

# Beispiel Jämtland

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**20 September 2007**

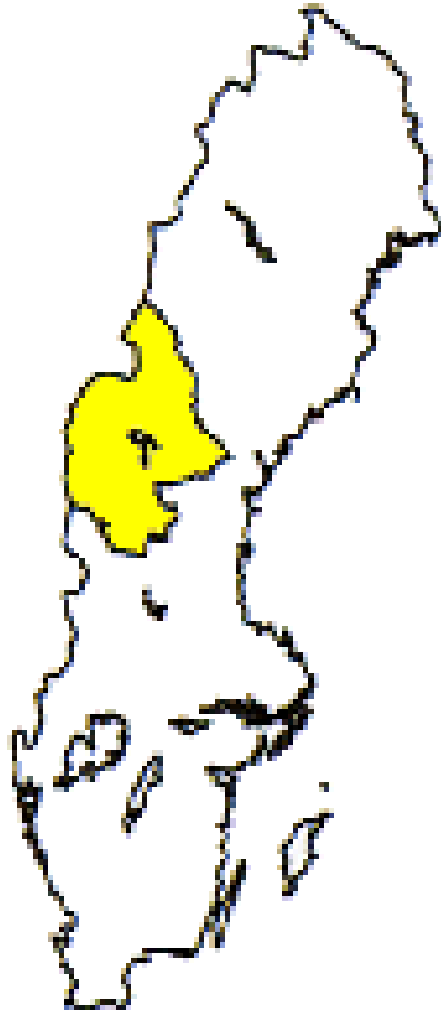
Jimmy Anjevall, Jämtland County Energy Agency

SUSTAINABLE ENERGY EUROPE  
2005-2008



# Jämtland County

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127 000 inhabitants

50 000 km<sup>2</sup> (10% of Sweden)

2,5 inhabitants/km<sup>2</sup>

8 Municipalities

# Regional Energy Agency

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- Financed by the 8 municipalities and the Swedish Energy Agency
- Board of politicians and industry
- 3 employees
- Working with energy efficiency and renewable energy sources
- Outlining regional objectives



# Electricity production

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**Total production: 12,5 TWh**

