

INTERNET OF ENERGY – IoT bei der Salzburg AG

KRISTIЈAN JARC & ANDREAS OYRER // 04.05.2022

IMAGINE
MITTELSTANDSFORUM 2022

WHO WE ARE?



 LOGIN  KONTAKT  SERVICE  MENÜ



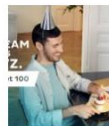
DAS BESTE INTERNET FÜR
DEINE ZUKUNFTSMUSIK.

DAS IST
GREEN
TECH.

> MEHR ERFAHREN

Datenschutz-
Einstellungen

DAS IST GREEN TECH





QUESTIONS

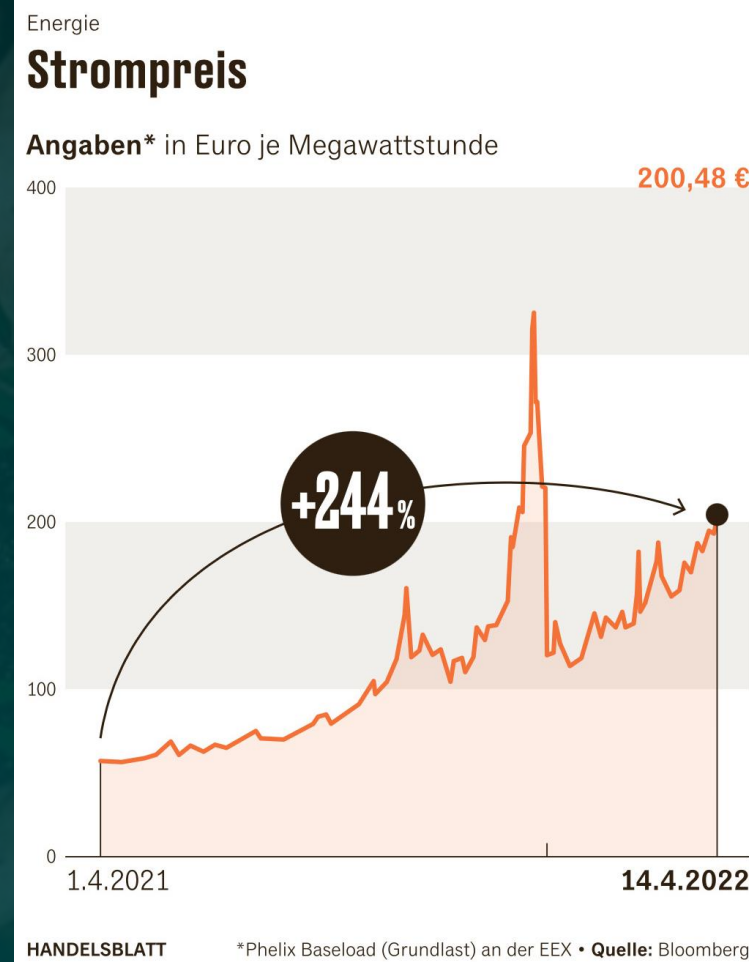


airbnb

NETFLIX

What do these companies have in common?

What's going on?



What's going on?

Klima Change



Gap of Natural Resources



Independency



Geopolitical
Situation

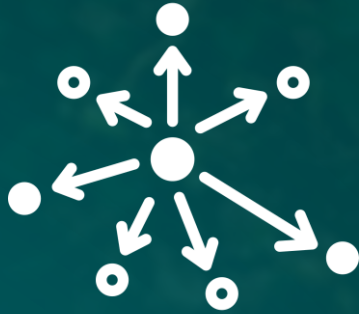


Electrification



The Future we want

Democratization & Decentralization
of Energy Production



More Sustainable Energy
to fight climate change



Local Autarky from Energy
Market



Strengthen local
communities



The Future



TODAY AVERAGE CONSUMPTION*
(3 PEOPLE HOUSEHOLD)
4000 Kwh p.a.

CUSTOMER BUYS AN E-CAR**
+ 3000 Kwh p.a.

CUSTOMER CHANGES TO A
HEAT PUMP***
+ 6000 Kwh p.a.

* Statistik Austria 2016 ** über 18.000 E-Car Neuzulassungen in 2021 *** über 440.000 HH in 2019/2020 & 29.000 in Salzburg

DIGITAL BUILDING BLOCKS



Digitale Organization

Agile Methods, Mindset, Skills

External Focus



Customer & Products

Transform & Extend Products
With/Into Digital Capabilities

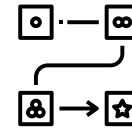
External Focus



New Business Models

Explore, Build, Evaluate

Internal Focus



Process & Analytics

Optimize, Automate, Measure

Internal Focus



Digital Workspace

Easy to Use, Everywhere,
User Experience



System & Application Landscape

Cloud, Mobile, Security...

