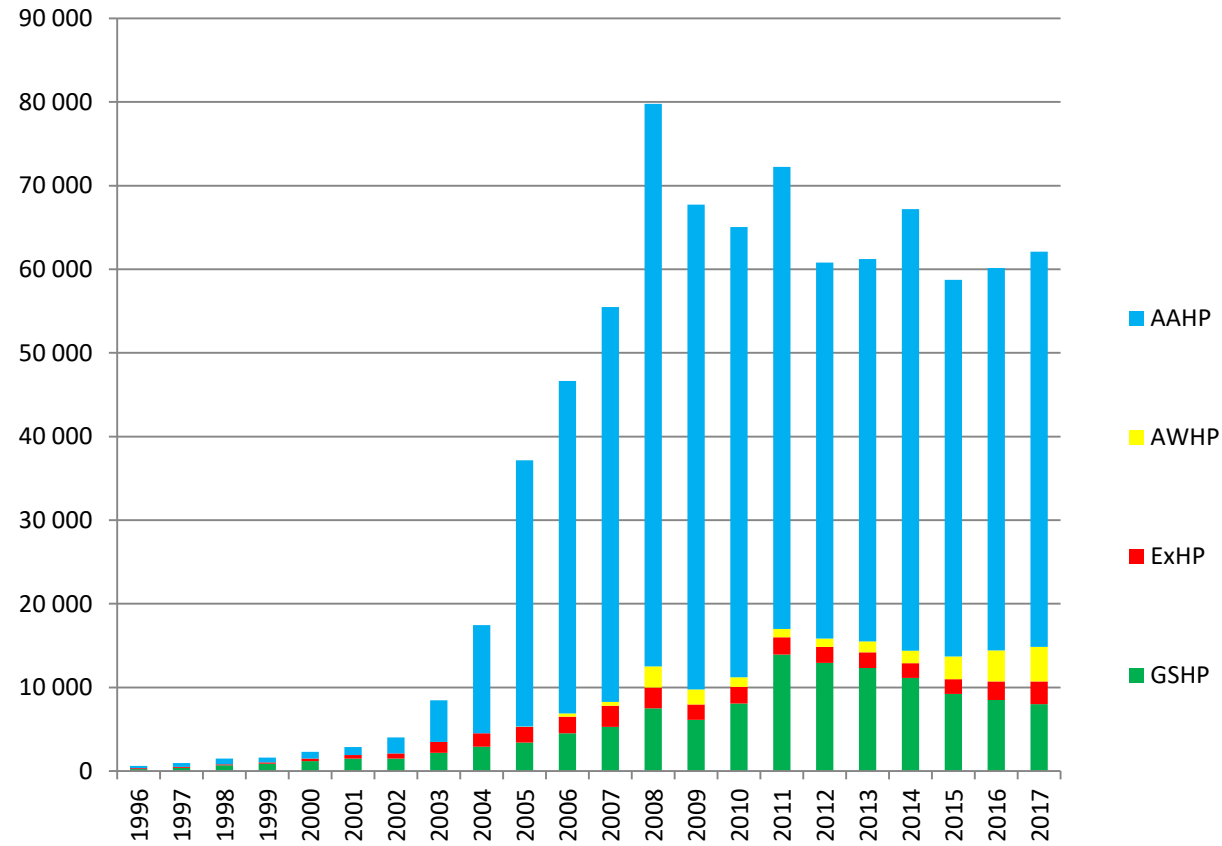


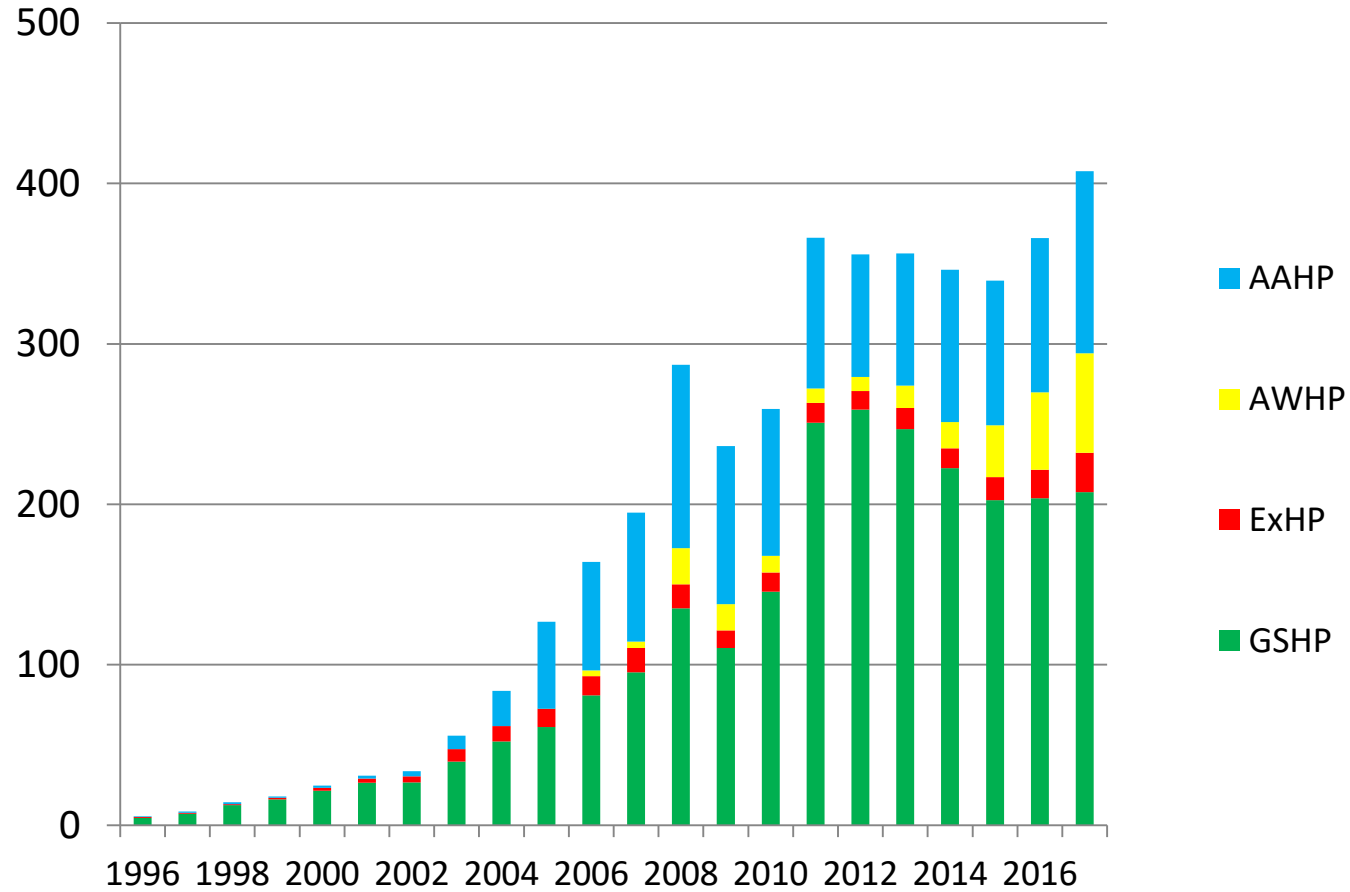
Annual Heat Pump installations in Finland

