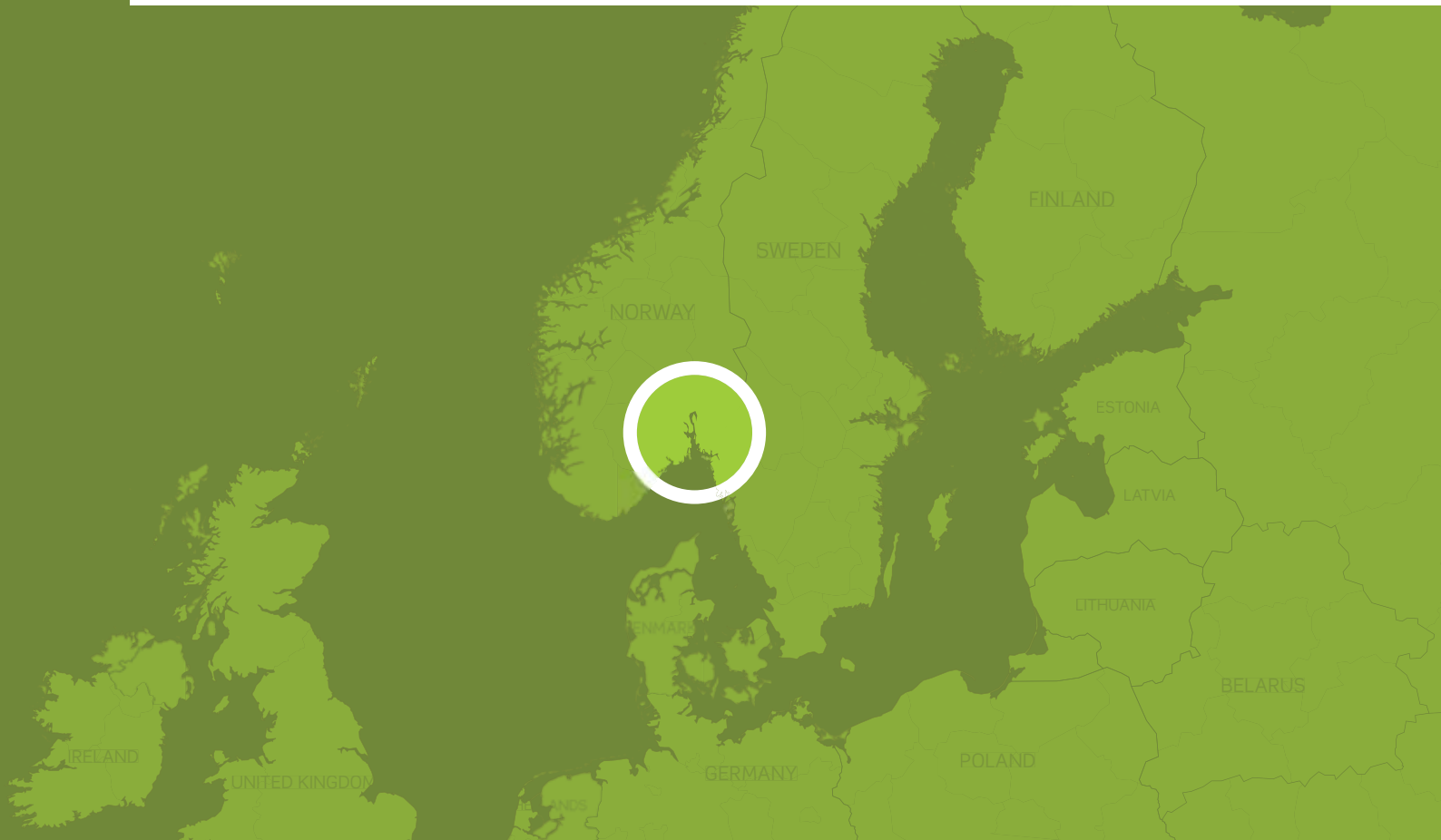


OSLO KNOWS RENEWABLE ENERGY

Norway is the leading energy producing nation in Europe and the Oslo region plays a key role in driving the Norwegian energy cluster. Get to know some of the main reasons why the Oslo region is positioned to develop a leading international cluster in renewable energy.



DEVELOPING A RENEWABLE ENERGY SUPER-CLUSTER

For a region to become a super-cluster requires a unique combination of knowledge, capital, attractiveness and creativity. The Oslo region is well-positioned to meet all these requirements within renewable energy and environmental technology:

Pioneers in renewable energy: With its dynamic urban development, the Oslo region is particularly important as a test bed for new and sustainable energy solutions such as de-centralized and local energy production sites. Companies and research institutions in the region are vital contributors to the development of principal renewable energy sources such as bio, geothermal, wind, and solar, as well as promising technologies like hydrogen.

