

Managing B2C Market in DHC : The Lisbon Case

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29.05.2019

UNEP Webinar

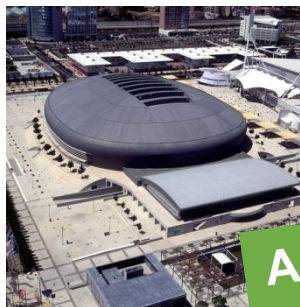
Cooling your home: how to connect residential buildings to district cooling

Lisbon DHC: brief overview



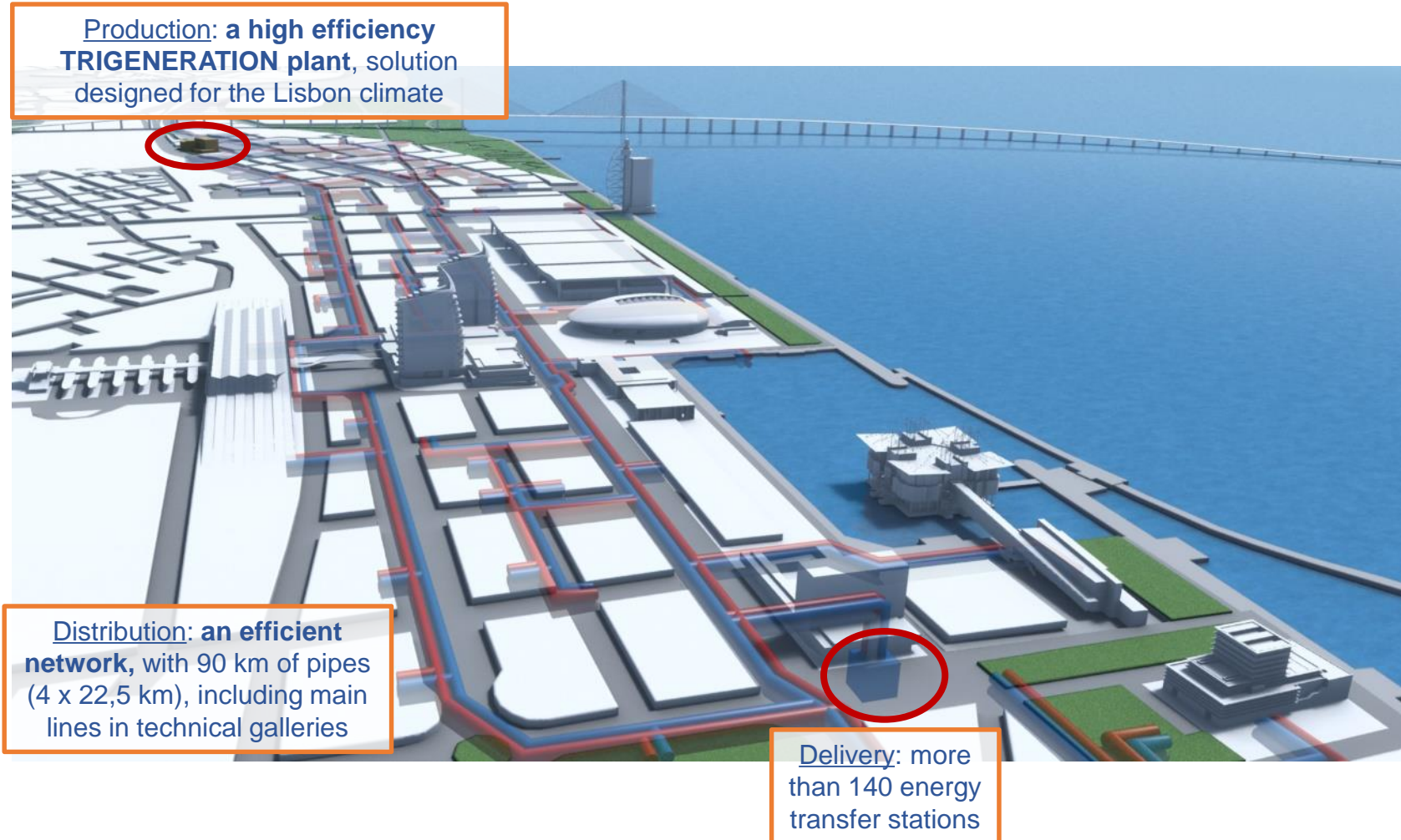
PARQUE DAS NAÇÕES The heart of modern Lisbon

