


# BLOCKCHAIN

*GAME CHANGER FOR ENERGY UTILITIES*  
*PETER GÖNITZER, GENERAL MANAGER WIEN ENERGIE*





“Our intuition about  
the future is linear.  
But technology  
develops  
exponentially, and  
that makes a  
profound  
difference.”

RAY KURZWEIL









**BIONIC  
COMPUTING**



**ROBOTICS**



**ARTIFICIAL  
INTELLIGENCE**



**AUTONOMOUS  
VEHICLES**



**BLOCKCHAIN**



**AR/  
VR**



**IOT/  
CONNECTED  
HOMES**



**ALTERNATIVE  
DRIVE VEHICLES**



**SMART DATA  
ANALYTICS**

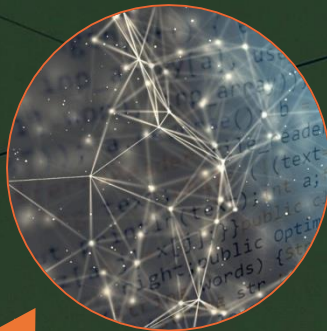


**SMART  
DRONES**

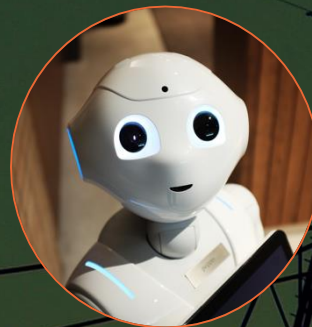


# THE 3 D's

**D**ECENTRALISATION



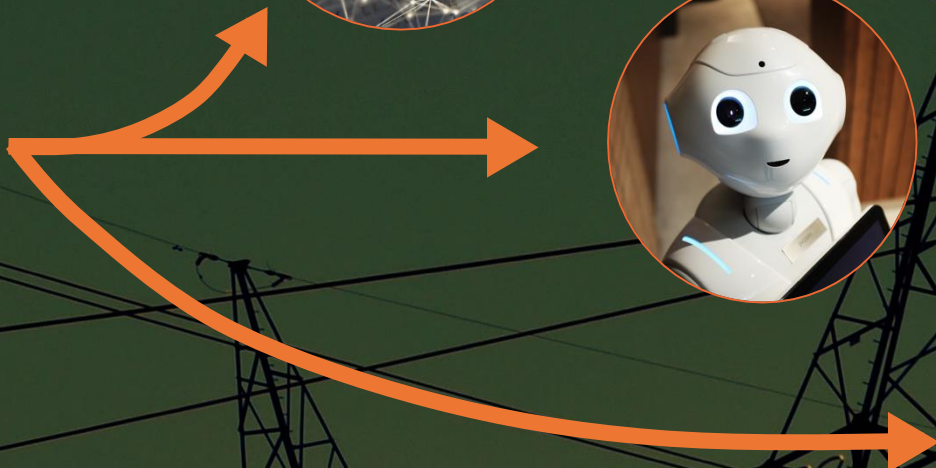
**D**IGITISATION



**D**ECARBONISATION



Energy  
transition





The image is a composite. The left half features a close-up of a lightbulb with a shattered glass envelope. The filament is glowing with a warm orange light. Several pieces of glass are shown in mid-air, having just broken away from the bulb. The background is black. The right half of the image shows a dark night sky filled with stars and the glowing, reddish-orange band of the Milky Way galaxy. In the foreground, the silhouettes of three people are standing on a dark, rocky outcrop, looking up at the stars. The overall theme is one of transformation and looking forward.

**DISRUPTION**

**NEW  
OPPORTUNITIES**



Will energy utilities  
transform into  
tech companies?



