

# Slimme meter data voor een efficiënte energy transitie

Hanneke van der Horst v2025-1 | Restricted



### Eerst even voorstellen ...

- Hanneke van der Horst
- Quby, Eneco, NET2GRID, Papilvia
- > 15 jaar ervaring met energie inzichten
- Customer engagement, LivingLab, apps



### **NET2GRID**

- Locaties: NL, Griekenland, VS
- EnergyAl®, energie inzichten uit slimme meter data
- Klanten/partners in Europa & NAM





Even terug in de tijd.... METEN = WETEN

WIE KENT DIT SOORT APPARAATJES?





매 후 🕳

Met de uitrol van de slimme meter worden *energie inzicht apps* "mainstream"

- Inzicht in energiekosten
- Inzicht in grootverbruikers
- Persoonlijk relevante bespaartips





9:41



### Increase self-consumption with alerts & forecasts



### Insight

Prosumers, specially from countries without compensation for solar injection, want to consume their solar production as much as possible themselves.

### Solution

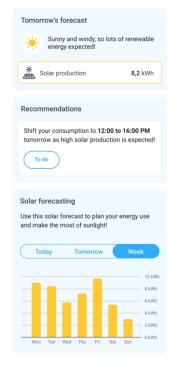
Help consumers to make more use of their solar production with forecasts, real-time solar injection alerts and recommendations on how to shift the load of (bigger) appliances.

### Benefit

Activate flexibility without additional hardware.



#### ✓ Solar production forecasting



### Manual load shifting with dynamic/ToU tariffs



### Insight

Consumers want to benefit from dynamic/ToU tariffs, but without the risk having to pay to much because of energy usage during high tariff periods. Consumers also want to monitor their usage & costs and make optimal use of low tariffs.

### Solution

Notifications with next day tariffs. Always up-to-date costs overviews. Recommendations on how to optimize appliance utilisation.

### Benefit

Take away barriers and unclarity around dynamic/ToU tariff contracts.



### Automated load shifting via DER asset automation



### Insight

Consumers with multiple DER assets want to fully automate and make optimal use of lower tariffs via load shifting their DER assets.

### Solution

Near real-time energy consumption, injection and dynamic tariff data available via local LAN and cloud Streamer for DER OEMs and HEMS providers to consume, so they can determine the most cost effective moments.

### Benefit

Home installation state and energy price informed automations for load -balancing installation and making use of lowest energy prices, without loosing comfort.



### Tariff plan advice



### Insight

Consumers with DERs (mainly EV charger owners) want an easy way to save on energy, without sacrificing comfort. They would consider switching to a dynamic/ToU plan, if that results in a reduced energy bill.

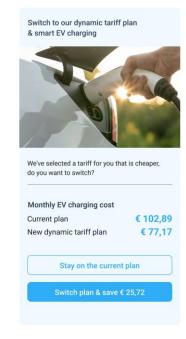
### Solution

Target EV owners with outcome of DER detection and calculate potential savings by comparing current cost structure with wholesale prices.

### Benefit

Unlock flexibility by targeting dynamic tariffs/ToU contracts to customers with EV.

#### < Dynamic tariff plan





### Solar PV / Home battery upsell



### Insight

Consumers who are looking for their next step in the energy transition are looking for the best offering that suits their home & living situation.

### Solution

Based on the historical energy consumption the optimal sizing is calculated for Solar PV and/or Home battery system.

### Benefit

Personalized offering which takes into account the energy usage patterns of the household.



### Solar PV monitoring service



### Insight

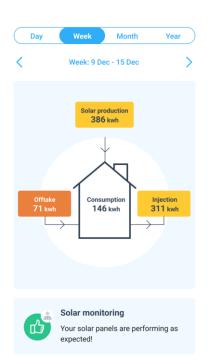
Consumers want to see if their PV system produce as expected and they can expect to receive the promised ROI. This is not easily calculated manually because of different seasons and weather.

### Solution

This service provides insight into how much the PV system produces, in relation to the expected production based on addition profile questions concerning the PV system. And automatic detection of failures.

### Benefit

Service with revenue guarantee for PV owners.



