



The Heat Pump Market in Finland: status and outlook

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Market characteristics

- 1) In Finland still “1 million wrongly heated small houses”
- 2) New houses, 10.000 pcs /a,
have no significant effect CO₂- releases 2020

Market Charasteristic

Replacement market

300.000 Oil heated houses
200.000 Water based electric heated houses
500.000 Direct electric heated houses
500.000 Free time houses (electricity)
100.000 Big estates outside district heating (oil, electricity, wood)

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1.600.000 houses potential for

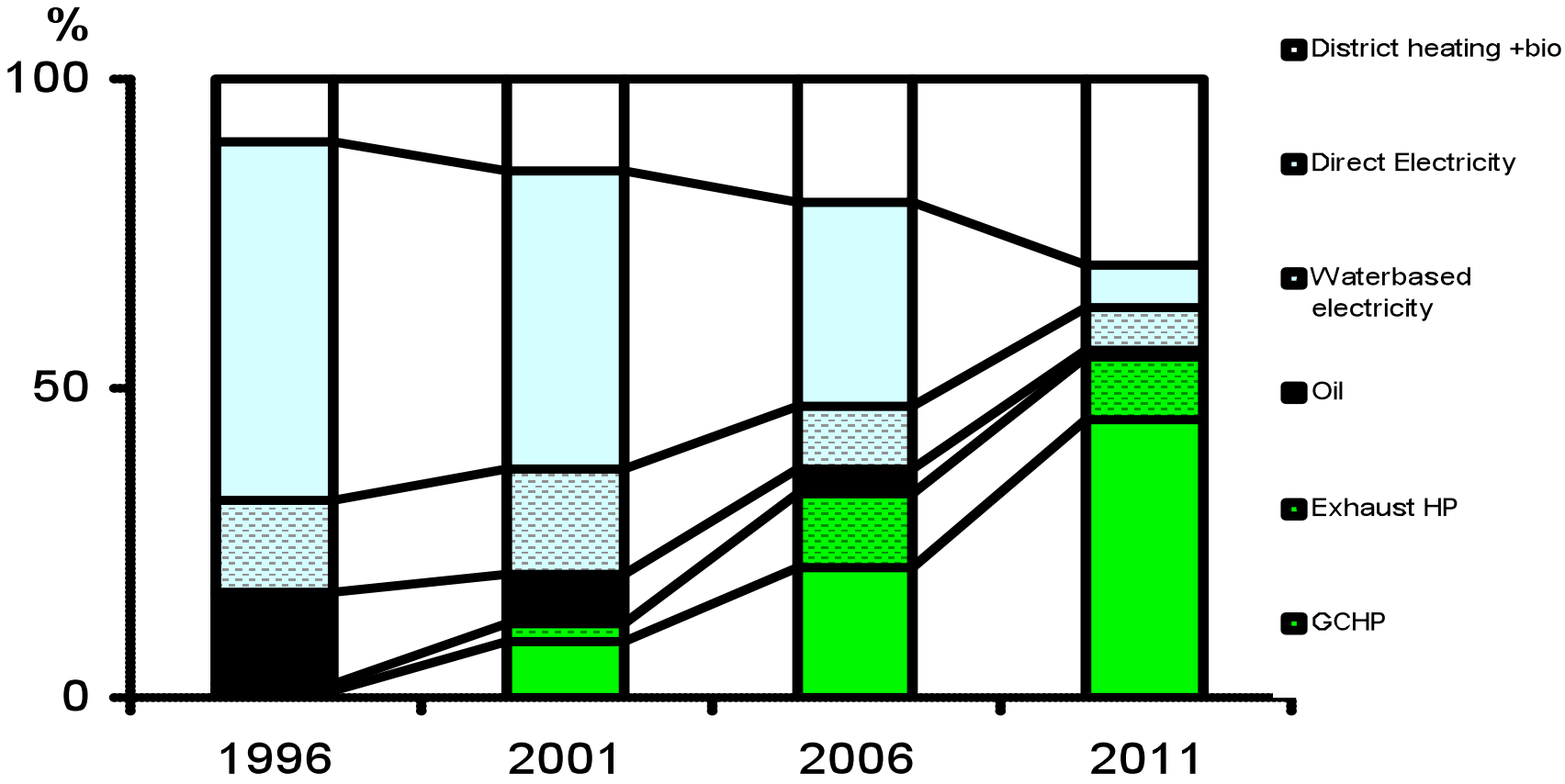
- **heat pumps**
- **bio/pellets**
- **district heating**
- **(solar)**



