

# Country report of Norway for year 2012

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# Content

- General information about WtE in Norway
- Overview of incineration plants in Norway
- Status of incineration capacity in Norway
- Status of treated waste amounts in Norway



# National waste management plan

- Ministry of Environment of Norway will work on a new national waste management plan
- Direction for wastes related industries in Norway
- Role of Incineration plant in future for waste management

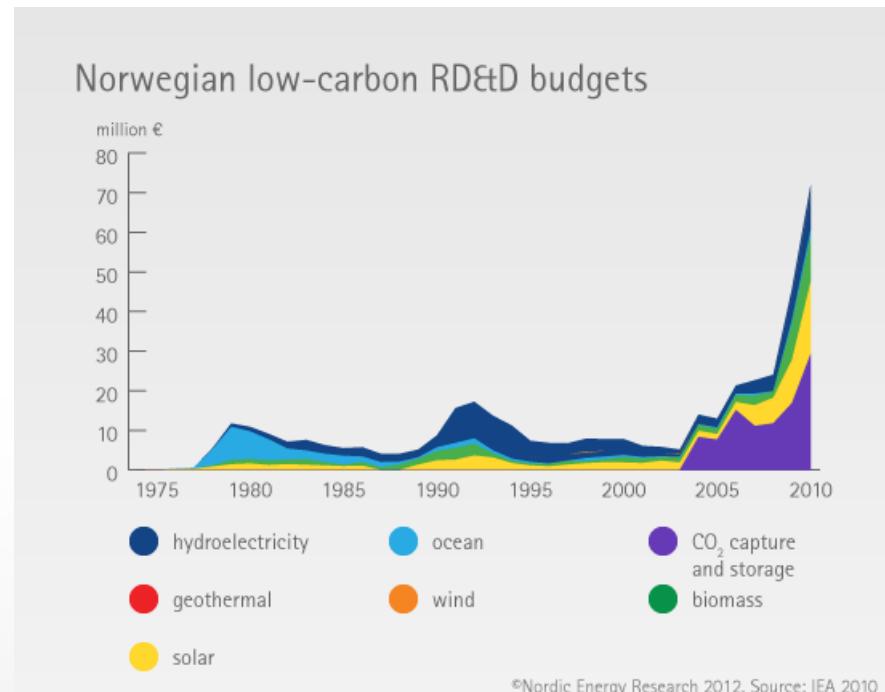
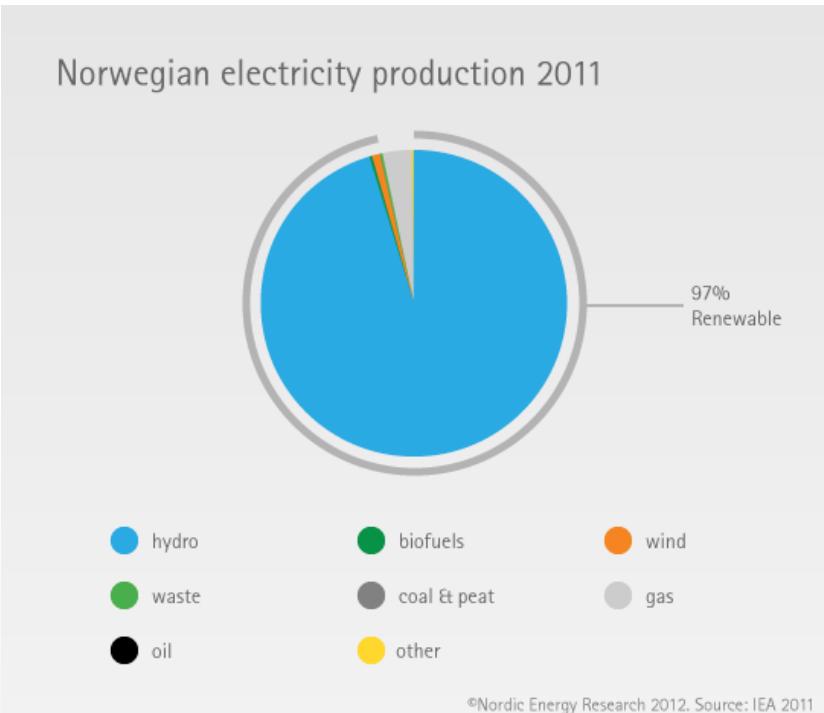


