



# **Market development for small scale pellet boilers in Europe**

November 2006

Herbert Ortner



## A short introduction to ÖkoFEN

Foundation	26.10.1989
based in:	Austria
Subsidiary companies in:	Germany, Italy, France, Switzerland
Employees including all subsidiary companies	164
Sales figures per year (2006)	7.000 boilers
Export rate:	81%
Turnover:	33 Mio €

## Our product

# Pellet boilers for domestic heating



### Capacity range of ÖkoFEN boilers

2 - 8 KW

3 - 10 KW

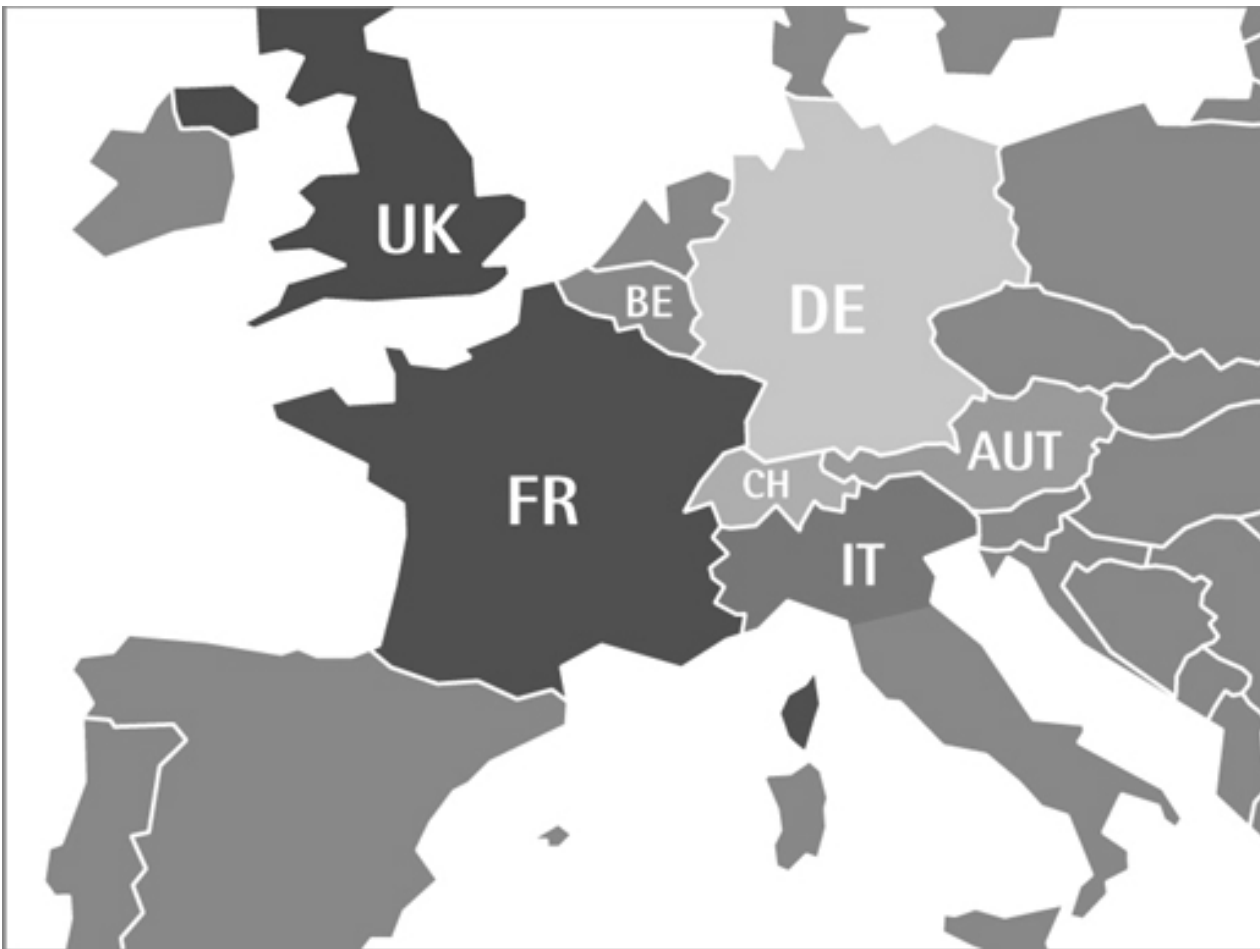
5 - 15 KW

7 - 20 KW

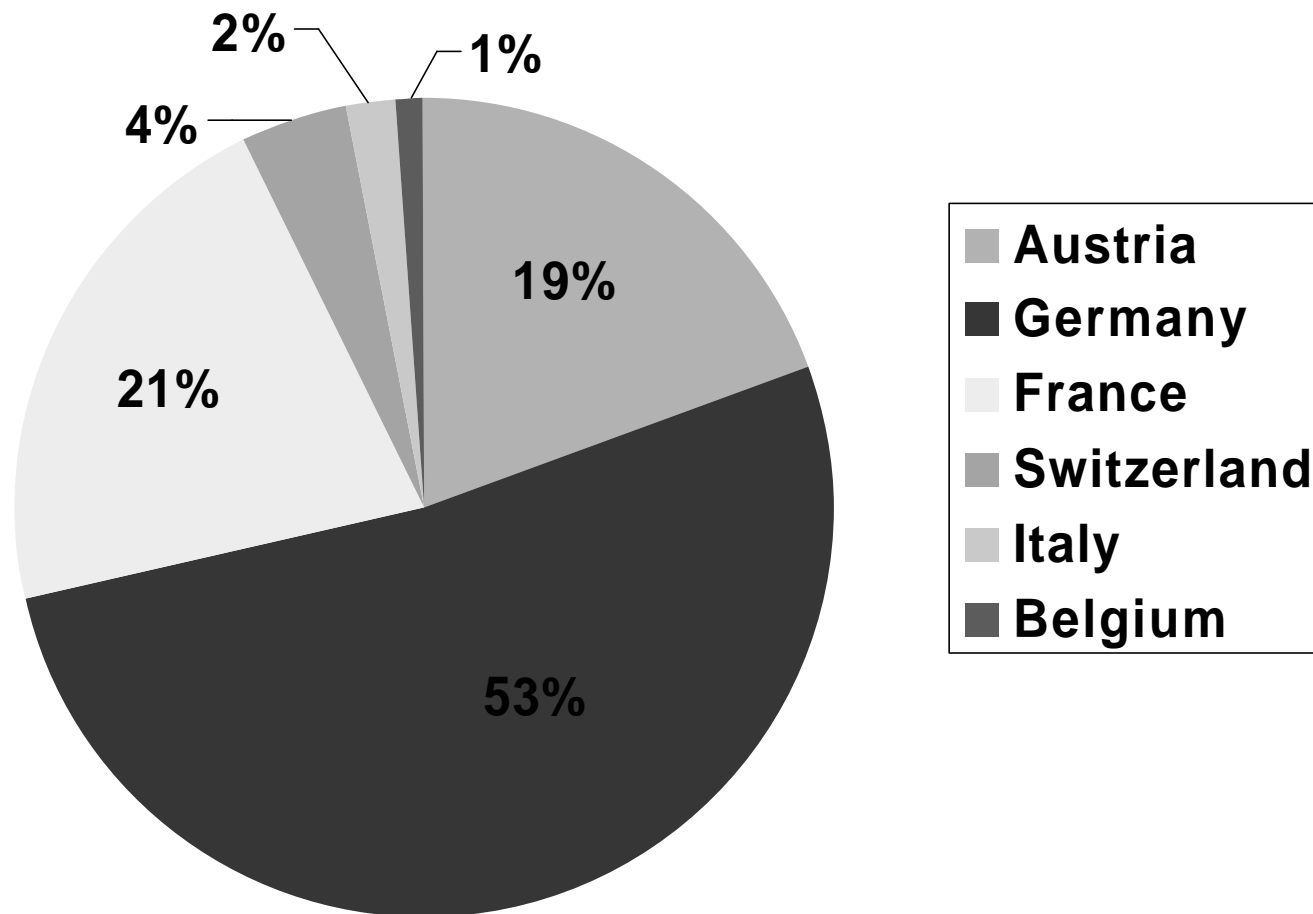
9 - 25 KW

11 - 32 KW

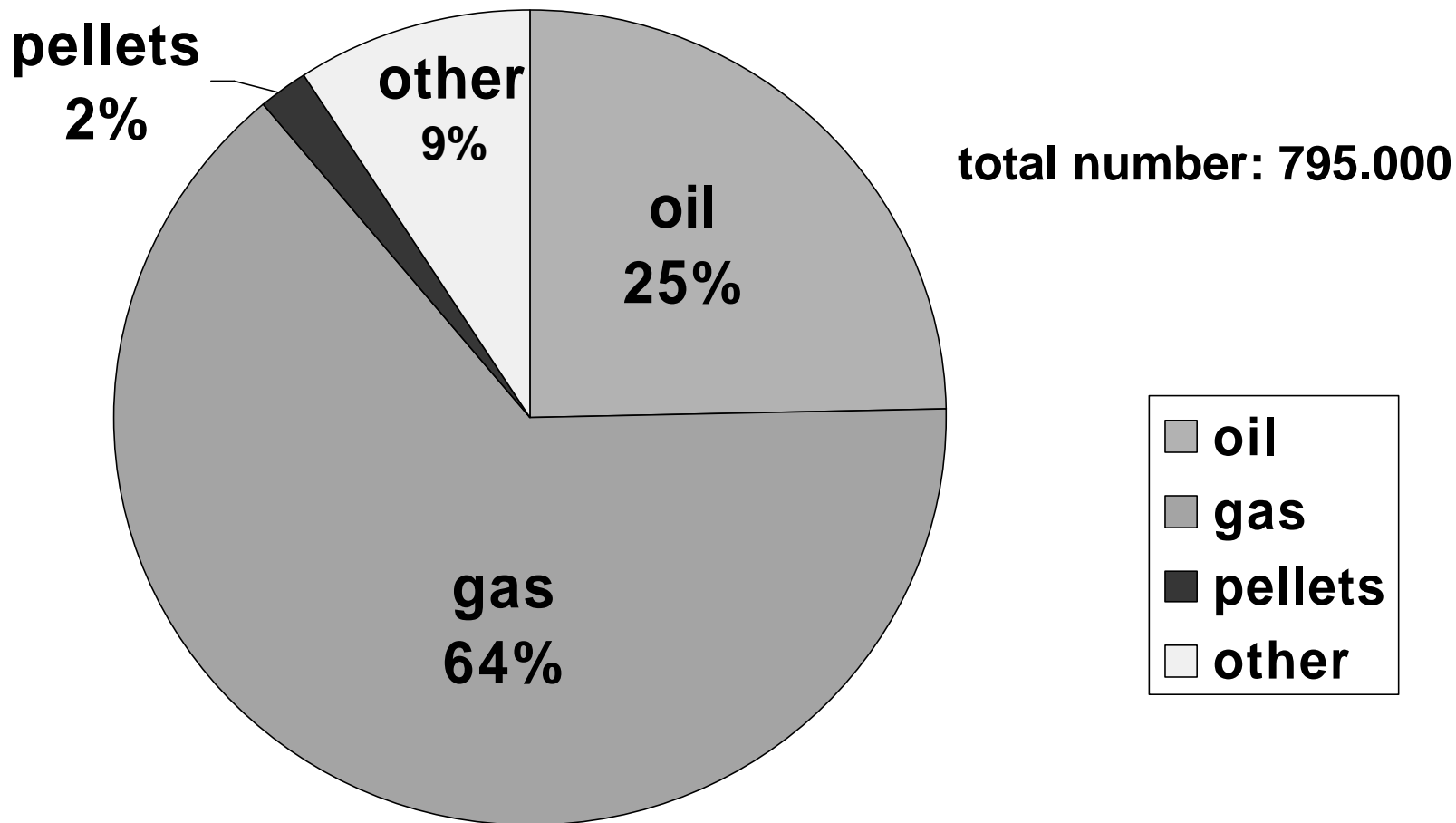
## European markets



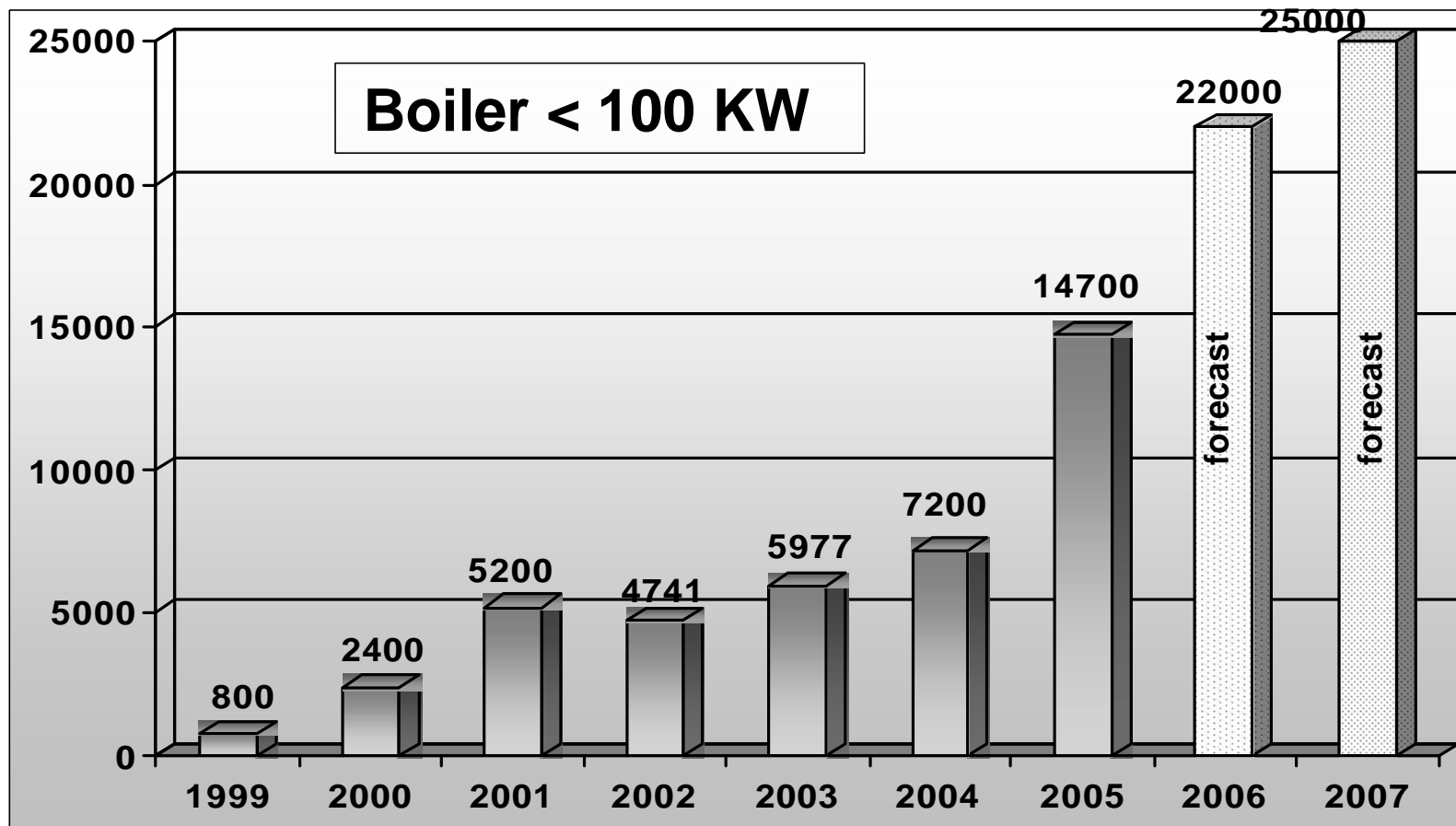
# Pellet boiler – division of markets



# Germany boiler market 2005

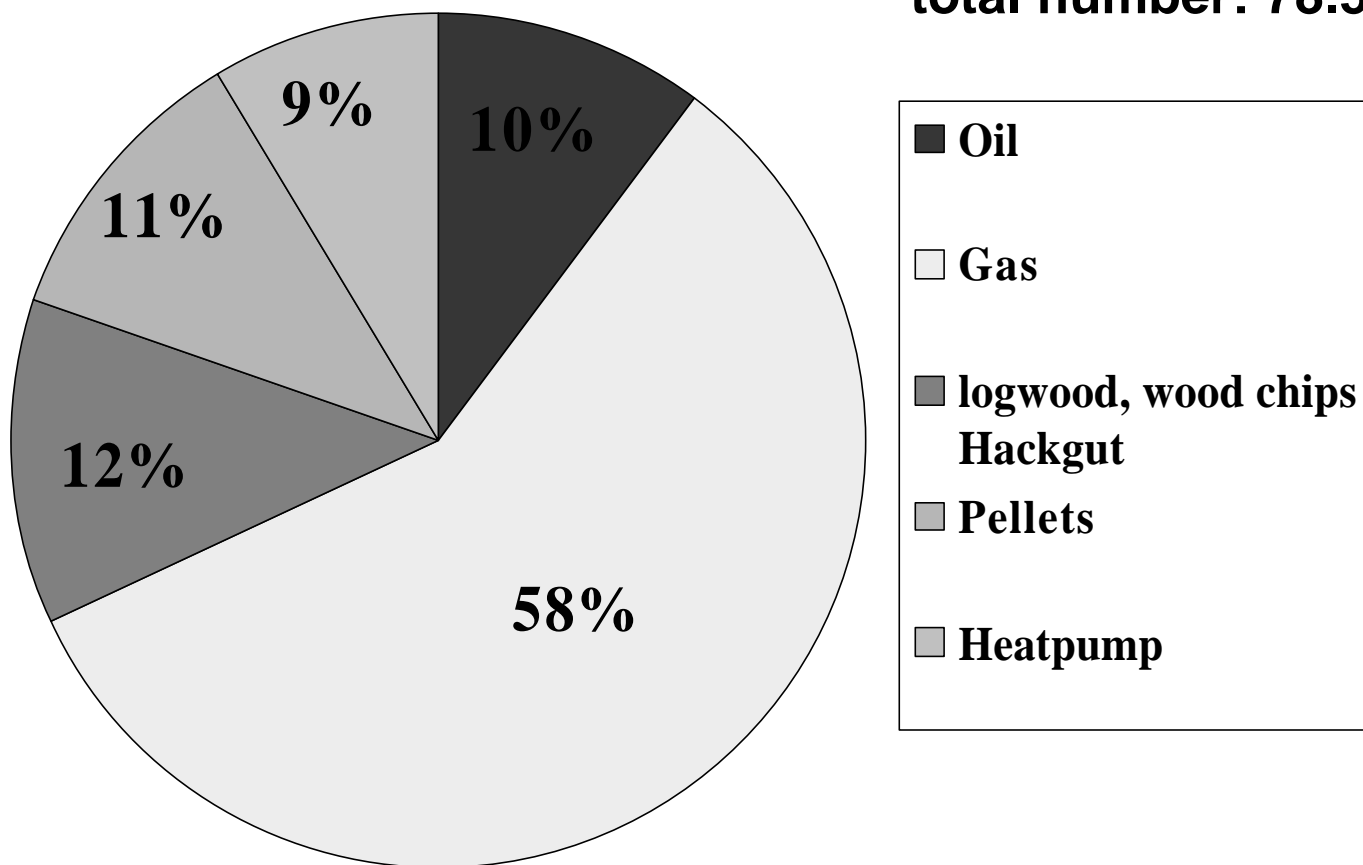


## Pellets boiler market growth in Germany



# Austria boiler market 2005

total number: 78.500



# Booming Italian market for pellet stoves

- 50% increase of pellet demand in last 3 years
- 100.000 pellet stoves sold in 2006 (?)
- Viable low cost technology for mediterranean countries and atlantic climat zone

# Why are pellets so successful?

- Pellet fuel is:
  - environmentally friendly, clean, safe
  - CO2-neutral and sustainable
- Boilers & stoves are reliable and very efficient
- High degree of comfort (similar to oil & gas heating)
- Effective supporting policies including financial incentives

