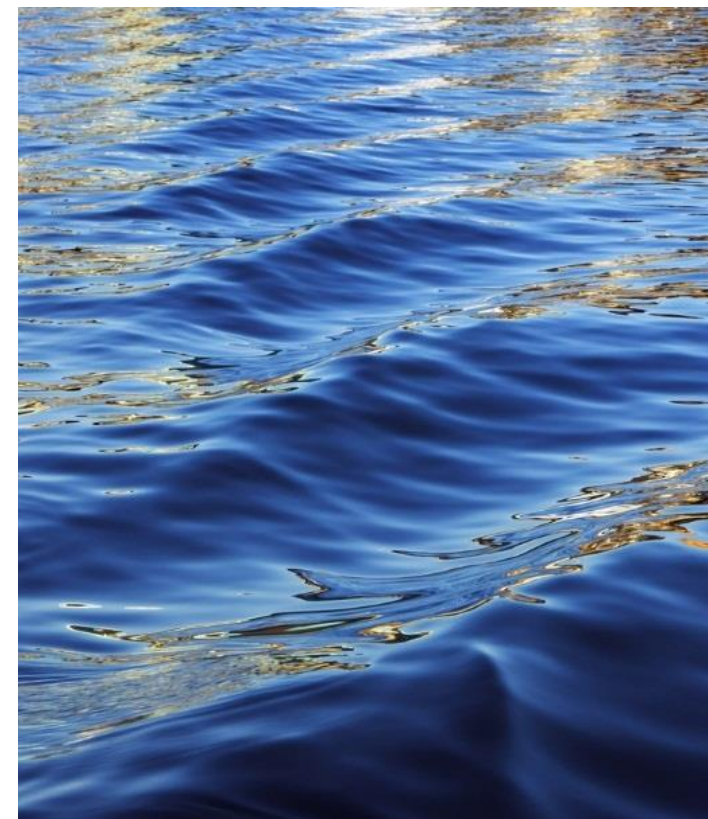
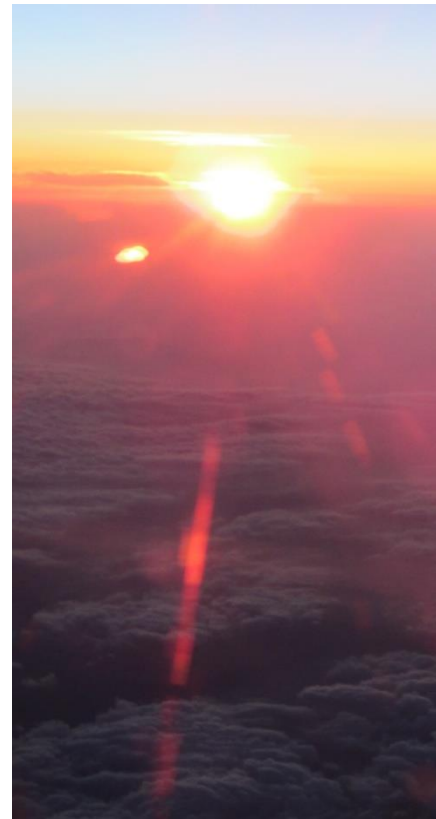


Smart Grid on a Chip

Decentral Control Technology
Save Fuel Cost
Smart Island/Isolated Grids

Hightech Venture Days at Semicon Europa 2015
Dresden, 06.10.2015
Dr. Thomas Walter



