



The Ányos Jedlik Plan electric vehicles \rightarrow sustainable mobility

Zsuzsanna Bibók 6 March 2017

TRANSITION TO A SUSTAINABLE TRANSPORTATION

Conference of the Hungarian Eionet Network of EEA





- European strategy for low-emission
 - mobility
- history of electric cars
- Jedlik Ányos Plan









European strategy for low-emission mobility

Current transport systems are not sustainable

- have negative impacts on human health and environment
- consume non-renewable energy sources

20 July 2016 Strategy has been adopted by the Commission.





European strategy for low-emissions mobility

Optimizing the transport system and improving its efficiency;

Scaling up the use of low-emission alternative energy for transport;

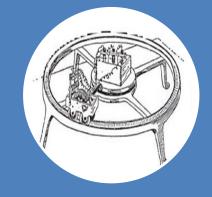
Moving towards zero-emission vehicles.

History of electric cars





In 1828 Ányos Jedlik created a small model car powered by his new motor



In 1834 Thomas
Davenport and his wife
build a model electric
car that run on a
circular, electrified
track



In 1835 the Duch
Sibrandus Stratingh
and Christopher Becker
build a small electric
car powered by
batteries

Practical electric cars





In 1884 Thomas Parker built the first production electric car in London;



France and United Kingdom were the first nations to support the widespread development of electric cars;



In the 20th century electric car lost its position in the automobile market





At the end of the 20. century attention turned towards the development of electric cars again;



Today our long term strategic aim is the usage of zero emission cars only in road transport.





E-mobility plan of Hungary → Ányos Jedlik Plan

March 2014 Ányos Jedlik Plan was announced

<u>main aim</u>: to change **internal combustion engine vehicles** for *plug-in hybrid* (PHEV), **extended range electric vehicles** (E-REV) and **for 100% electrical vehicles**.

Main topics of the Ányos Jedlik Plan





System of incentives (financial and non financial);



Adequate regulatory environment;



Expansion of charging infrastructure;



Research, Development and Innovation;



Electrified community transport;



Pilot projects.

Ányos Jedlik Cluster



Jedlik Ányos **Cluster has** been established September 2014

- consultative and advisory platform for the government
- shaping the necessary development policies,
- exploring the economic, social and environmental potential of electric mobility,
- recommending actions for politicians and business.

Members and cooperating partners of Ányos Jedlik Cluster



| Research | and a | academi | ic insti | tutions; |
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Electric vehicle manufacturers;

Energy companies;

Transport organizers;

Municipalities;

IT companies and international consulting firms;

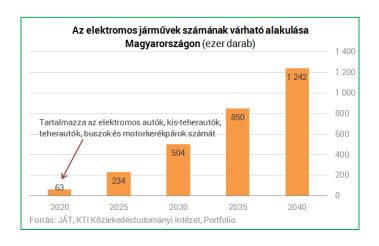
Automotive suppliers and mobility solution suppliers;

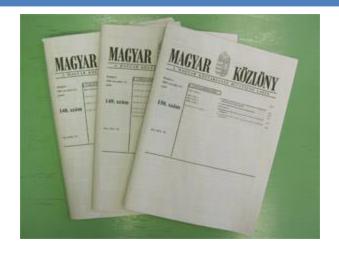
Transport companies etc.



Ányos Jedlik Action Plan

was approved in July 2015 with government decision [No. 1487/2015. (VII. 21.)]





Ányos Jedlik Action Plan Incentive scheme



Direct

- no registration fee
- company car tax is zero
- VAT on electricity of charging can be reclaimed by companies
- also allowance for night time charging
- support for the purchase of electric vehicles
- establishment of charging infrastructure

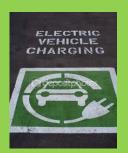




Indirect

- free parking for the period of charging
- overall free parking in some cities
- traffic allowance during smog alert
- free transit rights for restricted and protected areas
- bus lane usage for 5 years





Ányos Jedlik Action Plan



Facilitate the installation of the recharging stations

Facilitate household charging

Green license plate

for 100% electric

vehicles, plug-in

hybrid, extended-

range electric

vehicle and zero

lightened electricity trading license procedure for the charging station operators

possibility for the households to install a dual-rate measuring system

periods

extended zone

installation of a charging station is a priority during the administration procedures

emission car for the night charging

Pilot Projects



Building automotive test track in Zalaegerszeg

 will allow for testing of electric vehicles having automated driving systems and driver-less cars in artificial conditions;

Community transport

 Buses, Smart city solutions, E-taxi, Carsharing

Possible users introduced to green transport





From 2015

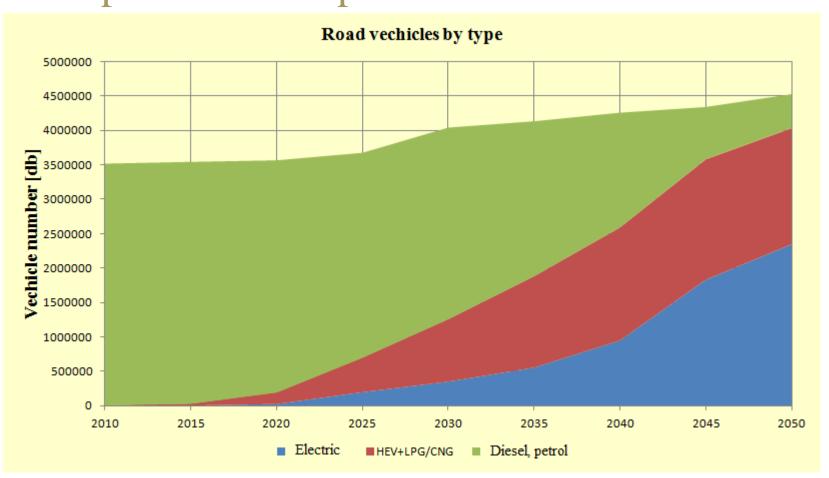
Government grants for municipalities to install 500 charging stations [1.25 billion HUF];

government credits for purchasing electric passenger vehicles and light trucks [2016. 2 billion HUF, 2017. 3 billion HUF]

• 1300 vehicles have been supported.



Expected development of vehicle numbers







Thank you for your attention!