2nd Vehicle 2 Grid Conference
Electric vehicles for the renewable city

# A'dam and EVA - a showcase for 21st century power pricing

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Introduction

Dynamic energy pricing for charging stations allows both charging station operators and energy retailers to benefit from demand response. However, retailers that offer dynamic pricing have to employ new trading strategies, prediction models and billing procedures that can robustly handle big data from smart meters, for instance, and can reason and learn about demand response by customers and their devices. SEITA is a spin-off from Centrum Wiskunde & Informatica that aims to facilitate the transformation from flat rates to dynamic rates with advanced demand response prediction models and pricing services.

Our prototype services were tested in 2016 with a German retailer requesting cost calculations based on our forecasts of their customer demand in response to dynamic tariffs, in order to make decisions whether or not to change their retail prices. These tests were supported by two EV aggregators controlling charging stations in Berlin and Milan, which adapted their consumption in response to changing retail prices.

Aim

Our aim is to mature our services through pilot testing in the Dutch market, where regulation now allows the use of dynamic tariffs for all end-users. Electric vehicle aggregation (EVA) by charging station operators is the most viable use case to provide real-life training data for our prediction models. This should allow retailers to learn how to deal with the opportunity to set dynamic prices.

Expected deliverables

1) Consultancy service for value assessments of EV fleet flexibility
2) Improved dynamic pricing models by training data from pilot with EVs
3) Transferrable insights on learning to predict the demand response of other types of flexible resources

Required partners

We are currently trying to find charging station operators and energy retailers interested in participating in a pilot with dynamic pricing, in order to continue training SEITA's algorithms together with Centrum Wiskunde & Informatica.

More information / Website

v2g.seita.nl