Market Characteristic

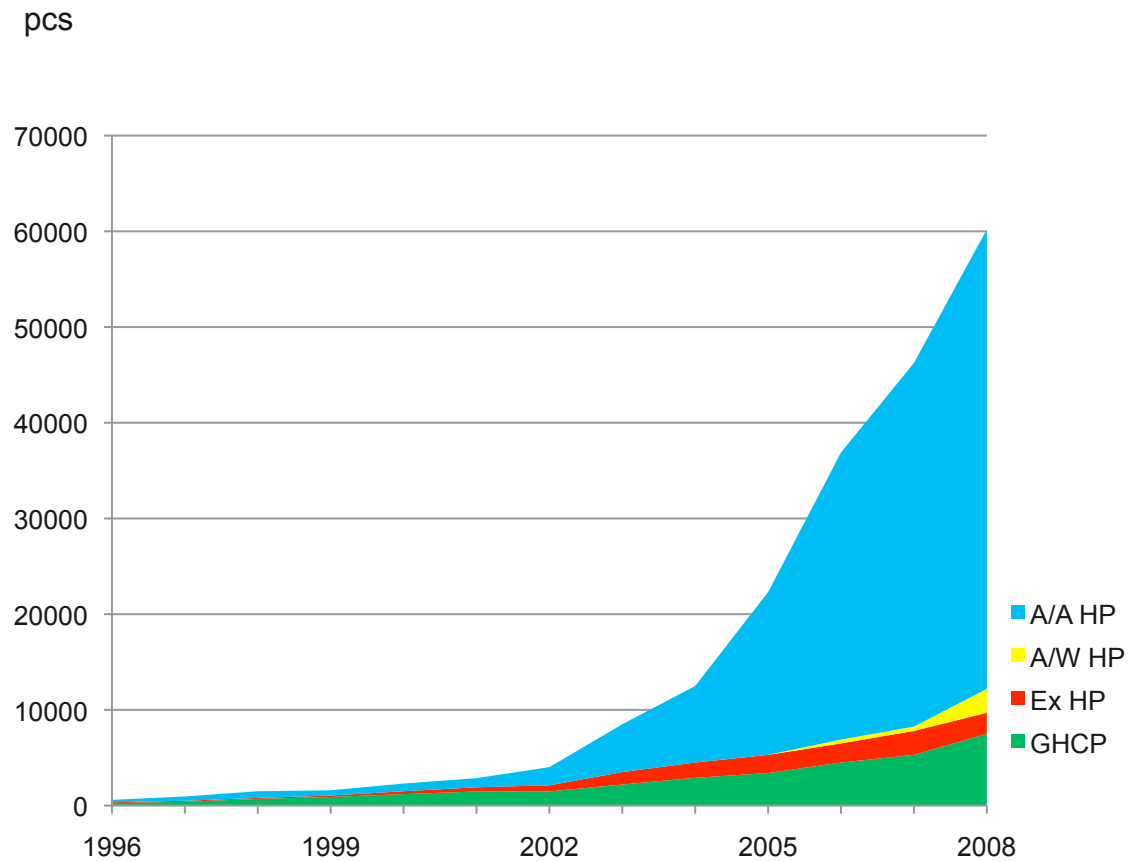
New single family houses

Heating systems of the new houses (10.000 pcs/2008) market shares 1996-2011 (2011 prognose by JH) %



