

# INVITATION

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Ministry of Foreign Affairs of Denmark  
The Trade Council  
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## DANISH DISTRICT HEATING & COOLING VISIT – BARCELONA AND MADRID

DBDH takes the pleasure in inviting you to participate in a joint Sector Visit to Spain with colleagues, and to write an article for a Spanish version of Hot|Cool. The event is arranged in close co-operation with the Trade Council of Denmark in Barcelona.

THE CONCEPT OF THE ACTIVITY WILL BE A PACKAGE CONSISTING OF:

- Market visit to Barcelona and Madrid, 20 - 22 September
- Article of 1200-1500 words for a special edition of the Hot & Cool magazine in Spanish (3,000 copies)
- Advertisement

THE DHC SECTOR VISIT HAS THE FOLLOWING PURPOSES:

- To establish contacts with key developers of district heating projects, authorities and partners.
- To help distributing knowledge to regional and local authorities about DHC and the opportunities that DHC can bring to the local development.
- To gather information about new initiatives and developments in a market with great potential in energy efficient solutions.
- To get an updated and accurate picture of how the crisis has affected the Spanish economy and how we can expect the market to develop over the next few years.
- To influence the legal and the technical specifications that will contribute to the market development.

## PRELIMINARY PROGRAM

### MONDAY 20 SEPTEMBER, DEPARTURE COPENHAGEN TO BARCELONA

The sector visit to Barcelona will focus on matchmaking meetings with technical and purchasing managers from some of the most important energy companies in Spain. On the arrival day we will be informed about the Spanish economy, and facts about the country's district heating and energy politics.

### TUESDAY 21 SEPTEMBER, BARCELONA

Meetings with technical and purchasing managers from important agencies:

**ICAEN:** Is the Catalan Energy Agency and is the official 'body' under the Regional Ministry of Economy. The main purpose of the Agency is to promote and develop renewable energies and energy efficiency solutions in the region of Catalonia. ICAEN can participate as institutional shareholder in strategic projects, and is the shareholder in almost all the district heating projects, which have been developed in Catalonia.

**The Energy Agency of Barcelona:** Their role is similar to ICAEN, but their competence area is the city of Barcelona, and depends of the Municipality. The goal of the Agency is to position Barcelona as a sustainable and energy efficient city and can be institutional shareholder in strategic projects.

**Elyo:** The company is owned by French utility GDF SUEZ and the main activity is to deliver energy consultancy services and to develop and operate efficient energy supply to buildings, including district heating and cooling installations. They have been involved in developing the district heating and cooling installations DISTRICLIMA in Barcelona and Zaragoza.

**Dalkia:** Their main activity is to deliver energy consultancy services and to develop and operate efficient energy supply to buildings, including district heating and cooling installations. Currently, Dalkia is participating in the development of a new district heating and cooling installation in Barcelona, called Marina.

**Gas Natural Soluciones:** Subsidiary of Spain's biggest utility group after the merger of GAS NATURAL and UNION FENOSA, Gas Natural Soluciones is the group's company in charge of delivering Energy Services, specially heating, to industry, commercial centers and large buildings (schools, hospitals, administration, residential, etc.).

#### In the afternoon - Visit to Mataró plant and Forum/@22

Barcelona is distinguished by being a city with several district heating plants. In the outskirts of Barcelona are the cities Mataró and St. Pere de Torelló who have smaller district heating plants burning biomass. In Barcelona we will visit FORUM/@22 which is a renovated area with heating and cooling installation connected to a waste incineration plant.

The city has started a new project called La Marina - Zona Franca, which is expected to be operative in 2011 and supplying 51.4 GWh of heat in 2016 with an investment of almost 65 million EUR. Moreover, Barcelona has many district heating projects: e.g. GAS NATURAL SOLUTIONS, Dalkia and Elyo.

In the late afternoon/evening - Departure from Barcelona to Madrid with flight, train or bus.

## PRELIMINARY PROGRAM, continued

### WEDNESDAY 22 SEPTEMBER, MADRID

The sector visit to Madrid will be a seminar on district heating and cooling with presentations about Danish technology and knowhow. The seminar will be held at Madrid's Chamber of Commerce or in cooperation with IDEA (the Spanish Agency) AVEBIOM (Association for Heat Utilization of Biomass) and El Instalador (trade journal for plumbing installation).

