

Country report: Sweden



Anneli Petersson, Dr.
Swedish Gas Centre

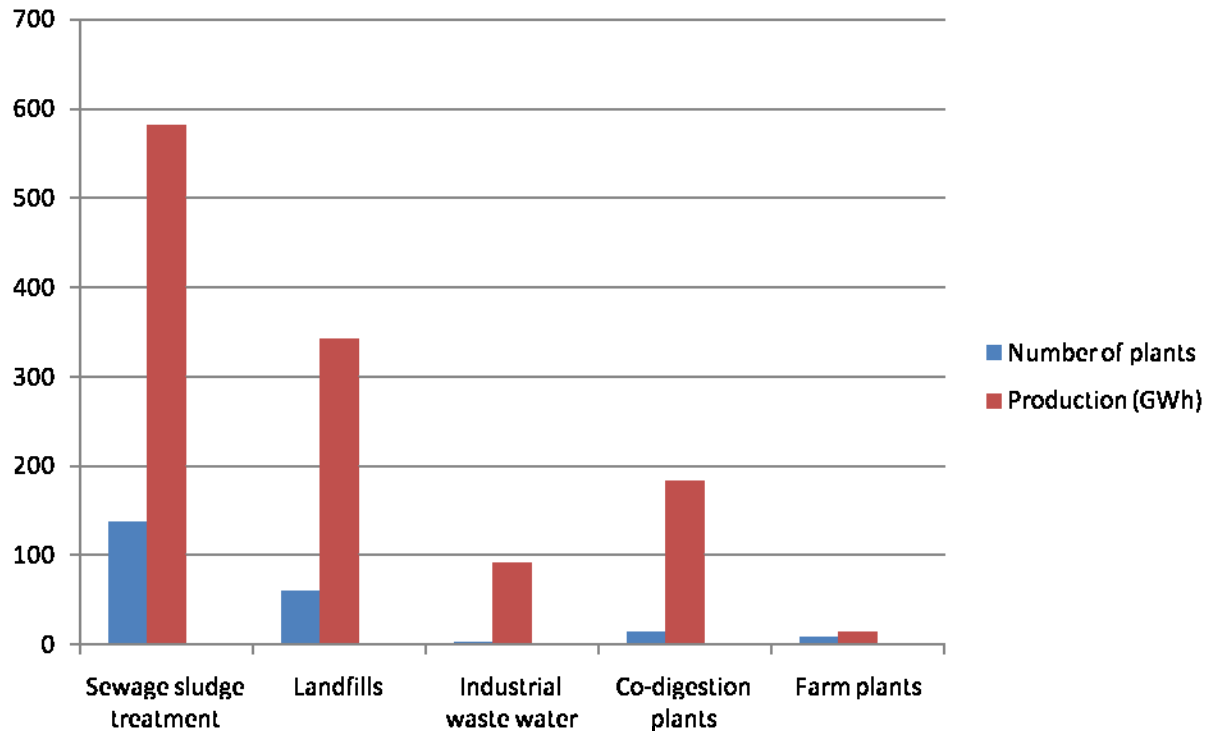
Biogasproduction in Sweden 2006

- 1.2 TWh produced per year
- 223 plants
 - 138 municipal sewage treatment plants
 - 60 landfills
 - 3 Industrial wastewater treatment plants
 - 14 Co-digestion plants
 - 8 Farm plants

Source: Swedish Energy Agency, ER 2008:02

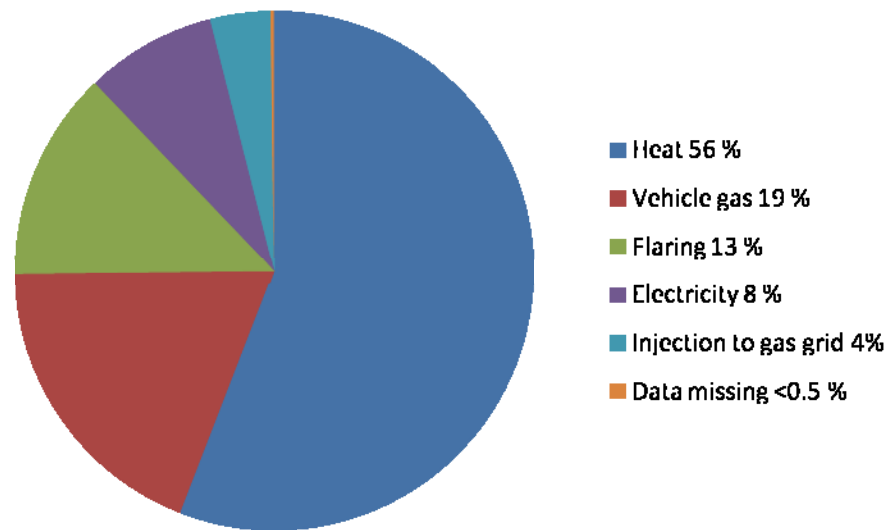
New statistics for 2007 and 2008 will be available Q3 2009

