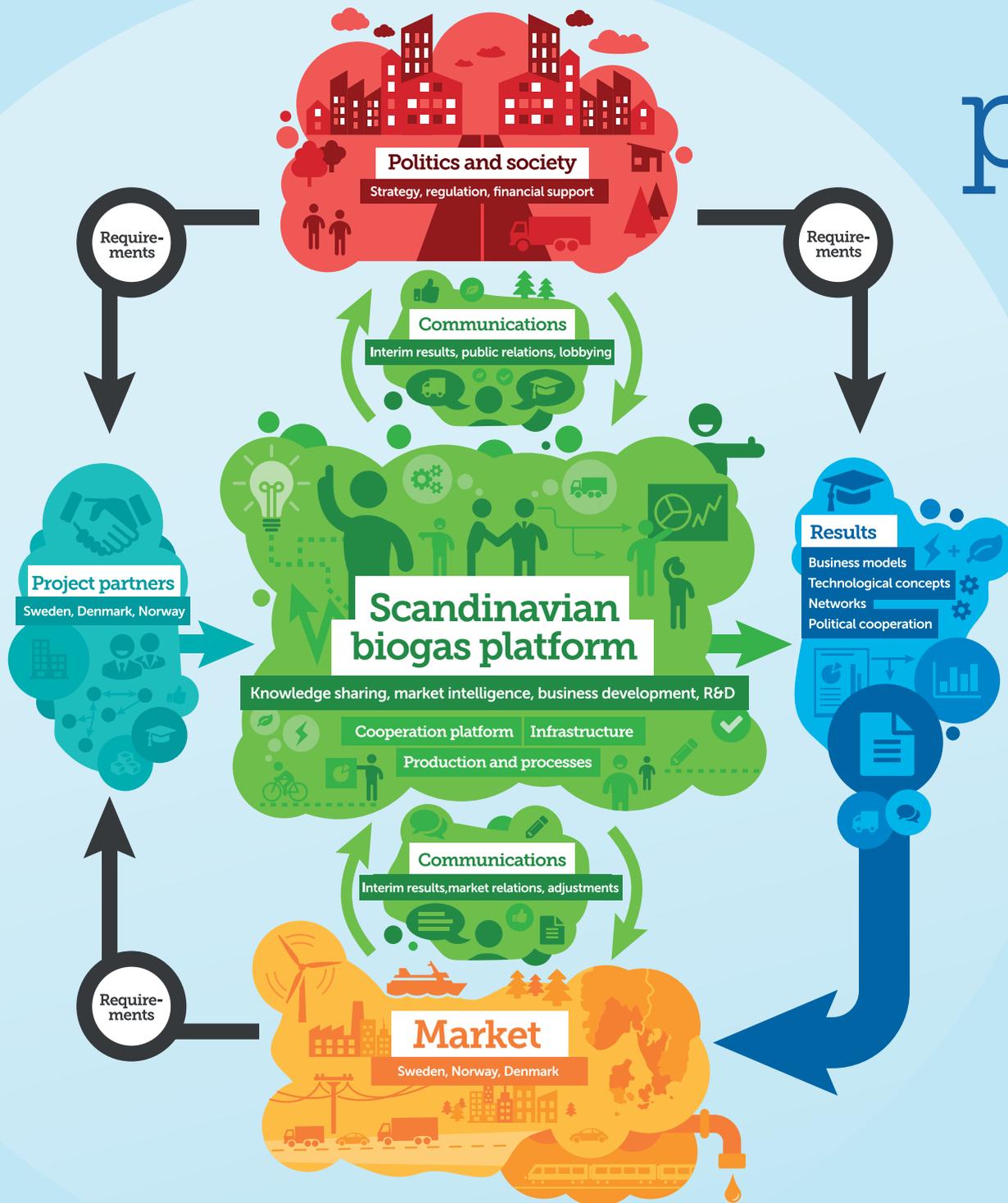
Expansion of the biogas industry will also benefit the labour market.

A broad-based partnership crossing borders

The Biogas2020 project involves 34 partners spanning various sectors. Together, they cover the entire value chain and contribute a wide range of expertise.

- 12 universities and other R&D institutions
- 14 public-sector bodies
- 5 knowledge platforms
- 3 private businesses

The project is divided into five areas.