From the opening of the seminar until lunch we will have presentations from both Danish and Spanish companies. Hereafter Match Making Event and prearranged b2b meeting at company tables.

In the evening – reception for the delegation with the Ambassador and discussion of future district heating promotions at a political level in Spain, or in selected regions.

## PRODUCTION OF HOT|COOL IN SPANISH

As part of the concept it's essential to present your solutions in Spanish. Thus, a Spanish version of Hot|Cool will facilitate the communication. Moreover, the edition in Spanish will serve as marketing material at the upcoming COP16 in Mexico.

Participating companies are required to produce an article for Hot & Cool. If you are unable to write the article in Spanish, DBDH will provide the translation from English to Spanish. Prior to arrival the magazine will be distributed to various Spanish stakeholders identified by the Trade Council of Denmark as well as contacts informed by the participating companies.

## TRAVEL ARRANGEMENT

Hotels will be arranged by the Danish Trade Commission in Barcelona and the price level will be approx. 600 DKK

BCD will arrange the flight tickets. Price will depend on time of booking, but the level is approx. DKK 3000 incl. tax. Contact Annette Paludan at tel. 3915 4581 for booking.

### Monday 20 September

14:20 Departure from Copenhagen Airport

17:05 Arrival Barcelona

### Tuesday 21 September

20:20 Departure from Barcelona (with flight)

21:25 Arrival Madrid Barajas

### Wednesday 22 September

20:45 Departure from Madrid - Barajas

23:55 Arrival Copenhagen

# BINDING REGISTRATION

## DO YOU WANT TO JOIN?

The registration form must be filled out and returned to the DBDH secretariat before 15 July 2010.

Danish DH Sector Visit, Barcelona and Madrid, 20-22 September, 2010

Yes, our company will participate. The price is 15.000 based on the participation of 8 companies and co-financing from the Danish Export Council

Article and advertisement HOT|COOL in Spanish

10.000 DKK half page

12.000 DKK full-page

14.000 DKK page 3 or back page

No, thank you we will not participate

Company (stamp): \_\_\_\_\_

Contact: \_\_\_\_\_

E-mail: \_\_\_\_\_

Return the binding registration to DBDH before 15. July, 2010

### DBDH

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## BACKGROUND

Spain is one of Europe's largest economies with Western commercial standards and a well established local distribution network. Furthermore Spain is Denmark's 9th largest export market and fifth when it comes to exports of energy technology. The figure for the Spanish energy self-sufficiency is 21% (80% of all their energy is import). By comparison, Denmark is the only EU country that is self-sufficient in energy (131%) because of CHP/DHC.

Spain has large unexploited biomass potential: forest and agricultural land and cattle, poultry and pig herd, but in the Spanish energy segments there's lack of knowledge and technologies, particularly in biomass, biogas and district heating.

Therefore, Spain will be a very attractive market for Danish companies that possess knowledge, technology and equipment for the energy industry. And due to Spain's high unemployment and negative economic growth, the Spanish government is now focusing on energy as one of the sectors that will help to create jobs.

### Spain's potential in heating and cooling

Spain and district heating are two words which for years have not hung very well together. This perception has begun to change because the Spanish government has realized that the country gradually is deviating too much from its Kyoto obligations and because the energy intensity is approx. 20% higher than the EU-15 and almost twice the level of Denmark. Regarding meeting the EU objective for 2020, Spain is lagging significantly behind.

Therefore, the Spanish government 'has taken the bull by its horns' and over the last 2-3 years they have launched several initiatives and national plans to reduce energy consumption at all levels in the society, and the political focus on energy efficiency and renewable energies is getting stronger.

In December 2009, the prime minister introduced the Law about Sustainable Economy which is the first step towards a change in the economic model of the country. From an economic growth (which until now has been based on brick and tourism), they are moving towards a knowledge-based economy, in order to create a place among the elite in the developed countries.

