

Quiet, Clean Urban Transport for Kaunas People



Kaunas Trolleybus Company

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Kaunas City Introduction

- Geographical environment
- The second largest city in Lithuania
- 378 000 inhabitants
- Over 40 000 students
- Clean energy production from hydro power stations



Kaunas Public Transport System

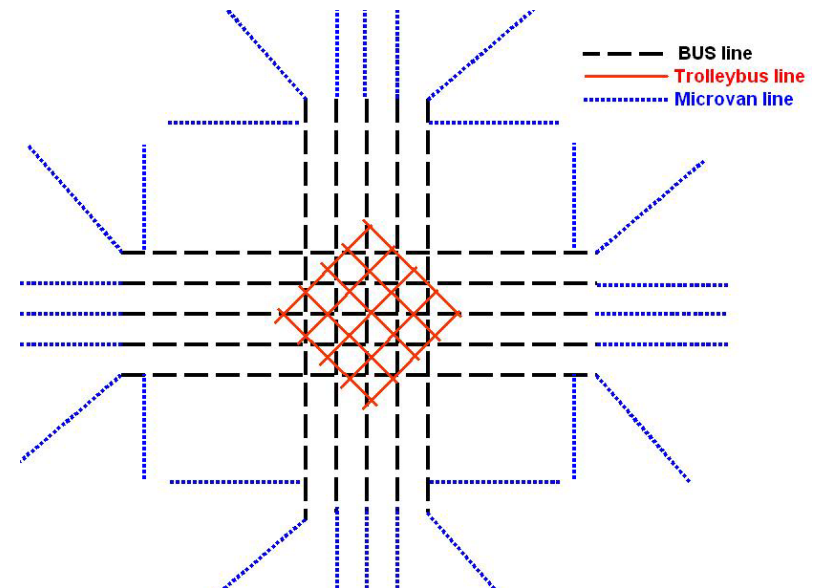
- City owns 2 companies (municipal operators)
 - Bus company “Kauno autobusai” – 121 diesel buses
 - Trolleybus company “Autrolis” – 171 trolleybuses
- 43 private operators
 - 300 taxi vans run 35 routes
- 2,5 trip per day per inhabitant
- 60 % of PT users
- 22,5 % using private cars



Kaunas City Policy on Transport and Energy


- 1999 city environmental strategy (policy)
 - Minimize emissions from traffic
 - Revise city traffic management system aiming at decrease of transit traffic flows
 - Priority for public transport, bicycles and short walks when reorganizing traffic
- 2003 city Master plan
 - Public transport should be affordable, operate fairly and efficiently
- 2003 Public Transport strategy

The role of PT modes in the city by PT strategy





40 Years of Trolleybuses in Kaunas

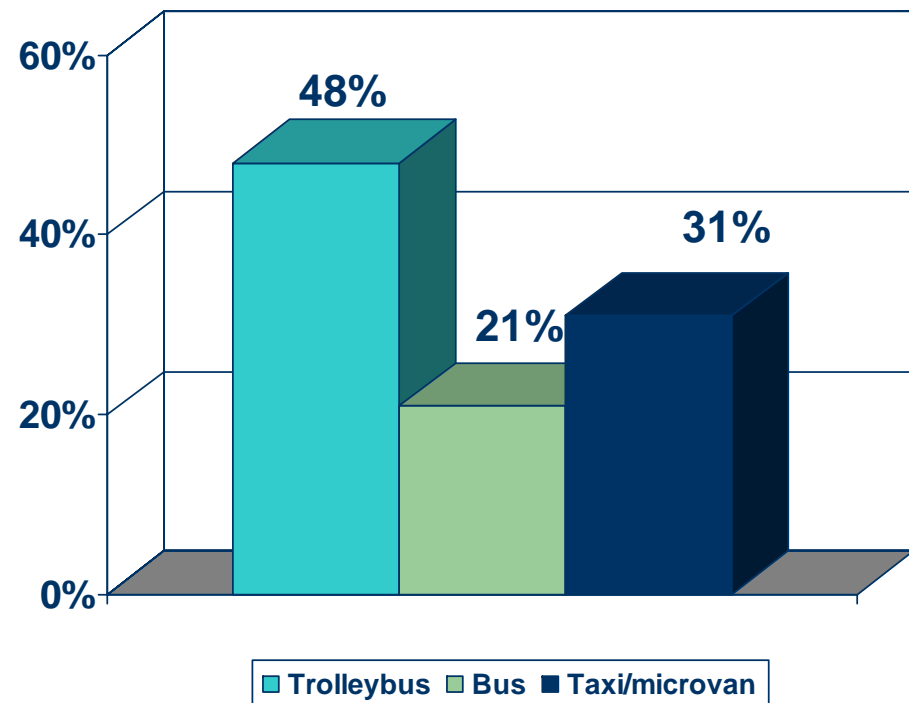
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- Second on the Lithuanian scale, medium-sized on the European scale
 - 31st of December 1965 – the first trolleybus route
 - 16 routes covering total of 368,3 km
 - 33 million passengers every year
 - The electricity contact network comprises 135,7 km
 - Trolleybuses carry ~ 66% of passengers