MYTHS

Smart Meter Data leaks!

Smart Meter data is only for grid companies

Cloud Technology is not secure!

Cloud Technology proper used is best security

Only PV / Solar / Wind can solve our energy demands!

PV / Solar / Wind in combination with storage technology can be a game changer

Hydrogen is an Alternative for Electricity

Hydrogen is a storage technology and need electricity

Our Solution: An Energy Ecosystem

An Energy Ecosystem for everyone based on Internet of Energy (IoE)*

*IoE = The Intelligent & Connected
Control of Energy & Sustainability

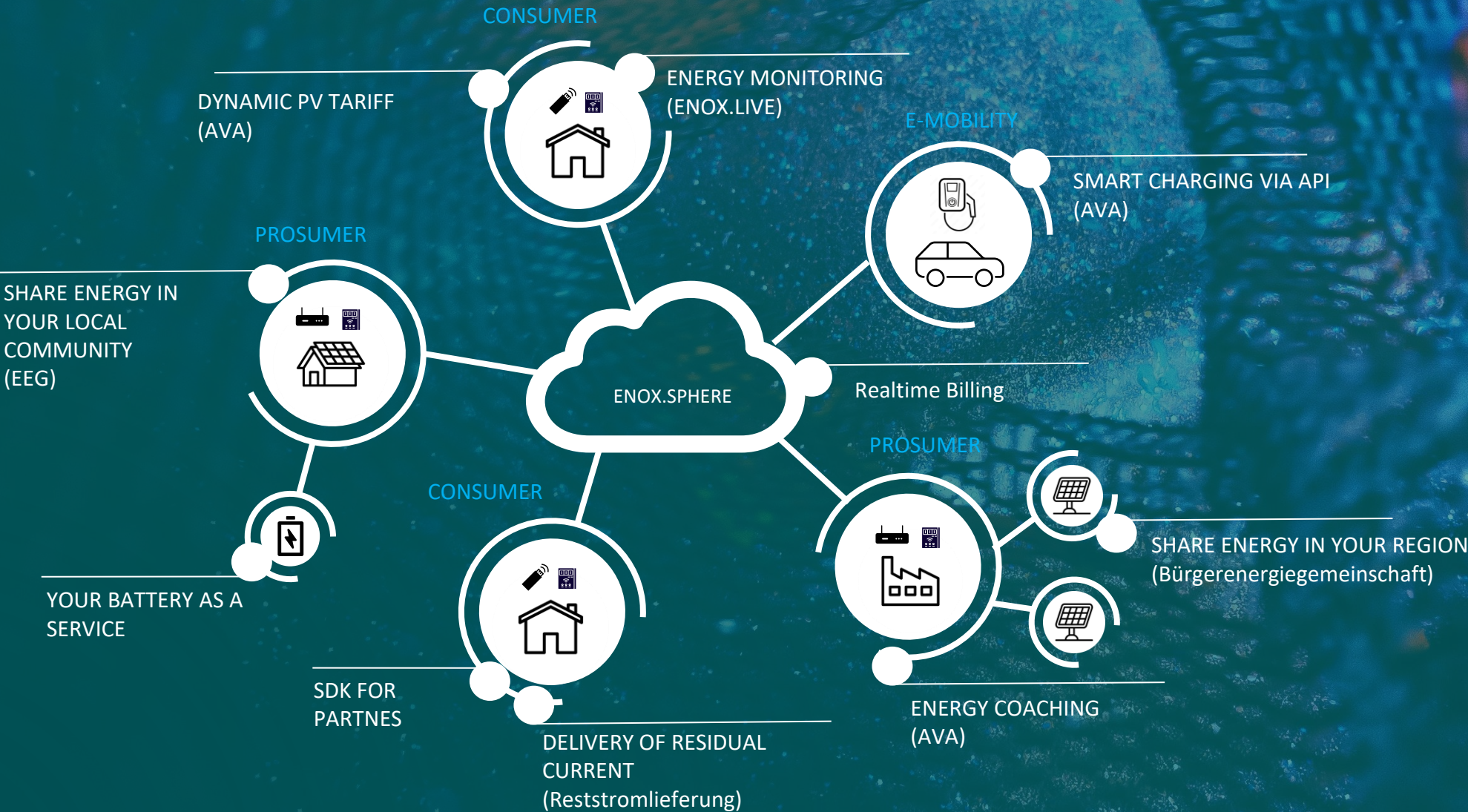
A person's hands are shown from the wrists down, cupping a small green plant seedling with several leaves growing out of a mound of dark soil. The background is a blurred natural setting with green foliage. A semi-transparent teal overlay covers the left and bottom portions of the image. White text is overlaid on the teal area. Thin white lines form a partial frame: a horizontal line at the top, a vertical line on the right, and a corner bracket on the bottom left.