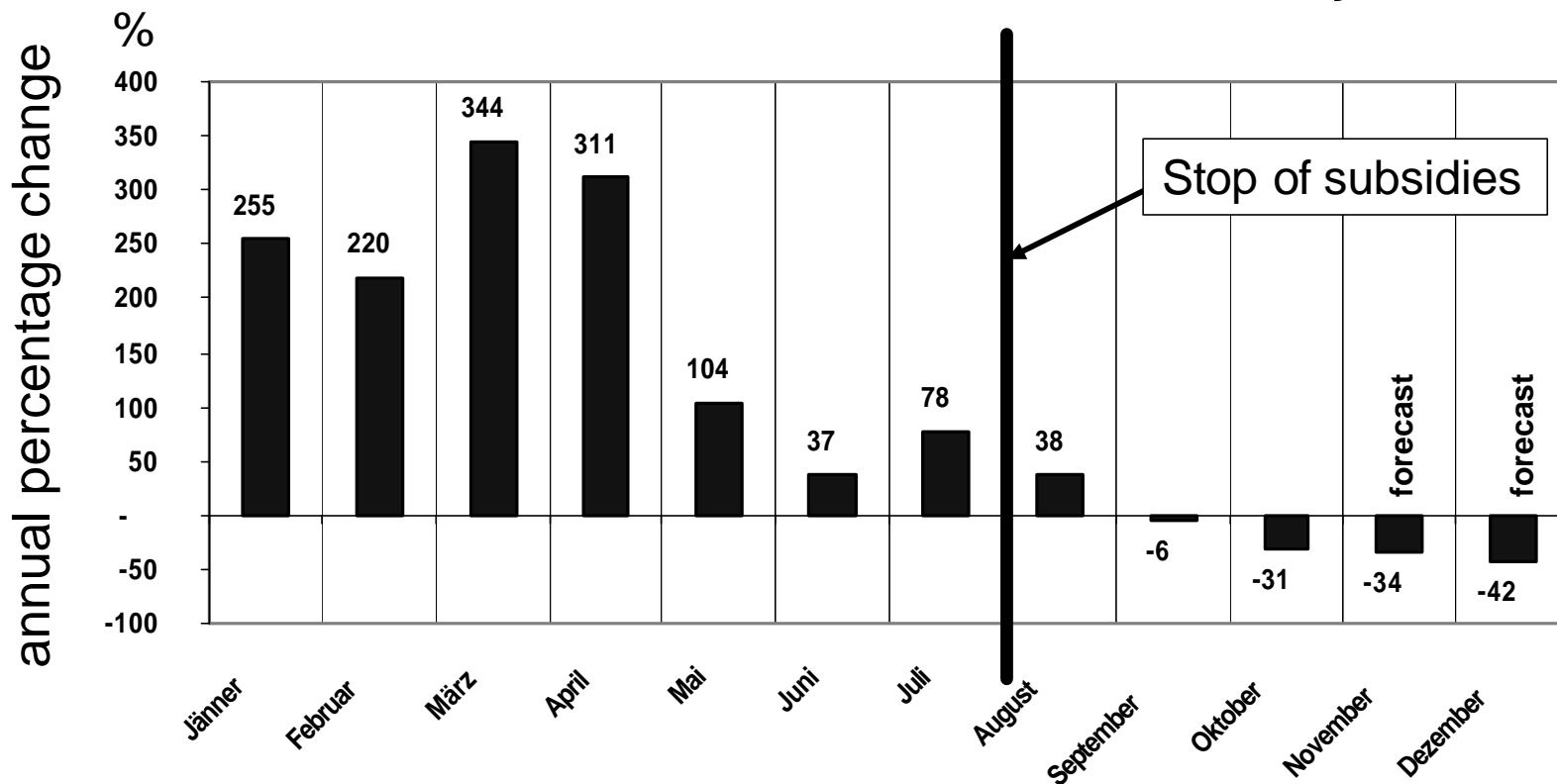
# Which problems do we face in market development?

- Lack of stable political support
- No supply security and unstable price of pellets.
- In many countries no established supply system (chicken and egg problem)
- Fuel supply industry needs clear political message – from EU level!
- Competition with renewable electricity production is presently causing supply shortage & price increases



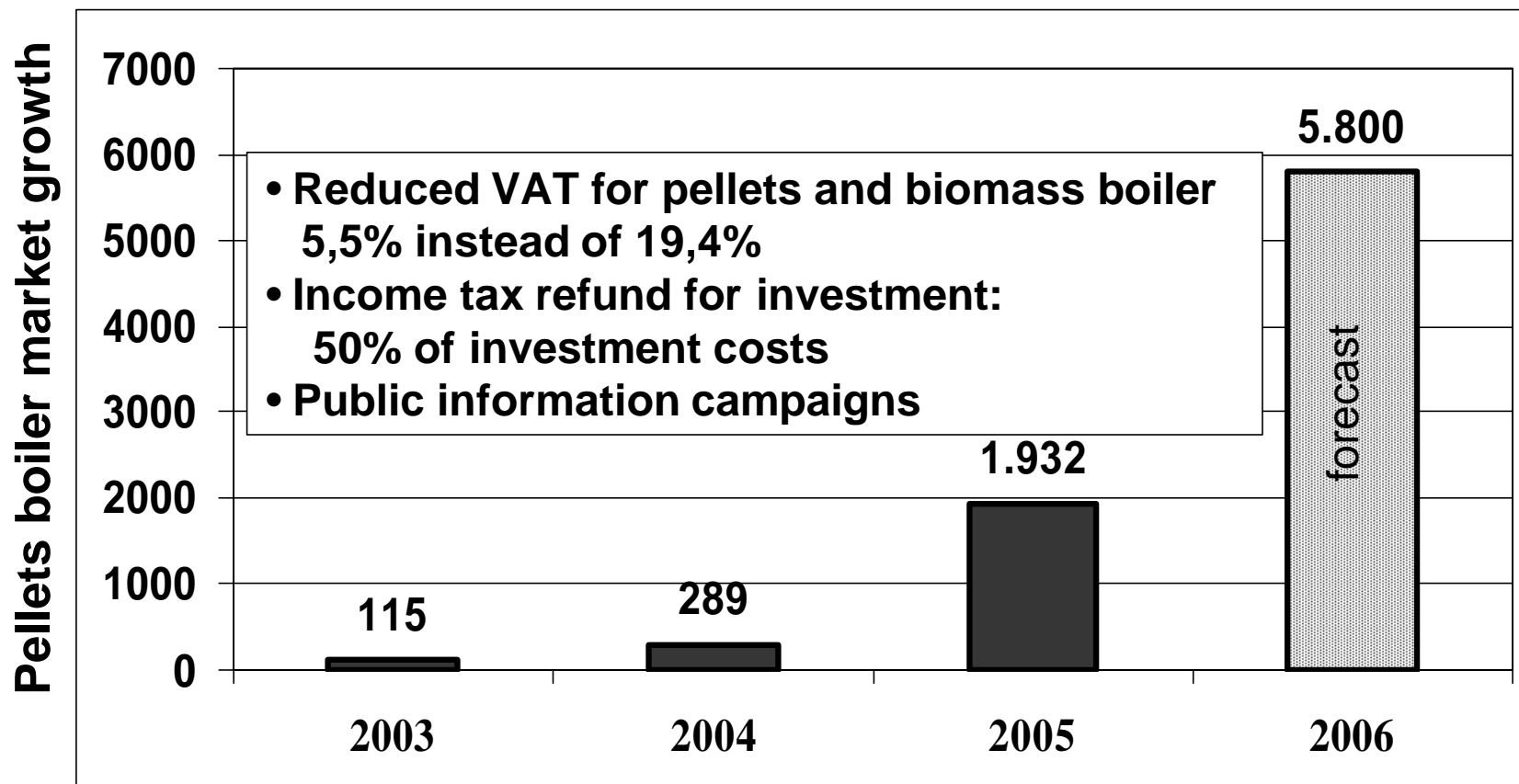
## Impact of subsidies-stop on boiler sales in Germany 2006

Intermittent subsidies have terrible effect on stability of demand!