- 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

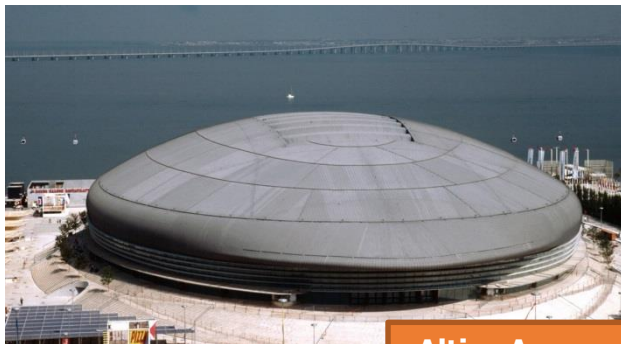


Lisbon DHC: brief overview

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 $\approx 10\%$ of energy sales but $\approx 90\%$ 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



The B2C market

Individual metering will be the standard for DHC

Energy Efficiency Directive – Article 9 Directive (EU) 2018/2002

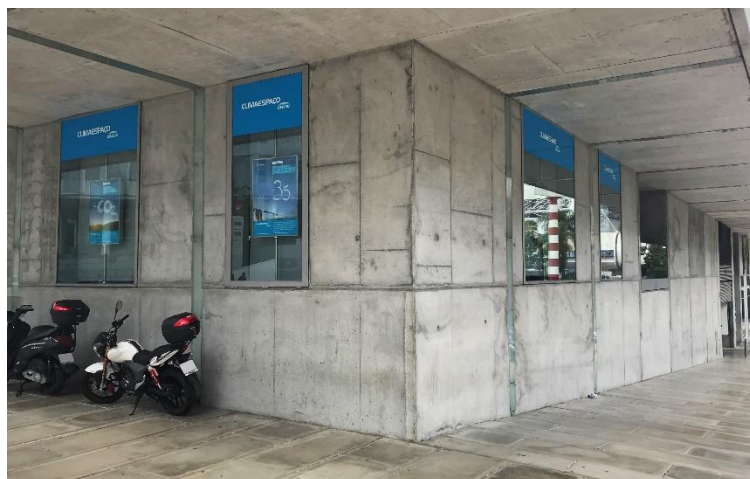
- Member States shall ensure that, for district heating, district cooling and domestic hot water, **final customers are provided with competitively priced meters** that accurately reflect their actual energy consumption.
- In multi-apartment and multi-purpose buildings with a central heating or cooling 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 in DHC:

Customer Support Service

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)



Managing B2C market in DHC: HOME, a complementary maintenance service



“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”.

www.climaespaço.pt

A SUA CASA ESTÁ
NA NOSSA HOME

Home é o novo serviço de assistência da Climaespaço, agora otimizado para garantir uma resposta ainda mais rápida e eficaz, em caso de avaria da sua instalação de calor ou frio, em qualquer altura. Contacte-nos, nós estamos mesmo ao seu lado.

ASSISTÊNCIA TÉCNICA
home
BY CLIMAESPACO
ENGIE

Assistência Técnica 21 893 10 57,
disponível 24 horas.

