

# GSHP promotion meeting in Athens



## *Ground Source HP in France*



## *A development focussed on quality*

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## Summary:

- **Heat pumps in France**
  - ✓ History
  - ✓ Current situation
  - ✓ In situ measurements
  - ✓ Politic of quality
- **ADEME 's message to the French public**

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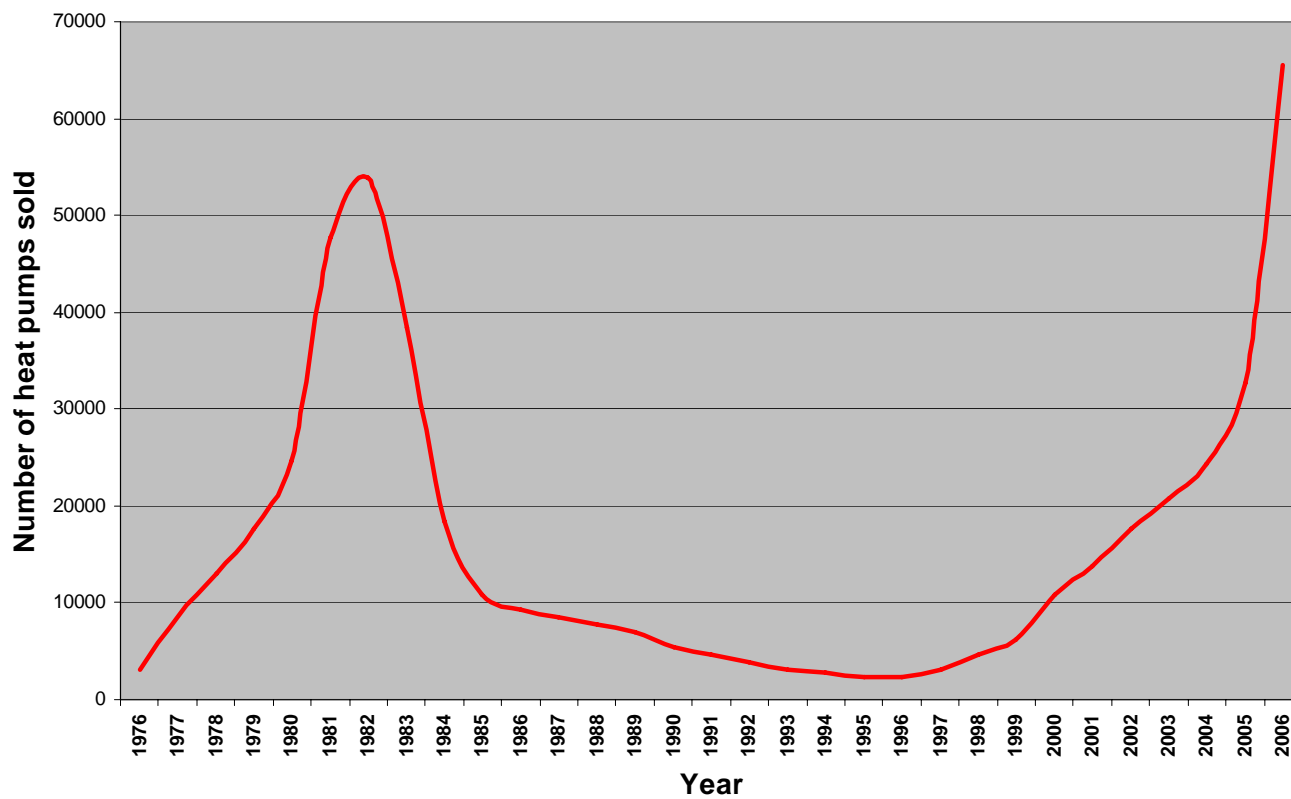


## *Heat pumps in France*

# HP in France: history



**History of Heat Pump sales in France**



✓ Program PERCHE in the eighties

↪ Major failure

✓ New start since 1997

↪ Politic of quality



# HP in France: current situation



✓ Since 1997, new start of the business



Target is focused on new buildings



Goal is a controlled development, based on quality



HP currently operating : ± 290 000 with ± 30% GSHP

<u>Heat Pumps sales</u> <small>Source: AFPAC</small>	2002	2003	2004	2005	2006	2006 vs 2005
Gnd direct evp / Gnd direct cond Gnd direct evp / Water		5 400	6 800	7 800	9 600	+ 23%
Brine / Water	7 700					
Water / Water		3 600	4 900	5 400	8 850	+ 64%
Air / Water	4 400	4 700	5 600	12 000	35 050	+ 192 %
Air / Air (*): ADEME estimation	Insufficient data			(7 500)*	(12 000)*	+ 60 %
<b>Total (hors Air/Air)</b>	<b>12 100</b>	<b>13 700</b>	<b>17 300</b>	<b>25 200</b>	<b>53 500</b>	<b>+ 112 %</b>



# HP in France: current situation



Since 2005 :

- ✓ Income tax cuts implementation
  - ⇒ Increase of the growth of the sales
- ✓ Rise of the demand for existing dwellings
  - ⇒ Air to water heat pumps are booming
- ✓ Market is attracting new contributors
  - ⇒ Need of training courses

# HP in France: current situation



## ✓ Dynamism of the market due to:

- ↪ The heat pump sector is now well organised → AFPAC (French Heat Pump Association)
- ↪ Income tax cuts implementation
- ↪ Energy prices increase
- ↪ Ecological awareness