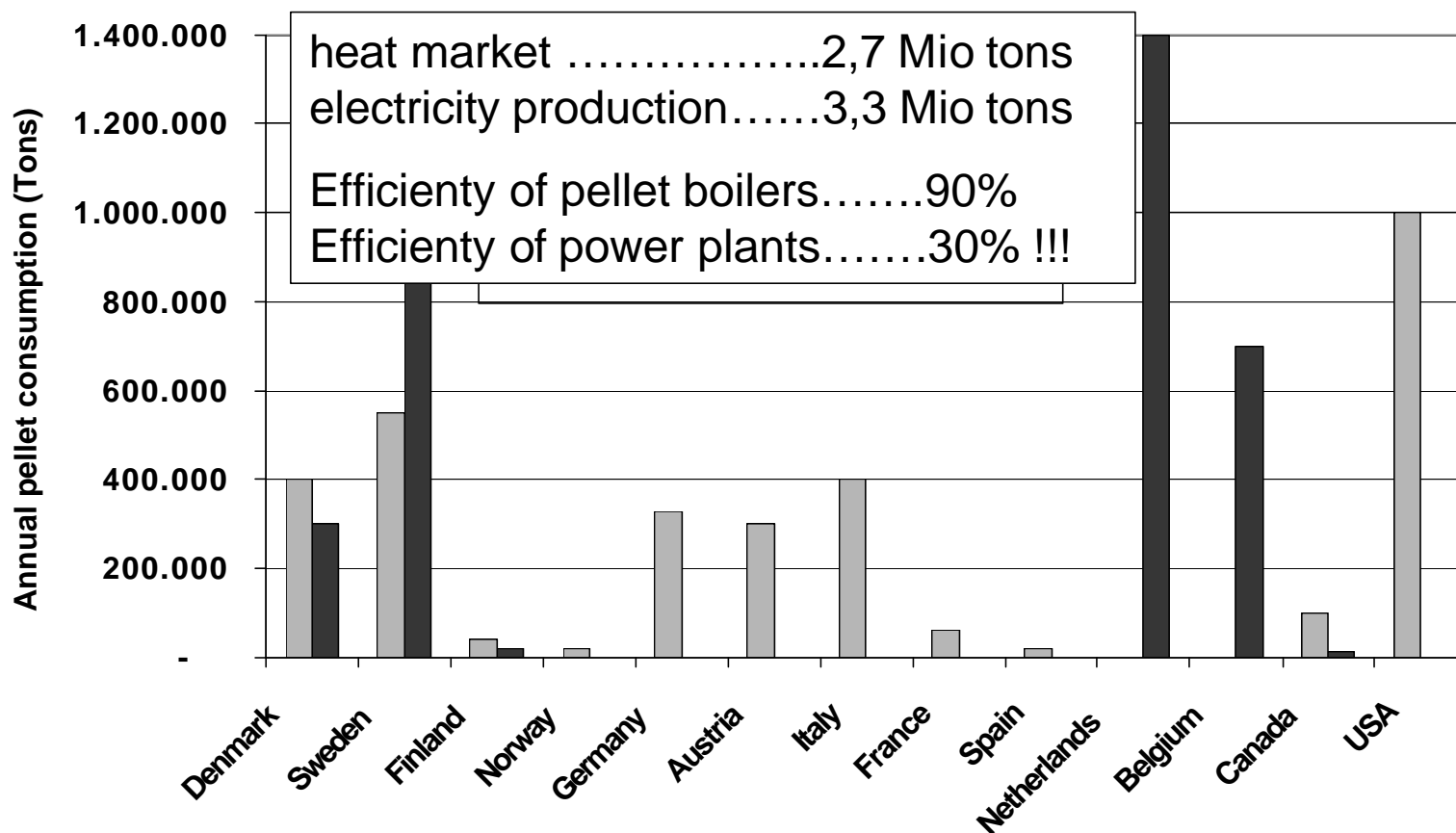


## France – an excellent example for political support



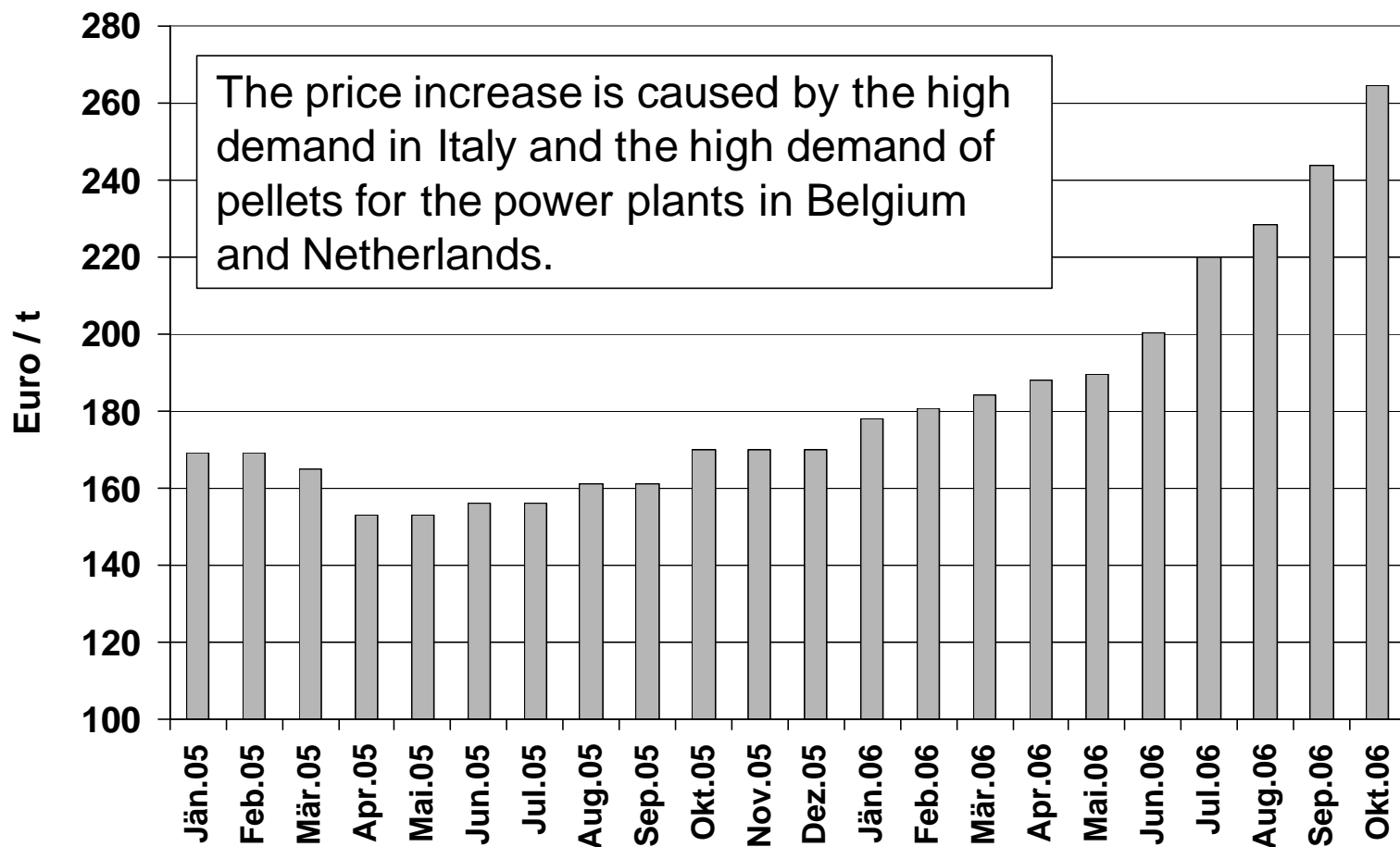


## Comparing pellet use for electricity production and heat production



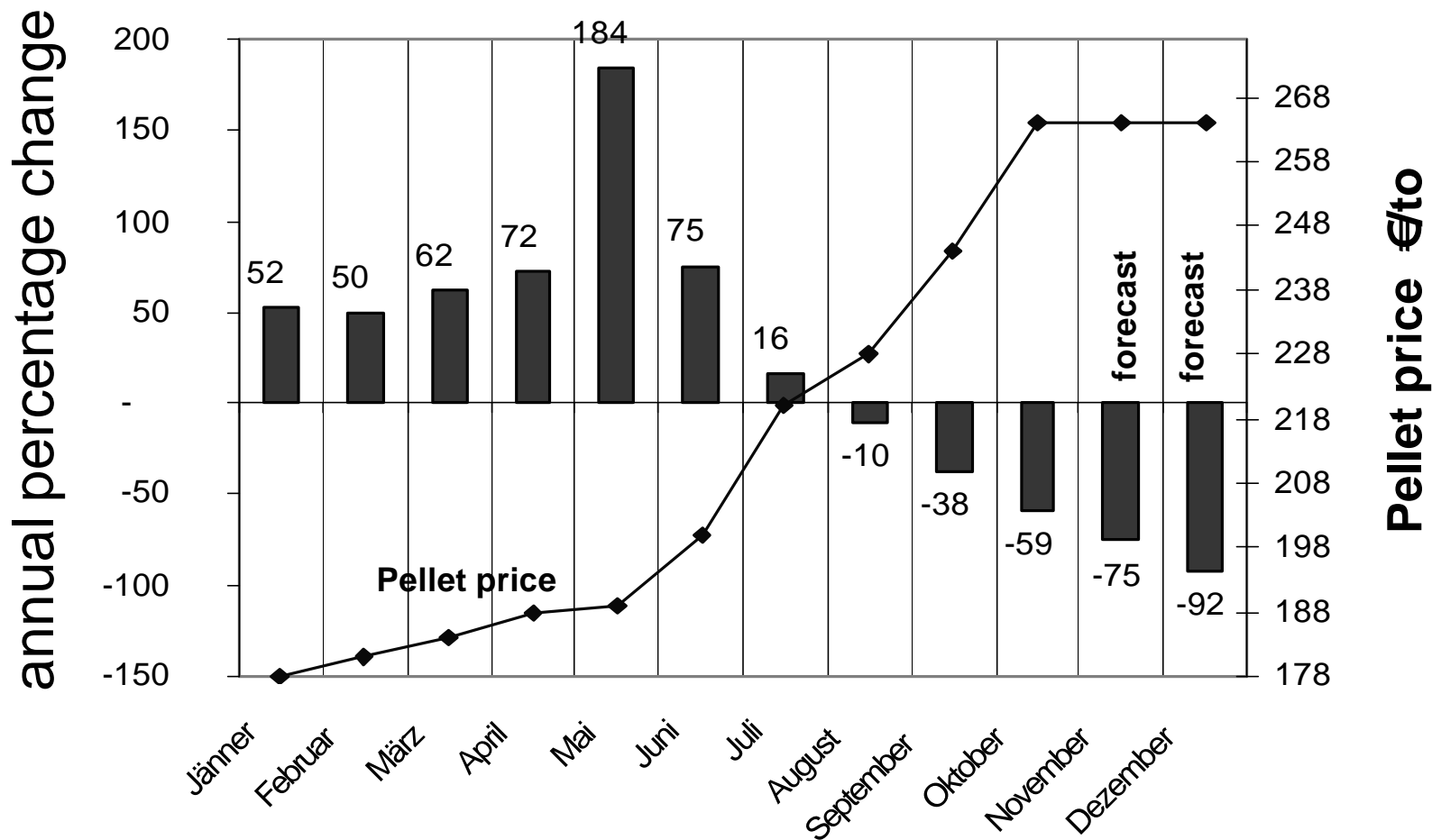


## Pellet price increase in Austria

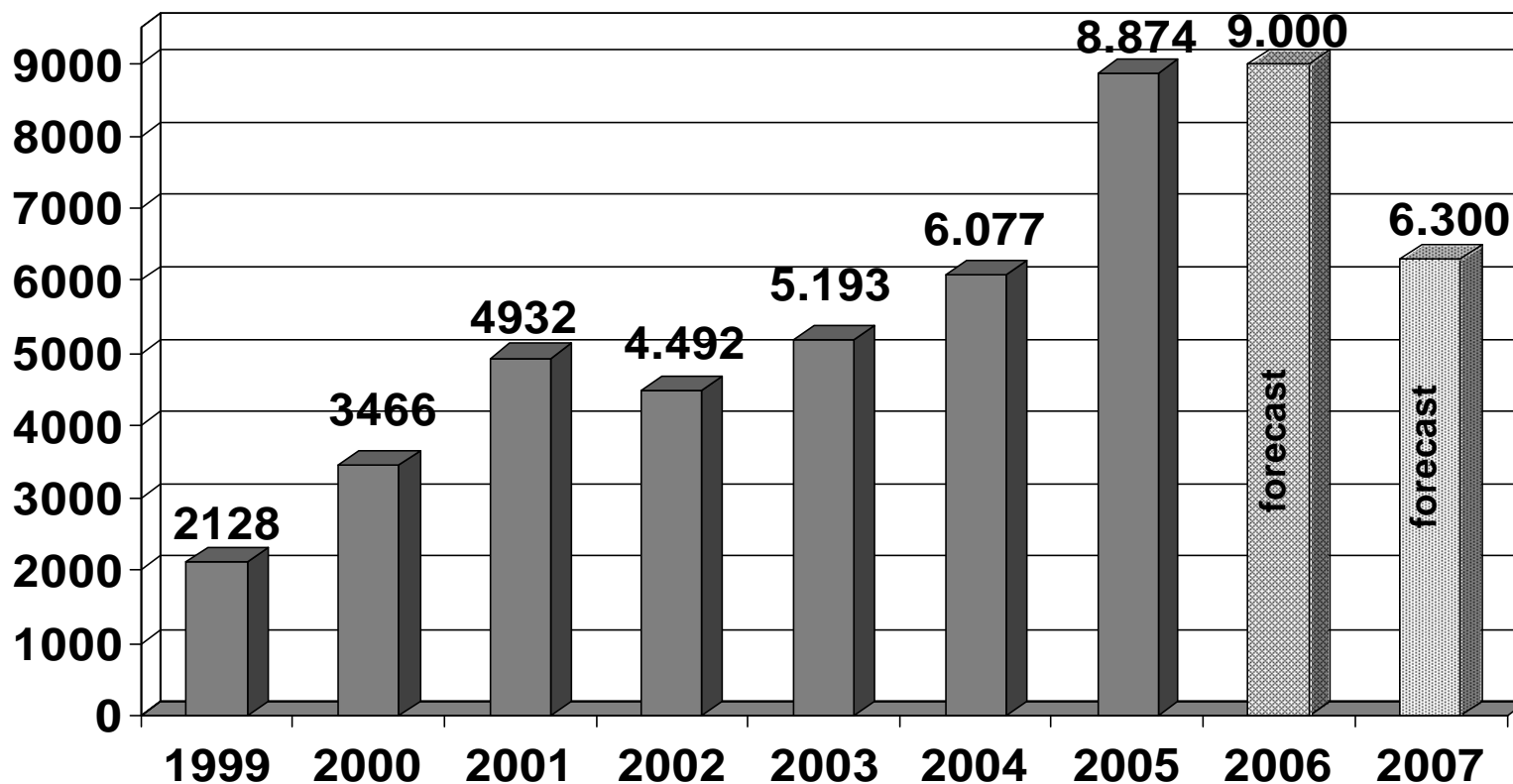




## Impact of price increase on boiler sales in Austria



# Pellets boiler market growth in Austria



# Effective political support needs more than subsidy schemes

- Public information campaigns
- Training schemes and certification of relevant professionals
