



Best practise in supporting DHC

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Presentation outline

- DHC Legislation
- DHC Benefits
- Support measures identified
- Presentation of 12 best support measures



DHC Legislation

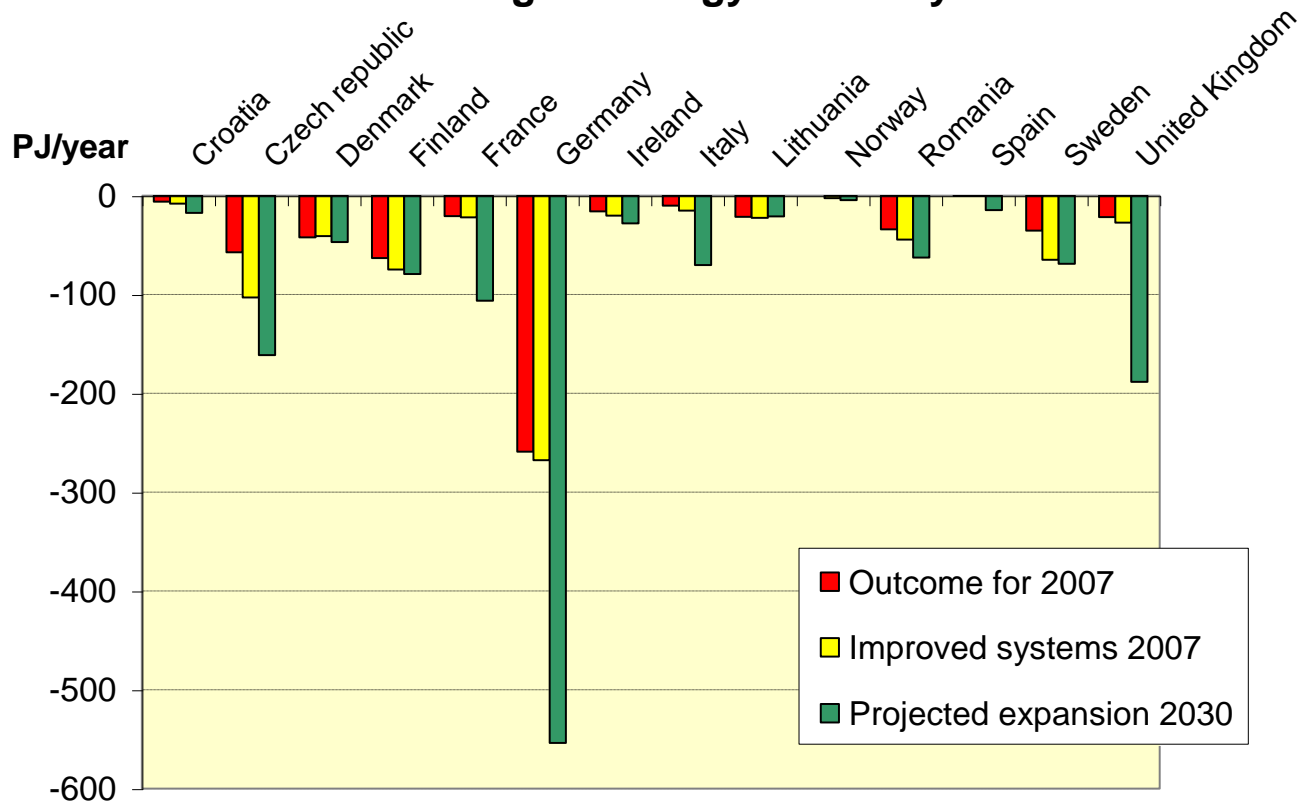
Number of relevant legislative frameworks by country group and legislative group.

Count of Legislative group	Country group				Grand Total
	Consolidation	Refurbishment	Expansion	New development	
01 Energy act	1	3	1		5
02 District heating act	2	5	1		8
03 Heat price regulation		8	2		10
04 No legislative framework			1	2	3
05 Energy efficiency act		3	5	1	9
06 Renewable act		1	2		3
07 Environmental act		5	3		8
08 Taxation act	1	1	3		5
09 Planning act	1		4		5
10 Competition act	1				1
11 Public utility act		1	4		5
12 National policies		2		4	6
13 Municipal & regional policies			1		1
Grand Total	6	29	27	7	69



DHC Benefits

DH Benefits: Reduction of primary energy supply, from higher energy efficiency



Support measures

Support measures within subgroups according to country groups.

