

Country report - Sweden -Sept. 2005

Progress in institutional framework

- National target to replace 3% of all fossile fuels in the transport sector by 2005 and 6% by 2010
- Tax on combustion and landfilling. 20/9 new deadline. 50€/ton for organic waste and combustibile and 40€/ton for other waste
- No tax exception if processing time >1 year
- 35% target for recycling of organic waste until 2010.
- OFMSW will not give green certificates
- Legislation on alternative fuels unclear yet
- Budget negotiation about 200 M€ for new Climate investment program (approved !)

Government policy on Environmental Targets - September 2005

- 25% of all new governmental cars should be Eco friendly 2005. 35% in 2006
- National action plan for adaption of the public tendering process (more environmentally oriented)
- Biogas in transport sector can contribute by 10% to the national GHG targets in 2010
- Free parking for biogas vehicles in Stockholm, exception from congestion fees
- Collection of OFMSW to be tenfolded in 2009 in Stockholm

R & D

- **Analysis of micro-organisms in biogas**
- **Counter measures to biological growth in upgrading plants**
- **SNG-production from solid biomass**
- **Analysis of methane emissions from post treatment of digestate**
- **Biogas train in Linköping**

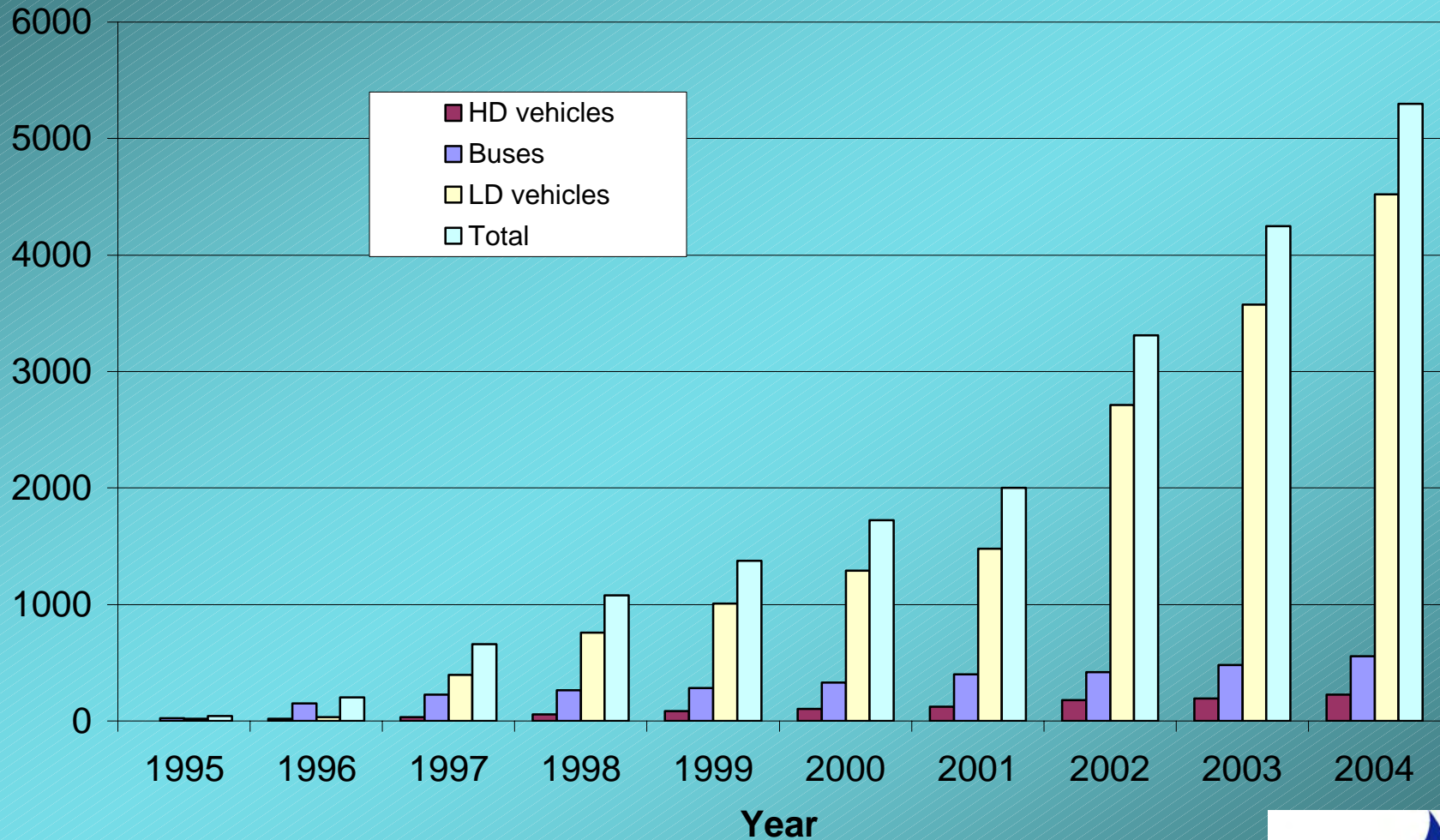
Biogas train

- Tekniska Verken in Linköping invested in train
- Linköping – Västervik (115 km)
- Y1 bought januari 2005
- Two new Volvo engines
- Range 500 km on biogas
- First trip 20 june 2005