# #1 CO-OPERATION WITH START-UPS

---

weXxelerate







# #2

## BUILD OWN EXPERTISE, SKILLS & KNOW-HOW

---

# #3

## NEW METHODS







We  
embrace  
innovation

AI  
PROGRAMME  
BOT TINA

URBAN PIONEERS  
CO-CREATION  
COMMUNITY

E-MOBILITY  
PROGRAMME

ASPERN  
SMART CITY  
RESEARCH

SCR  
Smart City Research



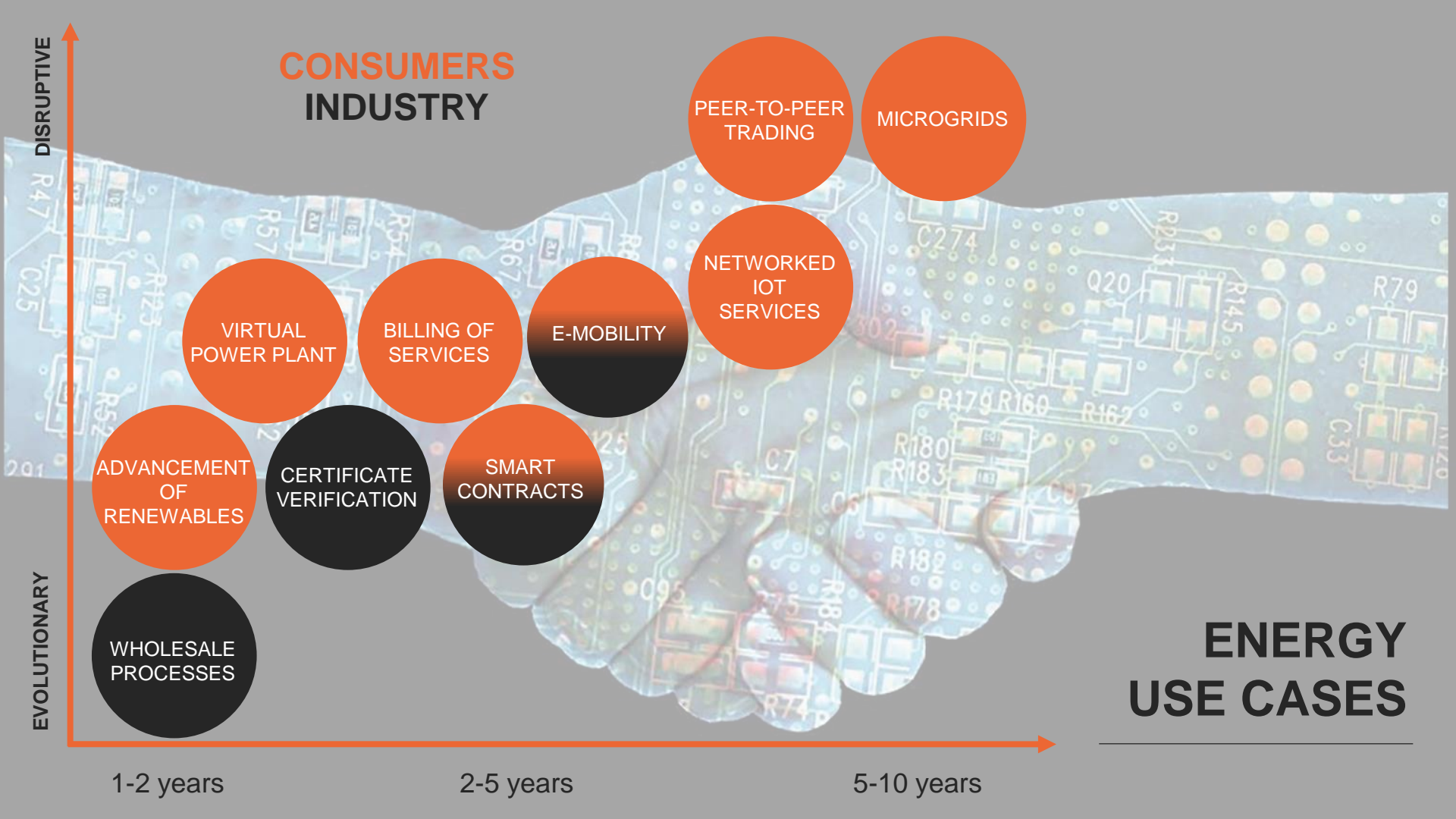
IOT/SMART HOME  
HAUSMASTER