Access to a highly qualified workforce: The Oslo region has Europe's highest share of Human Resources in Science and Technology in the labor force (HRST) according to Eurostat (2008), and ranks consistently among the highest educated populations in Europe. The universities and colleges in the region offer a broad set of constantly developing educational programs within the field of energy and environment studies.

Growth in venture capital: Investment activity in the Oslo region is propelled by increasingly active venture capital and private equity funds with a strong focus on renewable energy and environmental activities. The highly successful solar energy company REC was started with strong ties to these investment funds, which in turn rely on the competencies of the larger multinational energy corporations in the region. Today the funds manage EUR 4 billion, yet only half of this has been invested, and the search continues for attractive new energy and environment projects.

Oslo region investment funds focusing on new energy and environment

Seed Capital	Venture Capital	Buyout
Campus Kjeller	Convexa	Altaria
Kongsberg innovation	Ferd Venture	Credo Partners
Spring-fondet	Hafslund Venture	FSN Capital
Alliance Venture	Incitia Ventures	Hercules Capital
BTV-invest	Kistefos Venture	Norgesinvestor
	Northzone	Nordvestor Equity
	Teknoinvest	Reiten & Co
	Verdane Capital	True North

Source: MENON Business Economics 2008

Strong R&D environment: The Oslo region hosts many of Norway's leading R&D institutes and receives close to one third of Norway's total research investments, including publicly sponsored programs. The University of Oslo, the Norwegian University of Life Sciences, and the region's five colleges all conduct state-of-the-art research in various fields of clean energy.

Open and international: The Norwegian economy is open with a long tradition of welcoming foreign investment. Norway is an associate member of the European Union through the European Economic Area (EEA) Agreement, securing full business access to the EU market. It is easy to set up a business in Norway and Norwegians are seen as open-minded with a high proficiency in foreign languages. At the heart of an open, international and dynamic capital region, Oslo is a natural gateway to the Norwegian market and a preferred location for head offices, international companies and talent from around the world seeking opportunities in Norway.

High quality of life: A unique blend of vibrant big city life and recreational opportunities makes Oslo an attractive place to live and work. As the capital region of Norway, Oslo is also the centre of one of the most robust economies in the world and at the top of international ratings for quality of life. Norway stands out as a safe and modern welfare society. It is well organised to accommodate dual career families and offers an efficient and professional work environment with good opportunities to balancing career and family life.

Geographical proximity: The compact Oslo region is home to both large and small technology companies, R&D institutions, education and competency providers, consultants, venture and financial players, as well as environmental networks and NGOs. Short distances and a transparent community make it easy to develop interdisciplinary relationships.

FACTS AND FIGURES

Renewable energy and environmental cluster in the Oslo region

The Oslo region has 161 companies focusing exclusively on renewable energy and environmental products and services. They employ around 6700 people, creating EUR 2.6 billion in turnover and EUR 820 million in value added. Over the last five years, turnover in the cluster has grown annually by more than 16%, rapidly outpacing the rest of the economy. The cluster also has strong ties to the large oil & gas and hydro energy companies in the region, like StatoilHydro, Statkraft and Hafslund.

The most significant single player in the cluster is the solar energy company REC, with EUR 830 million in sales in 2007. Many other new energy forms are also represented, from biomass and wind to geothermal. Recycling is also a highly developed sector in the Oslo region. Although relatively few in number, R&D institutes in the cluster are highly respected and contribute to a large number of international projects.

