



# THE ALCHEMY OF INNOVATION

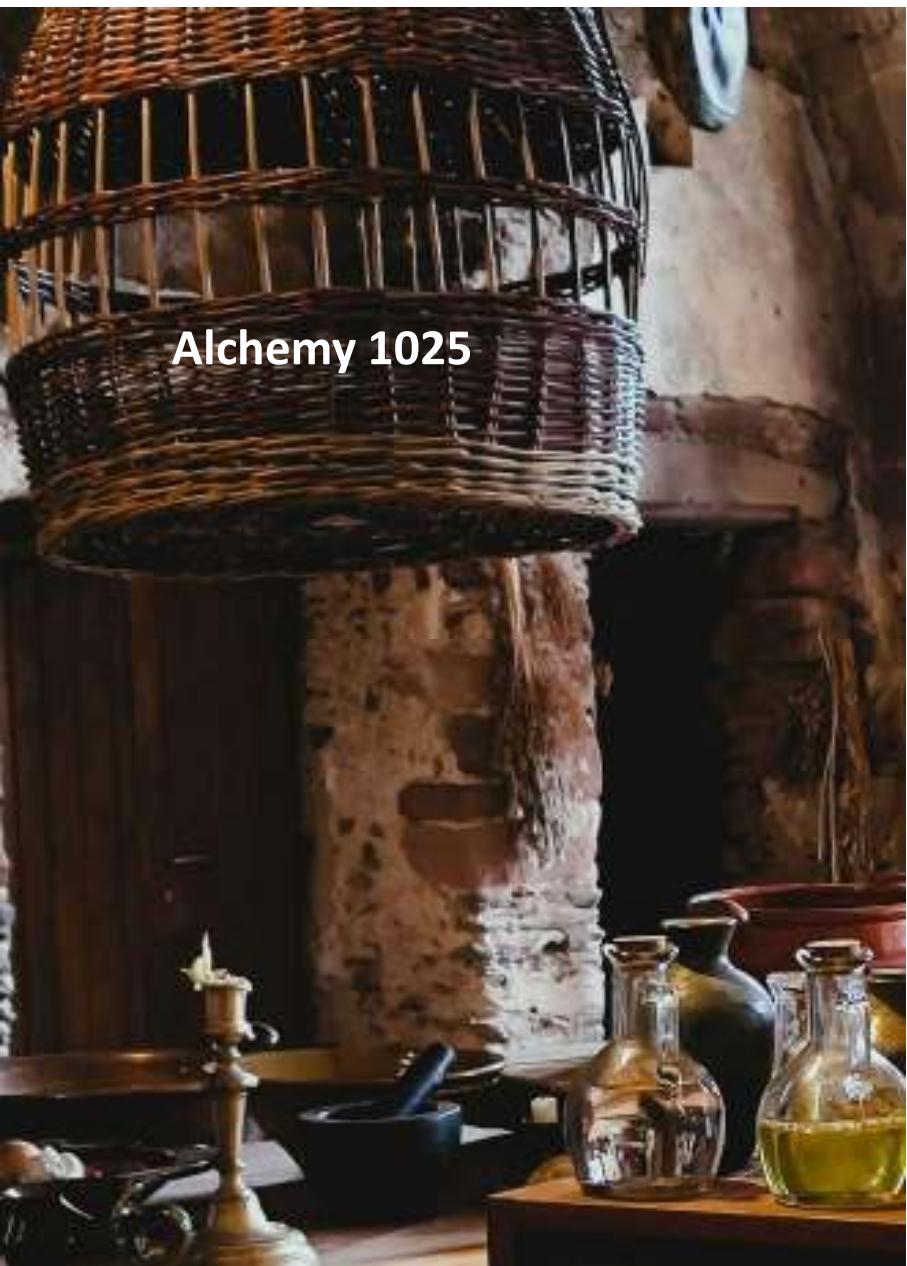
## From Spark to Structure

Catalysing Innovation: Infrastructure, Projects & People

Geert Palmers,  
September 26<sup>th</sup>, 2025

Alchemy 1025





**Alchemy 1025**

*In the Middle Ages, the dream was to turn lead into gold*



Alchemy 2025



## Alchemy 2025

*Innovation is today's alchemy: shaping life, not just making a living.  
In a world marked by climate and geopolitical challenges, innovation  
can open new paths forward.*

## Agenda

- Testimonial of 4 cases
  - **3E** ([www.3E.eu](http://www.3E.eu)), spin-off of IMEC.  
and 3 spin-offs:
    - **Dnergy**
    - **XANT**
    - **Flidar**
- **Lessons learnt** of a **2,5 decades** journey with over **500** committed people.



