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Heat Pumps in Switzerland

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History of heat pumps in Switzerland

- First artificial cooling around 1850 -> same technology can be used in heating
- Heat pump must compete in cost and efficiency with heat from combustion sources
- First discussions on using heat pumps during early 20th century
- First growth episode during oil crises

But,



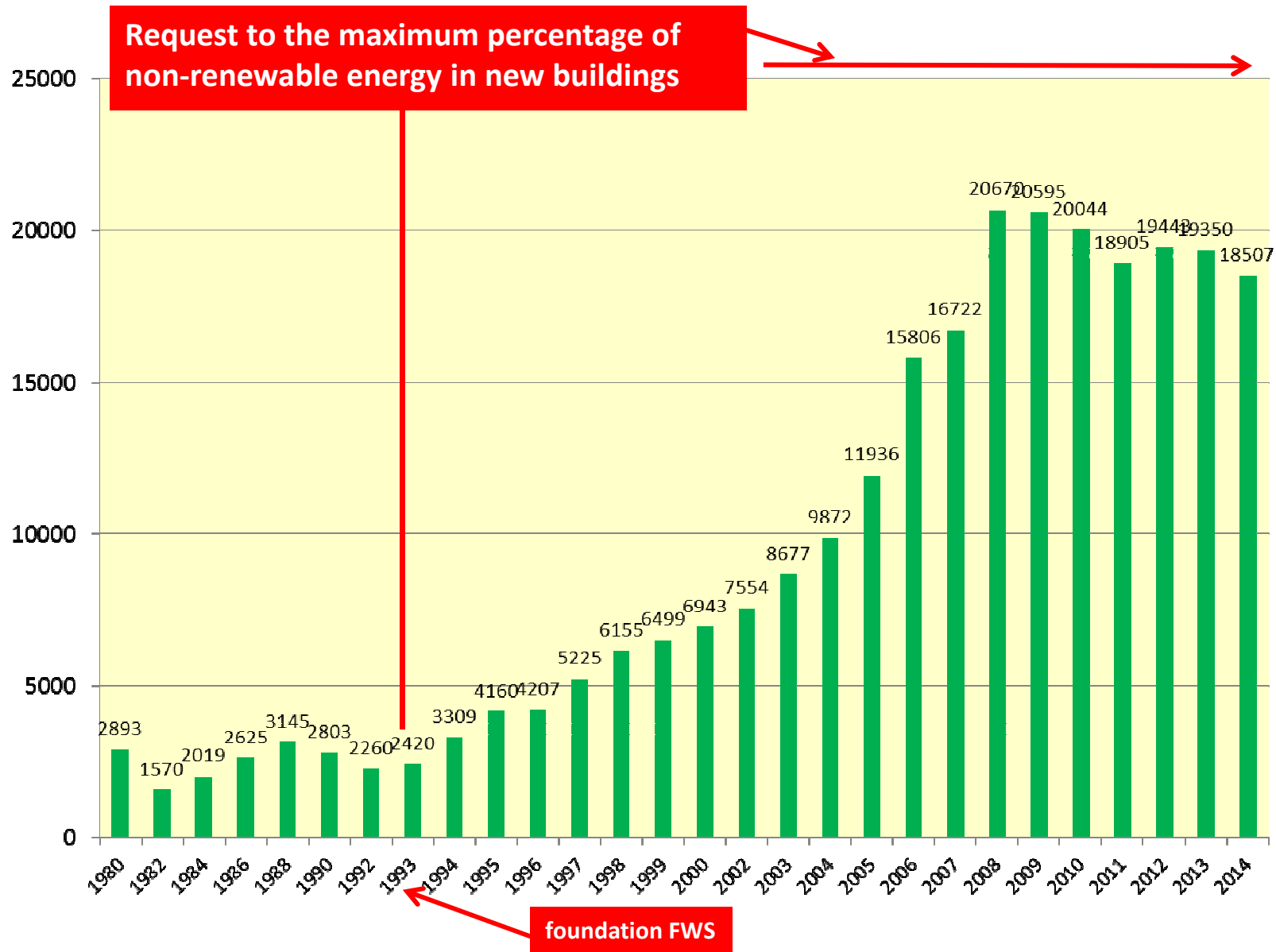
History of heat pumps in Switzerland, cont.

