Managing B2C Market in DHC: The Lisbon Case

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Cooling your home: how to connect residential buildings to district cooling
PARQUE DAS NAÇÕES
The heart of modern Lisbon

- A unique location, with 5 km of riverfront.
- 330 ha (5.0 km x 0.6 km).
- A new city built from scratch:
  - 20,000 people living
  - 20,000 people working
  - Some of the most important attractions of the city

A new urban area: buildings are designed and built to be connected to the DHC system
Lisbon DHC: brief overview

Production: a high efficiency TRIGENERATION plant, solution designed for the Lisbon climate

Distribution: an efficient network, with 90 km of pipes (4 x 22.5 km), including main lines in technical galleries

Delivery: more than 140 energy transfer stations
Lisbon DHC: brief overview

Large B2B customers account for ≈90% of energy sales

Lisbon Oceanarium

Altice Arena

Hotel Myriad by SANA

FIL – Lisbon Exhibition Centre

Vasco da Gama Shopping Mall

Orient Railway Station
The B2C market

- B2C market accounts for ≈10% of energy sales but ≈90% of the customers
- Massive residential buildings, with hundreds of individual customers
The B2C market

Specific needs of B2C market:
- Individual contracting, metering & invoicing
- Managing thousands of small customers
- Specific tools & offers designed for this particular market

At the moment:
- 3,500 B2C customers (residential & small business)
- 5,000 individual meters
Member States shall ensure that, for district heating, district cooling and domestic hot water, **final customers are provided with competitively priced meters** that accurately reflect their actual energy consumption.

In multi-apartment and multi-purpose buildings with a central heating or cooling source or supplied from district heating or district cooling systems, **individual meters shall be installed to measure the consumption of heating, cooling or hot water for each building unit, where technically feasible and cost effective**…

Where the use of individual meters is not technically feasible or where it is not cost-efficient, individual heat cost allocators shall be used…

Meters and heat cost allocators installed after 25 October 2020 shall be remotely readable devices.
Managing B2C market is much more than managing meters! Thus, dedicated resources are needed:

- A **Store/Contact Center** where people get information about the service, receive price simulations and sign contracts
- A **Customer Support Service** in charge of managing contacts, requests or claims
- A **small operational team** dedicated to install, remove and maintain meters, as well as collect and input readings (while telemetering is not in operation)
“Your house is in our HOME

HOME is the new maintenance service offered by Climaespaço, now optimized to ensure an even faster and effective response.

With a team of highly skilled technicians, HOME offers you a service of permanent assistance, 24 hours a day, so that you can count on us every time you need.

Contact us, we are right here on your side”.

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Managing B2C market in DHC: The ERP software

An integrated software designed to manage:

- Substations
- Pipe sections
- Buildings
- Apartments
- Customers
- Contracts
- Meters
- Readings
- Invoicing
- Payments
- Customer relationship
- (...)

Climaespaço uses an ERP with non-standard modules specially designed for this purpose, including a dedicated CRM tool.
Managing B2C market in DHC:
The invoice

A clear invoice layout:
- Clean
- Easy to read
- Including tips on energy efficiency

EED Proposal of amendment

Member states shall ensure that clear and comprehensible information is provided with the bill to all DHC final users

Member states shall ensure that final customers are offered the option of electronic billing information and bills
Managing B2C market in DHC: A problem called “energy losses”

The challenge is how to manage properly the energy losses measured inside the building, in a system (secondary) that belongs to a third party (condominium).
Ongoing developments:
Customer App: additional information, better customer experience

TELEMETERING + DIGITALIZATION

- The use of big data and digital tools open the possibility of improving customer experience.
- What will we do with the consumption data collected? Share it with the customers, through a end-user app.

- This system will provide customers with useful information for an effective demand side energy management:
  - Permanent monitoring of consumption
  - Year on year comparisons
  - Benchmarking with similar users
  - Establish a link between climate and consumption
  - Early detection of technical failures
  - Forecasts