## Foundation 1999

### What?

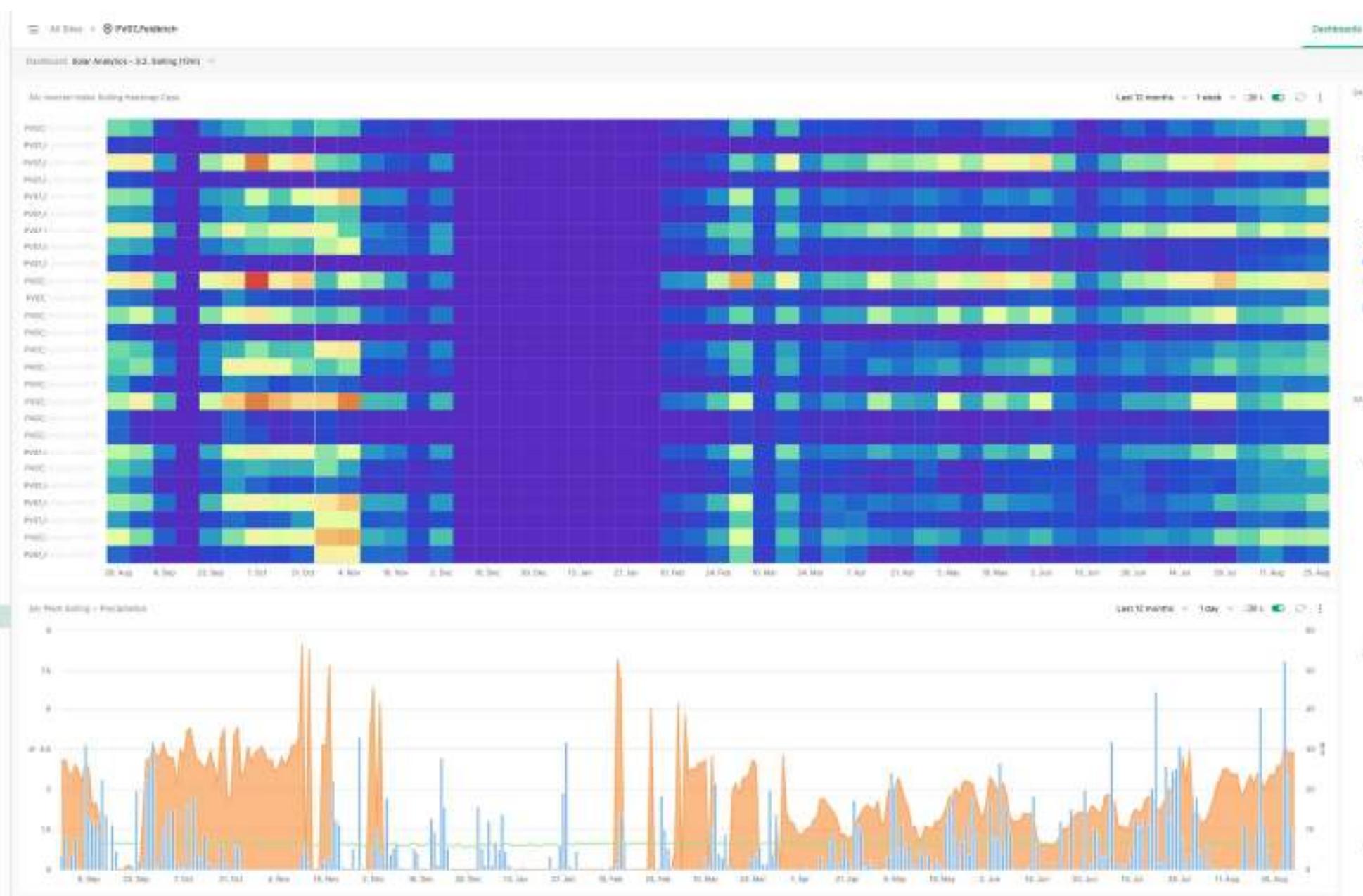
- **Expert services** for solar, wind and storage worldwide.
- **SynaptiQ**  
Leadership SaaS platform for better performance, long-term profitability of renewable assets across its full lifecycle.
- > 20 000 sites – > 20 GW globally served.
- 200 FTE's, Brussels, Paris, Barcelona, Cape Town, Chennai, Raleigh.  
References in 40 countries.