# A new light from WtE to public concern

- Trouble maker or part of solution
- Reduction of pollutants vs source of emissions
- Complementary to material recycling



# A new light from WtE to public concern



<http://www.nordicenergy.org/thenordicway/country/norway/>



# Waste Incineration- part of solution

- Waste remaining after material recycling must be treated
- Management and energy recovery from wastes not suitable for material recycling
- Material recycling after incineration (concentration in ash)
- Environment protection



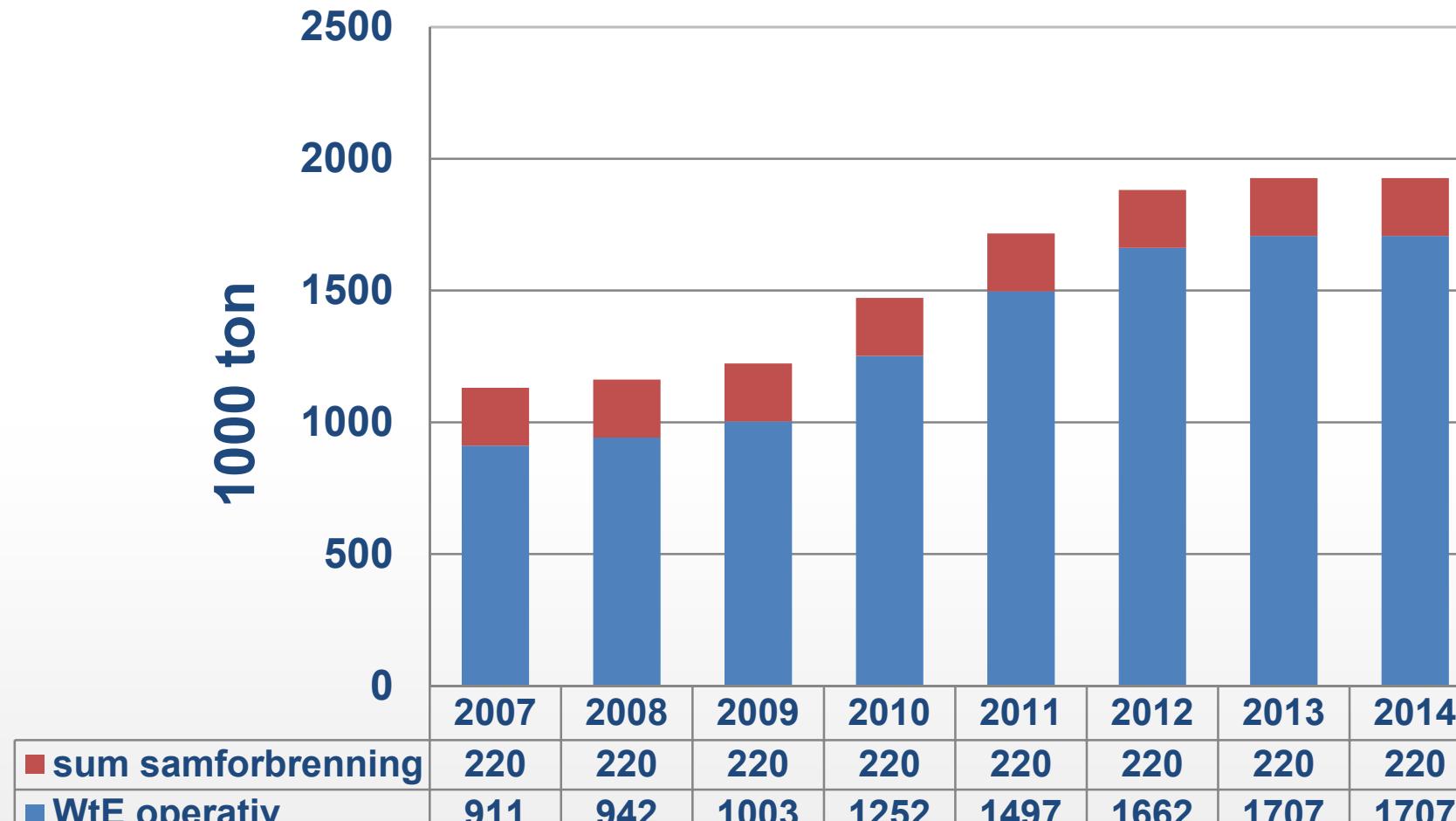
# Waste incineration plants in Norway (2012)



