



GreenWay **the Way for Electromobility**

May 2013

GreenWay Operator

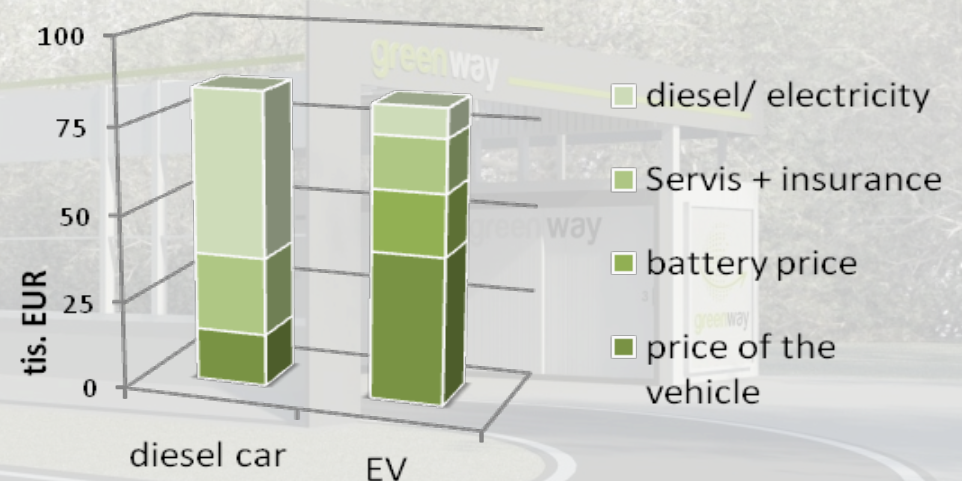
GreenWay Operator

- Provide the E-mobility service performed by the fleet of light commercial electric vehicles used on the basis of long-term, all inclusive, leasing contracts
- To prove the concept, we already finalized all technology. The first fleet of EVs and two battery swap station are already in operation in Slovakia.
- The next phase, concentrates on **Slovak, Austrian, and Czech markets**. In 2012, GreenWay Operator attracted the equity investment of EUR 1.5 mil. and currently seeks second round of funding.

Business Model Proposition

- Electric vehicle, characterized by high initial investment and low running cost, is already an economically viable option for users running sufficient amount of kilometers (>60-70,000 km/year)
- Observed trends in the price of energy, technological improvements and many research studies suggest that electric cars will be even more competitive in the future
- Integration of car lease, battery management, infrastructure (battery swap stations and charging points) and energy in a closed system overcomes obstacles in EV adoption and creates sustainable competitive advantage

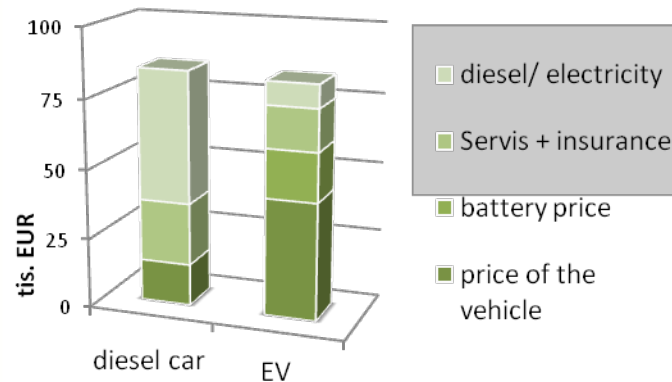
Cost of **7 years** operation / 490,000 km



Business Model Background

How to make business model economically and operationally feasible???

Cost of 7 years operation / 490,000 km



Who drives 70,000 km /year
289 km/wday



Solution is



the System



Available charging infrastructure



Battery swap secure continuous driving



Clients with stable repeating routes / Swap stations following client's routes



Light commercial vehicles / Spedition & courier co.

1. Considering high fixed costs (initial investment into car, batteries and infrastructure) and low ongoing costs per km, EVs are an option mostly for high mileage customers, which are concentrated rather in business segment, in particular in light commercial vehicles
2. The need for swap stations will initially narrow down the focus for clients with repeatable routes, such as logistics / courier services
3. The investment to infrastructure is made within closed system providing all-inclusive fleet service based on long-term contracts

Components Description of the GreenWay Operator

System car

- Proprietary developed system car based on a popular OEM model
- 60kWh battery enables range of over 200 km
- Max pay load 745 kg
- Swappable battery located inside cargo space (reduction <1,5m³)
- Cost of car below 41.000 €
- Cost of 60kWh battery below 24.000 €

