# Smart City Solutions: A stronghold in the Copenhagen region

## A perfect Smart City laboratory

Copenhagen is home to some of the most ambitious Smart City objectives in a global perspective. This makes the region a natural catalyst for companies exploring best practices in a Smart City context.

In Copenhagen, industry players find a perfect combination of a culture of cross-sectorial collaboration, easy data access, political focus, specialist competencies, and state-of-the-art infrastructures. A multitude of technologies and solutions develop across industries such as ICT (information & communications technology), cleantech, utilities and transportation. New technologies are tested under ideal conditions in interaction with a population familiar with advanced technologies and open to innovations.

**Citizen involvement builds Smart City successes**
For a city to be smart it must perform efficiently and cater to the complex needs of its citizens. Thus, getting citizens involved in the process of making smart cities is crucial. Copenhagen holds a long tradition of taking a holistic approach to urban development and allowing concerns for people, businesses and the environment to go hand in hand.  This adds to the attraction of the Copenhagen region as an interesting place for international companies working to develop and test Smart City technologies and solutions.

## Unique access to public data sources

For decades Danish authorities have collected basic data about individuals, businesses, property etc. in order to be able to digitalise services across administrations and sectors. A new Danish government programme provide free access to public data sources in order to drive innovation, growth and job creation. The availability of an abundance of high-quality basic data makes up a unique starting point for the development of smart solutions to the challenges of urban development.

**Overview of open data**
*   **Geographic data:** Information about cadastral parcels, buildings, road network, rivers and lakes.
*   **Address data:** Streets, house numbers, zip codes and administrative units, linked to geographic coordinates.
*   **Property data:** Information about land, buildings and dwellings.
*   **Company data:** Information from the official register of companies (CVR Register) including The VAT-ID number, names, addresses, industry classifications etc.
*   **The Danish Civil Registration System** has made it possible to collect and store detailed population health data for decades, providing researchers and developers with unique opportunities.

*Denmark, Europe's best country for doing business*
- The World Bank, Doing Business 2014

## Ready for Smart Grid

Intelligent resource optimisation by means of Smart Grids that manage the production and consumption of electricity, water and heating is a characteristic of Smart Cities. In recent years, around one third of all EU Smart Grid research projects have taken place in Denmark. Denmark has one of the most diverse and yet integrated energy systems anywhere in the world. There is a long tradition for the early adoption of renewable energy sources and the integration of green technologies into all steps of the Smart Grid value chain.

Smart Grid projects in the Copenhagen region are driven by cross-sectorial partnerships involving companies, industry associations, universities, sector research agencies and public authorities.

**Significant regional projects include:**
- EcoGrid
- FlexPower
- iPower
- PowerLab

**About the market:**
- 188 Smart City companies in Copenhagen
- 19.000 employees in Smart City companies in Copenhagen
- 84% use the local market
- 30% of the turnover is linked to export

## The place to be for R&D

Denmark is among the top five regional innovation leaders according to the European Commission's Regional Innovation Scoreboard in 2014. In the Copenhagen region several research-intensive universities are involved in Smart City activities and collaborate with government and industries in open partnerships capable of handling the extreme complexity of Smart City challenges.

## Copenhagen rolls out the 'Internet of Everything'

Global networking giant Cisco cooperates with municipalities in the Copenhagen region to develop an 'Internet of Everything' – Cisco's take on the neural system of future smart cities. Services ranging from outdoor lighting, parking and traffic signals to kiosks, mobile services, utility services and flood defences will be managed in one single network.

"

The 'Internet of Everything' data revolution now is embraced by Copenhagen, which already is one of Europe's most innovative cities. It has an ambitious green vision and is a perfect setting for a green laboratory.

- Wim Elfrink, executive vice-president,
Industry Solutions and chief globalisation officer, Cisco.

**Test & demo**
Denmark is a compact, transparent market, and many significant test and demonstration projects involving multinational companies take place in the Copenhagen region. Advanced digitalisation and technology readiness levels and a population of early adopters make the region highly suited for testing consumer apps, other digital solutions and user-driven innovations.

## Companies of a certain caliber

Growing international awareness of the potential of Smart City concepts presents great opportunities for companies that are able to create solutions on a complex and unstructured background. This is a well-established strength of companies in the Copenhagen region, and system solutions are a key competence relating to the complex nature of Smart City challenges.

The region has become an incubator for Smart City start-ups, and small companies make up two thirds of the industry. In an international per-spective they are potential investment objects or bridgeheads for collaboration with public authorities in Denmark.

In a recent survey Copenhagen Capacity identified 244 companies involved in Smart City activities in the Copenhagen region.