Leapfrogging

The future, different from what you expect

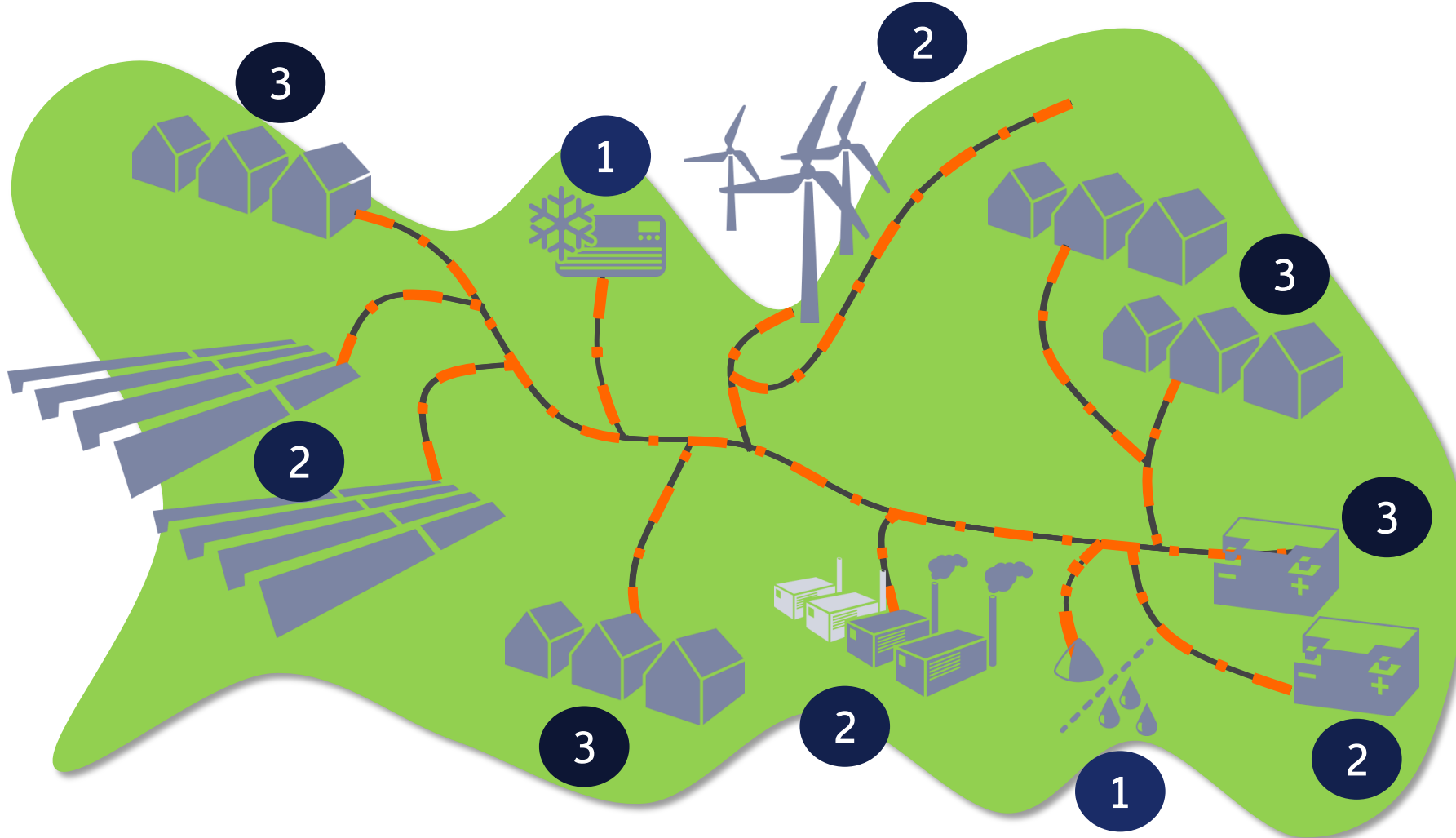


- Energy world: Paradigm change
 - Disruptive innovation, not „better mousetrap“
 - New players leapfrog old as Cisco and Apple have done
- Our business starts in a niche and can be scaled
- We offer strong customer benefit, efficient technology, and IP protection
- The opportunity you look for?