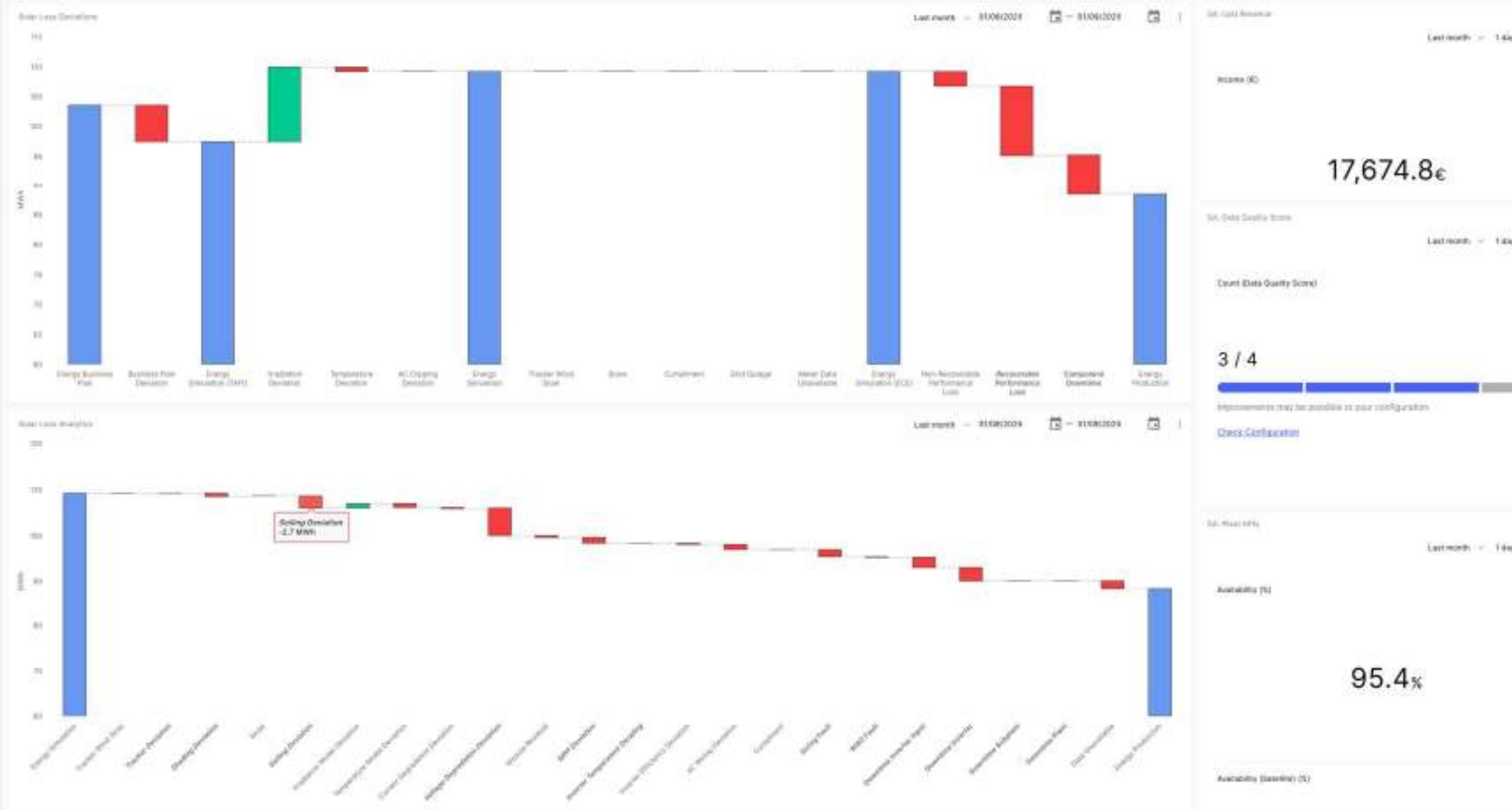
### Impact:

