OpenADR Webinar

October 17, 2023
Agenda

- Housekeeping
- Recap of FLEXCON and Ford Use Case
- Enlit Preview
- E.ON Sweden Presentation
- Q&A
Housekeeping

- The webinar is being recorded
- Slides and Recording will be made available on https://www.openadr.org/webinar-series
- All attendees are in listen only mode
- To ask questions, please enter them in the Questions tab of the Webinar Tool
  - We will field as many questions as possible at the end of the presentations
FLEXCON in Brussels

- Sold out event with 45 sessions on flexibility solutions in all end-users, data sharing patterns, market developments and efficient local optimizations
- More than 250 participants
- Takeaways
  - More presentations on actual running Flex Programs
  - Not many programs reach to the end customer yet
  - Many showcased programs were between a single flexibility provider and a single utility → proprietary
  - Good to see Flexibility is used and in action
Ford Motor Company Use Case

- Ford (an OpenADR Alliance Board Member) decided to offer their EV owners deals with utilities
- Ford, together with several other car makers decided to follow the OVGIP integration framework – Open Vehicle Grid Integration Platform
The Motivation

Today, Most of customers are charging but not “smart charging”

Most of the Time, when you plug your car at home, do you plan the charging time?

Would you be ready to shift your charge if ...

If it allows to limit the power demand peak requiring polluting power plants?
If it allows to make savings on your electricity bill?

Today, 2/3 of EV users in start their charge immediately when they plug at home.

Smartcharging solutions allowing customer to save money and reduce their CO2 footprint.

We have a problem which can not solved by building physical hardware products.
The Basic Concept

Illustration of "smart-charging" for a private vehicle at home

*Customer with a Time of Use tariff*

- **Natural charging profile**
- **Offpeak charging profile**
- **Smartcharging profile**

Triggering according to customer needs and the electricity market (negative prices, etc...) to minimize the supplier cost.

- **Electricity tariff**
  - + EV charging profile
  - 6PM
  - Peak: ~ 30¢/KWh

- **EV arrival**
- **11PM**
- Offpeak: ~ 10¢/KWh
- **7AM**
- **EV departure**

**Seen by the Customer**

- **Electricity market Price**
- **Hours**
- **$ $ $**

**Seen by the Utility**

- **$ $**

*Slide courtesy of Ford*
The OVGIP Model

OVGIP(CharScapes) – Automaker Gateway to Utilities

Utilities
Get Data and Energy services for resource planning, load balance, renewable integration

DTE
Xcel Energy
SMUD
DUKE Energy

Open Vehicle-Grid Integration Platform (SaaS model)

Single interface point for Utilities to gain access to widest base of EVs as grid resources

OVGIP EV-Grid Services Platform

Solves the Many-to-Many problem
Enables Business Efficiency for OEMs and Utilities

EV Driver
Paid financial rewards by Utility; no impact to daily mobility needs.

Ford and other OEMs
Enroll EV drivers and dispatch charging schedules to EVs. Recurring revenue stream from Utilities

OVGIP can help achieve scale for Grid Services

Slide courtesy of Ford
The Programs

DTE
- www.ford.com/grid/dte
- Customer Benefits
  - $100 Per Year

Xcel Energy
- www.ford.com/grid/xcel
- Customer Benefits
  - $150 Per Year
  - Or
  - $200 Per Year

SMUD
- www.ford.com/grid/smud
- Customer Benefits
  - $280 Per Year

DUKE Energy
- www.ford.com/grid/duke
- Customer Benefits
  - $19.99 Per Month*
  - Or
  - $24.99 Per Month*
  - Up to 800kWh (~2800 miles per month)

Slide courtesy of Ford
The Customer Side

SmartGrid Rewards

For the best user experience, please use Google Chrome, Edge, or Safari.

Take Charge of Charging

Now, Ford plug-in hybrid and battery electric vehicle owners in North Carolina can apply for a fixed, predicted monthly rate for home charging.

Apply Now

INTRODUCING

Duke Energy's EV Complete Home Charging Plan Pilot Program

Powered by Ford SmartGrid Rewards

Charging your Ford electric vehicle during off-peak hours helps reduce stress on the electric grid, which makes service more reliable for everyone. By participating in the Duke Energy's EV Complete Home Charging Plan pilot program and shifting when you charge, you'll support efficient clean energy and have the chance to save money.
The Customer Side

How does the Duke Energy EV Complete Home Charging Plan work?

Plug In

Upon enrollment, Ford will set your charge settings to shift charging away from peak hours for the grid.

Help Reduce Grid Stress

Occasionally, Duke Energy may notify Ford when they anticipate needing additional energy for the grid. Ford will send you a notification and automatically pause your charge during these grid events, but you always have ultimate control through your FordPass™ App.

Benefit

Enjoy predictable charging costs by paying a flat monthly fee* for home charging for one year.**
Enlit Preview

- Alliance Member Companies Exhibiting at RE+
  - AMPECO (stand no: 7.3.C40-06)
  - Driivz (stand no: 7.3.E33)
  - Fuji Electric (stand no: 7.3.B44)
  - Honeywell (stand no: 7.2.C170)
  - Kaluza (stand no: 7.2.C150)
  - Panasonic (stand no: 7.2.F10 and 7.3.MR6)
  - Siemens (Siemens AG – 7.2.D70; Siemens Energy – 7.3.C70)
  - Trilliant (stand no: 7.2.A140 and 7.3.MR9)
  - SmartEn – Demand-side Flexibility Zone

- Outreach Focus
  - SmartEn member companies
  - Utilities – RTE, Enel, etc. Also “DSO’s for Europe Entity

- P.R. Focus
  - Launch of OpenADR 3.0
  - Case studies with AMPECO, Driivz
  - On-site video interviews with members
  - Social media
Thank you!

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