Biogasproduction in Sweden 2006



New statistics for 2007 and 2008 will be available Q3 2009

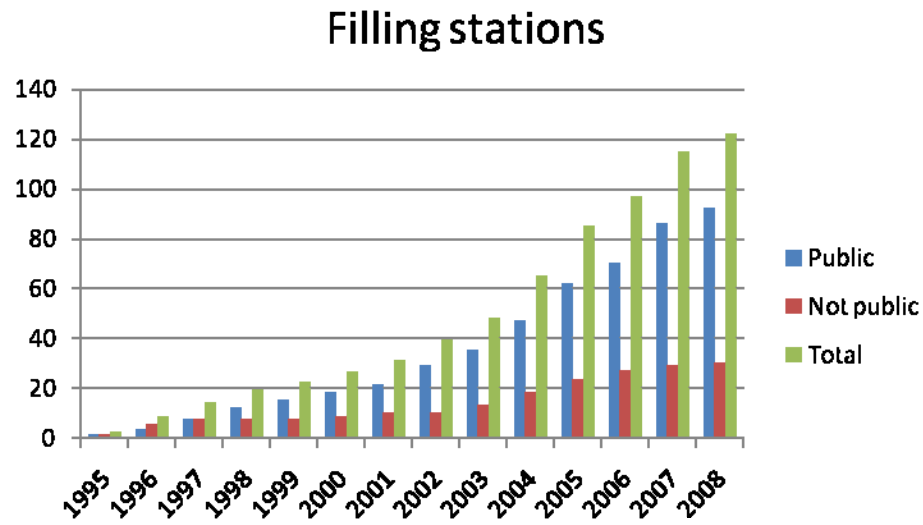
Utilization of biogas in Sweden (2006)



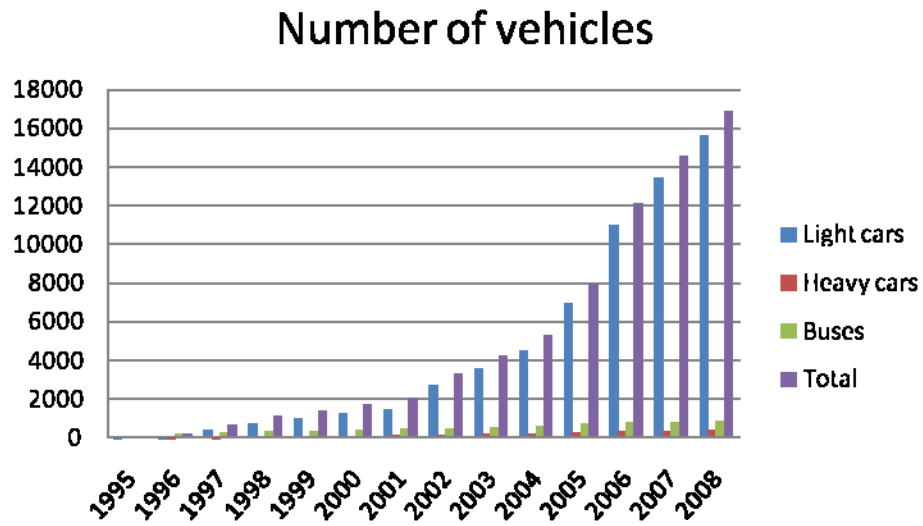
Source: Swedish Energy Agency, ER 2008:02

