

Beispiel Jämtland



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SUSTAINABLE ENERGY EUROPE
2005-2008



Jämtland County

127 000 inhabitants

50 000 km² (10% of Sweden)

2,5 inhabitants/km²

8 Municipalities

Regional Energy Agency



- ” 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



Total production: 12,5 TWh

Hydro power: 12,3 TWh

Wind power: 0,04 TWh

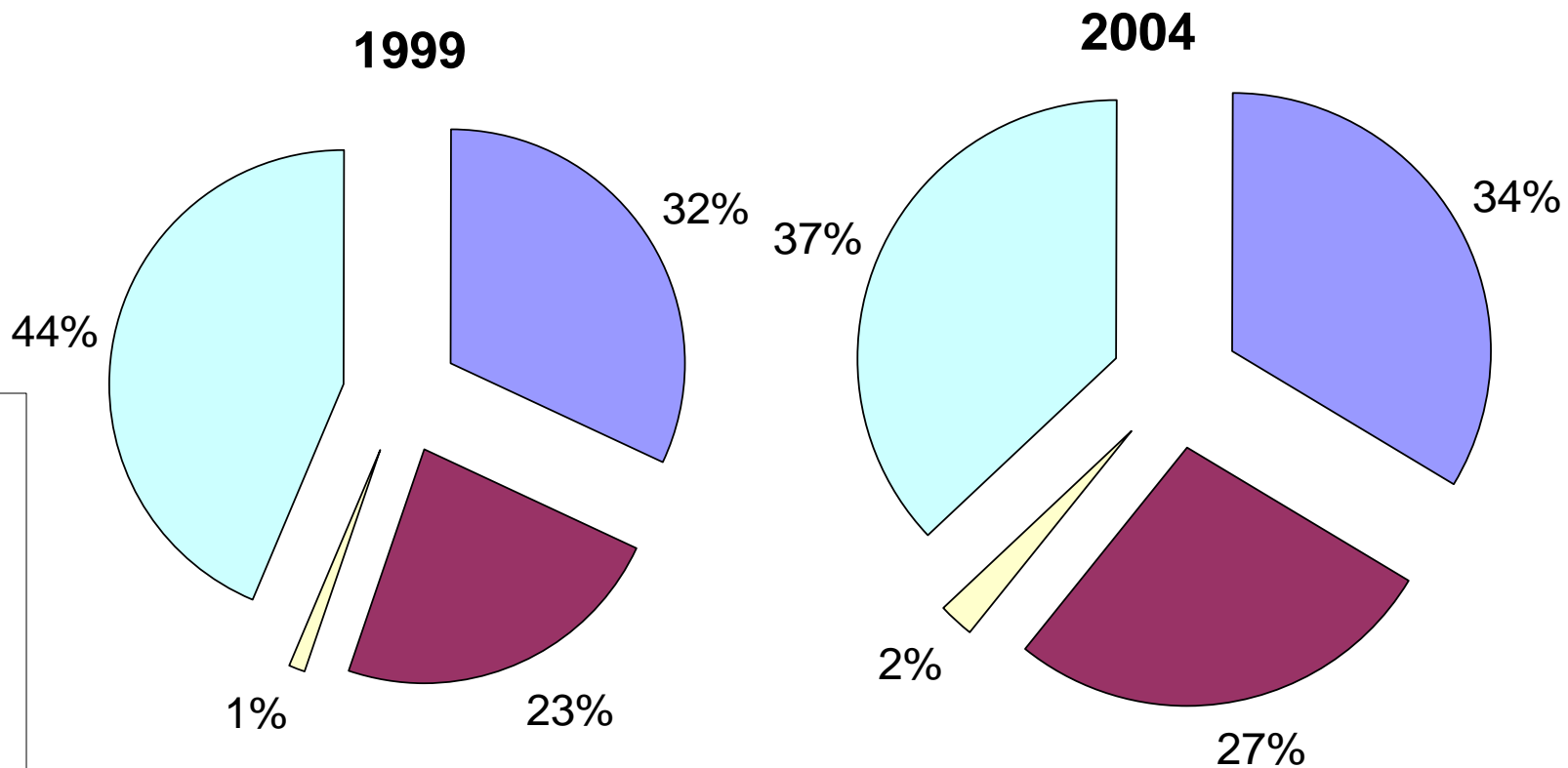
CHP (Biofuels): 0,2 TWh

Heat production

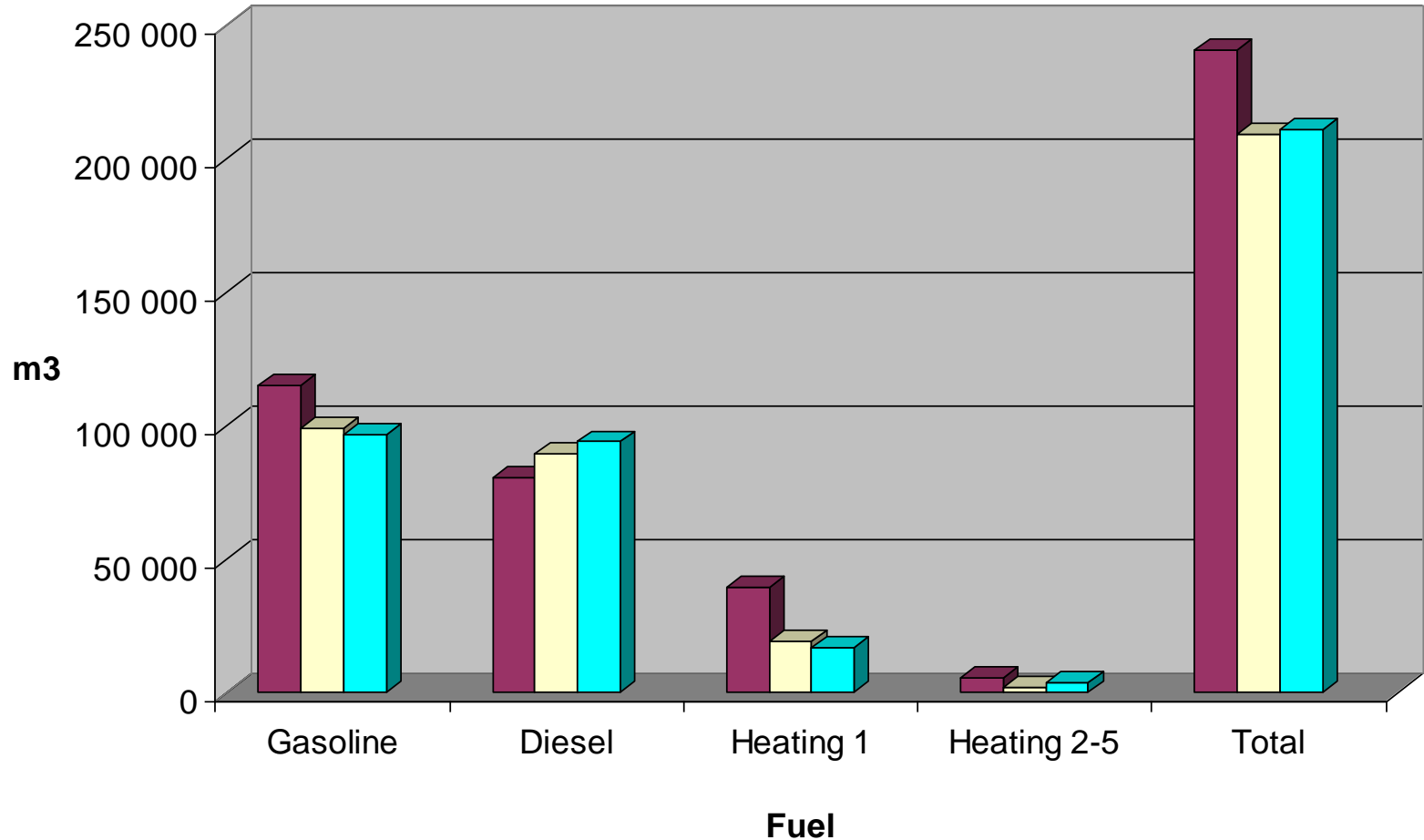


Total production	2,3 TWh
Biofuels:	1,1 TWh
Electricity:	0,7 TWh
Heating oil:	0,2 TWh
Peat:	0,1 TWh
Heat pumps:	0,1 TWh
Others:	0,1 TWh