For sustained growth further conditions needed:

- Price competitiveness
- Technical competitiveness (reliability, low noise compressors, high efficiency)
- Sales and maintenance network and infrastructure
- Adequate policy environment



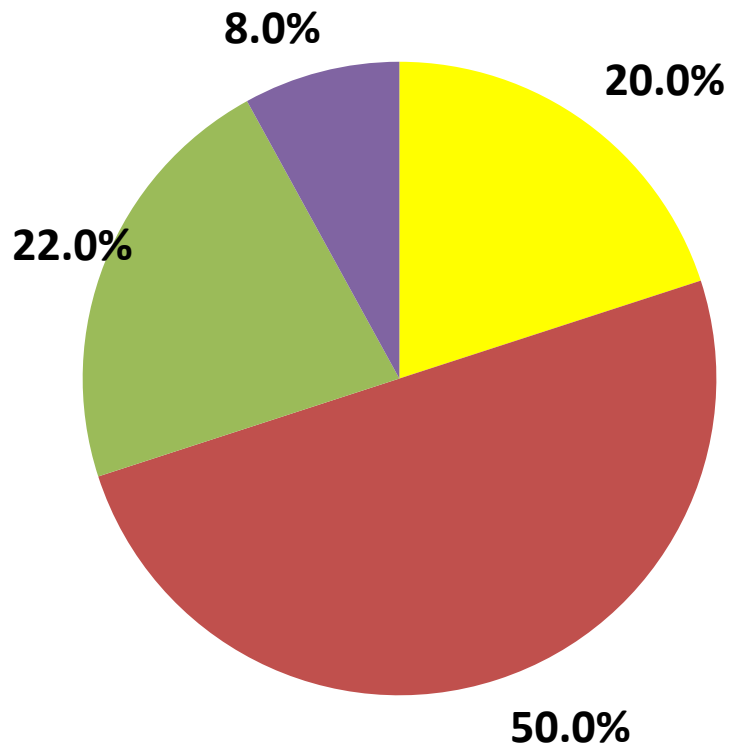
Heat pump sales statistics for Switzerland