### Sh

#### Shadow detected!

Your solar production may be impacted by obstructions such as buildings or trees. This leads to a reduction in energy production.

Learn more

### EDF Luminus Belgium

### **Basic monitoring vs Energy Control Monitor**



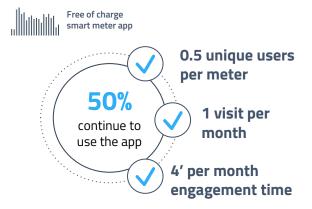








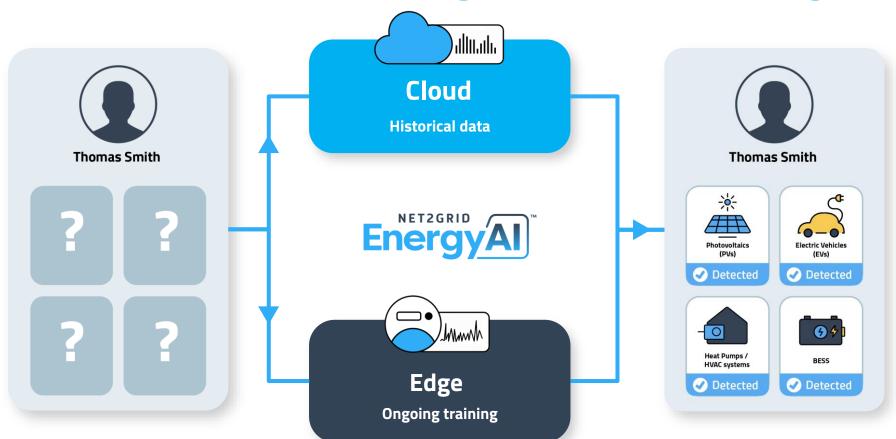
- Met name eigenaren van zonnepanelen nemen upgrade realtime service
- > 50% stelt alerts in
- Hoge NPS





### Detectie, patroon herkenning & volume inschatting





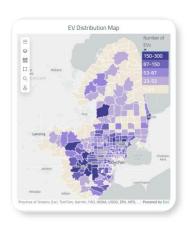
### **Use cases North-America**





#### System planning

Detect EVs in your distribution network. Pinpoint potential low-voltage hotspot areas caused by increased EV charging demand. Update load growth models for feeders and make informed decisions about infrastructure upgrades.







#### Optimized real-time control

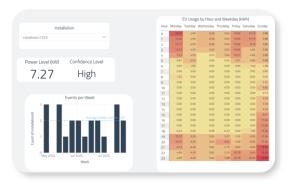
Near real-time detection of EV charging events and consumption. Protect distribution transformers and prevent unintended activation of protection devices.



## Targeted marketing and engagement for VPP, DR, and NWA enrollment

Identify and onboard new assets for VPP and DR programs. Estimate typical charging time slots for each EV owner.

Identify EV owners not optimally charging their EV and recommend shifting to off-peak hours.

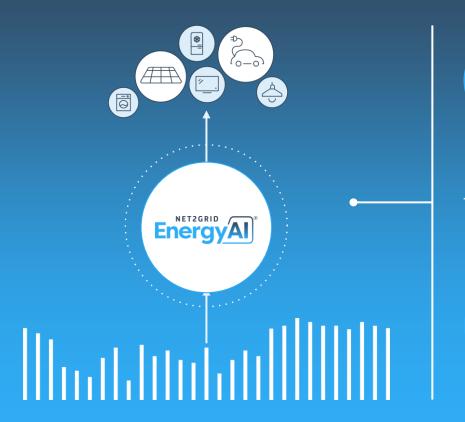




# EnergyAl Edge & Cloud main use cases



resulting in highly accurate and personalized energy insights and home asset profiles









Personalized Customer Experience, **Bill Manager & TOU Rate** Design/Advising



Stelling:

Inzet slimme meter inzichten voor **beleid & validatie** 



Stelling:

Inzet slimme meter inzichten voor netwerk planning



Stelling:

Inzet slimme meter inzichten voor gedragsbeinvloeding