



Policies and strategies for introduction of biogas in Tartu City



Bergen, 05.05.2011





Public bus transport in the Tartu City

Population: 98-100 000 inhabitants

Number of bus lines: 25

Total length of bus lines (km): 490

Buses in daily use: 50 (5 CNG and 45 diesel buses)

Average age of buses : 6 month

Passanger turnover in 2010 by bus: 12 000 000

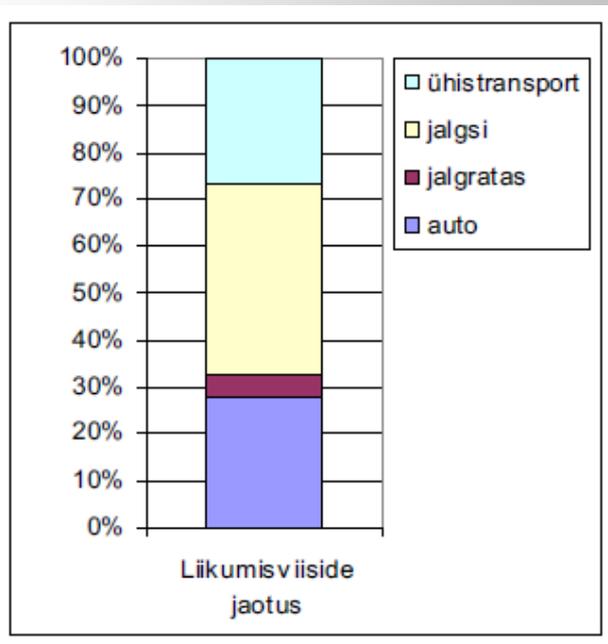


New buses in Tartu (January-March 2011)





Traffic modal split



 - public transport

 - car

 - pedestrians

 - bicycles

Our aim is: Public transport and bicycles

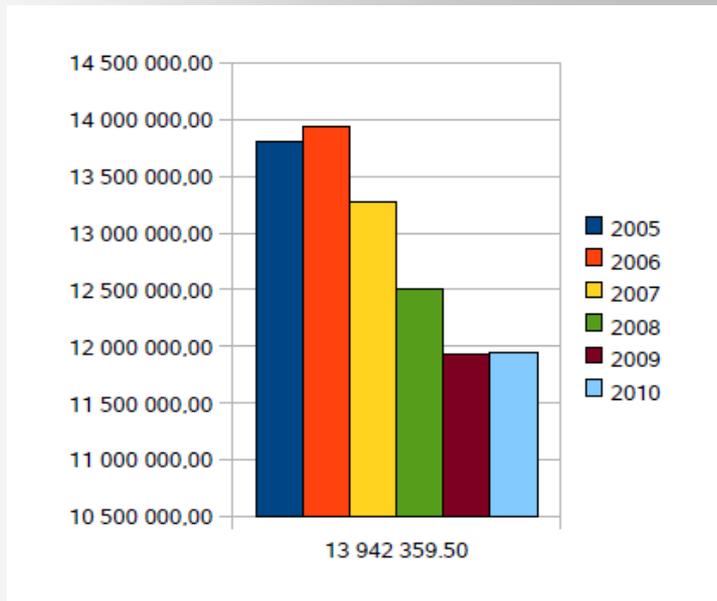


Cars





Passenger turnover of Tartu in public transport



January 2011 + 3%
February 2011 + 4%
March 2011 + 11%





New policy in public transport and BBB project

Tartu City Government decided to participate in Baltic Biogas Bus project on 23.03.2009. This decision was the beginning of development of environmentally friendly public transport for city of Tartu.

The project also dealt with wider participation in decision-making process of Tartu, and decided to opt for public transport the future strategy for the benefit of environmentally friendly public transport. As the city of Tartu is quite compact, a bus transport remains the main mode of public transport here in the future. Participation in the Baltic Biogas Bus project was designed to help shape the future strategy for the area.



Positive impact of the BBB project on Tartu City

The procurement of public transport included the requirement for biogas buses.

In the March of 2011 first 5 CNG(biogas) buses came on Tartu City streets

In the March a CNG station were be opened in Tartu City (first station in region and second in Estonia)

Tartu is the first city in Estonia to apply biogas buses in public transport

In the final stage is the transport development plan of Tartu City (2012-2020), which puts the emphasis on the development of environmentally friendly public transport





Biogas from Tartu waste water company and Aardlapalu landfill

Most suitable raw materials for biogas in the Tartu region:

- Bio-degradable part of municipal solid waste
- Sewage sludge
- Industrial bio-waste
- Herbaceous biomass (special crops for silage or natural grasses)
- Landfills

During closing works in aardlapalu landfill will be established gas pipes. First biogas from Aardlapalu landfill june-july 2012. In May will be started construction works of biogas plant in Tartu water company. Plant construction will be finished Oct-Nov 2012.

Biogas received from the landfill and water company is sufficient to equip all buses of Tartu city lines with fuel.



Environmental and economical advantages of compressed methane (biomethane) buses

1. Less of CO₂ emissions and PM-s
2. Expenditures on fuel are significantly lower

1km cost (diesel bus) in Tartu City = 0,54€

1km cost (CNG bus) in Tartu City = 0,25€



Problems of usage of (bio)methane gas

- Today we have relatively low taxes on methane gas.
- Technology of using compressed methane gas (cars) is uncommon in Estonia (“egg-chicken” dilemma).
- Today we have no biogas for cars on the market.
- To ensure a distribution of compressed methane technology is needed to have low taxes during long period.



Estonia's opportunities to fulfill the objectives of the European Union climate targets (20-20-20)

Estonia's opportunities to fulfill the objectives of the European Union climate policy targets in transport sector are quite limited:

- Biogas
- Hybrids
- Electricity (green electricity and electric cars)



Our policy and strategy

- To compose a transport development plan as a long term policy with action plan (strategy)
- To increase a share of public transport and decrease a share of cars in city transport
- Greening of public transport and to have a diversity : compressed methane buses, hybrid buses, electric buses
- To take in use compressed methane- and electric cars in service of necessity of local government
- To be a living example for citizens
- To do outreach work in national level (Government, Parliament) to ensure lower taxation on compressed methane gas.



Thank you!

Margus Hanson

Member of Estonian Parliament

E-mail: Margus.Hanson@riigikogu.ee