New statistics for 2007 and 2008 will be available Q3 2009

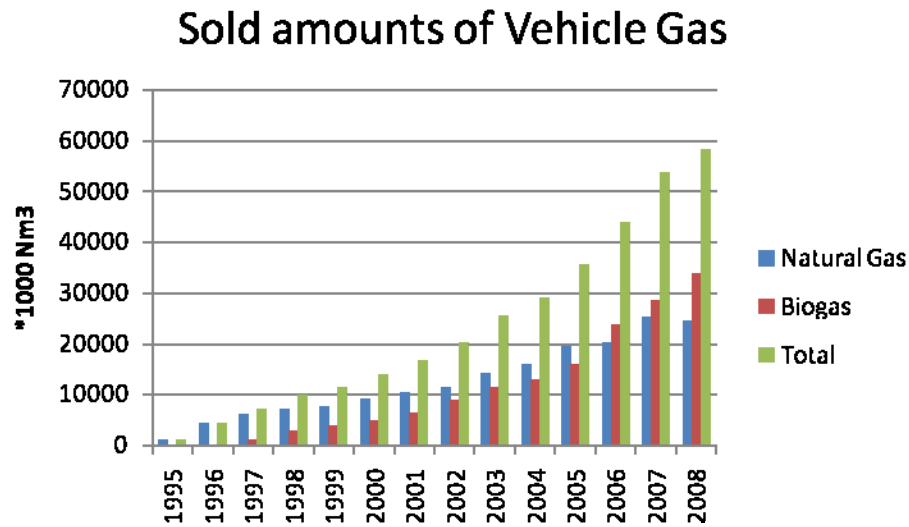
Filling stations



Gas vehicles



Sold volumes of vehicle gas

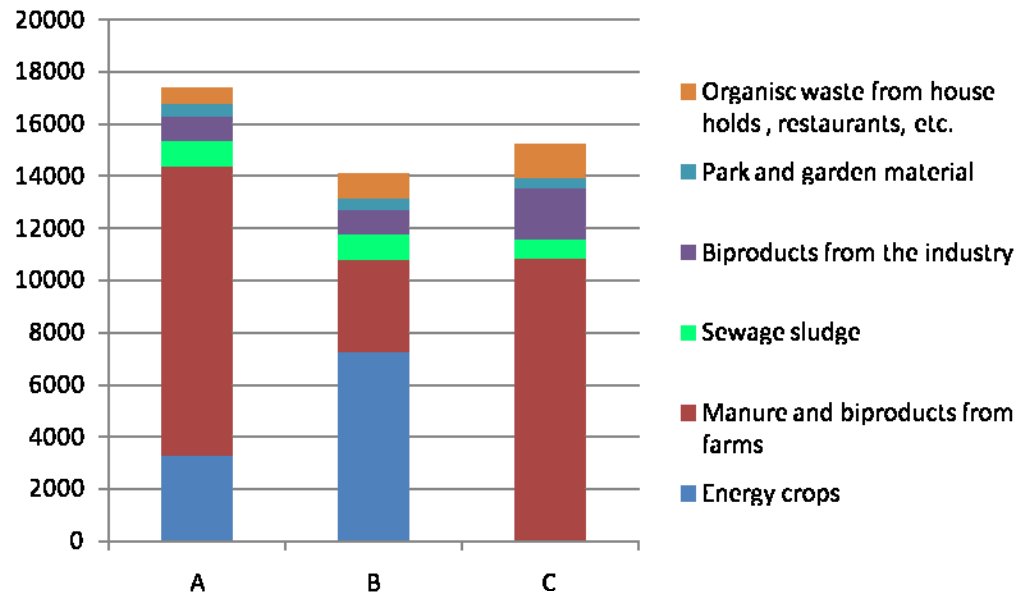


Biogas upgrading

- In Sweden today:
 - Water scrubber (24)
 - PSA (7)
 - Chemical absorption (3)
- In the near future:
 - Cryogenic