**“Its best  
applications  
are yet to come”**

*Alex Tapscott on Twitter*



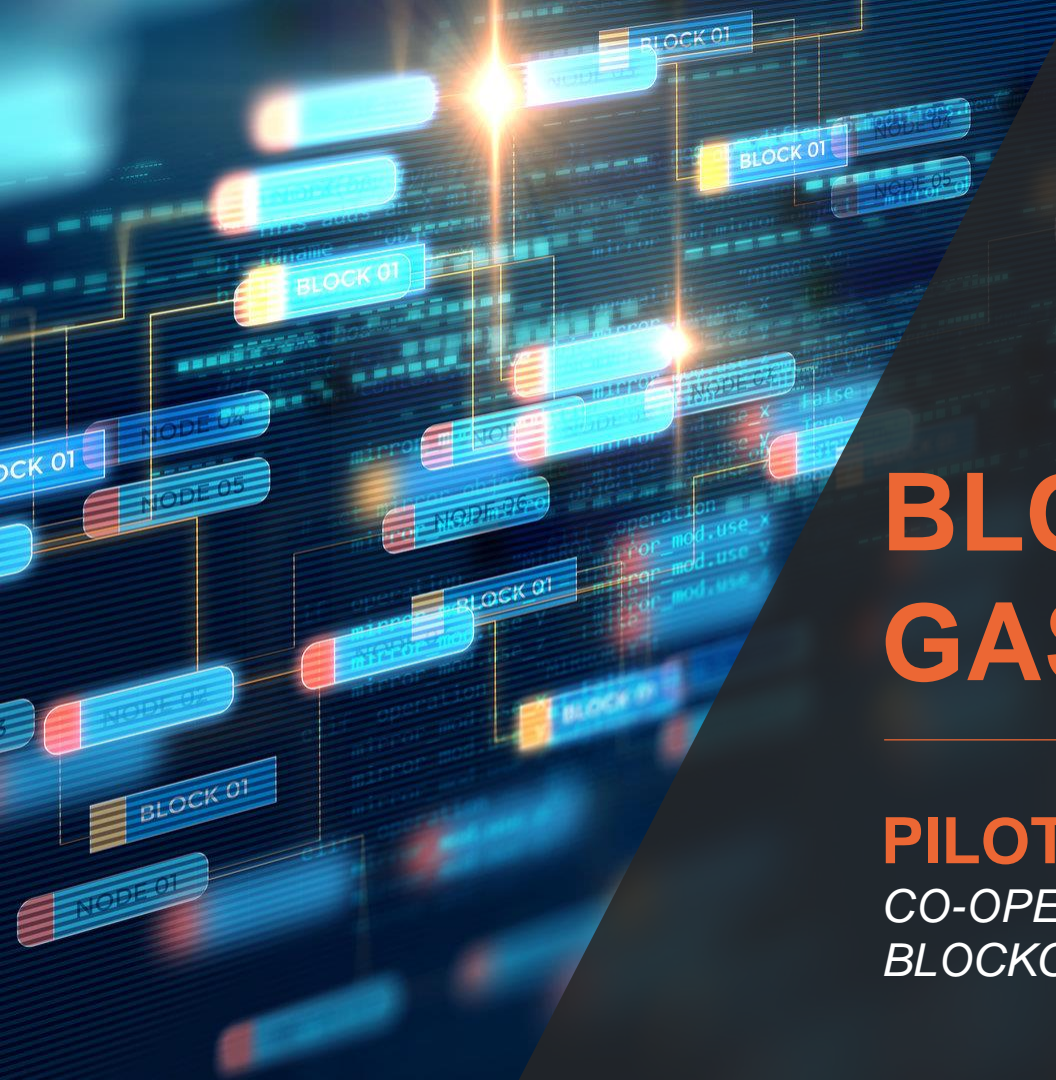


PILOT PROJECT #1  
BLOCKCHAIN & GAS TRADES

PILOT PROJECT #2  
ENERCHAIN

PILOT PROJECT #3  
BC & PV IN APARTMENT BUILDINGS

Als Anbieter von Energiedienstleistungen versorgen wir zwei Millionen Menschen und 230.000 Gewerbe- und Industrieanlagen mit Strom, Erdgas und Fernwärme in und um Wien.