Figures for the Oslo region 2006

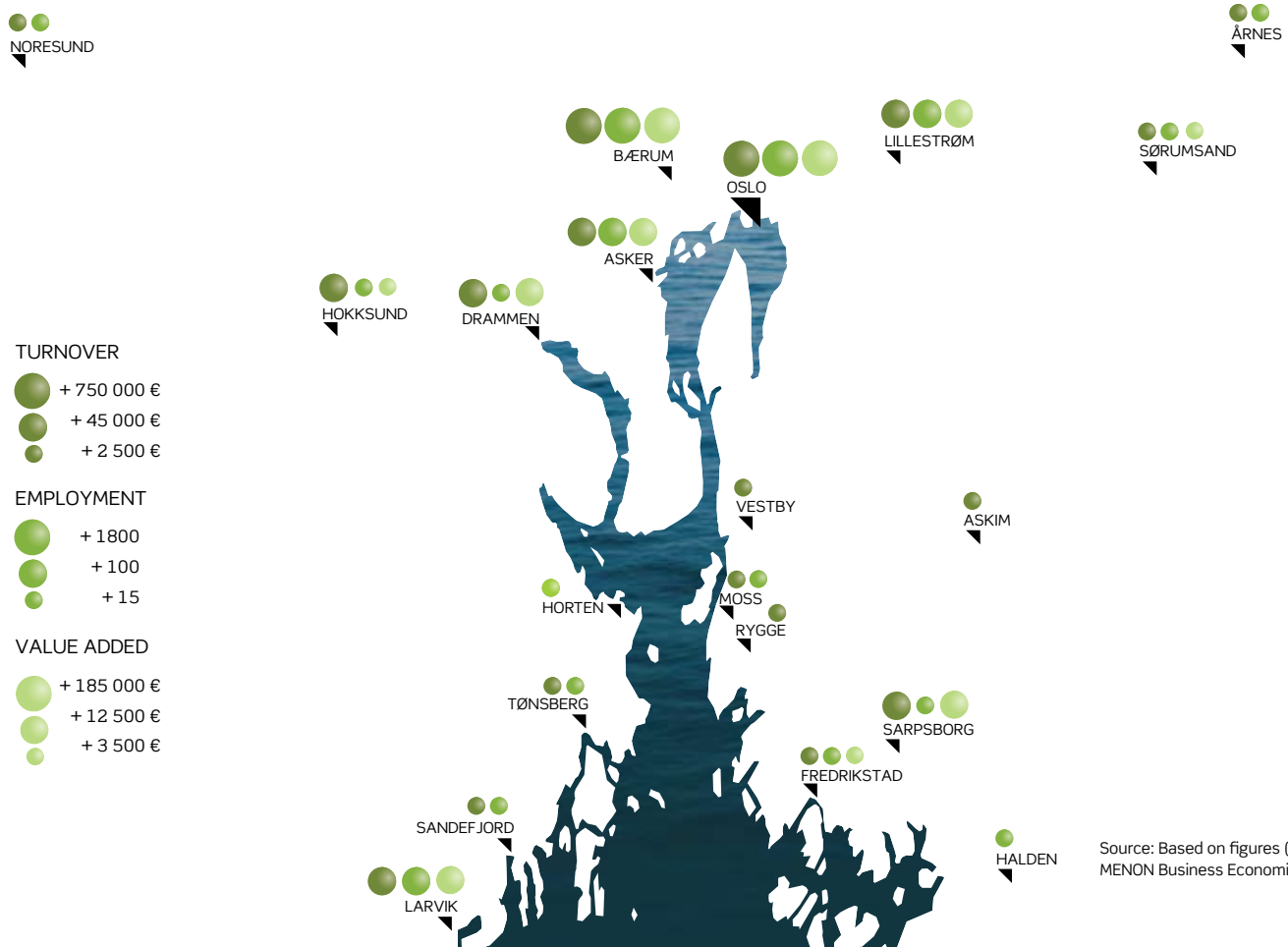
	Number of firms	Turnover Mill EUR	Employment	Value added Mill EUR
Solar Energy	5	831	1804	451
Biomass Energy	30	299	1209	94
Wind Power	12	174	310	-28
Geothermal Energy	18	145	206	34
Tidal	3	4	0	-1
Recycling	57	878	2176	197
Wholesale waste	21	119	124	11
Energy and Environment R&D	8	115	821	61
Consulting	7	7	48	5
Total (2006 figures)	161	2573	6698	823

Source: MENON Business Economics 2008

These figures are limited to companies related to production of clean energy, or companies that measure, prevent, limit or correct environmental damage to water, air and soil, as well as waste management. The companies included must have a majority of their activities in these fields. Note that hydropower is not included. Also note that the figures exclude several large multinational companies with headquarters in the region that work intensively with new energy and environmental activities, but where these are not defined as core activities.

Companies in the renewable energy and environmental cluster are represented throughout the entire Oslo region, here defined as Oslo and four counties around the Oslo fjord: Akershus, Østfold, Vestfold and Buskerud. Measured in number of companies, Oslo is by far the largest with 53. Akershus is home to

world leading companies within solar energy (REC) and recycling (Tomra), while Østfold is big on geothermal energy (Fortum). Vestfold is dominated by companies within biomass energy and Buskerud also has significant geothermal energy activities.



Source: Based on figures (2006) from MENON Business Economics 2008

Oslo Teknopol

- at your service

Oslo Teknopol is a non-profit regional development agency established by the City of Oslo and Akershus County Council. Our aim is to stimulate innovation and attract foreign investments and talent to the Oslo region. We cooperate with OREEC and other networks of companies and R&D institutions in renewable energy and environment. Together we can help you access the Oslo region's unique knowledge base and connect with its innovative players.

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