- High Quality standards for equipment and fuel
- Program management coordinating all efforts

# Conclusions I

- Effective political support has only been established in a minority of member states
- Most member states only support renewable electricity and renewable traffic fuels
- Lack of political support has limited market development to few member states
- Competition with renewable electricity production is causing supply shortage & price increases

## Conclusions II

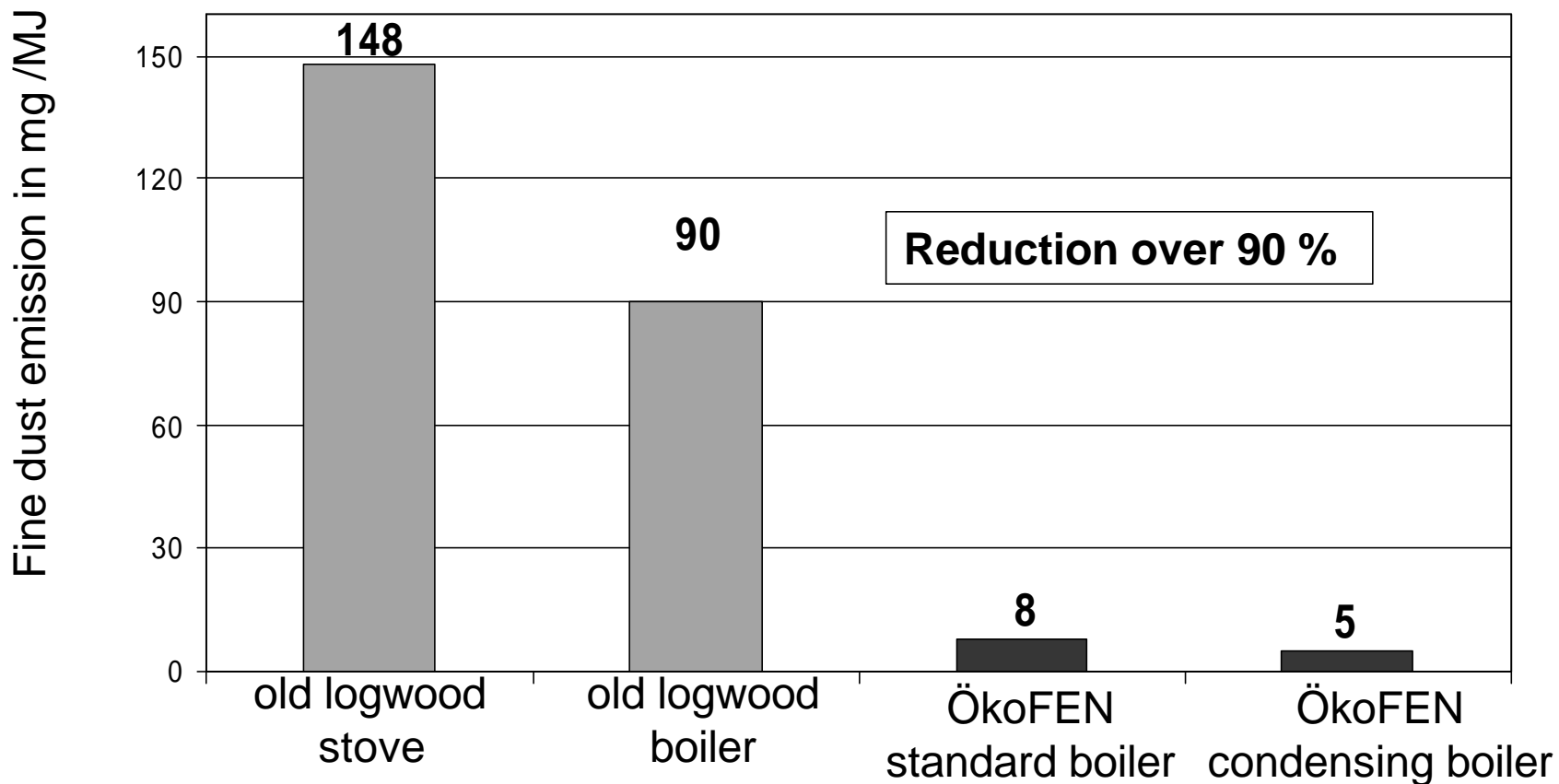
- Renewable heat technologies have a large economic potential in Europe and it is the most effective way to substitute fossil fuel
- **WE NEED A DIRECTIVE for renewable heating to create incentives in all member states.**
- Wood pellets should primarily be used for the heat market and not for electricity production.
- Carbon credits also for small scale application

## **Fine dust emission regulations – a potential threat for pellet technology**

- Pellet technology has led to a massive reduction of fine dust emissions
- BUT regulation authorities tend to treat them in the same way as conventional wood heating equipment
- A problem could also turn up in respect to NOX emissions
- Inadequate emission regulations could stop market development!