# BLOCKCHAIN & GAS TRADES

---

**PILOT PROJECT #1**  
CO-OPERATION WITH  
BLOCKCHAIN START-UP BTL



# WHAT'S IT ABOUT?

- BLOCKCHAIN-BASED DEAL MATCHING FOR GAS TRADES
- BTL'S INTERBIT PLATFORM

## OBJECTIVES

- ASSESS THE POTENTIAL
- PROVE SCALABILITY
- BUILD INTERNAL KNOW-HOW



15<sup>th</sup> February 2017

Kick-off

Sprint 1  
6 weeks

Sprint 2  
6 weeks

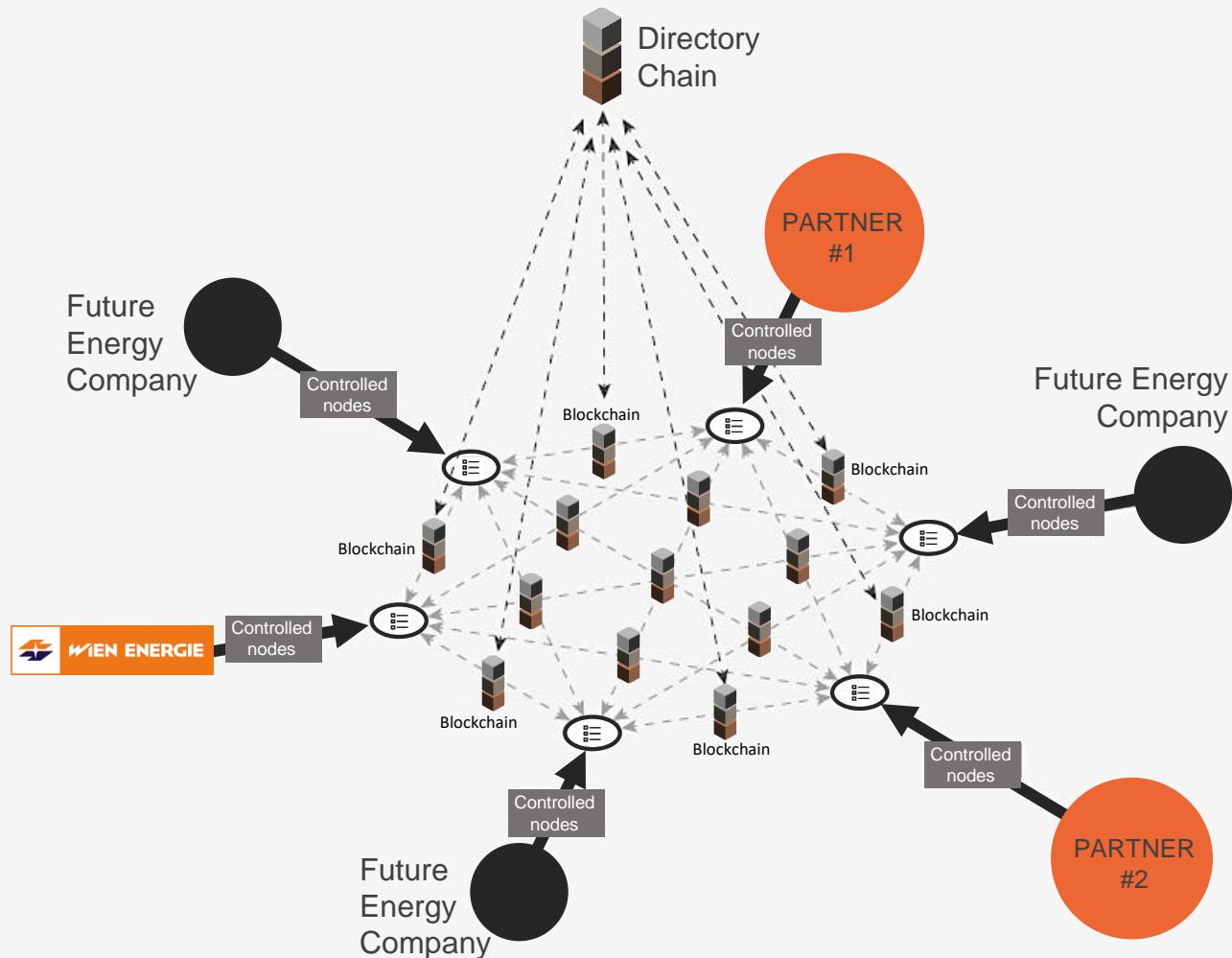
Closing out



16<sup>th</sup> May 2017

# PROOF OF CONCEPT

- 1,000 TRANSACTIONS/  
SEC/CHAIN
- SCALABILITY OF  
100,000  
TRANSACTIONS  
WITHIN THE NETWORK
- PRIVACY  
SECURED
- MINIMAL  
DEVELOPMENT  
EFFORT





# MEDIA BUZZ

## ■ GREAT MEDIA RESPONSE

### International Business Times

Business Fintech Blockchain Bitcoin

## Blockchain developers BTL Group working with Austria's Wien Energie

The pilot scheme in association with EY will use BTL's Interbit platform to cut the costs of energy trading.