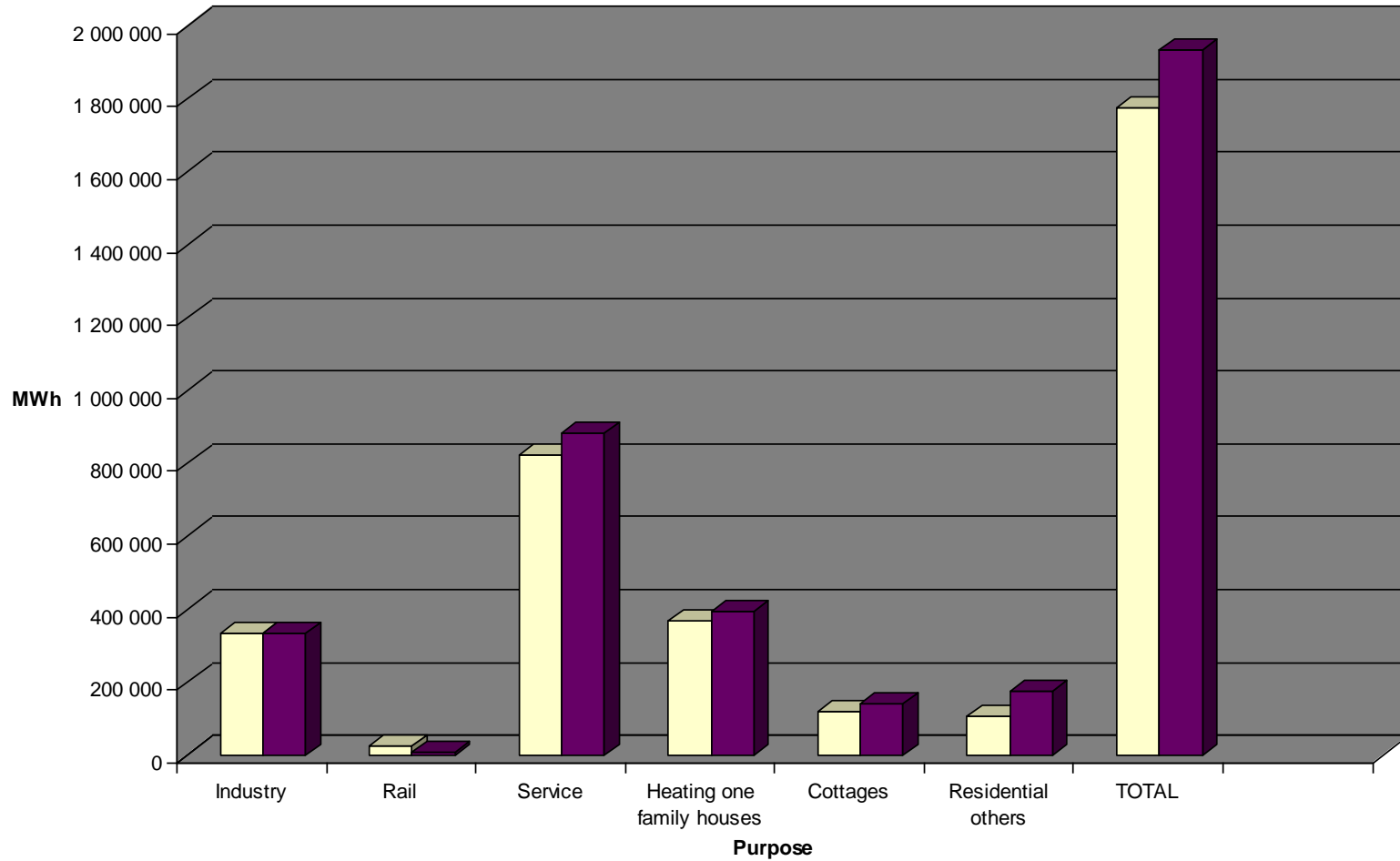
Share of renewables



Regional oil deliveries



Electricity consumption



Achievements so far (+)

+Power: 100% domestic and RES

+Heat: 2/3 bioenergy/waste heat