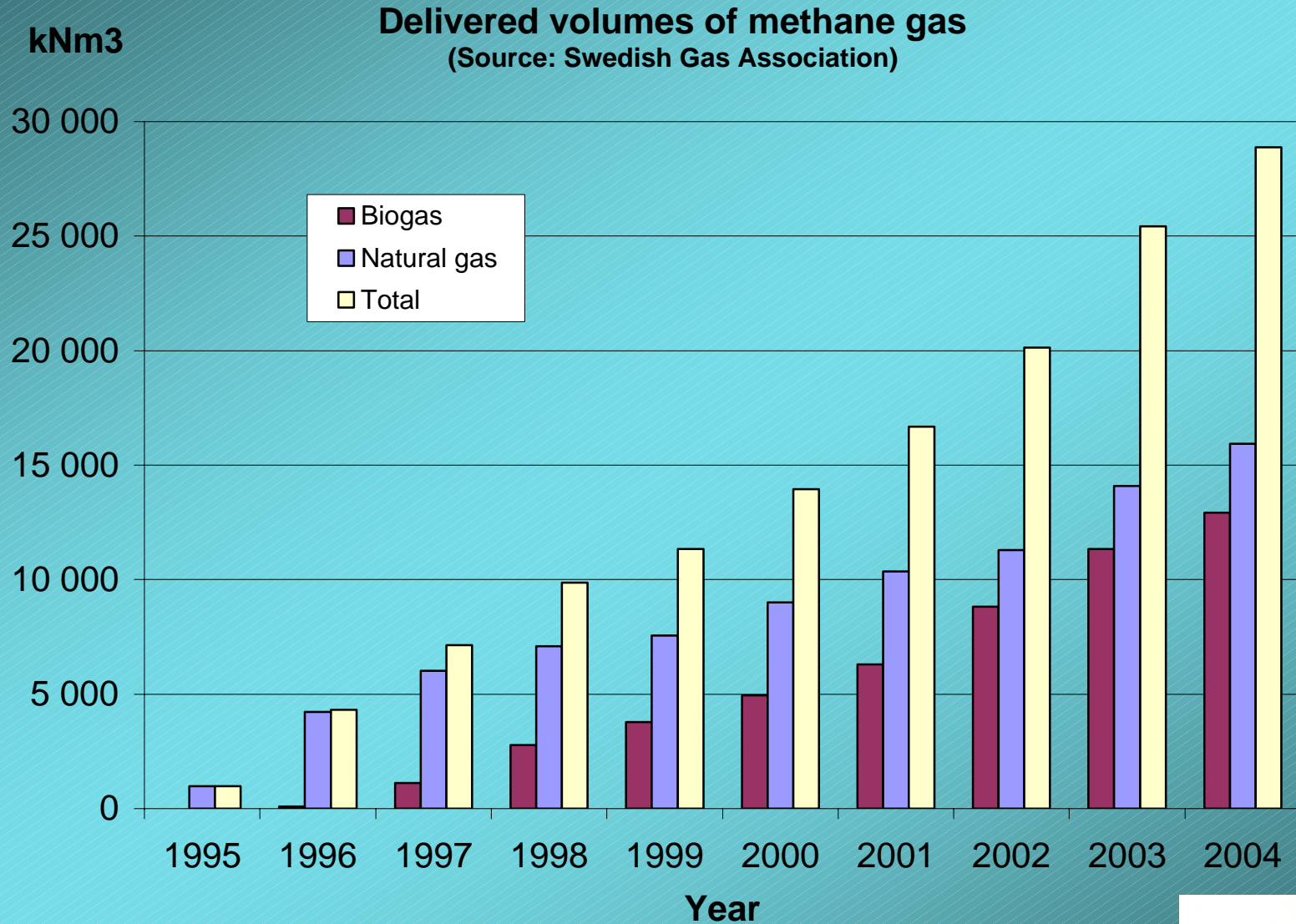


Development of gas vehicle market

Number of vehicles



Development of market for CNG/CBG



Selected news from SE biogas plants

- **Kristianstad - New upgrading plant 2005 - 1,8 M€ - 600 m³/h, mobile filling station, farmscale biogas/upgrading, covered manure pits**
- **Gothenburg - new upgrading plant 2005 - 1400 m³/h - CIRMAC - injection into MP grid**
- **Southern Sweden WT-company forms AD company**
- **Sydkraft - 20% biogas in fuel to NGV's, 2 Mm³ to Malmö gasgrid in 2007, 50% biogas in vehicle fuel 2010**
- **Trollhättan - new plant for plants under study**

Selected news from SE biogas plants

- Falkenberg - 180 000 tpy plant under design
- Helsingborg - New upgrading plant for 1,7 Mm³/year + new upgrading from sewage (1 Mm³/year)
- New biogas plant on dairy in Umeå
- New upgrading plant in Boden 1 Mm³/year (sewage)
- Norrköping - new biogas plant with raw material from ethanol plant

International activities

- **Marcogaz - Code of practice for biogas injection under development**
- **BIOCOMM finalized - Regulation draft for introduction of biogas into the natural gas grid developed - May 2005. Project partners: SGC, German Biogas Ass., ICAEN, Barcelona**