



## ELENA Project Factsheet GOTHENBURG CABLE CAR (GCC)

<b>Location</b>	Gothenburg, Sweden
<b>Beneficiary</b>	City of Gothenburg (Göteborgs kommun)
<b>CoM signatory</b>	September 2008
<b>Sector</b>	Urban public transport
<b>Total PDS cost</b>	EUR 7 398 800
<b>ELENA contribution</b>	EUR 2 800 000
<b>Project Development Services (PDS) financed by ELENA</b>	<p>The project requires extensive planning and cooperation between state, region and city, as well as design of a fit-for-purpose procurement strategy which will enable the City of Gothenburg as the lead procuring entity to engage with the preferred contractor already during planning and design using the Early Contractor Involvement (ECI) procurement strategy. The cable car will be fully integrated in the urban public transport system which requires specific tasks to be undertaken such as design of terminals as well as system integration of customer information and tariff systems. In this context, PDS to be financed by ELENA are:</p> <ul style="list-style-type: none"> <li>• Project management and technical supervision</li> <li>• Procurement of planning and construction</li> <li>• Initial design of physical layout and strategy for permits and approvals</li> <li>• Financing plan including cooperation with government and regional authorities</li> <li>• Design of tender documents including technical specifications and project budgeting</li> <li>• Integration with existing public transport services and technology</li> <li>• Design of stakeholder agreements and legal contracts for operation and maintenance</li> <li>• Monitoring and control of contracted services and works</li> </ul>
<b>PDS Timeframe</b>	January 2018 – December 2020
<b>Investment programme description</b>	The IP consists of the planning, construction, testing and commissioning of a high-capacity, 3S (three rope) urban cable car system. The cable car will span from the inner-city public transport hub Järntorget north across the river to Lindholmen, a tech- and educational centre, continue to station Lundby (industries, Volvo HQ) to finally reach Wieselgrensplatsen, a residential area and

	<p>public transport node. The existing connections by road, bridges and ferries are time consuming, energy inefficient and create bottlenecks due to capacity limitations. With the suggested technology, the cable car will offer significant transport capacity comparable to a tramway line (approximately 2 000 persons per hour per direction). With a total length of 3 km and four stations, the cable car will interconnect public transport hubs, large workplaces and residential areas, providing a significant shortcut within the existing network of trams and busses. The cable car will be fully integrated in the local public transport pricing and ticketing scheme and trips by cable car will be priced in the same way as comparable journeys by tram or bus. It will increase competitiveness of public transport and free transport capacity on the existing river connections, allowing for growth of public transport on other connections as well.</p>
<b>Investment to be mobilized</b>	Appr. EUR 101m
<b>Description of the approach to implement the Investment Programme</b>	<p>The project is a cooperation between the City of Gothenburg and Västtrafik, the Public Transport Authority. The two parties have established a Project Implementation Unit (PIU) under the governance of the City administration and a joint steering committee. The PIU was formalised in 2015, and the direct staff will be recruited or seconded by the PIU.</p> <p>The civil works for the project will be procured through public tenders using an Early Contractor Involvement concept (ECI). The objective of the concept is to involve an experienced contractor already in the design and specification of the project, and if successfully completed consequently also be responsible for detailed design, construction, testing and commissioning. Thus the civil works contract is divided into two phases, for which the ELENA PDS will be used during the first phase in which the project is designed and specified.</p> <p>The completed project will remain the property of the city, but operation and maintenance of the system will be tendered out by Västtrafik under a Public Service Obligation contract (PSO) enabling the PTA to fully integrate the services in the local public transport services.</p>
<b>Expected results</b>	<p>The cable car is estimated to relieve the current public transport network with over 3 million trips annually on the connections to and from Lindholmen, Västra Ramberget and Wieselgrensplatsen across the river. The cable car leads to estimated annually energy-savings of 4.2 GWh. Accumulated over 20 years of operation, the estimated energy savings are 85 GWh.</p> <p>Using the current average Swedish electricity mix for operating the cable car, it will lead to GHG-emission savings of 2 300 t CO<sub>2</sub> annually, 4 000 tonnes accumulated over 20 years.</p> <p>If zero-emission electricity production is used (new production capacity), the annual GHG-emission savings are 2 400 t CO<sub>2</sub> annually, 48 000 tonnes accumulated over 20 years.</p>
<b>Leverage factor (Minimum 10)</b>	36

<b>Market replication potential</b>	<p>The project has a certain replication potential, however the integration of a cable car in a urban public transport system will depend on the specific geographies and physical layouts of a city. The use of Early Contractor Involvement (ECI) for procurement of complex civil works, and the use of green bonds as an element of financing are both innovative aspects of the project, which could have a substantial potential for replication.</p> <p>The ELENA support contributes to a significant increase in expenditure in the priority activities of sustainable transport in the urban area and thus contributes to implementing regional and national objectives in these sectors. The market replication potential of the project is considerable.</p>
<b>Status</b>	Contract signed on 21/12/2017
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