Hydro power: 12,3 TWh

Wind power: 0,04 TWh

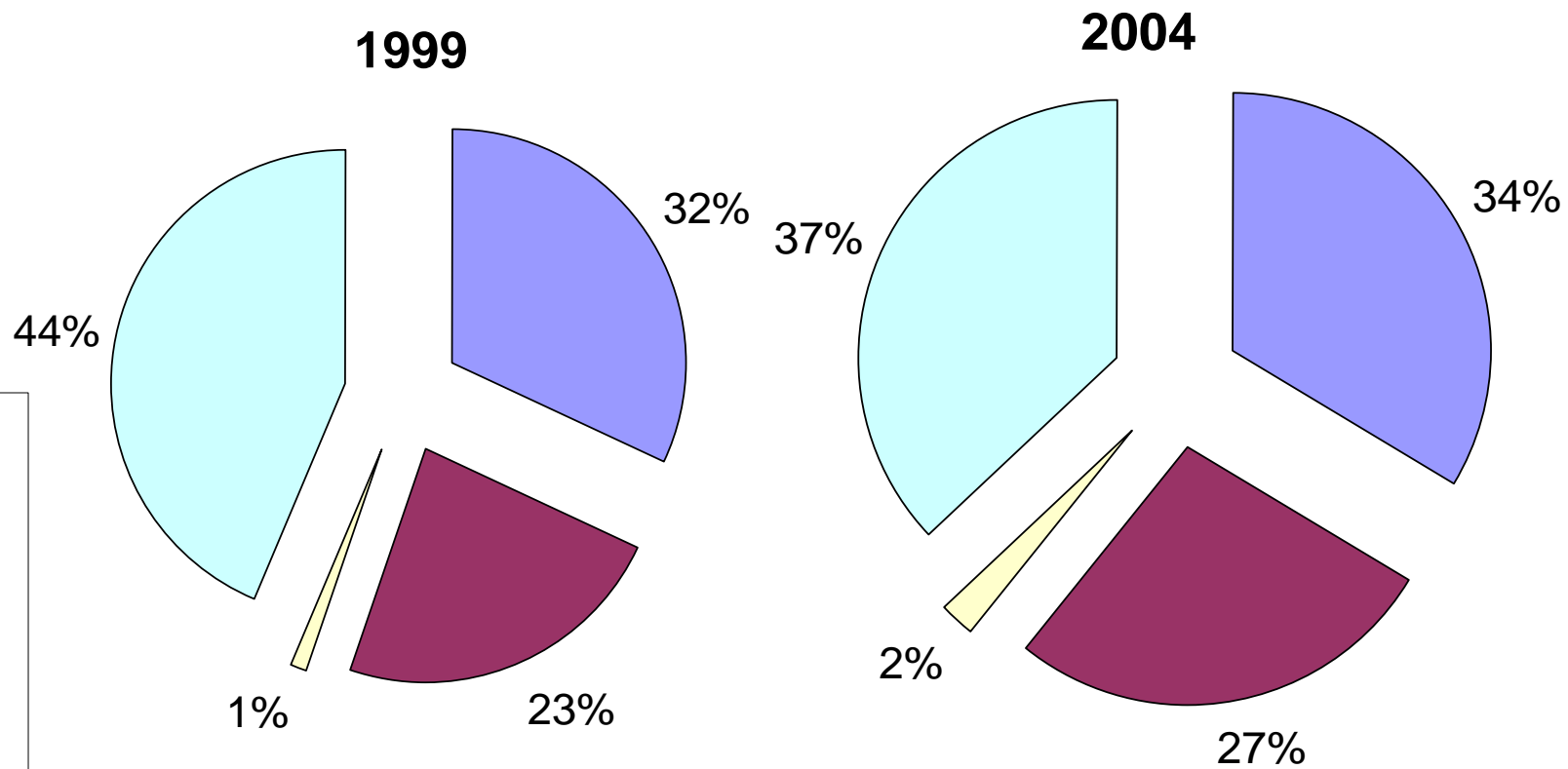
CHP (Biofuels): 0,2 TWh

# Heat production

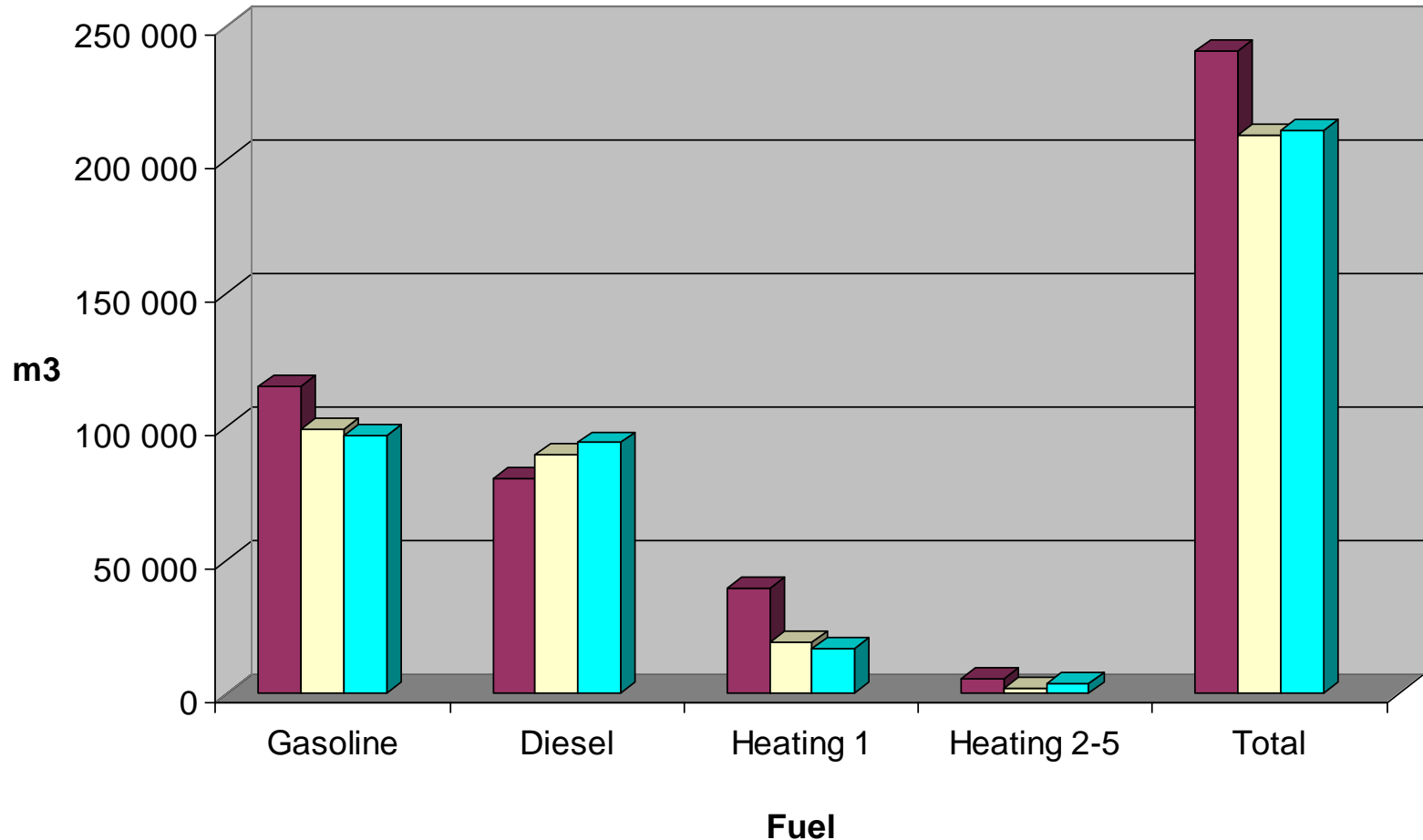


<b>Total production</b>	<b>2,3 TWh</b>
Biofuels:	1,1 TWh
Electricity:	0,7 TWh
Heating oil:	0,2 TWh
Peat:	0,1 TWh
Heat pumps:	0,1 TWh
Others:	0,1 TWh