Battery swap technology

- Proprietary developed semi-mechanical system of battery swapping
- A self-service by professional drivers utilising a simple electric powered equipment. One battery change takes up to 7 minutes
- Due to clever mechanism, the process is safe and can be handled very easily
- Costs of one swapping station is 100.000 €

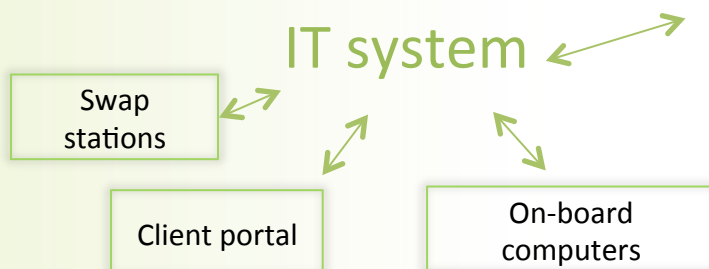
24/7 assistance



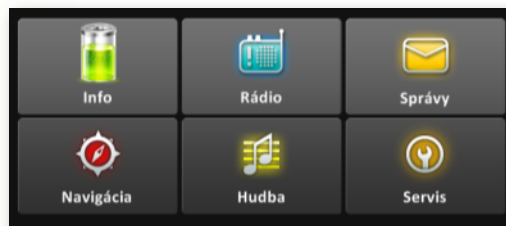
- ✓ On-line monitoring
- ✓ Countrywide towing
- ✓ Back-up car
- ✓ Quick return back of your EV



IT system



- Tailored route planning
- Instant info on client fleet & swap stations – update every 5 minutes
- Client portal with AVL software, valuable statistics, billing and data collection



Network of swap stations

- Organic - step by step growth of the network lowers the risk of investment
- Station serve the regional transportation first
- Since certain density level, clients with variable routes could be acquired
- New installations follows new clients acquisitions
- Initially built for clients with fixed repeated routes
- Target to set stations along main roads each 50-60 km

Current Status: Cars

Currently 5 Citroen Jumper vehicles:

- ✓ 200 km driving distance per charging (fully loaded vehicle)
- ✓ Fleet of 4 vehicles with tens of thousands kilometres driven
- ✓ First client in operation since May 2013 (driving 2 cars)
- ✓ 2nd generation (concept II) already in development



Current Status: Charging Infrastructure

- ✓ 2 swapping stations in operation already
- ✓ first one is strategically located in Bratislava near highway exit
- ✓ second is placed in in Nitra

- ✓ The lease agreement for additional 13 locations in Slovakia are already signed
- ✓ By covering this network we could reach the area where 80% of Slovak GDP is produced and 7,000 new light commercial vehicles are sold every year
- ✓ This charging points will include fast charging
- ✓ Majority of them to be available for public charging as well



Financial Model: Key Inputs - Revenues

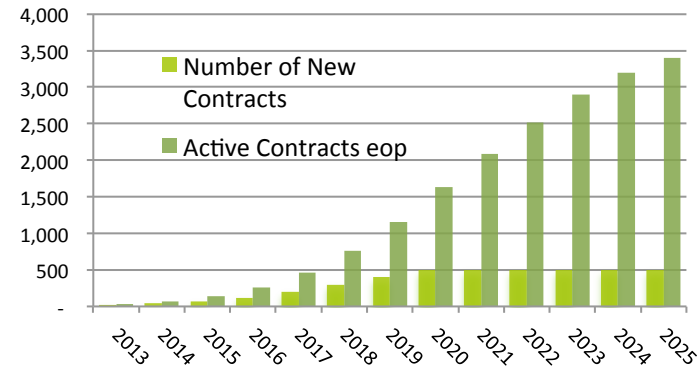
Number of Cars in the System

- Number of new contract initiation is based on estimate of target market size and realistic penetration and market share assumptions
- Number of paying clients depends on the life of the electric vehicles (batteries modeled separately), which is assumed to be 7-years