ENOX.ENERGY

CONNECTED SUSTAINABILITY

SALZBURG AG

Use Cases



SMART METER

Smart meters – these are digital electricity meters that will replace mechanical meters in the coming years

The electricity consumption is automatically and safely transmitted to the grid operator at regular intervals.



OUR BASIC DEVICES



ENOX.PLUG

Our ENOX.PLUG adapter gives you the capability to get data from your smart meter.

- Realtime data from smart meter*
- WLAN Connectivity
- LTE Connectivity
- No additional power supply needed

*Smart meter with customer interface needed

OUR BASIC DEVICES



ENOX.HUB

Our ENOX.HUB edge device gives you the capability to control and manage your energy resources.

- Offline Capability
- Connectivity to SolarEdge, Fronius, ...
- LAN Connectivity
- WLAN Connectivity
- LTE Optional
- MBUS
- MODBUS

Supports: PV-Inverter, Wallboxes, Smart Meter, Batteries

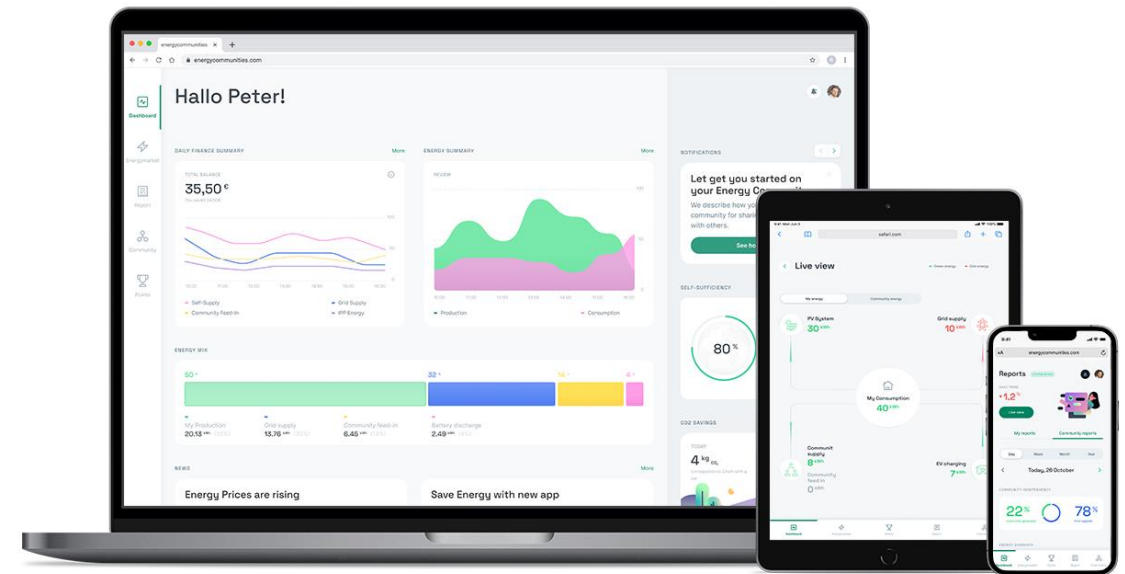
WEB APPLICATION FOR DISPLAYING ENERGY FLOWS IN REAL TIME

Live view of the energy generated and consumed
within the community.

Optimal visualization.

Even better overview and transparency.

Available via Internet technology (CLOUDnative) on
a wide variety of end devices.