## Conducive working environments

86% of the Danes speak English, and 58% speak German. Highly qualified employees are readily available to match the complex needs of companies engaged in Smart City activities. Flat organisational hierarchies and informal working environments stimulate creativity, reflexion, commitment and initiative among employees at all levels.
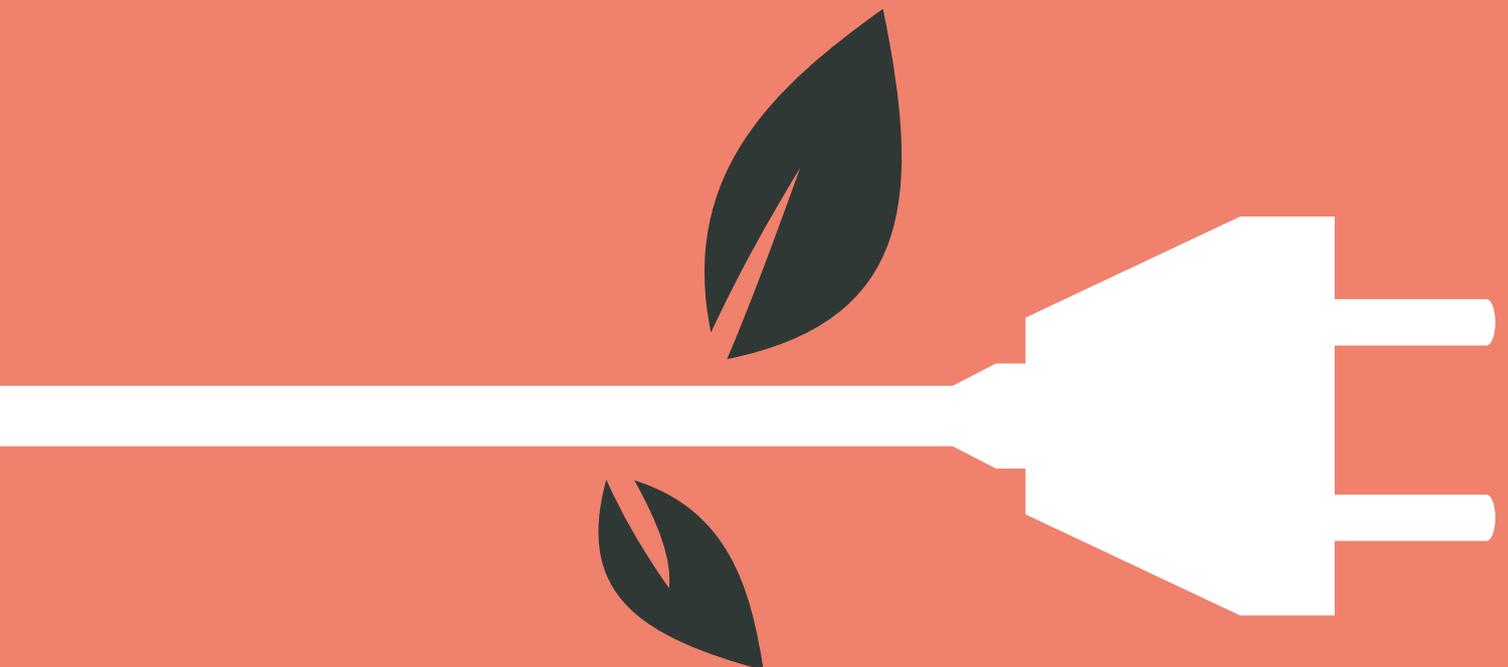
### Open collaboration in Triple Helix

"

The open structure of public admin-istrations in activities such as private-public innovation projects allows companies in Copenhagen to utilise the unique potential for cross-sector collaborations.

- David Overton Charbre Holm, senior business developer, Technical University of Denmark (DTU).

COPENHAGEN
# CAPACITY

# Most business friendly climate in Europe

## The easiest place to do business

Denmark is the least corrupt country in the world and the easiest place in Europe to do business, according to the World Bank. Establishing an office can be done in 48 hours, and it is easy to arrange credit lines, pay taxes, protect investors, trade across borders and resolve insolvency problems.

**Flexible labour law – easy to scale headcounts**
In terms of hiring and firing, Denmark has the most flexible legislation in Europe, and Copenhagen is approximately 15-20% cheaper than Stockholm when comparing salary, social security and office rent.

**Unique Danish tax rule**
Companies with their Nordic headquarters in Copenhagen benefit from a unique tax rule that allows them to avoid double taxation of income from foreign branches of their Danish company. Denmark is the only Nordic country to offer this unique tax rule.

**Strategic location**
Copenhagen is a natural catalyst for international smart city companies looking to pursue growth strategies. Facilitated by an excellent infrastructure, companies operating in Copenhagen have easy access to:

- The Scandinavian market with an affluent population of 25 million.
- The continental European market of 100 million consumers.

## Copenhagen Capacity at your service

Copenhagen Capacity offers free business consulting services to foreign-owned companies looking to expand their business development activities in Copenhagen and beyond.

While maintaining full confidentiality and without charge we can assist you with services such as:

- Business information, industry reports, benchmark analyses.
- Access to an extensive network of consultants, authorities and businesses.
- Unbiased and unique cost calculation and location tools.
- Knowledge sharing and practical assistance during the entire investment process.

Our services are also available to foreign-owned companies already located in Copenhagen.

**For more information, please contact:**



**Djouhara Oualli Westberg**
Business Development
Manager – Cleantech
Email: djo@copcap.com
Direct: 0045 33 34 38 76
Mobile: 0045 40 22 14 36

**Learn more**
The official Copenhagen Capacity website www.copcap.com presents the strengths and potential of the Copenhagen region, as well as the business opportunities available to international companies, investors and talents.