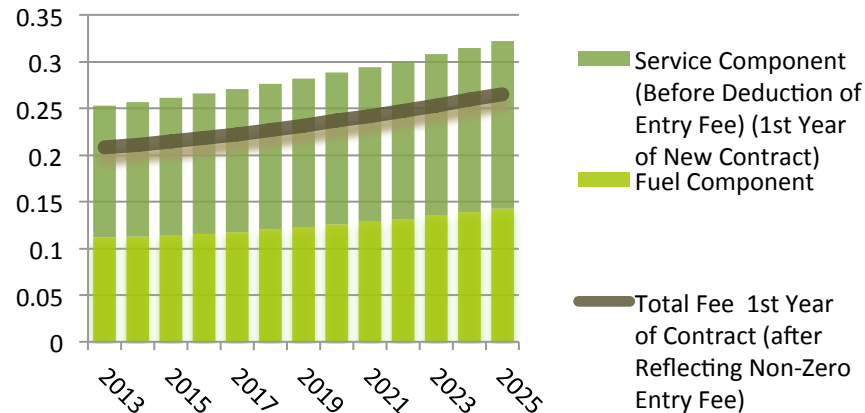
Mileage Fee

- Fee (per km) derived from:
 - market prices for all-in services (capital costs, service, tyres, etc.) on long-term contracts for diesel cars
 - fuel costs of a similar diesel car
- Entry fee / down-payment of EUR 15,000 per vehicle (indexed, deducted from ongoing fee)
- Annual mileage assumed at 70,000 km / year

Number of Clients and Origination



Mileage Fee per Km

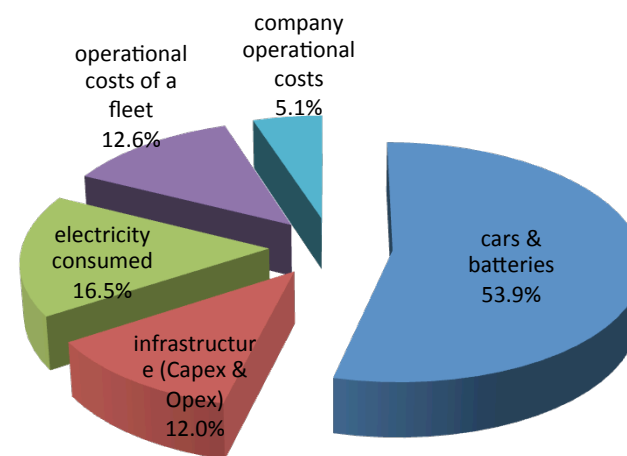


Financial Model: Key Inputs – Fleet Costs

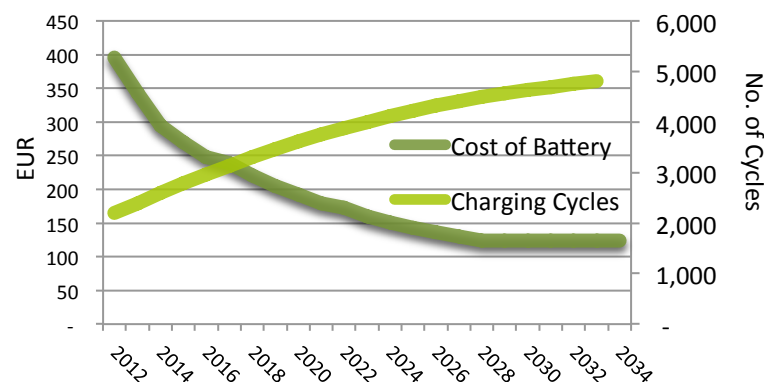
Projection of Costs

- Is based on a comprehensive assumptions coming out of test operation as well as more than one-year research
- Key assumptions include:
 - costs of electric vehicles will trend lower, as first cars are tailor-made customs
 - 2 batteries per vehicle initially with slight decrease as the number of vehicles in the system growth
 - improving trend in batteries cost, life and reach
 - with extendable-capacity stations, infrastructure investment can be calibrated as the need grows
 - economies of scale in cost levels for service and tyres

Break-down of Costs in NPV



Assumptions on Costs of Batteries



Currently seeking growth capital – 3 mio EUR

Three types of EQ are expected (always common shares)

- EQ Class A – 1,5 mio EUR seed, already used
- **EQ Class B – 3 mio EUR growth 1, to cover new assets on SK, AT and CZ markets for 2013-2014, until EBITDA >0**
- EQ Class C – 17 mio EUR growth 2, to cover asset growth (IRR > 25% p.a. lifetime to be achieved)

First client served from May 2013 on commercial basis

- Using 2 vans
- Value of the contract close to 100 ths EUR for 2013

GreenWay Operator currently employs 15 FTE, systematically building up competence in e-mobility sector



GreenWay Operator

The Company is owned by investors with a focus on green energy solutions and information technology who have financed the first stage of the Project.



Rastislav Lauko – CEO. Before he joined the company, Rastislav was a member of top management of SPP company – leading utility in CEE region. He was responsible for strategic planning, heading different infrastructure projects with budgets exceeding 100 mil. EUR per year. His background is in corporate finance, graduating in Bratislava and Oxford. In GreenWay, he is responsible for projects management, development of technologies and company operation.

Project Partners



Člen skupiny
e-on