- **Bankable expertise globally**
- **4%** increase in revenue post-implementation of SynaptiQ, attributed to more accurate performance forecasting and optimized operations.
- **50%** cost savings primarily through improved fault detection, streamlined maintenance processes, and reduced downtime.

## Portfolio PV assets: overview









**Foundation 2018**, spin-off of 3E

**What?**

- Decarbonization of office buildings into operational reality
- Turning siloed data (BMS, metering and monitoring data) into insights, automating HVAC control, and delivering results through technology, action plan and services:

**Impact:**

- **20%** energy savings per building on average,
- Very attractive **financial returns**
- **Comfort** for building tenants

## Overview Case 2 (11/2021 – 08/2024)

AUTOPILOT Active



### Building data

Surface: 18.742 m<sup>2</sup>  
Usage: offices  
BMS: Johnson Control  
HVAC systems: cold ceilings, convectors, 5 AHUs



### Financial KPIs

**COST**  
(2022-2024)  
72.417 €

**SAVINGS**  
(2022-2024)  
211.451 €

**ROI**  
Time  
<6 months

**NET**  
Avg service charge  
reduction per year  
2,47 €



### Energy KPIs

Avg AUTOPILOT  
kWh reduction  
18,4%

Other  
contributions,  
triggered by  
dnergy's  
analysis.\*  
6%

CO2 footprint  
reduction  
17,1%

\*dnergy's approach encompasses the implementation of good practices and the improvement of the usage of the existing technical equipment. AUTOPILOT is directly responsible for a part of the savings, which the implementation of our recommendations is responsible for another part.

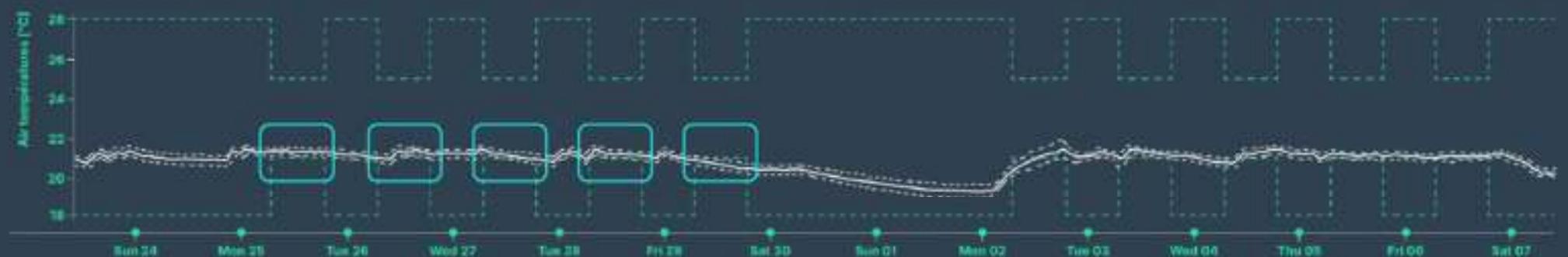
**With AUTOPILOT,  
The comfort-energy balance is optimal**