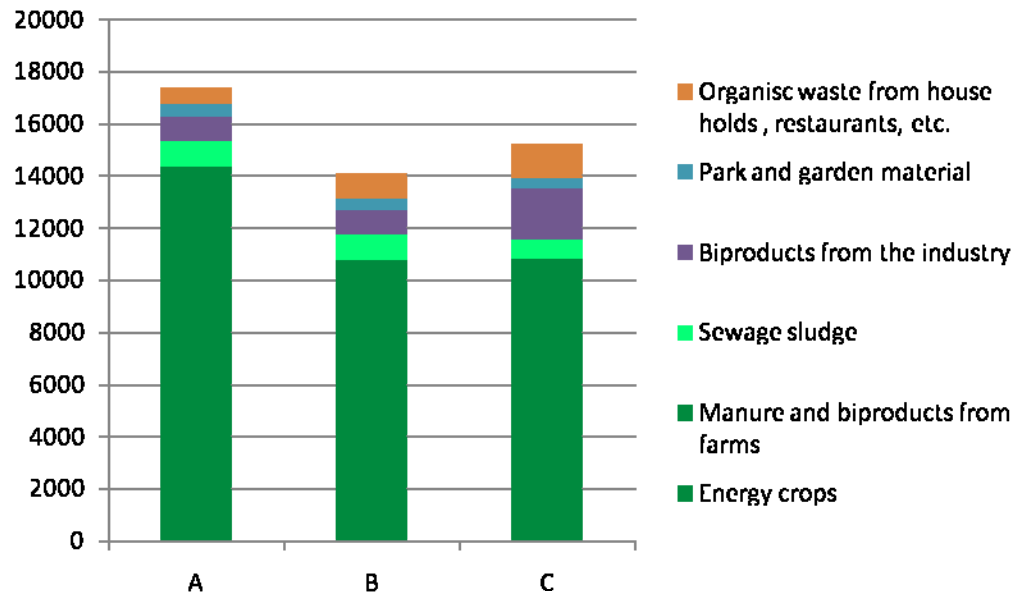


Potential for biogas production



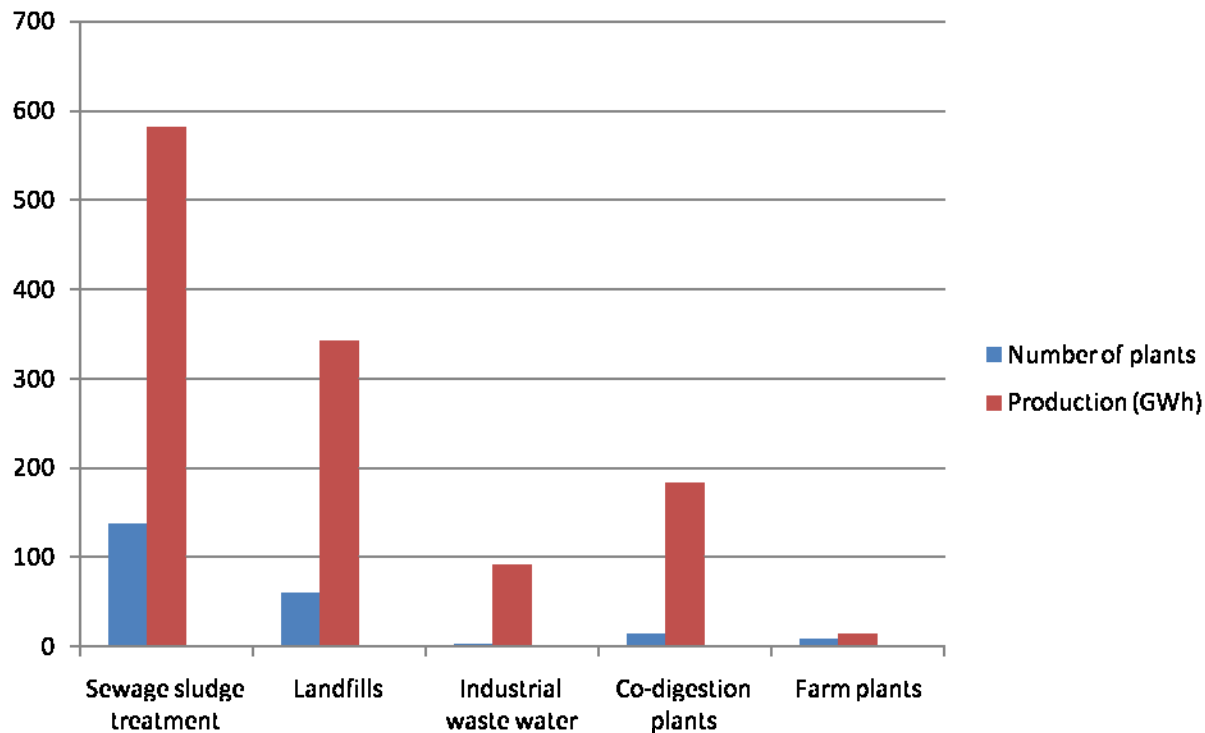
- A: Biogaspotential och framtida anläggningar i Sverige, Nordberg *et al.* 1998
B: Sammanställning och analys av potentialen för produktion av förnyelsebar metan (biogas och SNG) i Sverige. Linné och Jönsson. 2005
C: Den svenska biogaspotentialen från inhemska restprodukter. Linné *et al.* 2008