Source: Blog Prof. Wettengl: wettengl.info/Blog/?p=5072, Download 21.08.2015, Bullet points by Thomas Walter

Market Island Grids and Grid Islands Worldwide

SEMICON[®]
Europa2015



- Very high generation cost (Diesel or HFO)
- Renewables half the cost of fossils
- More RE, lower cost if demand adapts to generation
- Market size > 50 GW
≈ 100,000 M\$/a
- We focus on small niches we can access successfully

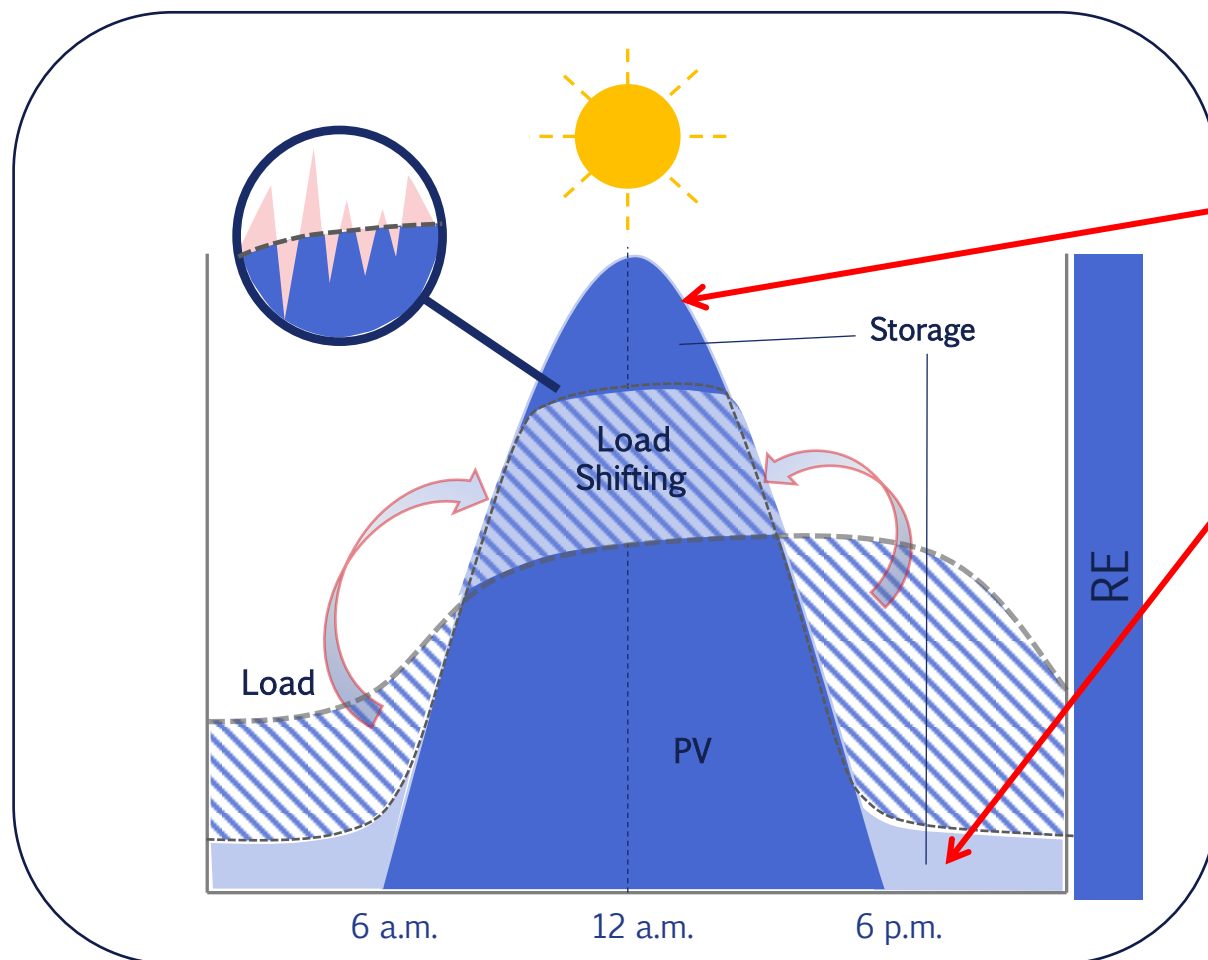


Our Solution

Convert Flexibility into Value

SEMICON[®]
Europa2015

**Easy
Smart
Grid** GmbH



Benefits of our solution:

- **Maximize Renewables:**
More RE can be used
(was shedded before)
- **Minimize Cost:**
Less cash spent on
fossil fuel and storage
- **Easy Smart Grid:**
Applied to low hanging
fruit, our Solution releases
 - five digit annual savings
 - with payback in one year



Short term: Savings
Long term: Smart Grid on a Chip

SEMICON[®]
Europa2015

 **Easy
Smart
Grid**
GmbH

Smart Grids will need

Decentral management by
variable prices

Low cost
Use of all available flexibility



Easy Smart Grid: Price transmitted by grid frequency (isolated micro grids)

Deliver cheap ADR
Anywhere in the grid

Secure & resilient
Real time & self stabilizing



Wider use in Smart Grid Cells

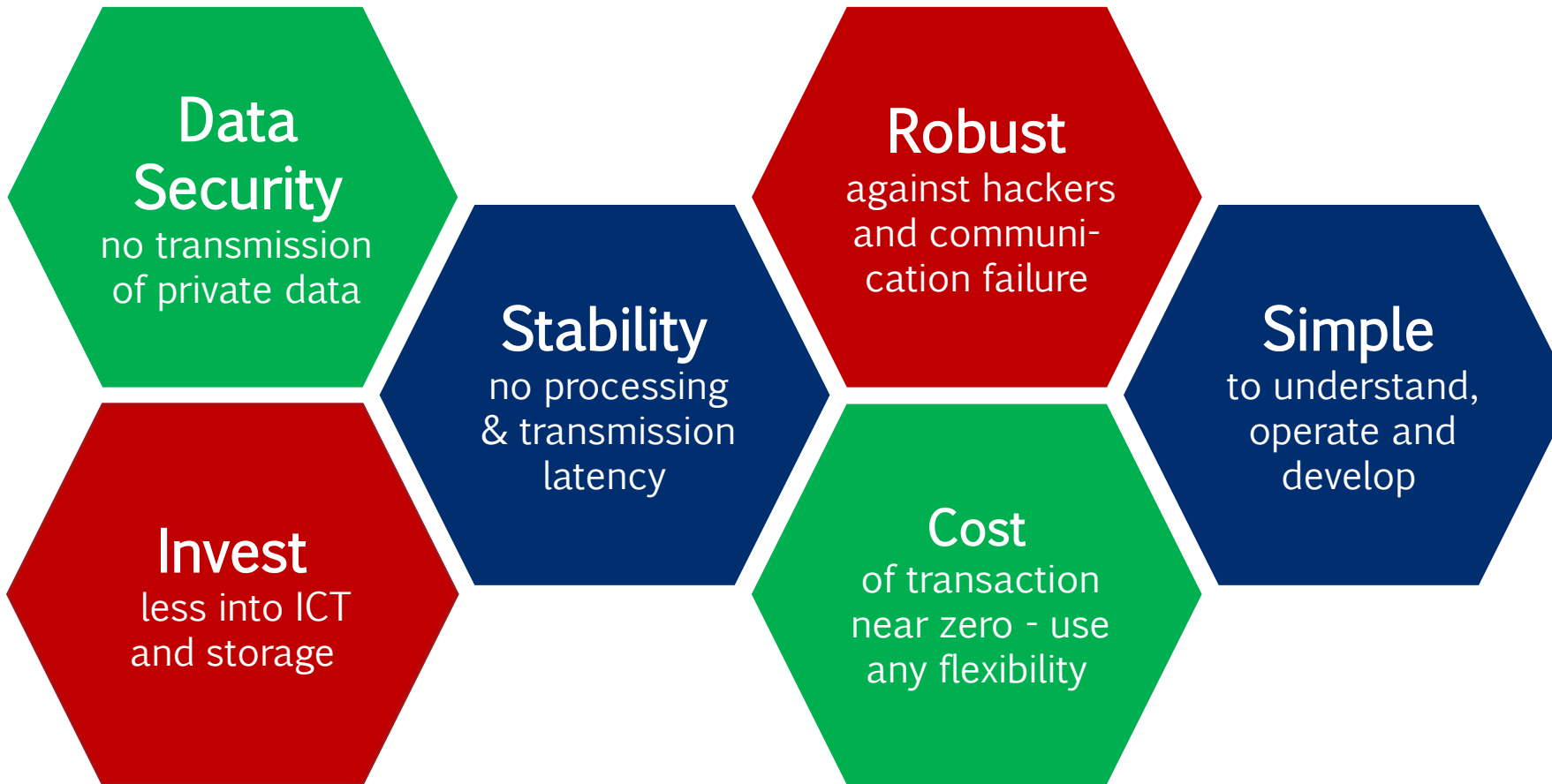
Efficient Real Time Market Technology
Self Balancing Micro Grids