- 15 Waste incineration plants (MSW)
- 3 Co-incineration plants (MSW + other wastes)
- 3 bankruptcy
- Plans in coming years



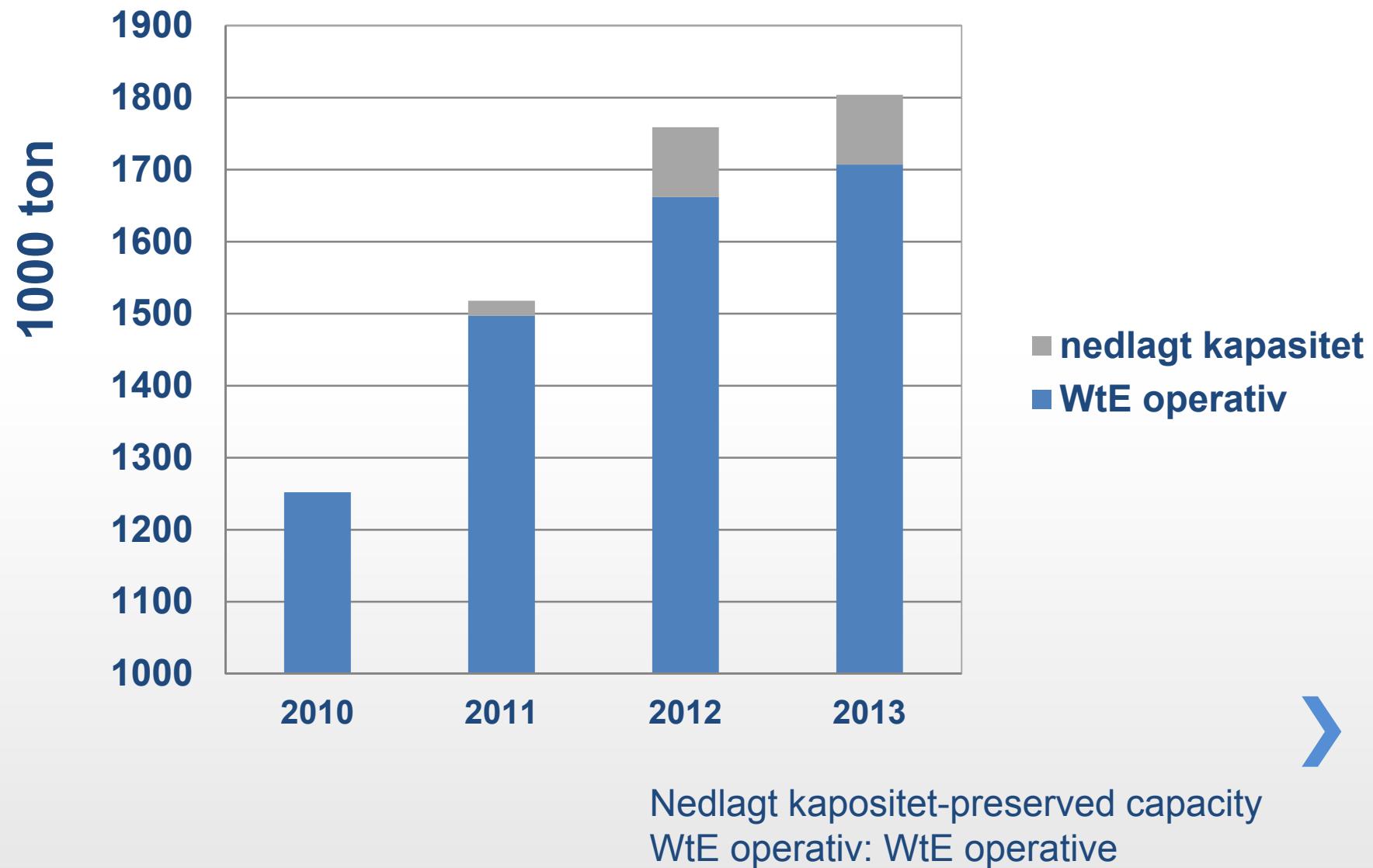
# Developing of incineration capacity of waste in Norway



