



ELENA Completed Project Factsheet
PROTHEUS Smart Grid Project for Paks
(PROTHEUS)

Location of planned investments	Paks, Hungary
Final Beneficiary	Municipality of Paks City
Final Beneficiary's address	Paks Város Onkormányzata Dózsa György út 55-61 7030 Paks Hungary
CoM signatory	Yes
Sector	Energy Efficiency and renewable energy in buildings Sustainable Urban transport Smart Grid infrastructure
Total PDS costs	EUR 672 330
ELENA contribution	EUR 460 901
Project development services financed by ELENA	<p>The Project Development Services (PDS) were for the internal Municipal staff for tasks such as:</p> <ul style="list-style-type: none"> • General project management tasks, • Supervision of experts in transport and energy, • Supervision of the tender and legal services, • Supervision of quality assurance and validation tasks, • Support and administrative services. <p>PDS by external experts were provided by consultants for the following:</p> <ul style="list-style-type: none"> • Tender preparation • Legal and regulatory support • Transport experts for preparing the new transport system and electric buses and chargers • Energy experts including analysis on renewable energy sources, storage, distributive system, as well as energy audits for buildings • Smart grid analysis • Project preparation for an NZEB building
Description of ELENA operation	<p>The ELENA facility has supported the Municipality of Paks with electric buses and related charging infrastructure. A building was constructed to NZEB standards and PV was integrated into public buildings. Technical assistance funded by the ELENA facility has contributed to investments of over EUR 9.2m. According to the final beneficiary, a further EUR 30m worth of tenders and investments are currently in preparation.</p>
Timeframe	01 May 2017– 30 April 2021

Investment programme description	<p>The investment programme consisted of the following projects:</p> <ul style="list-style-type: none"> ➤ 10 Electric buses and charging infrastructure ➤ Smart grid transportation system for the operating buses ➤ Building integrated PV 66.5kW on 10 public buildings (e.g. schools, kindergartens public municipal buildings) ➤ Energy efficiency renovation of a local authority building ➤ NZEB building: Base for the smart grid hosting offices and electric bus repairing and cleaning facilities.
Investment in implementation phase	EUR 9.2m
Results expected to be achieved	<p>The energy savings corresponds to 0.4 GWh/year, Final energy production by RES is estimated at 0.07 GWh/year CO₂ annual reduction of at 427 t/y</p>
Leverage factor achieved	20
Lessons learnt	<p>Important lessons relate to the need for a stable environment. During the ELENA project, changes were still necessary in the regulatory framework, as well as there being changes in the project team and local elections. On top of this, COVID-19 imposed an unprecedented halt of business activities. The project team had to adapt to the new circumstances but these all contributed to unforeseen delays. A longer timeframe than was possible under the ELENA contract was required in order to realise investments, and further investments are in the pipeline.</p>
Further information sources	n/a
Contact person at ELENA Beneficiary	Szabo Zoltan, szabo.zoltan@ptsh.hu