PROJECT COMPONENT	LEAD PARTNER
WP1. Project Management	Innovatum
WP2. Communications	Innovatum
WP3. Biogas2020 Platform Partnership Knowledge sharing, political lobbying, business modelling, concept development, market intelligence, process and technology support.	Innovatum
WP4. Production and Processes Agricultural and marine substrates, domestic waste, biogas production process, digestate, refining.	Agro Business Park
WP5. Infrastructure/Transport Heavy vehicles, gas filling stations, roadshows, compressed and liquefied biogas, biogas-powered ferries, business support.	NTU

4 views

on Biogas2020



1

Anne-Luise Skov Jensen
Project Manager
Agro Business Park



What is your role in Biogas2020?

– I'm in charge of component activity 3.2, business development.

What opportunities do you see for Biogas2020?

– I see excellent opportunities for involving all the stakeholders, including government, biogas consumers and technology suppliers. Such a huge effort on multiple levels is sure to pay off.

What are the biggest challenges?

– As partners in the project, we need to be really good at knowledge sharing. I think one of the greatest challenges will be making sure we don't end up duplicating tasks or taking steps to find out things that someone in another part of the project

already knows. I think that will be the biggest challenge: keeping tabs on all the activities and making use of the knowledge already available among the project partners.

What do you hope to have accomplished in three years' time?

– To have brought valuable knowledge of biogas production to a whole lot of people – from the farmer who wants to find a use for his manure, to the local authority that wants to introduce organic waste collection, to the government that wants to put in place laws and structures that encourage the use of biogas. And it must be the kind of knowledge that equips them to take specific action. Personally, I'm relishing the challenge of ticking items off the to-do list for my component activity and building good working relationships with the other project partners, both in my own component activity and across the project as a whole.

2

Hanna Jönsson
Economic Development
Officer and Biogas Väst
Project Manager



What is your role in Biogas2020?

– Region Västra Götaland is a partner in the Biogas2020 project, through our role as lead agency in our regional Biogas Väst project. We shall mostly be involved in the part of the project that is building a Scandinavian biogas platform for the component entities in the ÖKS region to work together and share their expertise.

What opportunities do you see for Biogas2020?

– In our region, there is the political will to promote development that leads to increased biogas production and use. Greater cooperation among the players will enable us to benefit from one

another's experiences, and to tackle and pursue issues of mutual interest more effectively.

What are the biggest challenges?

– The biggest challenges for the biogas industry in Sweden right now are stimulating the market and establishing long-term ground rules at national level.

What do you hope to have accomplished in three years' time?

– I hope that the forums and projects facilitated through Biogas2020 will have yielded tangible results, new business and productive working relationships that endure on their own merits. And that the project will have helped bring about a consensus on the wider socioeconomic benefits of biogas.

3

Rune Bakke
Professor, University College
of Southeast Norway



What is your role in Biogas2020?

– Heading up research into applied biogas processes based on the sludge blanket principle, where the anaerobic microorganisms proliferate to form granules. The goal is to achieve considerably more efficient methane production compared with conventional facilities.

What opportunities do you see for Biogas2020?

– This project gives us the opportunity to analyse the potential for intensive, decentralized biogas production in various contexts, supported by a respected and diverse group of colleagues.

What are the biggest challenges?

– Devising the best ways to integrate intensive biogas reactors into existing infrastructure and operating procedures in such a way that the whole process is sustainable.

What do you hope to have accomplished in three years' time?

– To have established better principles for utilizing the biogas potential of the manure produced on every farm and similar raw materials.

4

Martin Therkildsen
Energy Planner
HMN Naturgas I/S



What is your role in Biogas2020?

– I'm the project manager for the Biogas2020 activities of HMN Naturgas. My main task is to raise awareness of compressed biogas (CBG) and liquefied biogas (LBG) vehicle fuel technologies, and their implications for the various

customer segments in the B2B transport sector.

What opportunities do you see for Biogas2020?

– Biogas2020 offers HMN Naturgas a unique opportunity to get to know the private heavy transport sector and its reasons for switching to biogas-powered vehicles. The switch we're beginning to see in private fleets will open up huge potential for sustainable transport. All other things being equal, a bigger market for biogas will add significant value to the biogas produced.

What are the biggest challenges?