Potential for biogas production

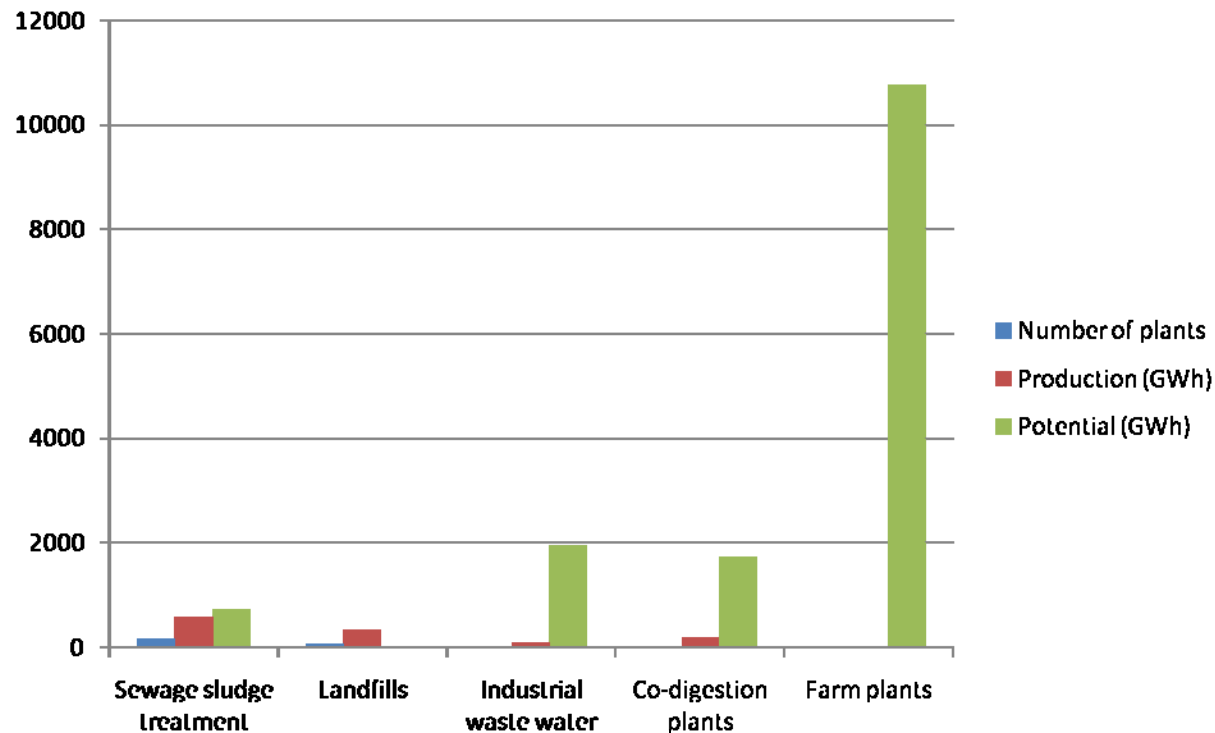


- A: Biogaspotential och framtida anläggningar i Sverige, Nordberg *et al.* 1998
B: Sammanställning och analys av potentialen för produktion av förnyelsebar metan (biogas och SNG) i Sverige. Linné och Jönsson. 2005
C: Den svenska biogaspotentialen från inhemska restprodukter. Linné *et al.* 2008

