



Electric Vehicle Charging Station

2011

 **University**
Gdynia Maritime University
Country
Poland

Location 
Urban centre

Size 
5,000-10,000

Mobility Organizational Structure 
None

Summary

The electric vehicle charging station is located at inner Gdynia Maritime University parking. Students and staff, who own a parking permit, have access to the station. The main objective of this project was to carry out research on the electric vehicle charging and promote ecological commuting. The station was built in 2011 in cooperation with the Automatic Vessel Department and several external stakeholders.

Aims

- Research related to the electric vehicles and energy use.
- Construction of the electric vehicle charging station, accessible to Gdynia Maritime University staff and students.
- Promote ecological travel among staff, students and residents.
- Encourage travel by electric vehicles instead of combustion cars.
- Reduce greenhouse gas emissions and pollution emitted by other means of transport.

Stakeholders

- Dr. eng. Andrzej Łebkowski.
- Gdynia Maritime University.
- Automatic Vessel Department.
- Instytut Elektrotechniki w Warszawie.
- ELTE GPS Sp. z o.o.
- Agencja Rozwoju Regionalnego "MARR" S.A.

Background

The lack of the open-access charging stations is the main challenge for growing the electric vehicles sector. Electric cars have a shorter range than combustion cars and so need to be charged more often.

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Description

Many metropolitan areas have started to develop and build electric vehicle charging stations. One of such stations was constructed by the Gdynia Maritime University (and partners) in 2011. It is located at inner University parking, at Morska 81-87 street.

Staff and students who own a parking card can use it free of charge.

The charging station contains counters that identify users.

A new type of accumulators are able to charge (accumulate) power during non-peak hours (e.g. at night) and administer it during peak hours. The charging station is still being tested, however it is capable of handling modern powering systems like lead and lithium-ion batteries.



Indicators

- Number of cars that are charged per month.
- Energy intake per month.



Results

- Promoting ecological travel for conferences, festivals (Baltic Science Festival), University gatherings (exhibitions during the Gdynia Maritime University Open Day) and for scientific papers.
- Infrastructure development of electric vehicle charging system.
- Charging station is used for charging the University electric vehicle fleet.



Expense

- Fee for service 1,000 € per month, 12,000 per year.
- Electric energy cost depends on usage.
- Expenses are covered by Andrzej Łebkowski.



Financing

The charging station was built thanks to the Innovative Economy Programme, Priority Axis 5: Diffusion of innovation, Calculation 5.1 Support for the development of supra-regional cooperative relations. The coordinator of the project is the Polish Agency for Enterprise Development.



Findings

- Verification of the correct working of the user identification system.
- Verification of the build quality.
- Verification of the real energy used by the electric vehicle.

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Pictures



Fig 1. Electric vehicle charging station located at the Gdynia Maritime University car park



Fig 2. Promotion of the electric vehicles during the Baltic Science Festival



Fig 3. Promotion of the electric vehicles during the Gdynia Maritime University Open Day

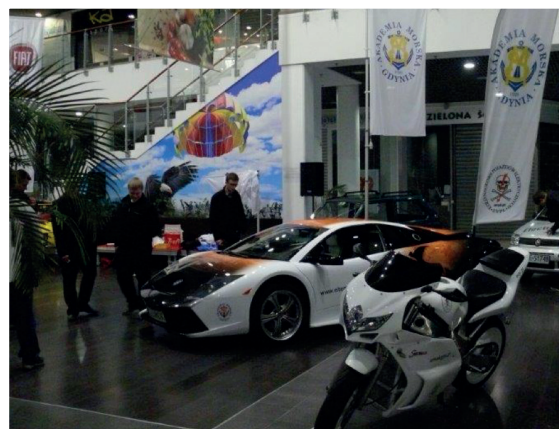


Fig 4. Promotion of the electric vehicles during the Baltic Science Festival



Links

<http://ev.am.gdynia.pl/>



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