Count of Support subgroup	Country group				Grand Total
	Consolidation	Refurbishment	Expansion	New development	
1 Burden - Carbon tax	2		1		3
1 Burden - Emission trading system			2		2
1 Burden - Energy tax	1		1		2
2 Support - Favourable loans		1	1		2
2 Support - Feed-in tariff, renewable electricity		1	1	1	3
2 Support - Investment grant, CHP			1	2	3
2 Support - Investment grant, DH connection	3		1		4
2 Support - Investment grant, DH distribution		3	5	2	10
2 Support - Investment grant, renewables	1	1	3	1	6
2 Support - Operation support, CHP incl FIT		4	1		5
2 Support - Operation support, renewables			1		1
2 Support - Social support for poor customers		1			1
2 Support - Tax deduction, CHP				2	2
2 Support - Tax deduction, DH	1	1	3		5
3 Market control - Consumer complaints board	1	1	1		3
3 Market control - Price regulation	1				1
3 Market control - Third party access		1			1
4 Planning - Building regulations			1	2	3
4 Planning - CHP planning	1			1	2
4 Planning - Heat planning & zoning, DH	2	1	5	2	10
4 Planning - National energy policy	1	16	3		20
4 Planning - Renewable planning			3	3	6
4 Planning - Waste planning & landfill bans	1		1		2
Grand Total	15	31	35	16	97



Best support measures 1-3

Rank	Top 12 support measures	Short description of the support measure	Sector dimension
1	Planning – Heat planning and/or zoning	Strategic energy planning, probably at municipality level. May include encouraging or even enforcing particular energy solutions (zoning). Currently applied in Germany, Denmark, Spain, France, Italy, <i>Lithuania</i> , Norway, and United Kingdom.	Distribution
2	Support – Investment grant, DH distribution	Financial support for district heating pipes through provision of grant, probably from government, but other sources also possible. Currently applied in Germany, Spain, France, Italy, Lithuania, Norway, Romania, and the United Kingdom.	Distribution
3	Planning – National energy policy	The framework, within which relevant legislation, possibly including measures on this list, may be framed. Currently applied in the Czech Republic, Germany, Denmark, Croatia, <i>Lithuania</i> , and Norway.	Planning



Best support measures 4-6

Rank	Top 12 support measures	Short description of the support measure	Sector dimension
4	Support – Operation support, CHP including feed-in tariff	Supporting CHP through regulatory means, one prominent example being by means of a Feed In Tariff or a CHP bonus. Currently applied in the Czech Republic, <i>France</i> , Italy, Lithuania, and Romania.	Generation
5	Support – Investment grant, DH connection	Financial support for connecting customers to existing mains network through provision of grant, probably from government, but other sources also possible. Currently applied in Germany, <i>France</i> , Denmark, Finland, and Sweden.	Demand
6	Burden – Carbon tax	Implementing a tax penalty on fossil fuels proportional to its fossil carbon emissions. Applicable to all energy systems (energy efficient approaches like district heating would prosper). Currently applied in Denmark, Norway, and Sweden.	Generation



Best support measures 7-9

Rank	Top 12 support measures	Short description of the support measure	Sector dimension
7	Support – Favourable loans	Providing low interest loans to finance the capital cost of establishing, extending or refurbishing district heating. Currently applied in Germany and Croatia.	All
8	Support – Investment grant, CHP	Financial support for CHP through provision of grant, probably from government, but other sources also possible. Currently applied in Germany and Ireland.	Generation
9	Support – Tax deduction, DH	Implementing a tax benefit for district heating schemes. Currently applied in Finland, France, Italy, Lithuania, and Norway.	Distribution



Best support measures 10-12

Rank	Top 12 support measures	Short description of the support measure	Sector dimension
10	Planning – Building regulations	Using existing regulatory framework to encourage deployment, and in to ensure unnecessary barriers are removed. Currently applied in Ireland, <i>France</i> , Norway, and United Kingdom.	Demand
11	Support – Investment grant, renewables	Financial support for renewables through provision of grant, probably from government, but other sources also possible. Currently applied in Germany, <i>France</i> , Croatia, Ireland, Norway, and Sweden.	Generation
12	Planning – Waste planning & landfill bans	Promoting in a strategic way disposal of waste, so that the energy can be recovered and put to use in district heating schemes. Currently applied in Denmark and Norway.	Generation



Conclusions about best support measures

- No objective selection procedure for finding best practise support measures was identified. Instead, a subjective selection procedure based on country voting was applied.
- The voting results gave a general preference to planning and financial support measures reducing the financial risk when expanding distribution networks.
- All three distribution support measures were elected to the 12 priority list and two of them top the list. This is a strong contrast to the total number of support measures, dominated by generation support measures.



The End

Thank you for your attention

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