The technical code of the Spanish buildings contains very little about district heating and there's a lot of ignorance about what district heating is, and what district heating can do, and what benefits district heating can give the consumer and the environment. Therefore the Spanish authorities are interested in knowing more about standards and regulations from countries with many years of experience, and here Denmark plays a pivotal role with knowhow, technology and equipment.

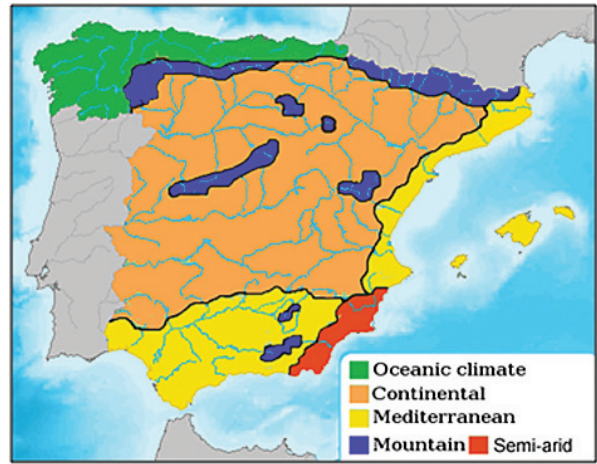
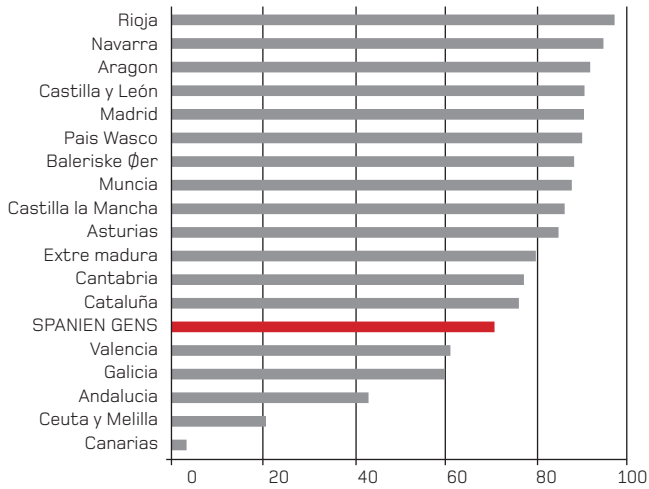
### Why Madrid and Barcelona?

The geographical location of Madrid, in the middle of the country, makes the climate ideal for developing district heating and cooling plants. The cold winters with temperatures often below 0° C and snow 2-3 times a year and the summers which often are hot with temperatures above 35°C.

Many Danes still regard Spain as a country of sun and heat all the year round, and therefore it's difficult to understand that there is a need for district heating and cooling. But there is - especially in the geographical center of the country (the 600 m. high plain) where the climate fits very well with the concept of District Heating and Cooling: high temperature degrees during summer and cold temperature degrees during winter, which is characteristic for the continental climate in approx. 2 / 3 parts of the Spanish territory (see for instance the climate map below). Here you can compare the average temperatures between some selected Spanish cities and Denmark. According to Spain's statistical, 70% of all Spanish households have district heating. However, there are major differences between regions.

## BACKGROUND, continued

% OF SPANISH HOUSEHOLD WITH HEAT



At the present moment the Spanish energy agency IDAE ([www.idae.es](http://www.idae.es)) is preparing Spain's new Plan for Renewable Energy (2011-2020), which will be handed over to the European Commission by the end of June, 2010. According to sources, the plan will place more emphasis within heating technologies than previously. In particular it will focus on biomass and biogas as renewable energy sources and use of heat for energy purposes. Recently, IDAE has created a grant program (BIOM-CASA) to promote the use of biomass for heating in households by installing biomass boilers and small district heating systems.

Due to Spain's efforts to use energy more efficiently, the focus is on heating and district cooling and there are already plants in operation in several regions, and more to come. There are even a few specialized local companies that are able to develop a district heating plant, or provide equipment for the industry, which obviously gives very good opportunities for the Danish companies.

AVERAGE TEMPERATURES IN DENMARK AND SELECTED SPANISH CITIES