# Comparing fine dust emissions for old logwood boilers and new pellet boilers

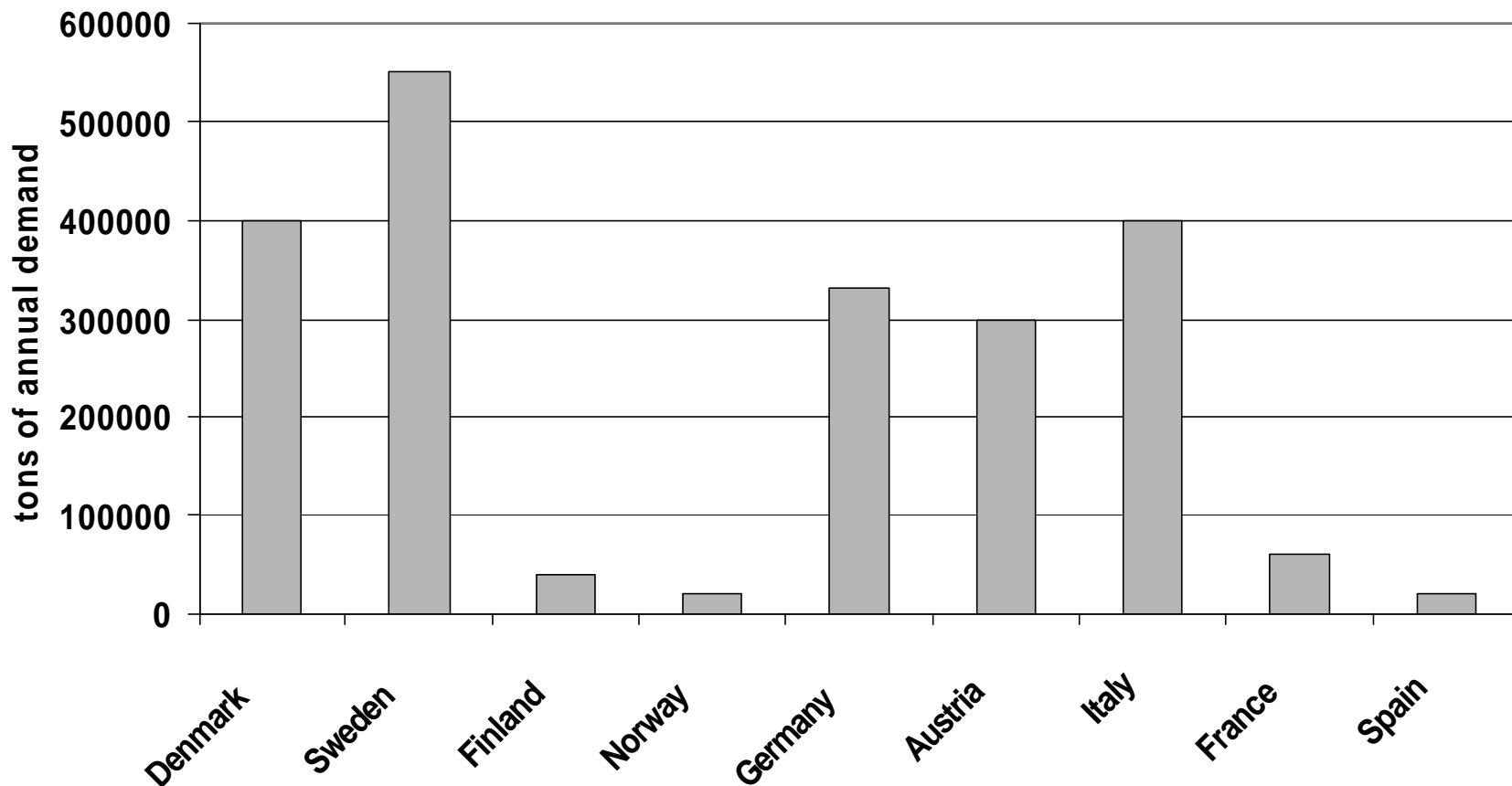


# At present renewable heat is the most economic choice for RES use

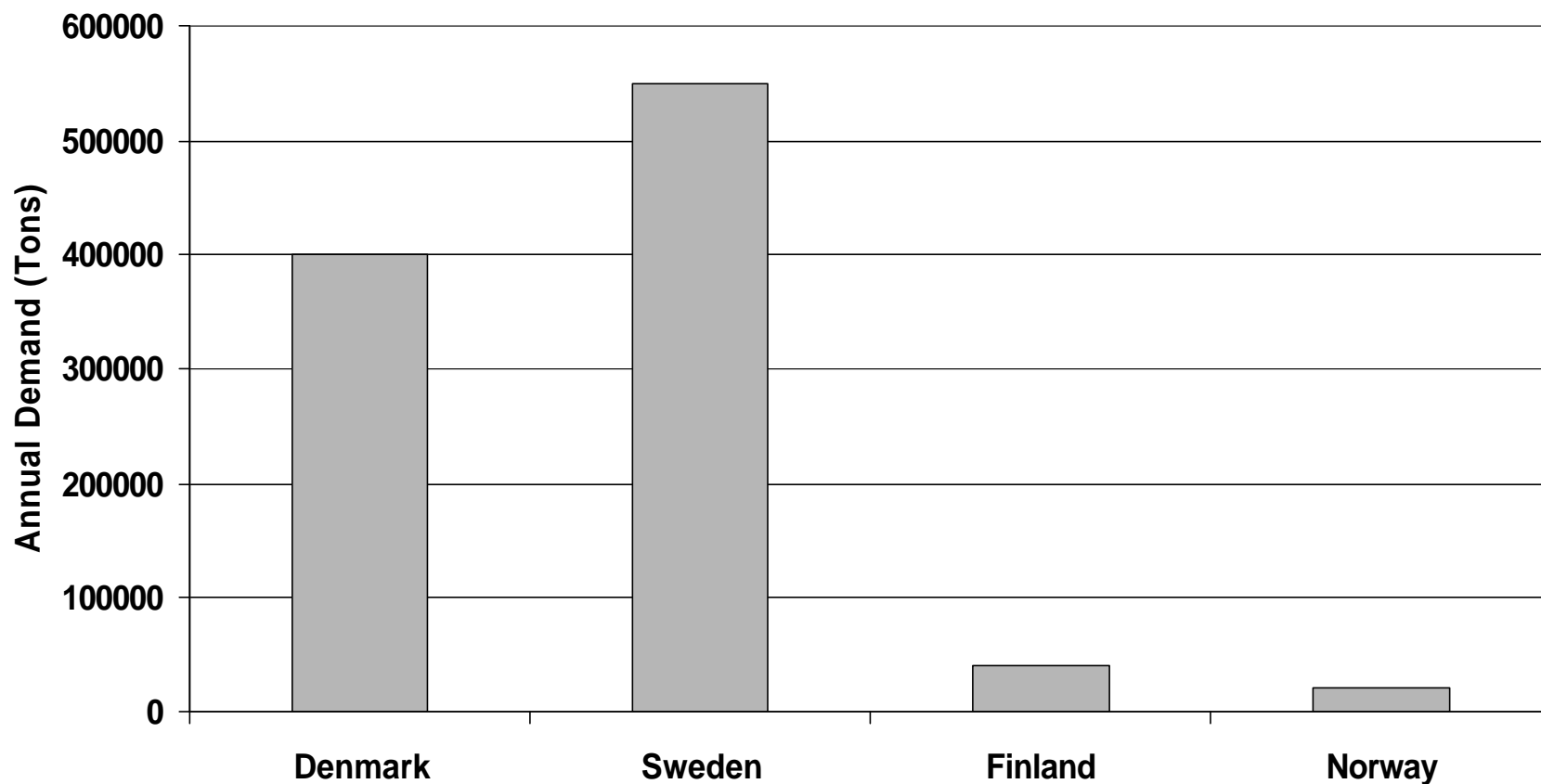
- Subsidy requirement for renewable heat:  
e.g. 3.000 € investment support for pellet boiler
- Produced energy in 15 years: 450 MWh
- **Subsidy : 6 €/ MWh**
- **NO CARBON CREDIT**
- Subsidy requirement for renewable electricity:  
**60 – 100 €/MWh**  
depending on country & technology
- Plus CARBON CREDIT  
**25 €/MWh** (assuming 30€/t CO<sub>2</sub>)



## Pellet use for heating – only few countries successful so far



## Pellet use for heating in Scandinavia: policies make a difference!



## Pellets boiler market growth in Switzerland

