
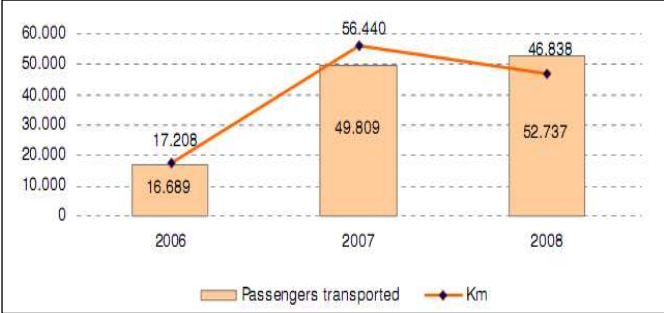


Introduction of the ECO-line in the city centre of Funchal (Portugal)

Keywords	Sustainable transport, technology innovation, central PT service												
Main photos													
Objectives of the action	<ul style="list-style-type: none"> ➤ To enhance mobility in Funchal, particularly for people with reduced mobility and for car parks users ➤ To ease traffic and to reduce air pollution and noise in the city centre ➤ To demonstrate the relevance of new technologies and their possible use in public transport ➤ To improve quality of life in the historic part of the city, along with improving the overall image of public transport 												
Description of the action	<p>The local administration is well aware of challenges imposed by a new energy paradigm. This has been expressed and endorsed in the Energetic Regional Plan (2002), which included the public policy's commitment to increase the use of sustainable means of transport in the city.</p> <p>In 2006, Funchal became one of first Portuguese cities to invest in the creation of a new PT line, using technology without direct emissions of CO₂ and with no production of noise. The investment's total cost reached 1 M€, of which 50% were covered by EU's funding.</p> <p>The fleet is composed of 4 mini buses (Gulliver type), powered by Zebra batteries with a large capacity (sufficient for about 100 km), which makes the vehicle more autonomous and able to travel along the city centre for a long time. Their pathway is relatively short (5 km) and passes through the area, where many economic activities are concentrated.</p>												
Results / Achievements	<p>Findings show that the concept proved to be successful in terms of passengers' dependency on the service for their mobility needs. The following chart illustrates the growing attention to the service (eco-line transported more than 50,000 passengers in 2008, despite the decrease in the number of km). Surveys carried out in the city also stress the high satisfaction with the line, which in turn contributes to the improvement of the public transportation image.</p> <div style="display: flex; align-items: flex-start;"> <div style="flex: 1;"> <p>Making use of only 0.15 kW per kilometre, the service presents a low electrical bill (0.1 €/km), whereas the PT average costs stand for 0.64 €/km. These figures, however, are balanced with a little bit higher maintenance costs (0.3 €/km).</p> </div> <div style="flex: 1;">  <table border="1" style="margin-top: 10px; width: 100%; text-align: center;"> <thead> <tr> <th>Year</th> <th>Passengers transported</th> <th>Km</th> </tr> </thead> <tbody> <tr> <td>2006</td> <td>16,689</td> <td>17,208</td> </tr> <tr> <td>2007</td> <td>49,809</td> <td>56,440</td> </tr> <tr> <td>2008</td> <td>46,838</td> <td>52,737</td> </tr> </tbody> </table> </div> </div>	Year	Passengers transported	Km	2006	16,689	17,208	2007	49,809	56,440	2008	46,838	52,737
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Problems encountered	<p>Because Funchal is located in a rather peripheral region, dependency on material and technical support of the supplier is very high, which contributes to a very high immobilization rate (37%), mostly because of the low level of batteries' reliability. Another problem is lack of the integrated tariff system, which means that the Eco-Line is not connected to the remaining part of urban PT network.</p>												
Friendly advice for replication	<p>Very important aspects are the marketing side and the visibility of the service, since it has a great potential for raising awareness on clean transport. If the replication of this initiative takes place in a tourist location, such as Funchal, it might be used as a sightseeing attraction for visitors.</p>												
Online information	<p>http://www.horariosdofunchal.pt/index.php?option=com_content&task=view&id=48&Itemid=331</p>												
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