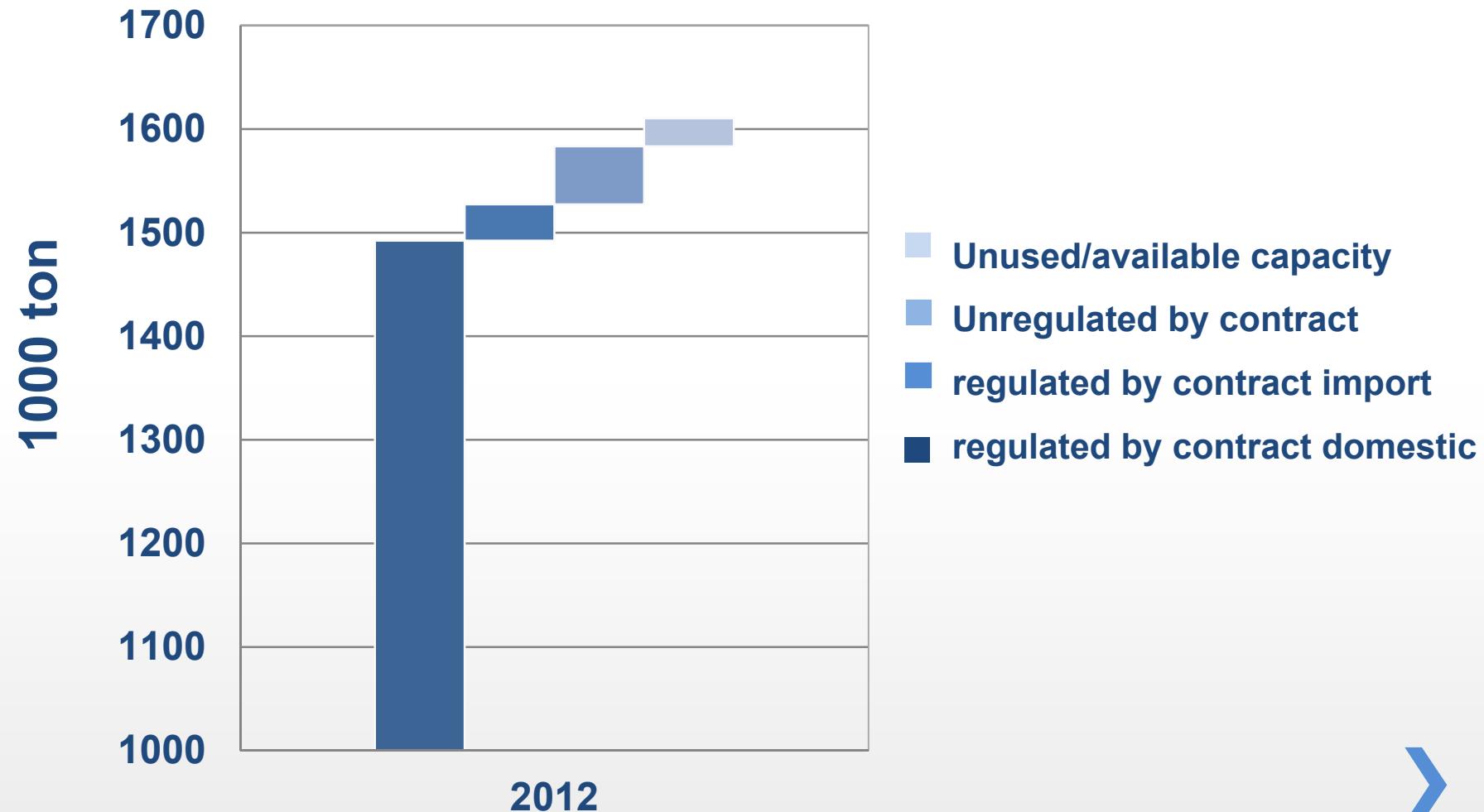
Samforbrenning - co-incineration  
Operativ - operative