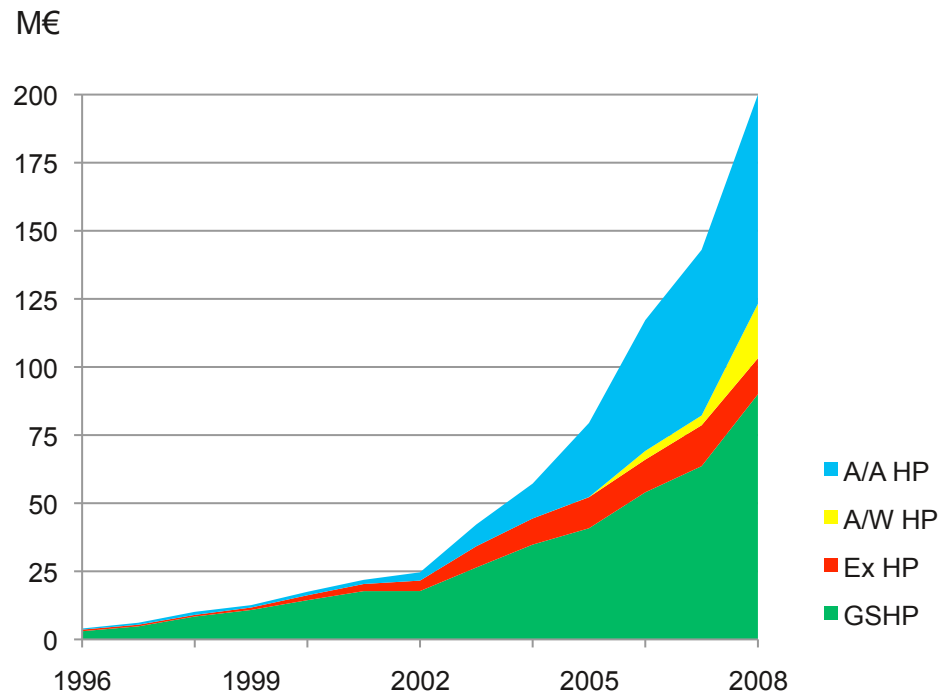
Heat pump figures

HPs in Finland 1996-2008 pcs



Heat pump figures

Finland , Heat pumps, in Euros, 1996-2008
(as installed with VAT)



GSHP 18.000€ Ex HP 6.000€ A/W HP 11.000€ A/A HP 1.800€

Heat pump figures

Finland , installed heat pumps 2008, 2007

	2008	2007	Growth
GSHP	7 500	5 300	42 %
EXHP	2 200	2 500	-12 %
A/W HP	2 500	450	456 %
A/A HP	48 000	38 000	26 %
Total	60 200	46 250	30 %

Legislation affecting heat pumps

EU-RES Directive in Finland

- Renewables from 28,5 % to 38 % in 2020, energy savings -20%
- Total energy consumption in Finland is ~300TWh/a
- Directive means increase of 30TWh/a in renewables
- With today's over 200.000 HPs 2-3 TWh/a RES is used
- With 1.000.000 HPs 25% of the RES goal of Finland is achieved
- In 12 years that means 50.000-70.000pcs/a
- Last year 60.000 HPs were sold in Finland, whereof 48.000 a/a HPs

SPF calculation method in RES DIR affects a lot what is HP RES in Finland 2020

Institutional & financial support:

Homework tax deduction

60 % of installation work, max 3000€/a/earning family member

The Finnish Heat Pump Association SULPU

80 members

coverage of HP market

- GCHP/ExHP over 90%
- a/a and a/w about 50%

annual budget >100.000 €

active in

- dissemination
- lobbying
- EHPA, IEA HP

EUCERT Training started 2009

- First 20 passed exam
- 5 courses / 100 2009