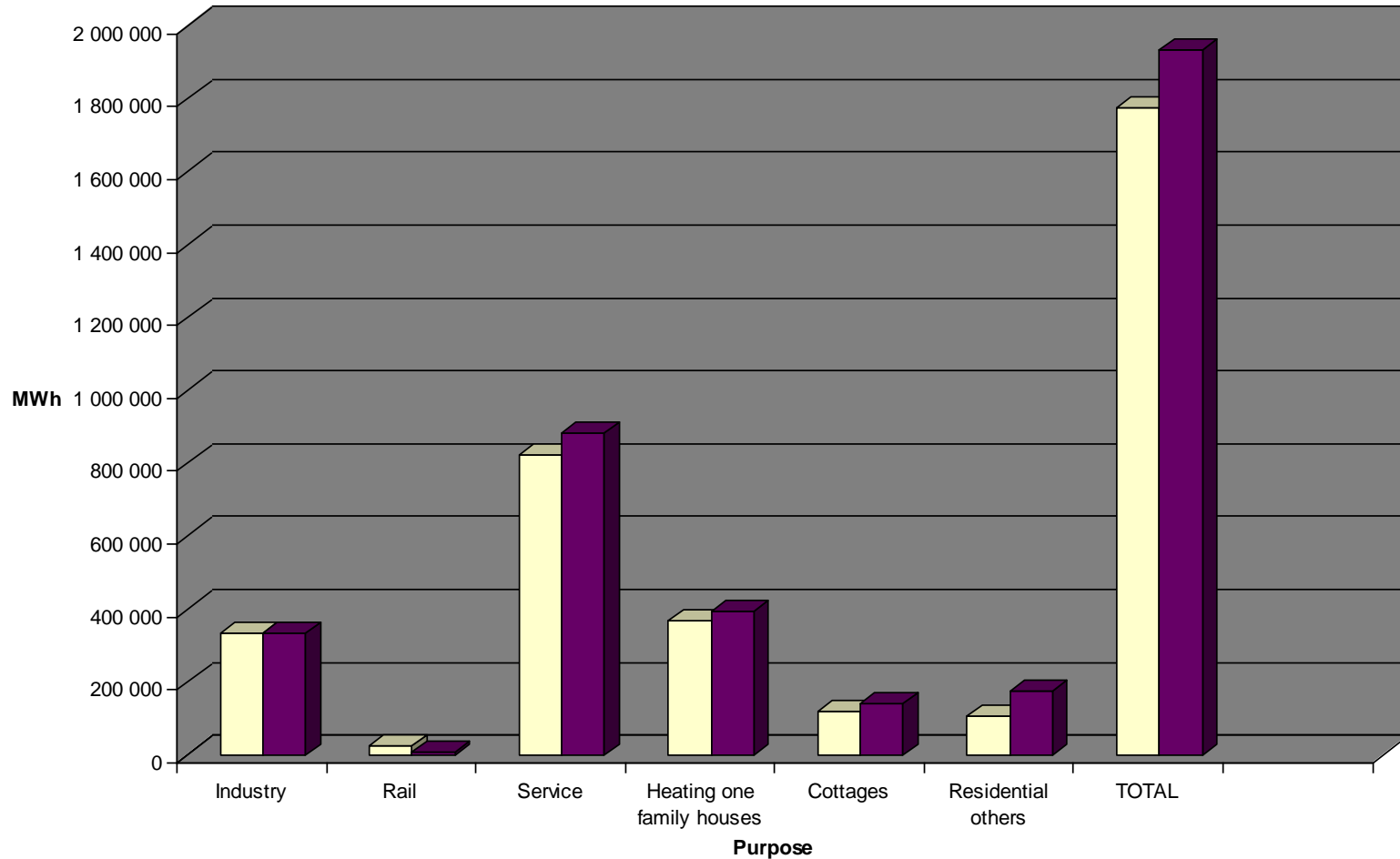
# Share of renewables



# Regional oil deliveries



# Electricity consumption





# Achievements so far (+)

+Power: 100% domestic and RES

+Heat: 2/3 bioenergy/waste heat

+Transport: 3% RES (ethanol)

+CO<sub>2</sub>: - 20% (1990 – 2004)

National/international attention  
Sustainable Energy Europe  
Eurosolar 2006  
Green motorists



# Negative trends/predictions (-)

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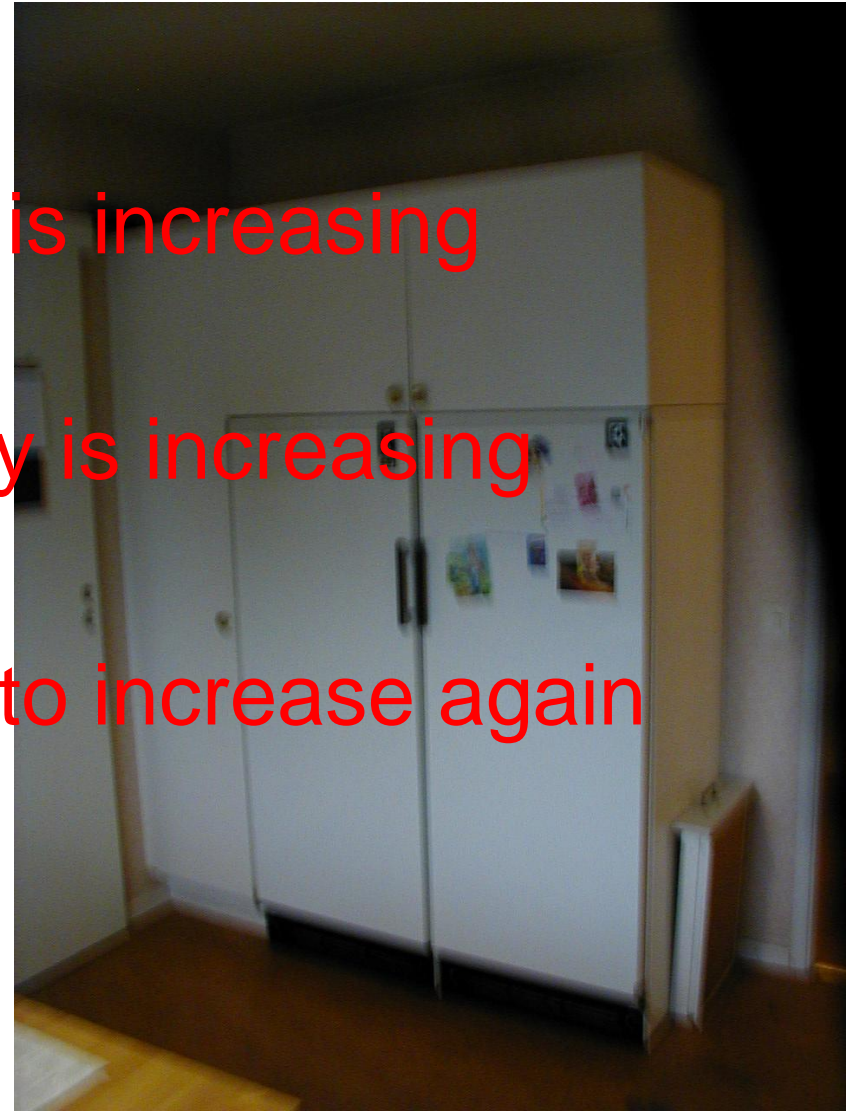
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- Total use of energy is increasing