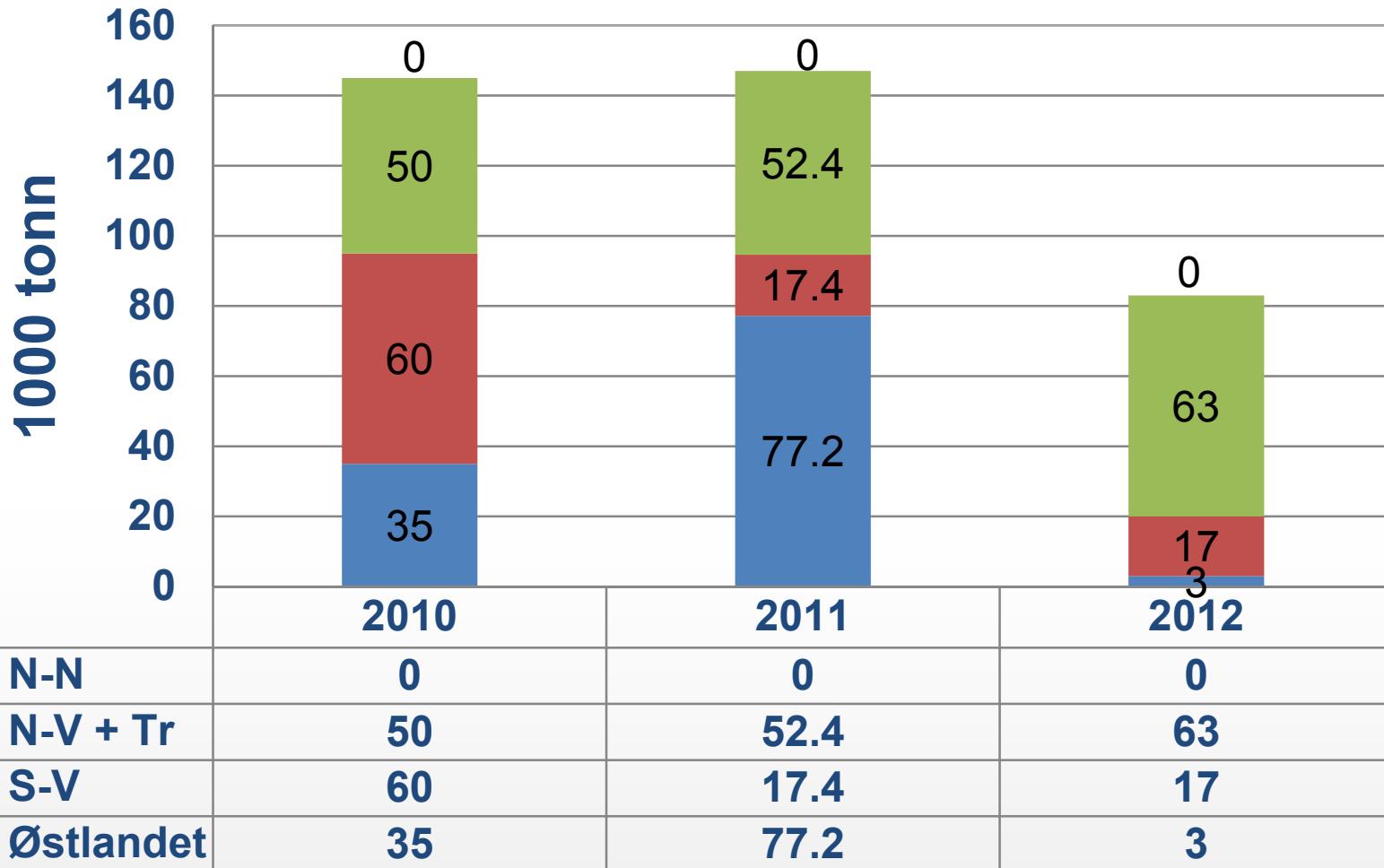
# Available capacity of waste incinerators in Norway