+Transport: 3% RES (ethanol)

+CO₂: - 20% (1990 . 2004)

National/international attention

Sustainable Energy Europe

Eurosolar 2006

Green motorists



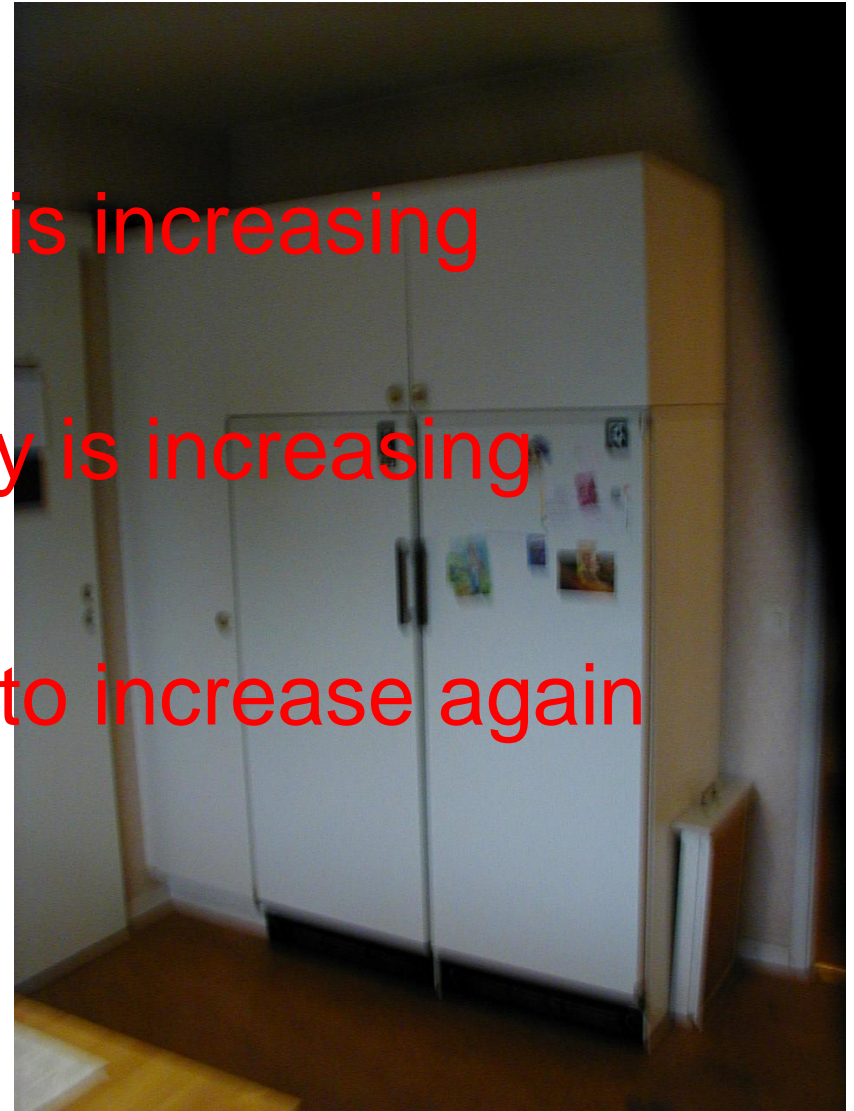
Negative trends/predictions (€)