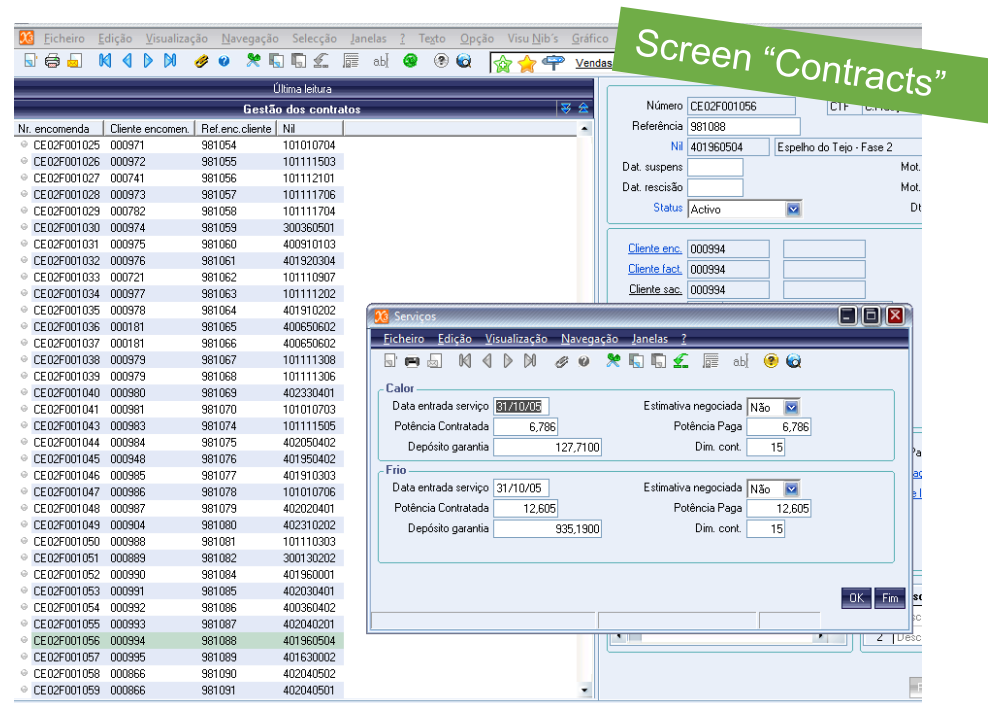
Managing B2C market in DHC:

The ERP software

An integrated software designed to manage:

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

Climaespço 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

DADOS DA FATURA

Fatura n.º: FCLCE XXXXXXXXXX
Período de faturação: 00-00-0000 a 00-00-0000
Data de emissão: 00-00-0000
Data de vencimento: 00-00-0000
Modo de pagamento: XXXXXXXXXX

NOME E
ENDEREÇO

DADOS DO CONTRATO

Cliente n.º: XXXXXXX
Contribuinte n.º: XXXXXXXXXX
Contrato n.º: CEXXXXXXXX
NIL: XXXXXXXXXX
Fração: XXXXXXXXXX
Potência de calor: 00,000 kW
Potência de frio: 00,000 kW

RESUMO DA FATURA

ENERGIA: 0,00 €
IVA: 0,00 €
TOTAL A PAGAR: 0,00 €
DATA LIMITE DE PAGAMENTO: 00-00-0000

MENSAGENS

CONTACTOS

ATENDIMENTO COMERCIAL - LOJA: 218 956 265
climaespaco.loja@climaespaco.pt
Dias úteis das 9h30 às 19h30. Sábado das 10h00 às 13h00

ATENDIMENTO TÉCNICO: 218 931 057
Atendimento 24 horas por dia, 7 dias por semana
Dias úteis das 9h30 às 17h00

SERVIÇO DE APOIO A CLIENTES: 213 171 182
climaespaco.info@climaespaco.pt
Dias úteis das 9h30 às 13h00 e das 14h00 às 17h00

PAGAMENTO POR DÉBITO DIRETO

ID do credor: XXXXX
N.º da autorização: XXXXX
IBAN: XXXXXXXXXXXXXXXXXXXX

PAGAMENTO POR MULTIBANCO

ENTIDADE: XXXXX
REFERÊNCIA: XXX XXX XXX
MONTANTE: 00,00 €

Modos de Pagamento:

- Débito Direto: a forma de pagamento mais cómoda. Se ainda não aderiu, poderá ativar esta modalidade de pagamento ligando 218 956 265
- Multibanco: pagamento utilizando os dados indicados na fatura
- Transferência bancária: para a conta da Climaespaco S.A., IBAN: PT50 003401090012853012144, BIC: BNPAPTPLXXX
- Loja Climaespaco: ATM, numerário ou cheque, nos dias úteis das 9h30 às 19h30 e ao sábado das 10h00 às 13h00