The Advantages of Electrical To the Passenger -

- Zero pollution emissions in the streets
- Lowest possible noise levels
- Powerful but smooth acceleration and braking
- Sense of permanence of service
- Best ride quality

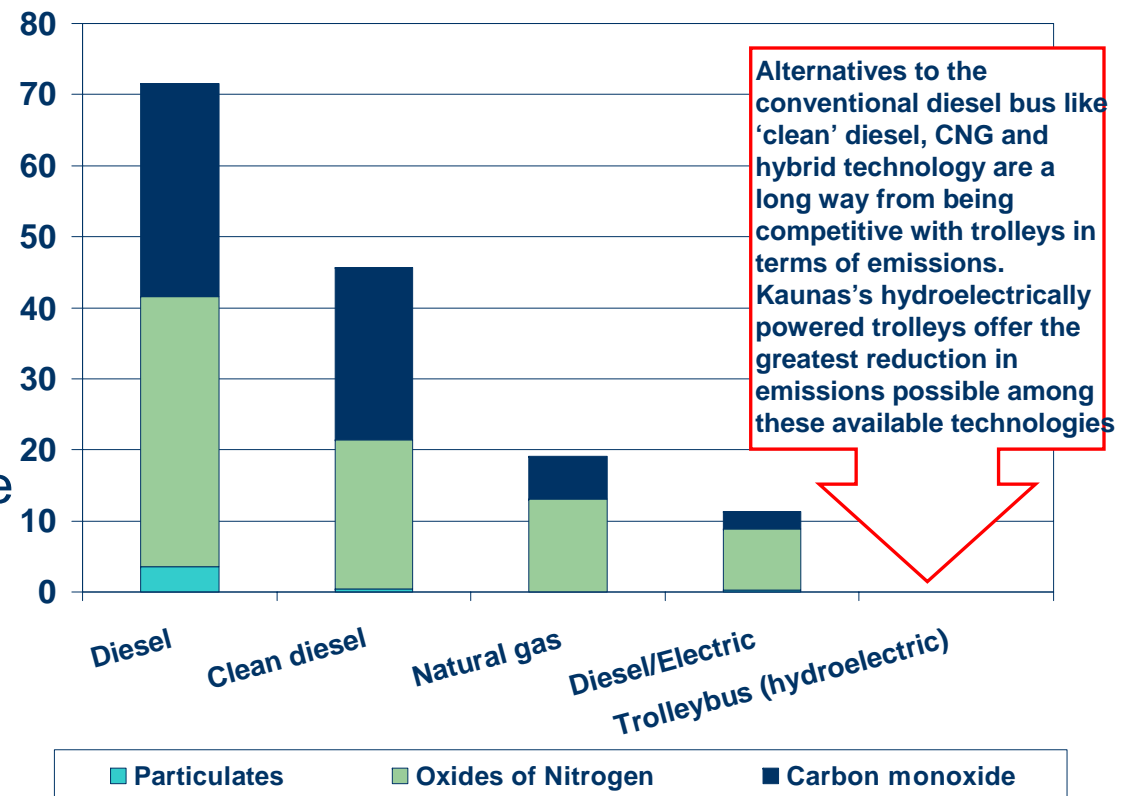
Actual Passenger Usage



The Advantages of Electrical To the Public Generally -

- Lowest possible emissions into the environment as a whole
- Lowest possible consumption of non renewable resources
- Lowest possible release of greenhouse gases like CO₂