- Total use of energy is increasing

- The use of electricity is increasing

- Oil deliveries starts to increase again



Regional objectives

Jämtland County - non fossile fuel region

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

Wind power: 1 TWh (2015)

Distribution systems for alternative fuels

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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



D f Y g Y b h ' k c f _ ' U f Y



Continued information concerning EPBD (left)

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



Saving energy in office buildings by changing behaviour (above)

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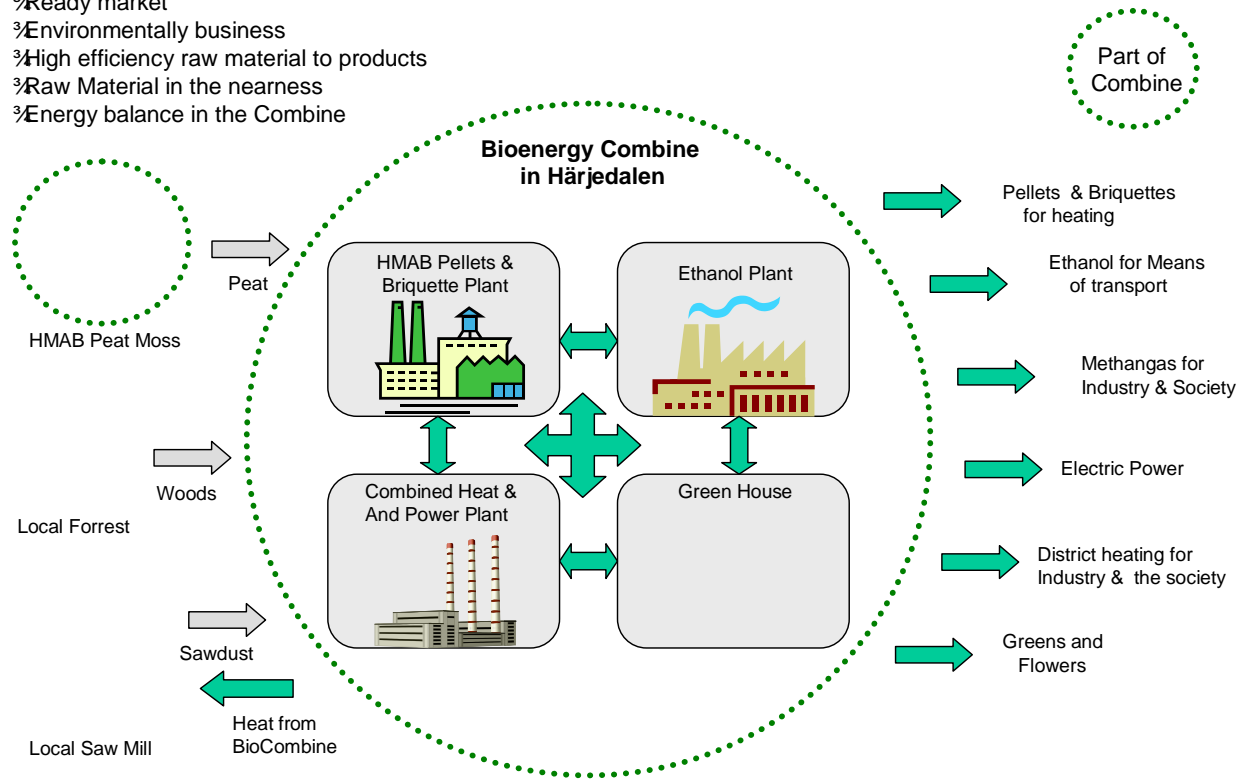
*Planning for
more wind
power plants*



: i h i f Y · k c f _ · U f Y

Bioenergy Combine in Härjedalen

- ³Ready market
- ³Environmentally business
- ³High efficiency raw material to products
- ³Raw Material in the nearness
- ³Energy balance in the Combine



CHP, ethanol and biofuel production