DETALHE DA FATURA

Fatura n.º: FCLCE XXXXXXXXXX Período de faturação: 00-00-0000 a 00-00-0000

CALOR

Descrição	Quantidade	Prego	Valor si/IVA	IVA	Histórico de consumos (kWh)
Consumo de calor					
Parte fixa de calor					
Contagem parcial					
Perdas de calor					
Leitura do contador em	00-00-0000	XXXXX kWh			
Leitura do contador em	00-00-0000	XXXXX kWh			

FRIO

Descrição	Quantidade	Prego	Valor si/IVA	IVA	Histórico de Consumos (kWh)
Consumo de frio					
Parte Fixa de frio					
Contagem parcial					
Perdas de frio					
Leitura do contador em	00-00-0000	XXXXX kWh			
Leitura do contador em	00-00-0000	XXXXX kWh			

Quadro resumo de IVA		
Incidência	Taxa	Valor
000 000,00 €	23%	000 000,00 €

Energia	000 000,00 €
IVA	000 000,00 €
TOTAL A PAGAR	000 000,00 €

A fatura será válida como recibo após boa cobrança.

Em caso de incumprimento de data limite de pagamento, o fornecimento de energia poderá ser suspenso nos termos contratuais. A reativação do serviço terá um custo associado.

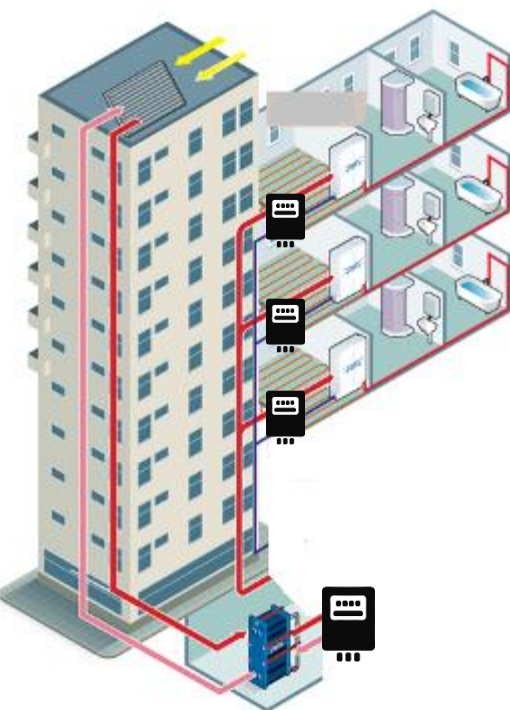
DICAS PARA POUPANÇA DE ENERGIA



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)



ETS meter

Nil Sub-Estação 300100000
Data cálculo 20/12/17

Consumos Sub-Estação
Consumo Calor kWh 26000,0000 Consumo Frio kWh 1000,0000

Consumos Frações

	Nil Edifício	Nil Fração	Consumo Calor kWh	Consumo Frio kWh	Perda Calor kWh	Perda Frio kWh
1	302A00000	300110001	0,0000	0,0000	0,0000	
2	302A00000	300110101	564,0000	0,0000	244,0000	
3	302A00000	300110102	0,0000	0,0000	0,0000	
4	302A00000	300110201	1583,0000	22,0000	686,0000	
5	302A00000	300110202	60,0000	0,0000	26,0000	
6	302A00000	300110301	2052,0000	2,0000	889,0000	
7	302A00000	300110302	1752,0000	0,0000	759,0000	
8	302A00000	300110401	1317,0000	0,0000	571,0000	
9	302A00000	300110402	0,0000	0,0000	0,0000	
10	302B00000	300120002	0,0000	0,0000	0,0000	
11	302B00000	300120003	0,0000	0,0000	0,0000	
12	302B00000	300120101	0,0000	0,0000	0,0000	
13	302B00000	300120102	950,0000	0,0000		
14	302B00000	300120201	330,0000	0,0000		
15	302B00000	300120202	1196,0000	0,0000		

Σ individual meters

Total Consumos Frações
Consumo Calor kWh 18140,0000 Consumo Frio kWh 954,0000

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