# Waste incineration capacity and operative availability



# Available Capacity by Region



- N-N: Northen Norway
- N-V+ Tr: North west Norway+Trøndelag
- S-V: Sourth West Norway
- Østlandet: East Norway

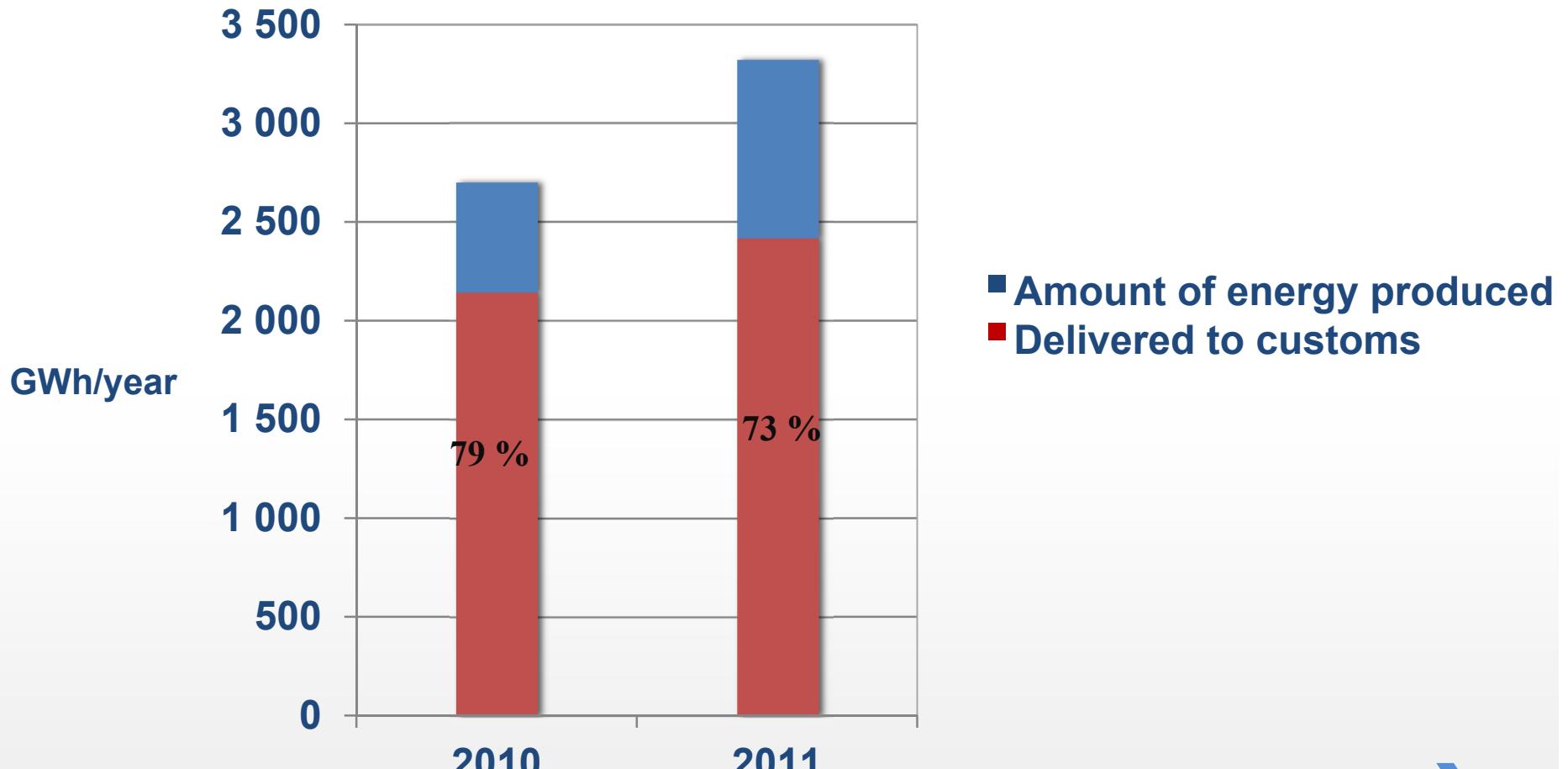


# Utilized capacity in 2011

- » Total capacity energy utilization 2011:
  - 1,477,697 tons
- » Treated waste 2011:
  - 1,345,321 tons
- » 91% of the incineration capacity is utilized.
  - 132,000 tons availability