**AUTOPILOT**  
by d'energy\*



**Scenario 3 : neither too cold, nor too warm**

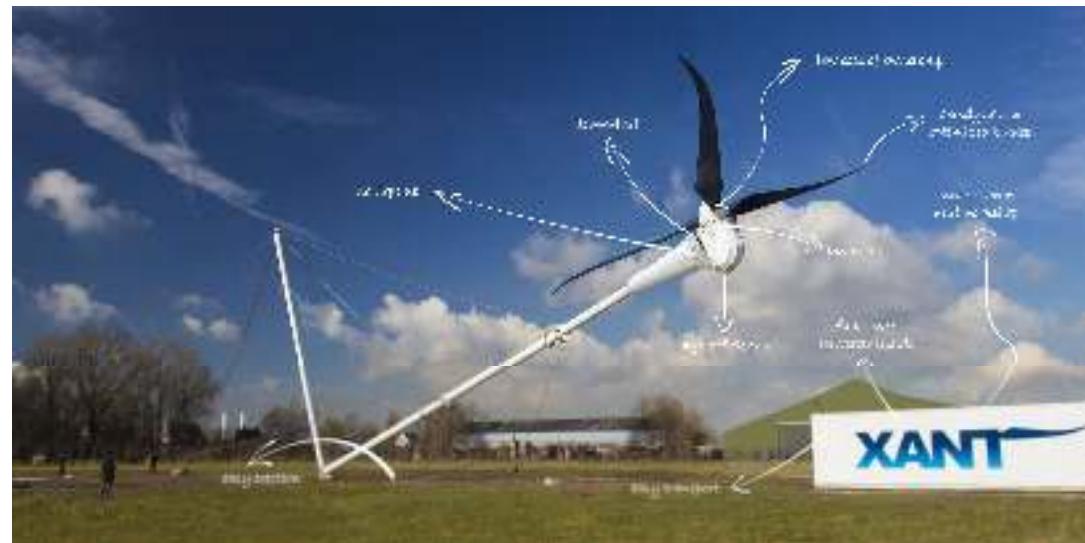
- Optimal energy consumption
- No tenant complaints





Foundation 2011, spin-off of 3E.

- **What?**  
Mid-size wind turbines: **robust, portable** (fits in a 40-foot container) **erected without a crane**, integrated PV, batteries, control system.
- **Impact:**  
**“utility in a box” for rural communities**