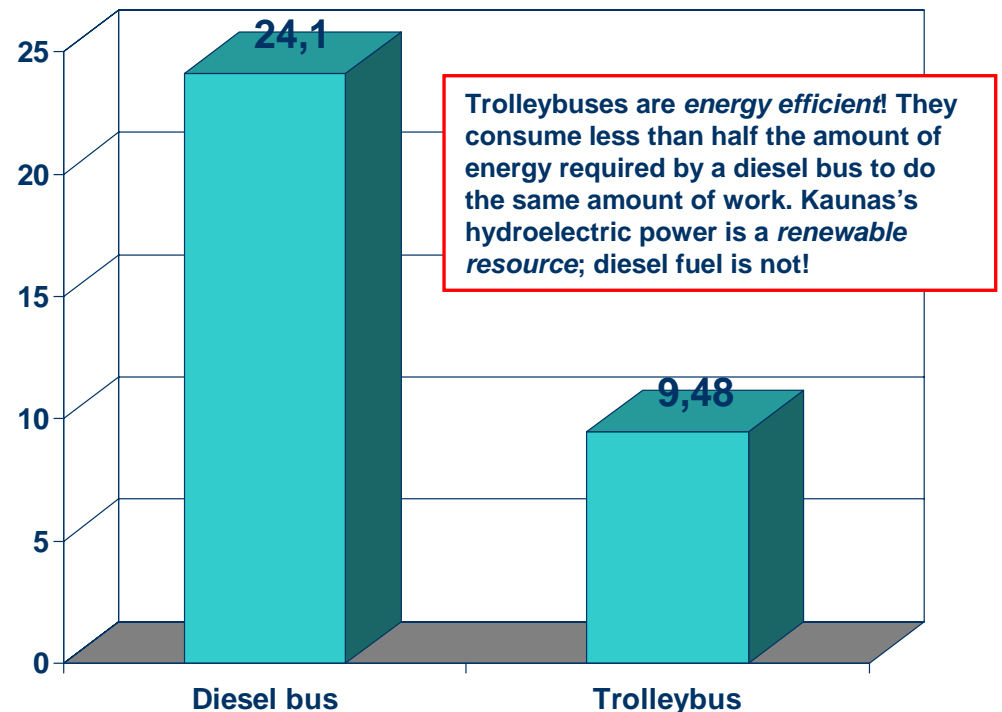
Comparative Maximum Levels of Air Contaminant Emissions by Mode of Propulsion (in g/km)



The Advantages of Electrical To the Operator -

- High mechanical reliability and efficiency
- Long service life
- No idling motor losses
- Greater acceleration and hill climbing performance
- Lower power costs
- Lower maintenance costs

Comparative Energy Consumption
(in MJ per vehicle km)



Today's Situation

- EBRD loan for Kaunas Trolleybus Modernization Project - 15 mln. Euro.
 - Renovated contact network.
 - Increased speed at the curves.
 - 42 new Solaris trolleybuses fleet.
- Total fleet 171 trolleybuses.
 - 42 vehicles – up to 5 years old.
 - 82 vehicles – up to 20 years old
 - 47 vehicles – older 20 years