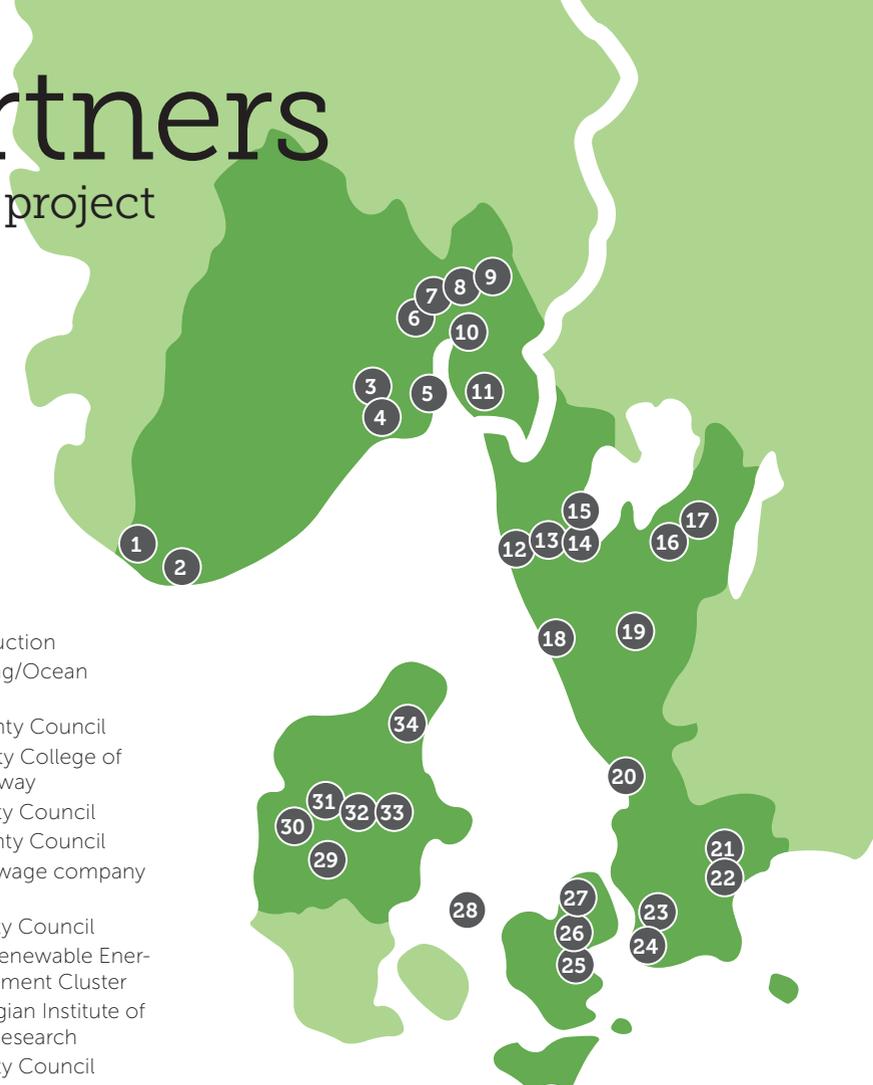
– Players in the transport sector have limited knowledge when it comes to gas-powered vehicles. As a result, significant additional risks are often built into business cases, putting gas-powered vehicles out of contention.

What do you hope to have accomplished in three years' time?

– In three years' time, a number of biogas production facilities will have obtained biofuel certification, so that biogas can meet the requirements on biofuel composition. HMN will have acquired an in-depth knowledge of why private fleet owners are switching to gas-powered vehicles, and a better idea of the opportunities out there for supplying CBG and LBG to various customer segments.

Partners

in the project



1. SeaWeedProduction
2. Lister Nyskaping/Ocean Forest
3. Telemark County Council
4. HSN - University College of Southeast Norway
5. Vestfold County Council
6. Buskeryd County Council
7. Vestfjorden sewage company (VEAS)
8. Akerhus County Council
9. OREEC Oslo Renewable Energy and Environment Cluster
10. Nibio - Norwegian Institute of Bioeconomy Research
11. Østfold County Council
12. KTH - Royal Institute of Technology
13. Fyrbodals Municipal
14. University West
15. Innovatum AB
16. SLU - Swedish University of Agricultural Sciences
17. JTI – Swedish Institute of Agricultural and Environmental Engineering
18. Region Västra Götaland

19. University of Borås
20. Halmstad University
21. Region Skåne
22. The Rural Economy and Agricultural Societies
23. Biogas Syd - Skåne Association of Local Authorities
24. Energiforsk AB
25. Gas2move
26. Roskilde University

27. Municipality of Frederikssund
28. Samsø Municipality
29. Aarhus University AU Herning
30. Nomi4s
31. Skive Municipality/Skive Energibyten
32. HMN Naturgas I/S
33. Agro Business Park A/S
34. Ntu Holding ApS