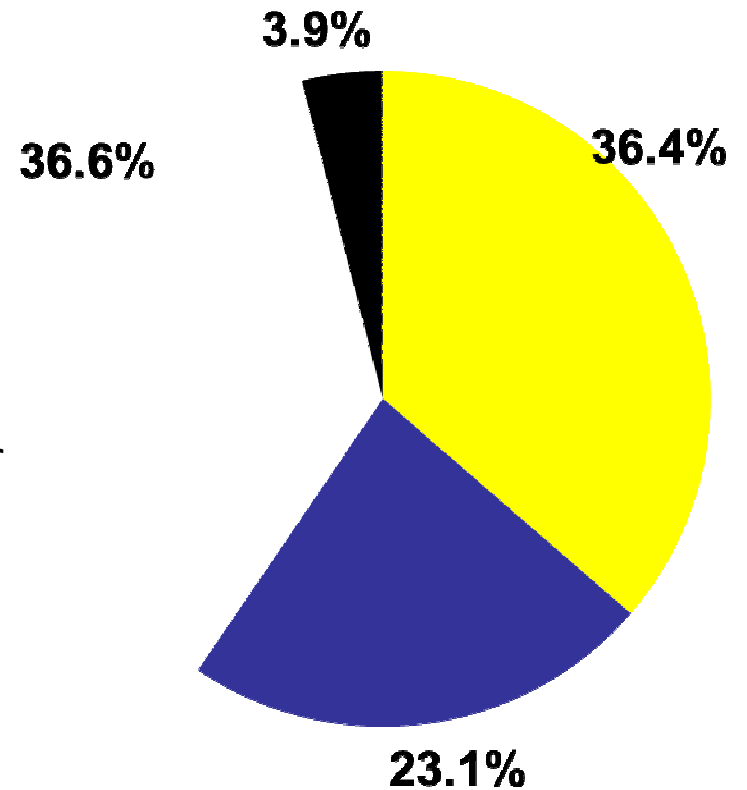


Heating systems market share

Year 2004



Year 2013



- heat pump
- oil-fired boiler
- gas-fired boiler
- wood



You need a network to develop the market

**government /
policy makers**



heating engineers



power suppliers



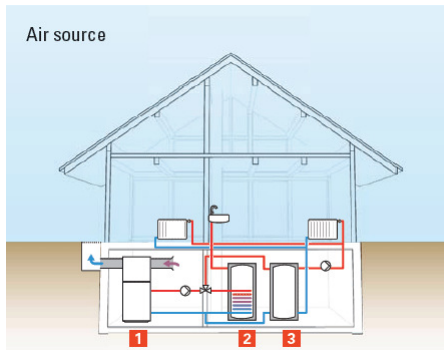
**heating systems
manufacturers**



home owners

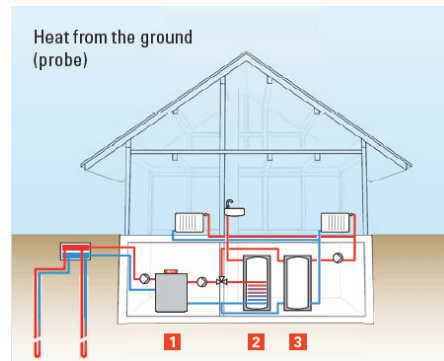


Heat pump systems



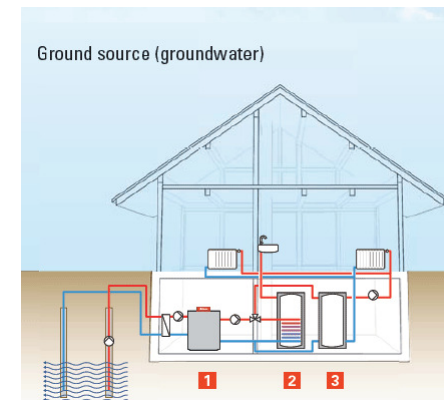
Air source (placed outside / placed inside)