Integration on device Controllers
Cellular Grid with Power Electronics



Unique Selling Proposition Versus conventional Smart Grid

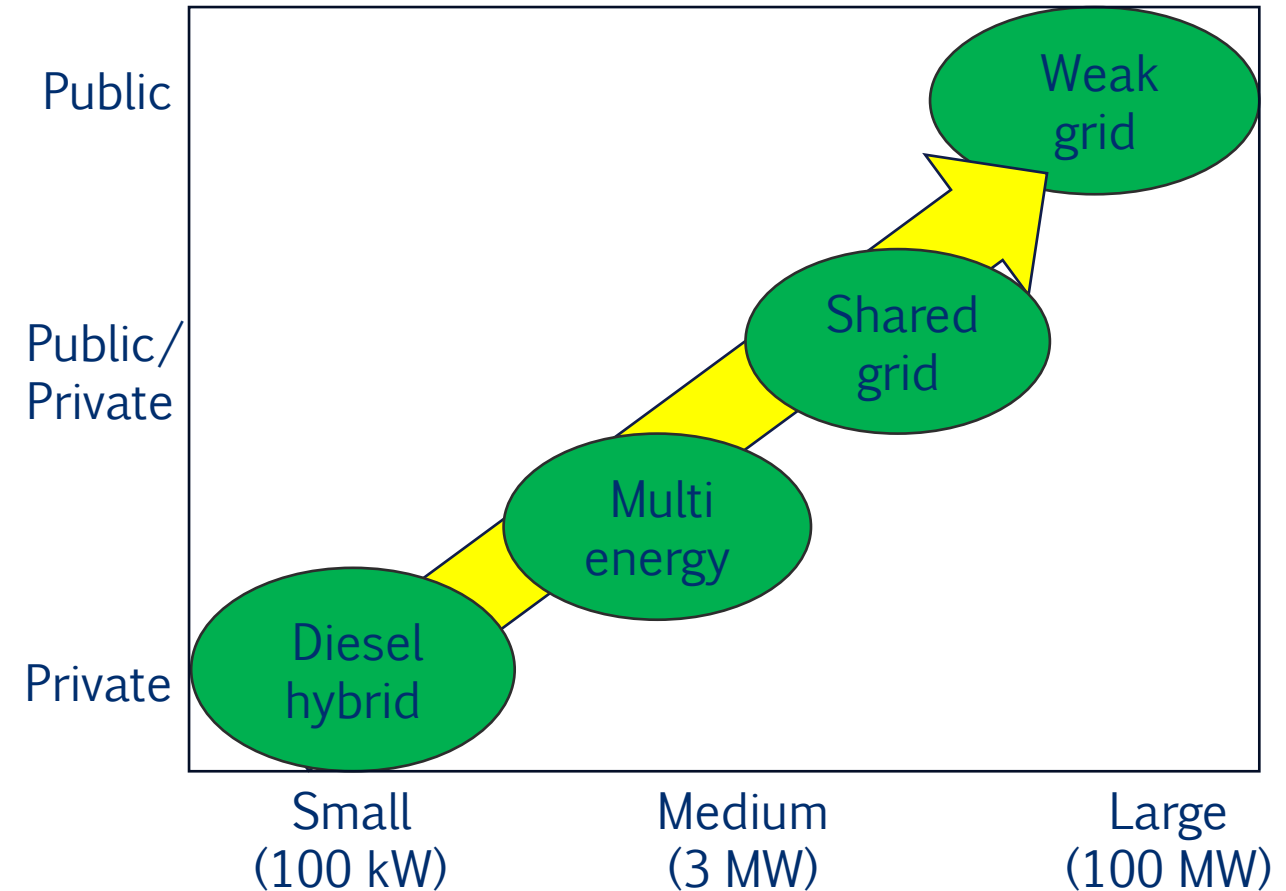
SEMICON[®]
Europa2015



Business Model

Participate in fuel savings

- High value and fast payback (0.2 \$/kWh replaced)
- Start with private grids driven by commercial interest
- Win-win project sales with end customer's existing partners
 - Customer access (low sales cost)
 - Readiness to buy (short lead times)
 - Ability to pay (easier financing)



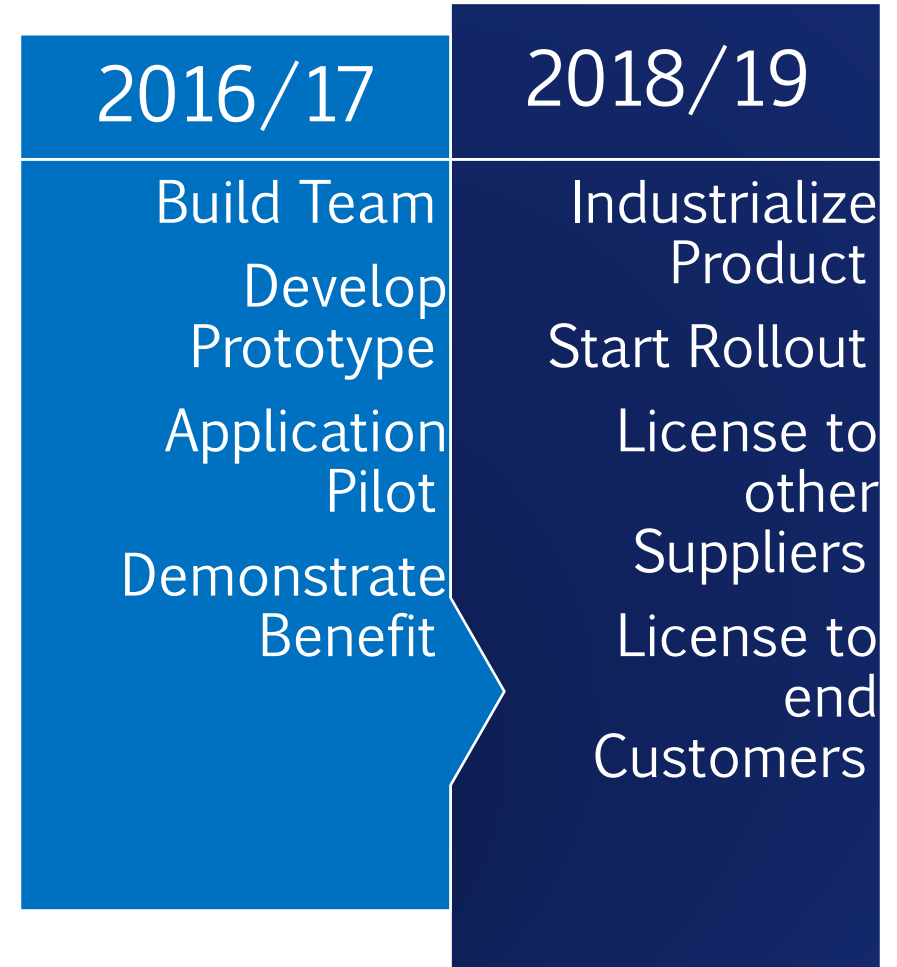
Roadmap and business model

Already achieved

- ✓ #3 EIT ICT Smart Energy Start-up in Europe
- ✓ External Expert and R&D support won
- ✓ IP confirmed and filed
- ✓ Partner network in place

To be done (2016+)

- Secure investment (up to 3 M€, four years)
- Expand team around founder (>30 years experience in Innovation, R&D, Marketing&Sales)
- Develop and sell Products & Licenses
- Strategic partners welcome:
Firmware IP, Solar Energy, Power Electronics,
Communication & Control





Thank you for your interest!

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

