



# Technology for 100% Renewable energy

Introduction @ SolarImpulse Foundation

Easy Smart Grid GmbH, Oct. 13th, 2021 Dr.-Ing. Thomas Walter







# **Easy Smart Grid - Overview**

### Vision:

A 100% Renewable Energy System

### Mission:

Smart & Resilient ICT to Coordinate it

# **Core idea (patented):**

 Translate grid states to price signals and harvest customer flexibility

## **Key Benefits:**

Cost of Storage & ICT



**Customer Centricity** 



Multiple Use Cases





# Who we are

# **Our Business Backgrounds**













Thomas Walter
Founder and CEO

- Technology & Innovation
- Builder of New Businesses
  - Early ESG Investor



Stefan Werner
Solution Manager

- Technology & Innovation
- R&D and Product Management
- Climate Activist







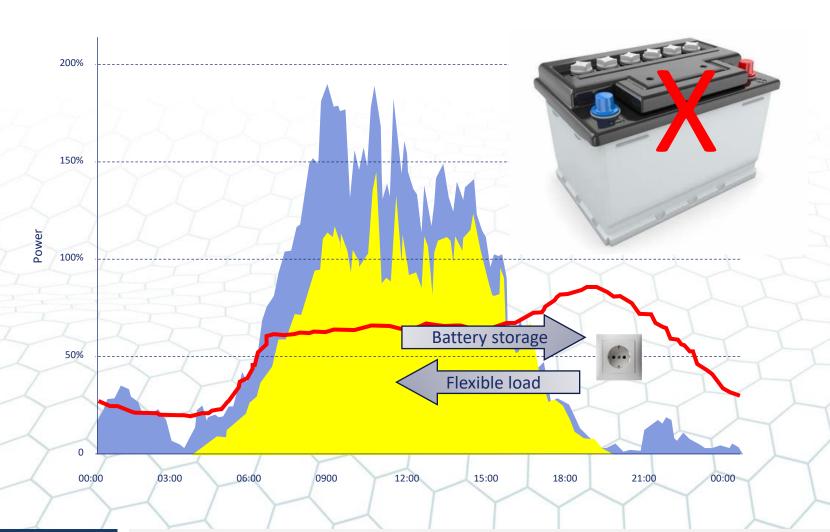
Preisverleihung 2010 "Klimaneutrale Kommune"



### **The Solution**

# Slash Cost of Storage with "Virtual Batteries"





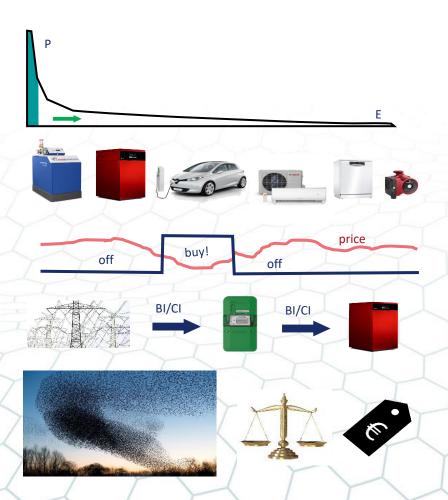




### **POC and MVP**

# **Convert Flexibility into Money**





- ✓ Use any flexibility of the customers
- ✓ Grow with decarbonized heating and mobility
- ✓ Enable Customer Centric Energy Markets: Simple contracts, no bidding, no penalties
- ✓ Patented operational ICT (OT) allows cost scaling: Efficient, simple, local/stackable, privacy ensured
- ✓ Resilient against failures and attacks
- ✓ Financial optimisation every second for every device



### **USP**



# Many Applications, easy to Differentiate and Scale

# Local energy market platform

- Automated selfdispatch
- Win-win of customer & system
- "Customer Centricity" (EU requirement)

# Transversal solution

- Heating/cooling, EV charging...
- Flex of any number, time, size, availability
- Step-by-step migration

# Multiple use cases

- Housing, work, infrastructure
- Minimize energy and grid cost
- DNO to DSO, Smart Cities, autonomous grids...

# Protected Know-How

- International IP protection
- Easy know-how transfer
- Business model: Value sharing
- Regional focus:D, Europe and US



### **POC and MVP**

# Real World Demo (22 HH, 100 Flexibilities)





Project supported by:



**Contract Partners:** 







### **Associated Partners:**













### **Supporting Partners:**





























# Where we stand

# **Our Evolution**







2024 Sell Licenses

2023 Next Segment

2022 Copy and paste

> Partner-ship with TSO

Hot leads

➤ 5 Companies to integrate LEC function

2 Companies for industrial applications

### **R&D Contracts**

- Subcontracts from 5 Institutes
- Direct partner in international project

2012 Patents filed 2014 ESG founded 2017 Seed round

2019 Demo simulated

2021 Demo & hot leads 2021 Industry Partnering

# **Opportunity**

# **Target markets**



### **Smart Quarters á la Allensbach**

- > 250 €/a additional value per HH
- > Start with 1% of Germans: 50 M €/a
- > 20% for our technology: 10 M €/a
- + Carbon and grid connection savings, industry and international markets

### **Grid Stability & Resilience**

New solutions are needed to master more critical events with fewer controllable assets.

TSO staff member: "Applying ESG could mean creating a self-stabilizing energy system"

### **Competitors**

Many actors, yet none can deliver: Real time pricing & system friendliness & cost/performance & IP protection

### **Grid Infrastructure**

UK plan 2023-28 assumes annual savings of 16.7 b GBP through flexibility from heating and transport (Source: SSEN RIO ED 2, +800,000 HPs, +1.3 M EVs)



# **Opportunity**

# Easy Smart Grid GmbH

# We look for 5 M € for next 3 years of growth

Technology: 1.7 M€

Business development: 2.3 M€ Project development: 1 M€

- ➤ Universal technology for all segments
- Business development focus:Replicate & scale "smart Quarters"
- ➤ Seek partnerships, particularly for industrial and international markets (UK, IRL, NL, B, F, E, P, I, GR, USA)
- Company evaluation: 25 M € (2017: 4 M € before MVP and POC)







# Remember the "Swiss Army Knife" for more renewable energy!

Dr.-Ing. Thomas Walter Easy Smart Grid GmbH www.easysg.de thomas.walter@easysg.de +49 171 229 4629