**Foundation 2011**, spin-off of 3E.

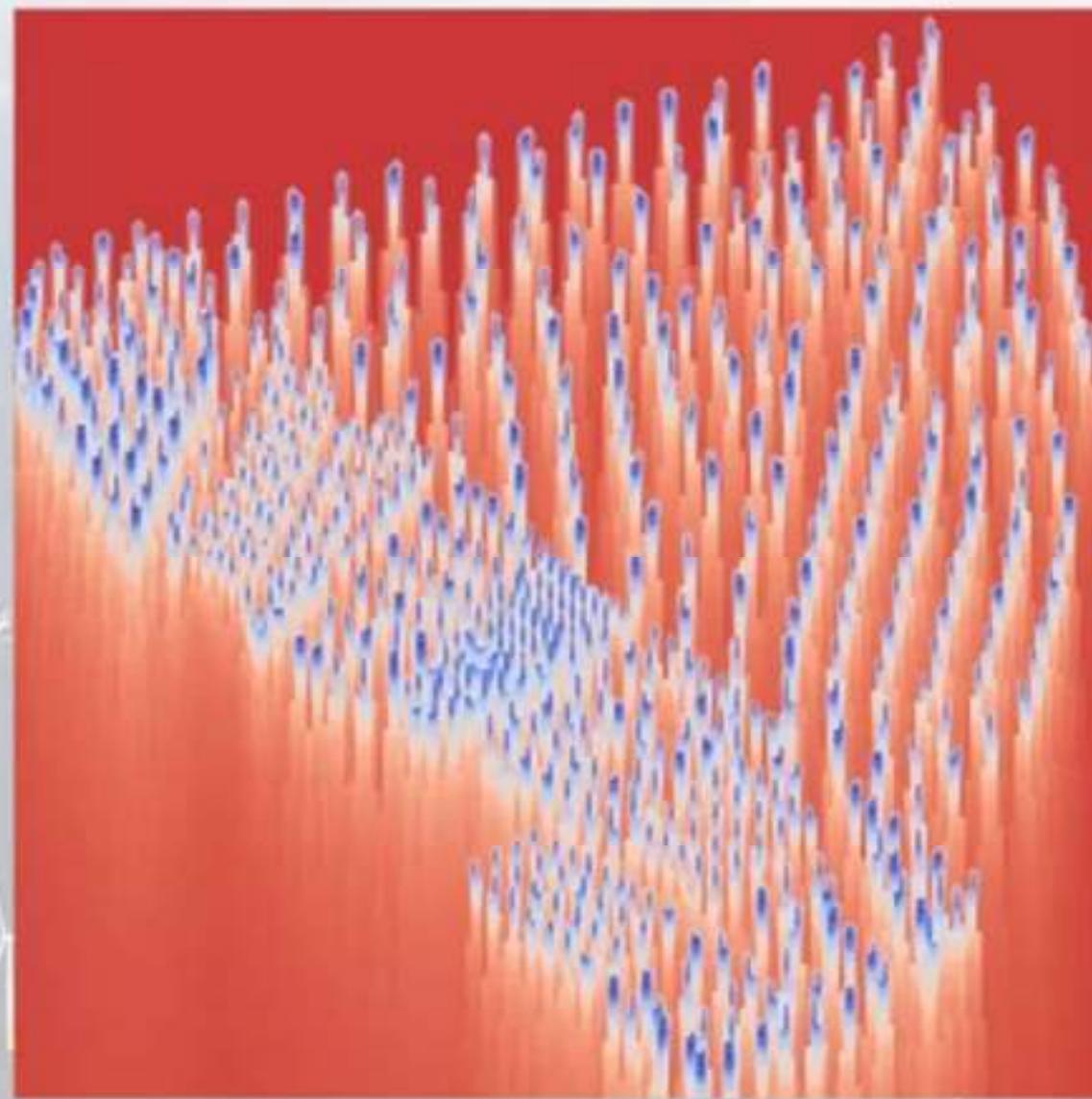
**What?**

- Cost-effective, accurate wind measurement solutions offshore using floating LiDAR technology.

**Impact:**

- **10 x** cheaper than fix mast offshore wind measurements
- **Affordable increased accuracy** of offshore wind characteristics before and during operations of offshore wind farms.





High

Wind speed

Low

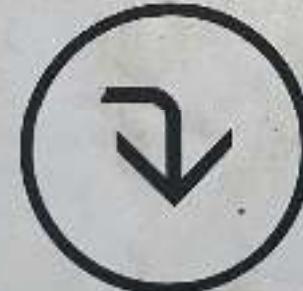
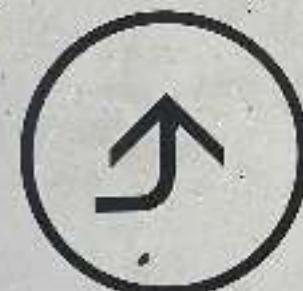


**People & People (The Customers, The Team)**



### People (The customers)

- Value proposition is not just a novel solution but valued by customers.
- Customer is your partner:
  - involvement from day one: **embrace early movers**.
  - Secure “**lighthouse customers**” who validate credibility.
- Economics:
  - Understand your **unit economics** (how you make €1).
  - Be disciplined with **burn rate**: failure rarely occurs because of a lack of brilliance.
- Map
  - Value chain: suppliers, partners, distribution channels
  - Funding runway: grants, VC, corporate partnerships.



### People & people (The Team)

- Innovation only happens when **different kinds of brilliance** meet in **mutual respect**.
- Diversity in **skills, gender, culture, and mindset** increases resilience and creativity. Accommodate non-conventional thinkers, who respect each other

Balance:

- **visionaries** (big-picture thinkers),
- **operators** (execution-focused),
- **connectors** (network and sales-oriented).

- Uniformity is safe, but it kills innovation.
- Innovation dies if it stays only with technologists.
- Attract only people who have a **strong commitment to & drive for the mission**, who do not leave the kitchen when it gets hot in the kitchen.
- **Create a vivid culture of openness**, responsibility, creativity, learning from failure.
- Be disciplined in **culture nurturing**. A company is a living animal.
-



Facts to Reflect



## Facts to Reflect

***60% of today's children will work in jobs that don't even exist yet.***

*Young firms—not established giants—are the main net creators of jobs in modern economies.*

*What better preparation for that uncertainty than entrepreneurship? It teaches you **how to create rather than wait**, how to design rather than simply consume.*

*When you start something, you are **not just building your own future—you are building livelihoods for others**.*