Number of installations increasing annually by 60 000 units

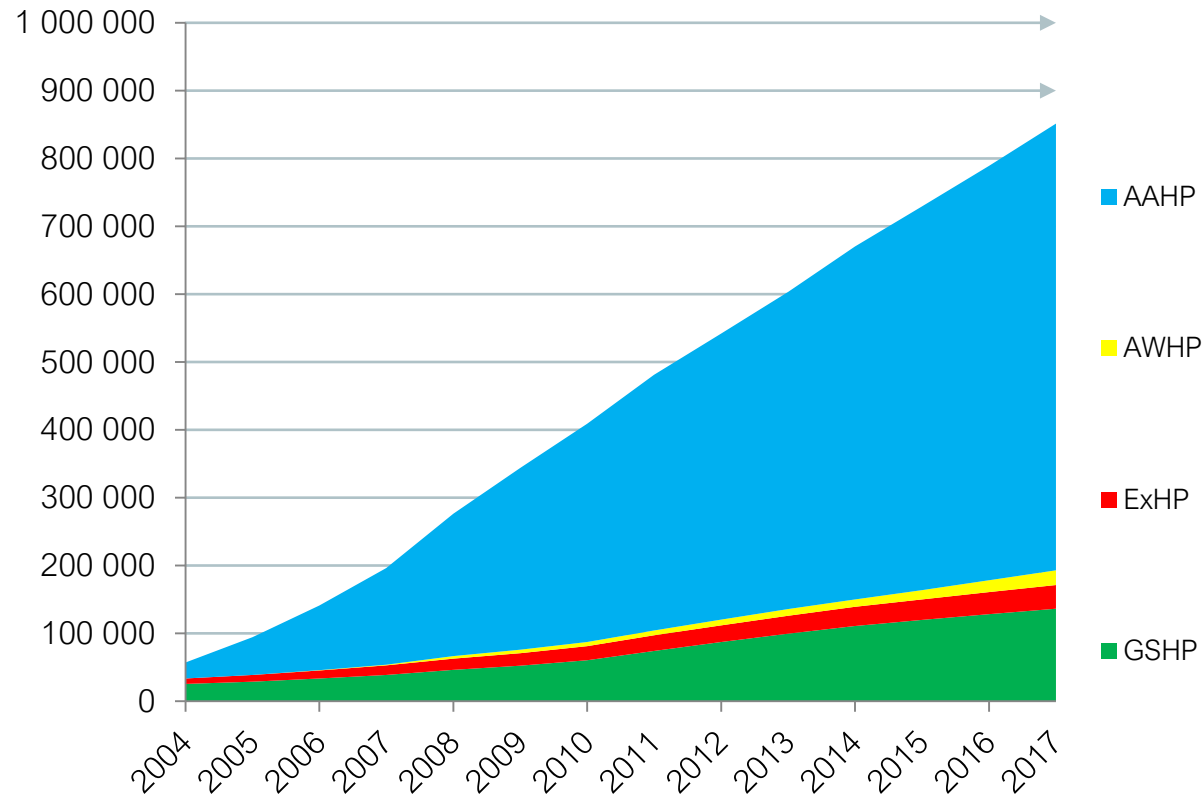


Annual Heat Pump investments in Finland

Private end-users are investing 500 M€ annually
(Megawatt-size district heating/cooling , shopping center, service building , industrial HPs as well as planning , service, etc. are missing from figures below)



Cumulative Heat Pump sales



850,000 heat pumps in Finland, a country with a population of 5,5 million people.

Three Out of Four Builders Choose a Heat Pump

They are already extracting 6 TWh/a of RES local renewable energy from the ground, the rock or the air from around the houses

Finns are already investing 500 million Euros a year in heat pumps (in RES)

On a European Scale, the Heat Pump Market Is Big (22 HPs per 1000 household/a)

Heat Pump Sales 2017, pcs in capacity categories

Heat pump sales 2017 in Finland

Heat source	Pump type	Vuosi	Heat effect (kW)					Total	Change %
			0-6	7-10	11-25	26-100	101-1000		
Outside air	Air to water (AAHP)	2017	175	2 539	1 184	237	3	4 138	11,6 %
		2016	220	2 487	834	168		3 709	
	Air to air (AAHP)	2017	45 403	1 541	230	107	0	47 281	3,4 %
		2016	44 489	834	340	75	4	45 742	
Poistoilma	Exhaust air (ExHP)	2017	2 699	1	22	0	0	2 722	22,6 %
		2016	2 175	5	7	32	2	2 221	
Maa, vesi, kallio	Ground (GSHP)	2017	1 842	2 720	2 554	864	6	7 986	-5,9 %
		2016	2 067	3 179	2 447	789	9	8 491	
Total		2017	50 119	6 801	3 990	1 208	9	62 127	3,3 %
		2016	48 951	6 505	3 628	1 064	15	60 163	

Heat Pumps in Finland

6

TWh of Renewable
Energy annually

200

M€ improvement in
Trade Balance annually

3000

jobs annually

400

M€ of private
investments annually

>10

% Return on
Invested Capital

>1

million tons in decreased
CO₂-emissions annually