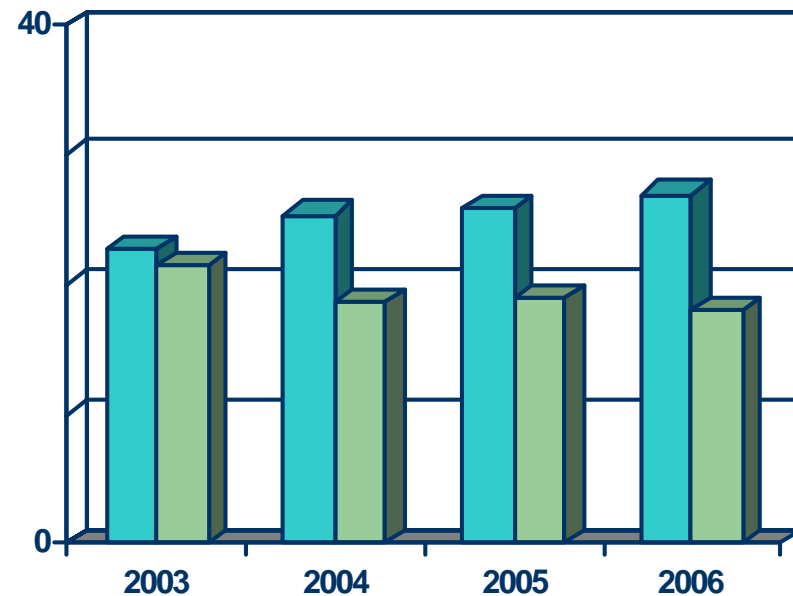


Today's Results

- Present workload of trolleybus lines – 45-50%
 - 33 million passengers carried a year
- 1989 – 1993
 - 72 million passengers every year
- Trolleybus fleet consumes – 5% of production of Kaunas hydro power station per year

Number of sold tickets

Thousands



■ Tickets with discount

■ Without discount

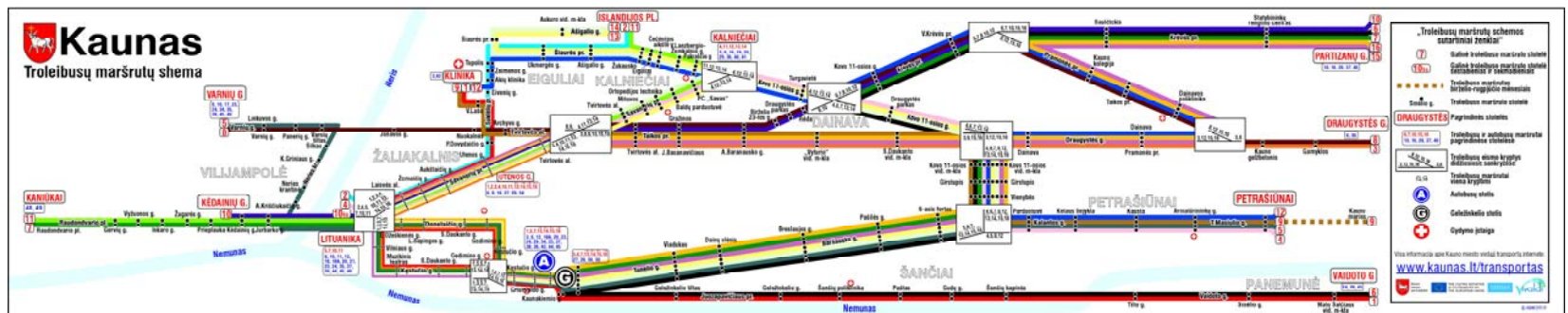
Infrastructure Developments

- Trolleybus line to Šilainiai residential area (70 000 inhabitants)
 - Technical data
 - 1st stage – 11,5 km
 - 2nd & 3rd stage route length – 19,1 km
 - Investments
 - 1st stage – € 0,8 million
 - 2nd stage – € 3,5 million
 - 3rd stage – € 6,7 million



Increasing Attractiveness

- Vivaldi was the first major EU project for Kaunas
 - The main activities were
 - promotion of PT
 - PT priority lanes
 - improved travel information
 - bus stop renovation
 - improved PT access for disabled
- BUSTRIP project



Future Actions

- CIVITAS plus application
- Preparation to marketing campaign
 - Product based
 - System based
 - Links to other services
- Special ride for tourists with oldest trolleybus





**Thank You for Your Interest and
Attention**