# HP in France: current situation



## ✓ Income tax cuts:

↪ 50 % of the price of the machine

✓ Minimum COP according to EN 14511 > 3,3

✓ Installation by a professional

✓ Valid for all type of heat pumps (specific conditions for air/air)

↪ Reduction of the return on investment ( $\approx$  7 years for a GSHP on BHE compare to  $\approx$  12 years without tax cut)

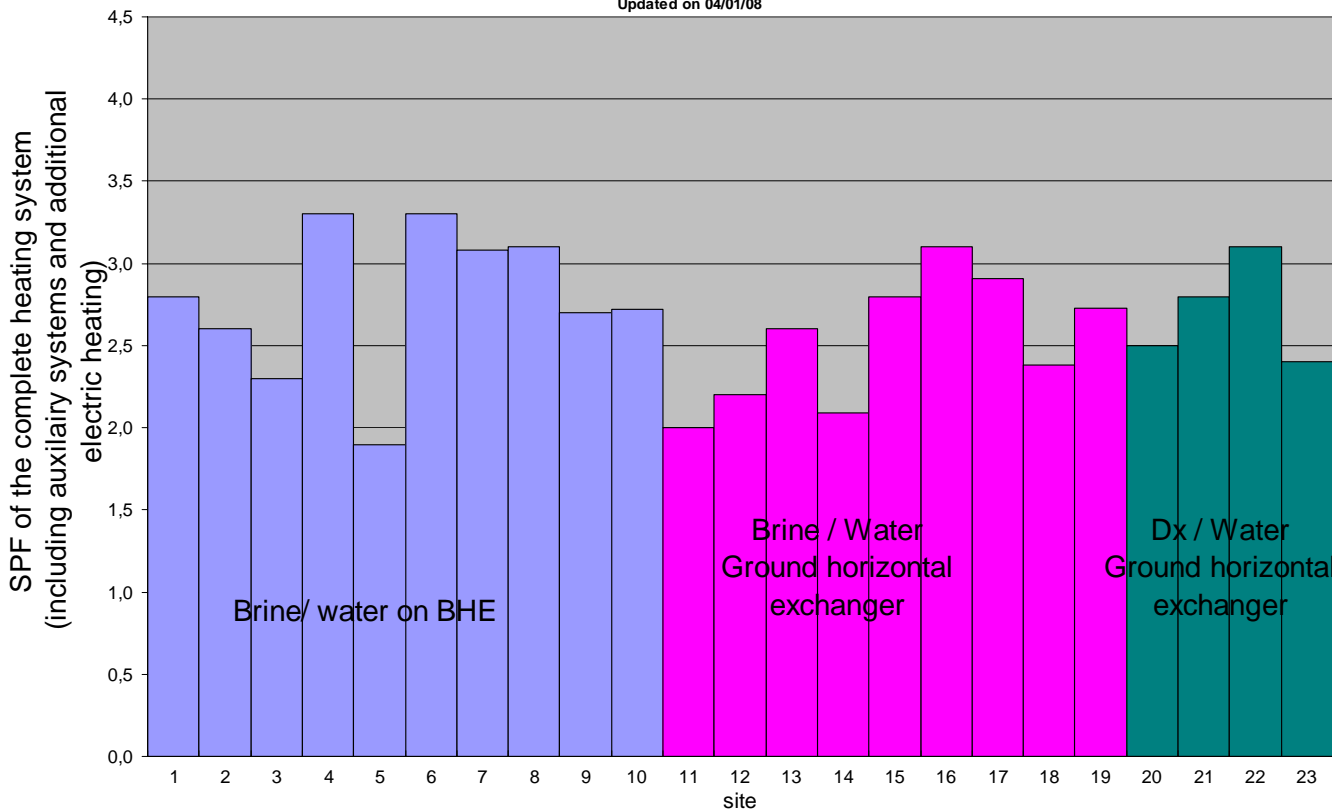


# HP in France: In situ measurements



**GSHP in-situ measurement (residential)**

Updated on 04/01/08



- ✓ Global performance is good
- ✓ Quality of machine and installation is the key point for high SPF



# HP in France: politic of quality



- ✓ **Most important thing is to promote quality :**
  - ↪ Quality certification for machine : NF PAC
  - ↪ Quality charter for fitters : QualiPAC
  - ↪ Consolidating existing tools : Drillers quality charter and guarantee fund for water to water HP (AQUAPAC)
  - ↪ Develop communication on heat pumps
  - ↪ To reinforce the income tax cuts criteria

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***ADEME 's message to the French public***

# ADEME 's message to the French public



Necessity to have a global approach gathering : the machine + the building + the sizing and fitting



Thermal study is essential



Preliminary improvement of the building 's insulation whenever it is possible

No discrimination between HP ' technologies



Minimum COP of 3,5 advised for all type of HP to simplify the message

# ADEME 's message to the French public



Quality is mandatory to obtain a lasting high SPF



Promotion of NF PAC, QualiPAC and the quality charter for drillers

HP is not the only heating system. It is not necessarily the best solution in all situations



Existing dwellings to be studied carefully, stress on the electrical network to be considered, etc.



Hot water production and cooling not to be forgotten

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[www.groundreach.eu](http://www.groundreach.eu)

[www.ehpa.org](http://www.ehpa.org)

[www.egec.org](http://www.egec.org)

[www.ademe.fr](http://www.ademe.fr)

[www.geothermie-perspectives.fr](http://www.geothermie-perspectives.fr)

[www.afpac.org](http://www.afpac.org)

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**Thank you for your attention**