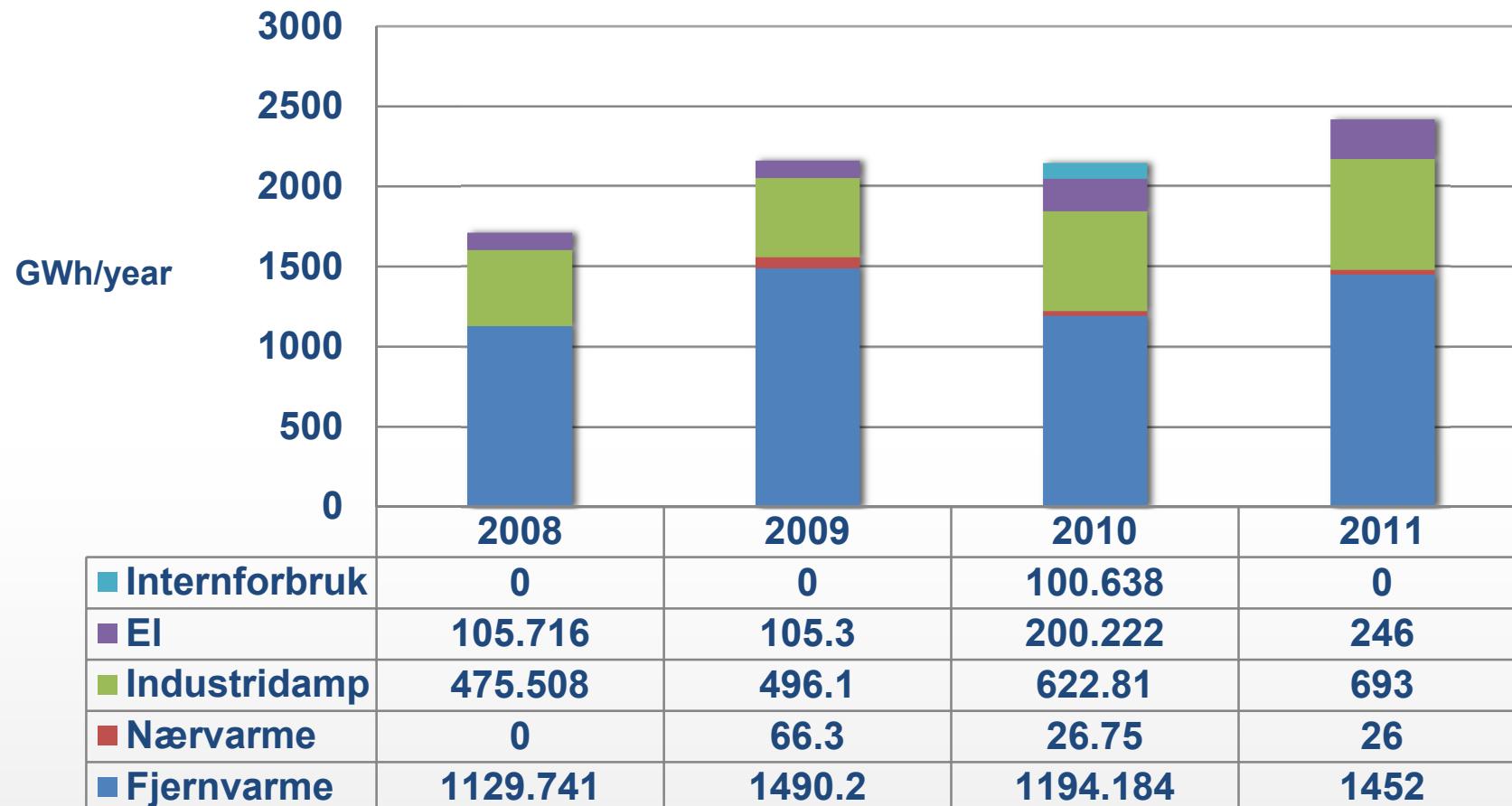


# Energy Utilization



# Energy Production 2008-2011

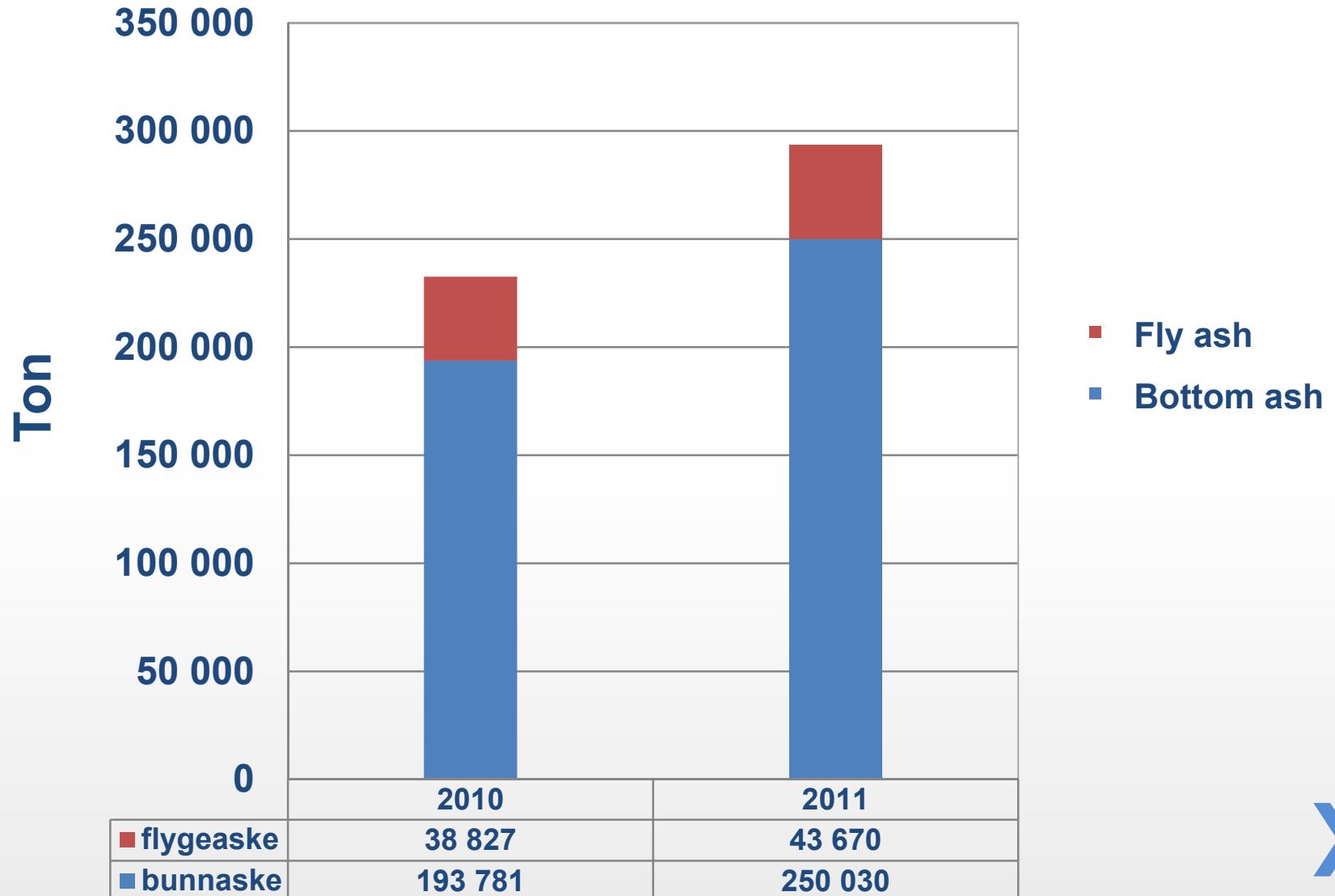
## Energy delivery to customers



- Internforbruk: consumption for fuel drying and plant interal use
- EI-electricity
- Industridamp: industrial steam
- Nærvarme: local heating
- Fjernvarme: district heating



# Final products 2010 and 2011





**Thank you for your attention !**