Symbolbilder

IoE APP & DESIGN

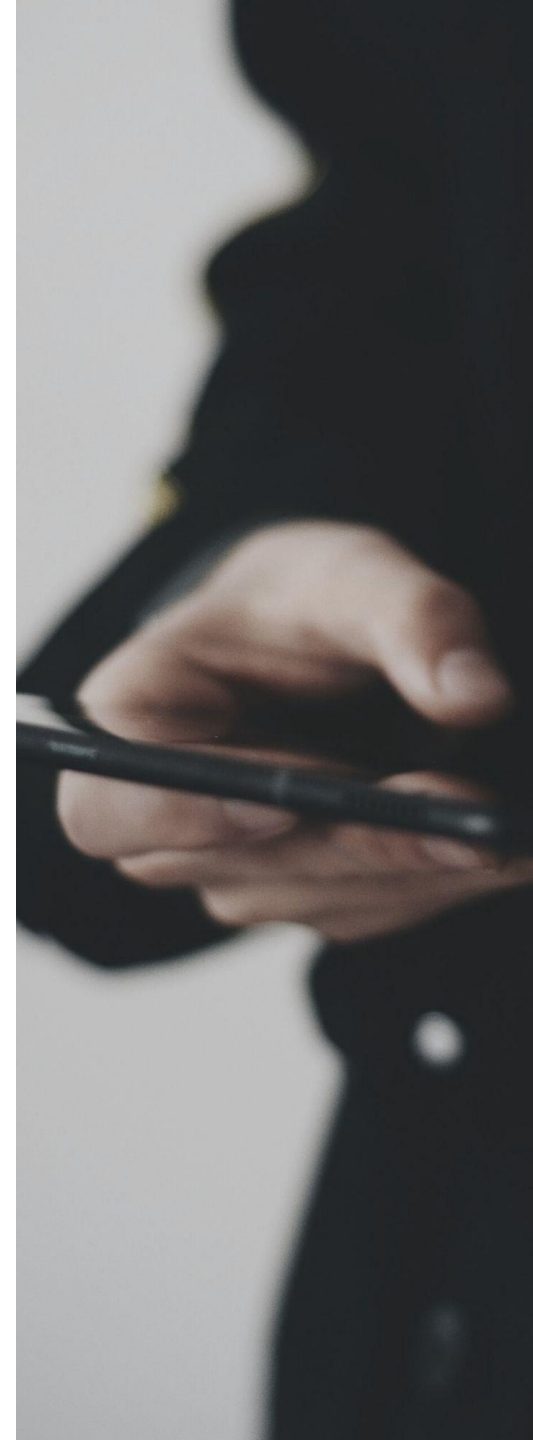


HOW TO GET IT DONE?



HOW TO GET IT DONE

- **AKZEPTANZ DES NUTZERS IST EIN ENTSCHEIDENDES KRITERIUM FÜR DEN ERFOLG**
- **MUSS SO EINFACH UND INTUITIV SEIN, WIE DIE BEDIENUNG EINES SMARTPHONES**
- **DAS SCHWIERIGE IST, KOMPLEXE DINGE FÜR DEN USER EINFACH ZU GESTALTEN**
 - Komplexität bleibt im Hintergrund verborgen



HOW TO GET IT DONE

- **START MIT CONSULTING UND WORKSHOPS**

- Kennenlernen und Verstehen
- Fokus auf Software und Vernetzung der Edge-Komponenten

- **AGILE PRODUKTENTWICKLUNG**

- Erste POCs & Tests mit Komponenten

- **„NACHHALTIGE“ SOFTWAREENTWICKLUNG**

- Wartbarkeit, Erweiterbarkeit, Security, Update-Konzepte, ...



HOW TO GET IT DONE

– **SKILLS UND MINDSET DES PARTNERS**

- Partner ergänzt die vorhandene Expertise
- Ganzheitliche Sichtweise notwendig
- Neue Ideen durch aktiv Mitdenken + Einbinden in das große Ganze

– **INTELLIGENZ DURCH SOFTWARE**

- Software war bisher nicht Fokus eines Energieversorgers
- Intelligente Vernetzung der einzelnen Komponenten



ANSWER



NETFLIX

All the companies did not come from the original business!

SALZBURG AG

**SOFTWARE IST EIN ENABLER FÜR DISRUPTIVE
GESCHÄFTSMODELLE**

**AKZEPTANZ DER USER IST ENTSCHEIDEND –
KOMPLEXITÄT MUSS IM HINTERGRUND
BLEIBEN**

**NICHT WARTEN, BIS DIE ANDEREN WAS
MACHEN - DISRUPTION AKTIV
VORANTREIBEN**

**TAKE
AWAYS**



VIELEN DANK!

Ihre

FRAGEN?



<https://bit.ly/3LWoEOk>

HIER FINDEN SIE:

- die Präsentationsunterlagen
- ab morgen die Aufzeichnung des Vortrags
- weiterführende Informationen

Sie erhalten den Link am Freitag auch per E-Mail.



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