- The use of electricity is increasing

- Oil deliveries starts to increase again



# Regional objectives

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**Jämtland County - non fossile fuel region**

**GHG/capita: -50% (1990 to 2025)**

**Wind power: 1 TWh (2015)**

**Distribution systems for alternative fuels**

**No "single use" of heating oil in 2010**

# Present work areas.....



Increase the use of biofuels  
in middle-scale heating  
plants (50 kW – 1 MW)

Increased use of thermal  
solar energy in houses and  
commercial buildings



# Present work areas.....



*Continued information concerning EPBD (left)*

*Information for one-family houses with electricity heating (below)*



*Saving energy in office buildings by changing behaviour (above)*

# Future work areas.....

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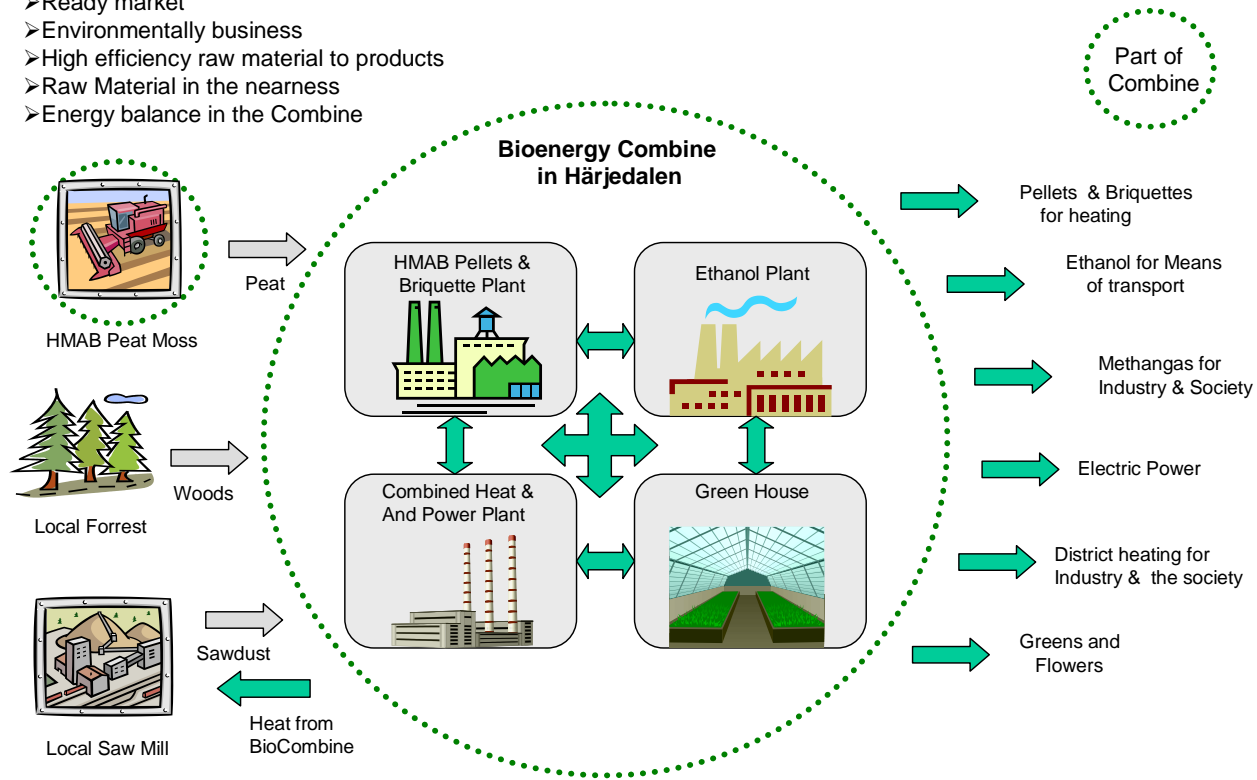
*Planning for  
more wind  
power plants*



# Future work areas.....

## Bioenergy Combine in Härjedalen

- Ready market
- Environmentally business
- High efficiency raw material to products
- Raw Material in the nearness
- Energy balance in the Combine



*CHP, ethanol and biofuel production*