



COPENHAGEN  
CLEANTECH CLUSTER

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# MONITOR COPENHAGEN CLEANTECH CLUSTER 2010

THE REPORT IS MADE FOR COPENHAGEN CLEANTECH CLUSTER  
by Copenhagen Capacity in collaboration with Brøndum & Fließ



## EXECUTIVE SUMMARY

This report forms a baseline for a forthcoming series of reports set up to track the effect of Copenhagen Cleantech Cluster (CCC). This, and the subsequent four years' annual benchmarks, will help track how the East Danish (the Capital Region and the Region Zealand) cleantech cluster develops, compared to other business areas, locally as well as globally.

The overall objectives of CCC's activities are to:

- Infuse higher growth into existing cleantech companies
- Increase the entries of new cleantech companies
- Increase the number of local settlements by foreign cleantech companies.

To these ends, CCC has identified a number of specific supportive activities towards the cleantech businesses. It is these efforts and activities that Brøndum & Fliess, through this baseline and the subsequent, annual follow-ups, intends to measure and evaluate.

This baseline study and the subsequent comparative annual benchmarks will include documentation on the following issues: Innovation, productivity, patents, links between the science-based institutions and the industry, time to market, supply of skilled cleantech workers and, finally, (re)settlements of internationally based companies.

Data for this report originates from two main sources: a comprehensive questionnaire, which has been sent to the identified East Danish cluster companies, and registry-based statistics from Experian. The survey was completed in June 2010.

The following summarizes the findings of this baseline study:

### **Number of companies**

- 522 East Danish companies with employment in one or more clean-tech areas have been identified.
- 50 % of the companies have less than 10 employees occupied with cleantech production.
- 11 companies have more than 500 employees occupied with cleantech. They comprise 40 % of all cleantech-related jobs in East Denmark.

### **Employment growth**

- The cleantech industry employs approx. 30,000 people in corporate cleantech areas.
- Employment growth in the cleantech sector has come to a full stop after three years of high growth and is currently at the same level as the rest of East Danish businesses.
- Despite the recent years' recession, the industry foresees an employment growth averaging 9 % annually over the next two years. Within the engineering consulting industry, the expected growth rate is higher than 15 %.

### **Growth in turnover**

- Cleantech companies experienced a significant decline in turnover (measured as corporate annual sales) of 19 % in 2009. The annual turnover within the cleantech sector generally fluctuated more compared to the rest of East Danish industries.

### **Growth in labour productivity**

- Although labour productivity in cleantech companies generally has remained constant over the past 4 years, significant fluctuations within the group of cleantech companies have been noted. Where the construction sector experienced significant growth in 2007, the private service industry dropped to zero in 2009, from 5 % growth in 2008.
- Looking two years ahead, cleantech productivity is expected to return to its former growth rates. An employment growth of up to 7.5 % is surpassed by even higher growth expectations in regards to operating profit. The productivity is expected to go up by 5.5% annually.

### **Number of new patents created by the cleantech industry**

- The industry expects significant growth in the number of new registered patents. Especially small research-intensive companies expect high growth rates in new registered patents.
- Most patents are taken out within the cleantech field *sustainable materials*, though it is only expected that few will be taken over the next two years. In comparison, the cleantech fields *energy infrastructure* and *distribution* expects the highest growth rate in patents, shortly followed by *green, renewable energy production* and *water and sewage*.

### **Establishment of partnerships between research institutions and the industry**

- Out of the nine *Approved Technological Service Institutions*, the cleantech industry has established most partnerships with the Danish Technological Institute, Force Technology and the DHI Group. Among the universities, most partnerships have been established with the Technical University of Denmark (DTU) and Risø DTU – the National Laboratory for Sustainable Energy at the Technical University of Denmark and Aalborg University.

### **Counts of new entries/ entrepreneurial companies**

- 21 % of all cleantech entities have been founded within the past 5 years, however, only one percent of the companies have been formed in 2009 or 2010.

### **Share of new spin-off companies**

- 13 % of the cleantech companies have been established as spin-off companies.
- Most of the spin-off companies are concentrated within the cleantech fields *Waste and Recycling* and *Energy Saving* (both 20 %), and *Sustainable Materials* (18%).
- 32 % of the spin-off companies have research and development budgets of more than 50 % of the annual turnover.

### **Collaboration between the CCC members**

- Cleantech companies request CCC to facilitate a wide range of activities. Most frequently mentioned are activities related to 1) participation in cleantech related demonstration and development projects and 2) creation of knowledge networks. Also mentioned are 3) activities focusing on marketing and market access, 4) improving the public legal framework and 5) identification of new markets in the light of global needs.



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