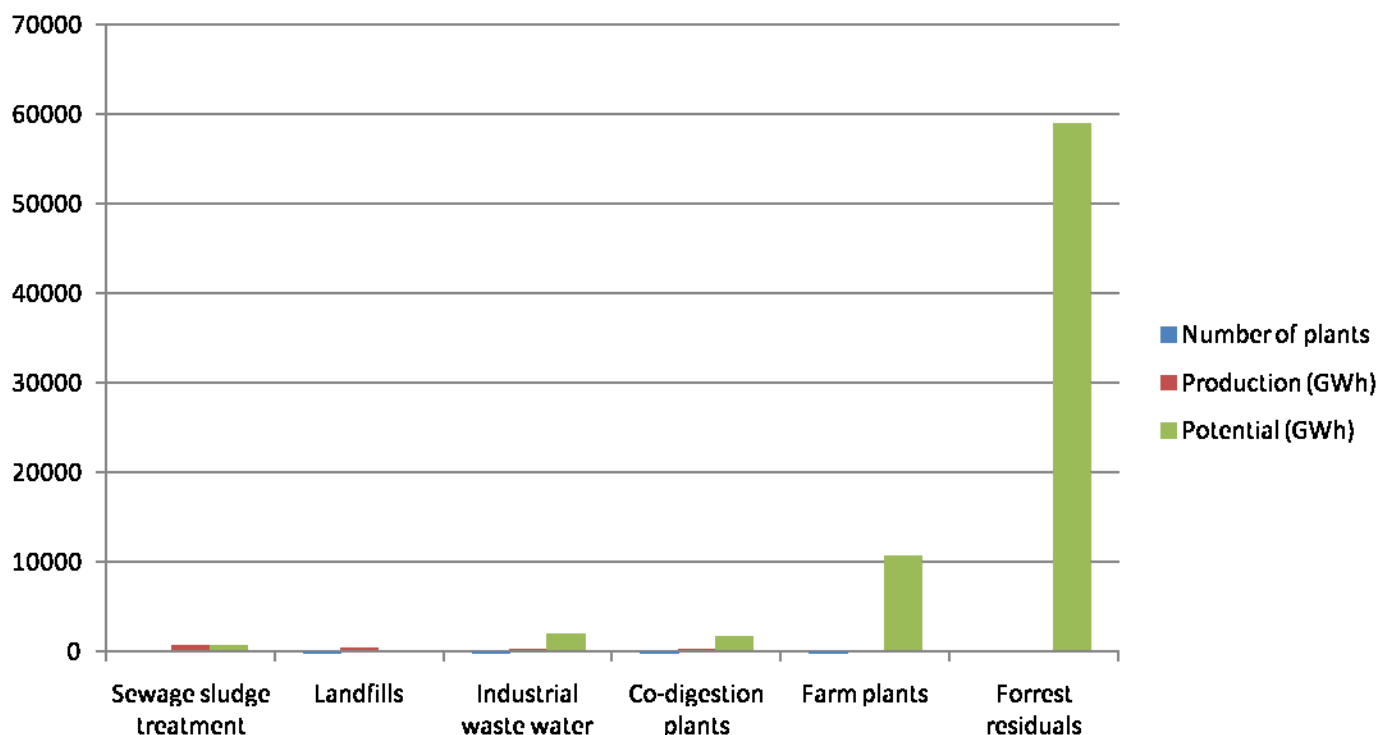
Biogas production in Sweden 2006



Biogas production i Sweden 2006 and biogas potential



Biogas production i Sweden 2006 and biomethane potential



Publications

- [Biogas from manure and waste products – Swedish case studies \(www.gasforeningen.se\)](#)
- [SGC Rapport 200 Substrathandbok för biogasproduktion](#)
- [SGC Rapport 202 Sammanställning från två seminarier: Kryoteknik för biogasbranschen, LBG - andra generationens fordonsbränsle](#)
- [SGC Rapport 198 Bio-Propane from glycerol for biogas addition](#)
- [SGC Rapport 197 LNG as an Alternative Energy Supply in Sweden](#)
- [SGC Rapport 193 International Seminar on Gasification 2008](#)
- [SGC Rapport 190 Elektroporation för forcerad metanutvinning från förnybara resurser](#)
- [SGC Rapport 188 Demonstration of Software Application Biogas Optimizer™ at the Händelö Biogas Site](#)



News

- Svanen award (a Nordic ecolabel) for vehicle gas
- Pro-longed investment support for filling stations
- Investment program for farm biogas plants
 - 2009-2013
 - At least 50 % of the substrate should be manure
 - Up to 30 % of the investment cost can be covered (though not more than 200 000 euros per project)
 - Total budget 200 miljon sek
- Cryogenic upgrading and LBG production to be ready 2009 in Sundsvall

Thank you for your attention!

