



## **The Sustainable Transport Company**

**A small project delivery umbrella organisation based in the UK with a number of overseas representatives**

**Close involvement from Bristol Electric Railbus (BER - operators of the 2 year Bristol ULR demonstration service)**

**Sustraco negotiates with selected consortium partners on a case by case basis**

**Undertakes R&D into drive train technologies for Ultra Light Trams**

### **Our aim:**

- ✓To decarbonise public transport systems
- ✓To reduce energy requirement per passenger km by two thirds
  - ✓To provide energy security by use of local sustainable fuels
  - ✓To improve the quality of public transport
- ✓To reduce the cost of rail based systems to that of bus systems





## Zero Emission Hybrid Railcar

- Results prove that ultra light trams (ULR) would be commercially viable with the use of Hydrogen fuel cells now.

- ULR requires only one third of the energy required by the same size bus, recovering brake energy as standard.



## Biogas Hybrid Rail Vehicle (BioRail) Research for SMEs

Bid for Research, Development and Demonstration funding. Working with SMEs and Universities from the UK, Belgium, Germany and Spain. BioRail will be split into a number of work packages based on two main themes:

- Producing transport grade Bio-methane at the most competitive price.
- The development of an energy efficient drive system for using the Bio-methane in trams using on-board prime mover with energy storage to recover brake energy.

WE need partnerships with forward looking cities and towns who are interested in tram systems for the price of Bus Systems



## What Have We Learned Over the Last Twenty Years



- No problems with ideas, solutions
- Finding partners: SMEs' and RTDs



- Problems with bureaucracy
- The 'as is' culture
- Funding
- The Chicken and egg situation - finding Municipal partners



The Possibilities for sustainable, low energy, cost effective public transport systems are limitless.