***SCOP 2,5 3,5**



Ground source

***SCOP 3,2 4,5**



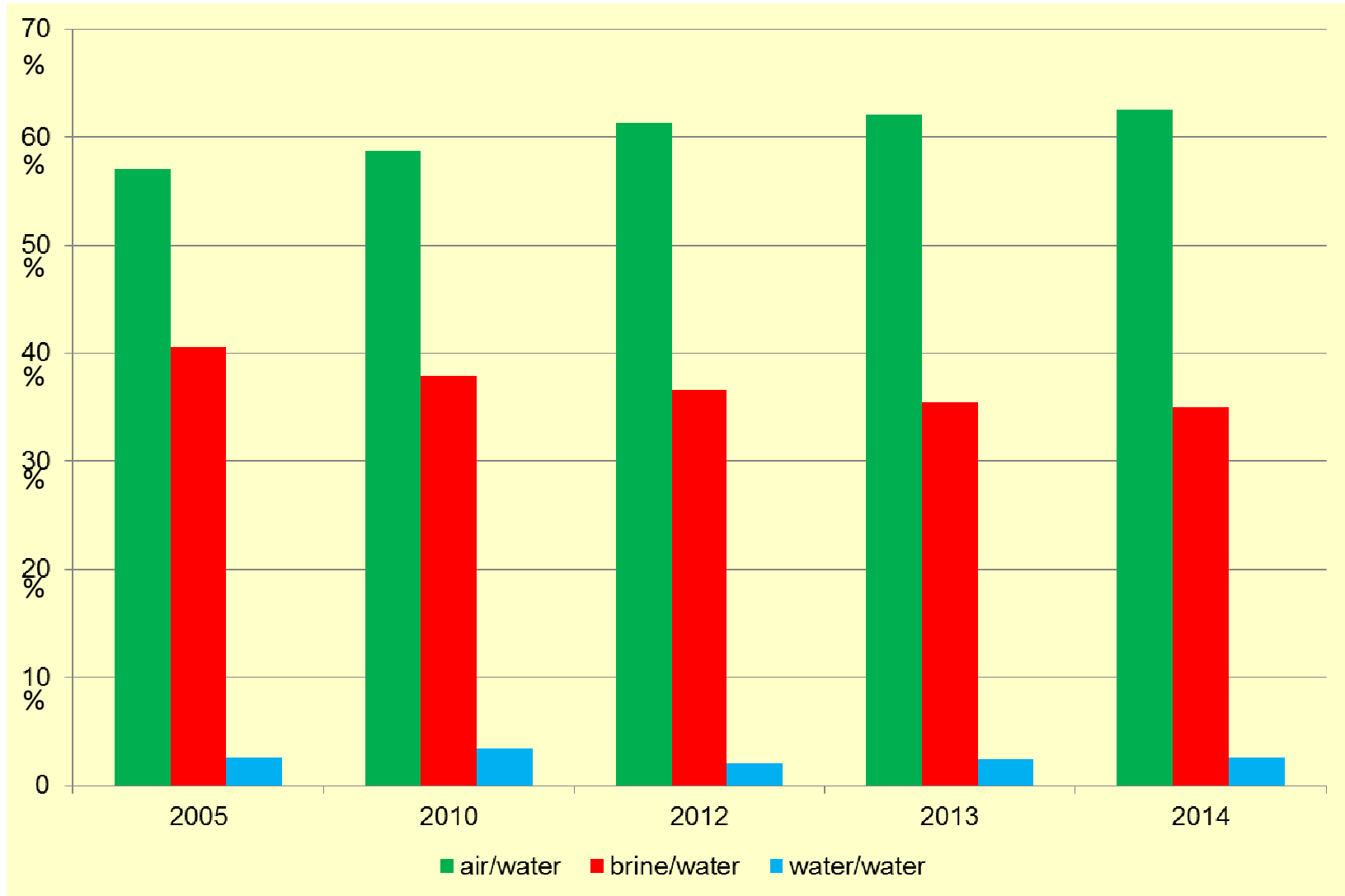
Groundwater

***SCOP 3,5 5,0**

***SCOP = seasonal performance factor**



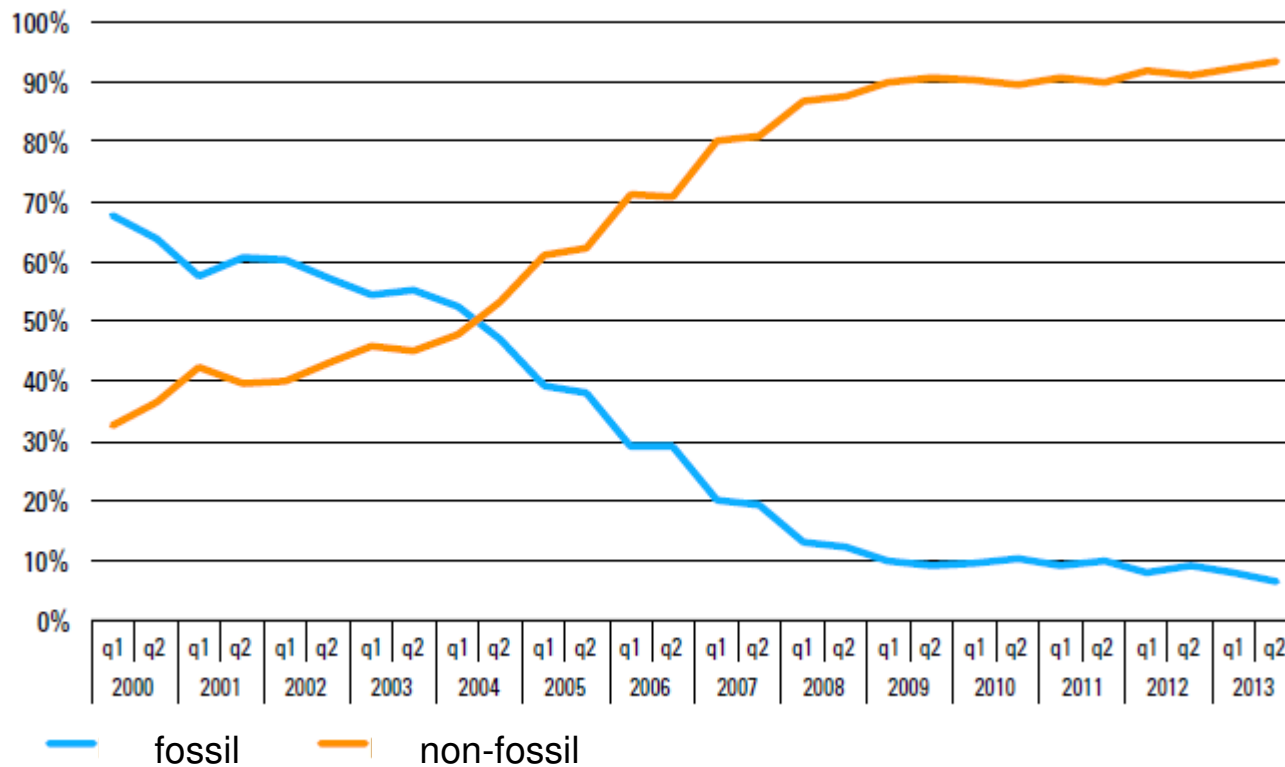
Heat pump systems market shares





Heating systems market share, new

Introduction of renewable energy requirements





Thank you for your attention!

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