ELENA Project Factsheet

Klagenfurt Electric Bus Investment Project (KEBIP)

Location of planned investments	Klagenfurt am Wörthersee, Austria
Final Beneficiary	City of Klagenfurt am Wörthersee, Austria
Sector(s) of investment	Urban Mobility Service
Total Project Development Services (PDS) cost	EUR 2 570 000
ELENA co-financing	EUR 2 310 000
Project Development Services (PDS) financed by ELENA	The Project Development Services to be financed by ELENA include the following major elements: 1) Financing concept 2) Legal advice for securing legally sound procurement procedures 3) A thorough market consultation covering a market overview to establish the framework needed for on-track and in-depot charging and/or hydrogen generation and fuelling infrastructure and to receive feedback of potential bidders on the optimum tendering setup 4) Technical, operational and financial analyses of technology options for the e-bus system, technical specifications and planning reports for dedicated bus lanes, an extended intelligent transportation system (ITS) and mobility hubs 5) Tendering documents for the e-bus system (buses and charging and/or hydrogen generation and fuelling infrastructure), dedicated bus lanes, ITS and multimodal mobility hubs
PDS Timeframe	01.12.2020 – 30.11.2024
Investment programme description	The planned Investment Programme is focused on promoting the measures as described in the Smart City Strategy and the Sustainable Urban Mobility Plan in Klagenfurt (SUMP). The investment components needed to be implemented are (subject to the outcome of the technology open tendering procedure described below): a) Purchase of zero-emission vehicles with four options being considered: i) battery electric buses with stationary charging in the depot, ii) battery electric buses with charging infrastructure on strategic points along the bus network, e.g. at the termini, iii) battery electric trolley buses for in-motion-charging for non-catenary operation in the city centre and the suburbs, and iv) hydrogen fuel cell buses b) Purchase and installation of the required charging infrastructure in the depot and/or along the bus network, purchase and installation

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<tr><td></td><td>of the required hydrogen generation and fuelling infrastructure, including adaptation of municipal power grids, if required
c) Adaptation of the depot for the maintenance and operation of zero-emission buses, including charging points and/or a hydrogen generation and fuelling infrastructure
d) Creation of multimodal mobility hubs
e) Creation of dedicated bus lanes
f) Further development and expansion of the current Intelligent Transportation System (ITS), including the implementation of a state of the art Transport Management System (TMS)

<table><tr><th>Investment component</th><th>Total investment Cost</th><th>% of total investment cost</th></tr><tr><td>Zero-emission vehicles</td><td>57 Mio €</td><td>43 %</td></tr><tr><td>Infrastructure in depot (charging points, hydrogen generation and fuelling infrastructure, depot transformation, electricity grid)</td><td>15 Mio €</td><td>11 %</td></tr><tr><td>Charging infrastructure outside the depot</td><td>38 Mio €</td><td>29 %</td></tr><tr><td>Multimodal mobility hubs</td><td>13 Mio €</td><td>10 %</td></tr><tr><td>Dedicated bus lanes</td><td>2 Mio €</td><td>2 %</td></tr><tr><td>Intelligent Transportation System (ITS)</td><td>7 Mio €</td><td>5 %</td></tr><tr><td>Total</td><td>132 Mio €</td><td>100 %</td></tr></table></td></tr>
<tr><td>Investment amount to be mobilized</td><td>EUR 132 Mio.</td></tr>
<tr><td>Description of the approach to implement the Investment Programme</td><td>The investment will be undertaken by the City of Klagenfurt in close cooperation with its internal Public Transport Agency (PTA) and Public Transport Operator (PTO), KMG Klagenfurt Mobil GmbH.</td></tr>
<tr><td>Expected results of investments planned</td><td>The City of Klagenfurt will introduce zero emission buses in its public transportation system. It will also implement measures to further enhance the public transport quality and reliability with a combination of public transport management and control systems and easier access to sustainable and emission-free mobility modes.
A fully electric transportation system along with the increased service quality are expected to increase the use of public transport by a factor of 2. Current CO_2 and NO_X emissions of 7.100 tCO_2e/year and 1.200 tNO_x/year, respectively, will be completely eliminated. Pollution by particulate matter and noise emissions will be significantly reduced.</td></tr>
<tr><td>Leverage factor (Minimum 10)</td><td>57</td></tr>
<tr><td>Status</td><td>Contract signed on 11.11.2020</td></tr>
<tr><td>Contact person at ELENA beneficiary</td><td>Mag. Sandra Habib – sandra.habib@klagenfurt.at</td></tr>
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