By Ian Allison  
February 14, 2017 10:10 GMT



Blockchain builder BTL Group is listed on the Toronto Stock Exchange Venture (Mark Binnh/Reuters)

futurezone Netzpolitik B2B Produkte Digital Life Science Meinung Games Apps Start-ups Community

PEER-TO-PEER

## Wien Energie führt ersten Gashandel mit Blockchain durch

von David Kotrba 04.11.17, 06:00 Mail an Autor



Wien Energie hat erstmals ein reales Gas-Geschäft per Blockchain eingefädelt - Foto: REUTERS/LASZLO BALOGH

FEATURED

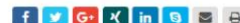


GELD  
Banken verbieten Kauf von Kryptowährungen mit Kreditkarte

wallstreet:online

## BTL Group to Commence Interbit Blockchain Pilot With Wien Energie and Other Major Global Energy Companies

Nachrichtenquelle: Marketwired | 14.02.2017, 10:00 | 403 | 0 | 0



VANCOUVER, BRITISH COLUMBIA--(Marketwired - Feb. 14, 2017) - BTL GROUP LTD. (TSX VENTURE:BTL) ("BTL") is pleased to announce that it is working with a group of leading energy companies, including Wien Energie GmbH, Austria's largest regional energy company, on a blockchain pilot using BTL's Interbit platform. As with previous projects that BTL has successfully completed in this space, the goal is to demonstrate how BTL's technology can significantly drive down costs associated with energy trading. This revenue generating pilot will run alongside the other work BTL is continuing to undertake in the energy and finance industries.

A nighttime photograph of a city street. On the left, a tall building with many lit windows is visible. In the foreground, there are long, horizontal light trails in red, orange, and yellow, suggesting traffic or light painting. A statue stands on a pedestal on the left side of the street. A dark, semi-transparent triangular shape covers the right half of the image, serving as a background for the text.

# ENERCHAIN

## PILOT PROJECT #2

PEER-TO-PEER ENERGY TRADING USING  
BLOCKCHAIN

CO-OPERATION WITH PONTON



## WHAT'S IT ABOUT?

- PARTICIPATION IN THE 'ENERCHAIN' P2P TRADING PROJECT
- P2P TRADING VIA BLOCKCHAIN
- TRADING PLATFORM FOR ELECTRICITY/GAS
- 40 EUROPEAN ENERGY TRADING COMPANIES
- JUNE 2017 – Q1 2018 (FIRST TRADES: SEPT 2017)

## BENEFITS

- INTENSIVE COMMERCIAL ANALYSIS OF BLOCKCHAIN & KNOW-HOW BUILDING
- IDENTIFICATION OF MAJOR ISSUES
- CO-OPERATION WITH IMPORTANT TRADING PARTNERS
- NO LICENCING FEES





A photograph of a modern building with large windows and a section of horizontal wooden siding. In the foreground, several solar panels are mounted on a structure, angled towards the sun. A dark, semi-transparent geometric shape is overlaid on the right side of the image, serving as a background for the text.

# BLOCKCHAIN & PV

---

## PILOT PROJECT #3

*BLOCKCHAIN INFRASTRUCTURE -  
PHOTOVOLTAICS IN APARTMENT  
BUILDINGS*

*CO-OPERATION WITH RIDDLE&CODE*



# WHAT'S IT ABOUT?

- BLOCKCHAIN INFRASTRUCTURE FOR A CITY DEVELOPMENT AREA
- 'URBAN PIONEERS COMMUNITY' INNOVATION PROJECT, 'VIERTEL ZWEI', VIENNA
- TESTING OF NEW ELECTRICITY TARIFF MODELS
- DEVELOPMENT OF NEW BUSINESS MODELS FOR THE ENERGY SECTOR



December 2017

*Kick-off*

January 2018

*Set up infrastructure*

*Connection to data sources*

February 2018

*Development & implementation of tariff models*

March 2018

*Connection to hardware*

*Go live POC*

April 2018

*Adaptation phase*

May 2018

*Evaluation phase*

June 2018

*Conclusion*



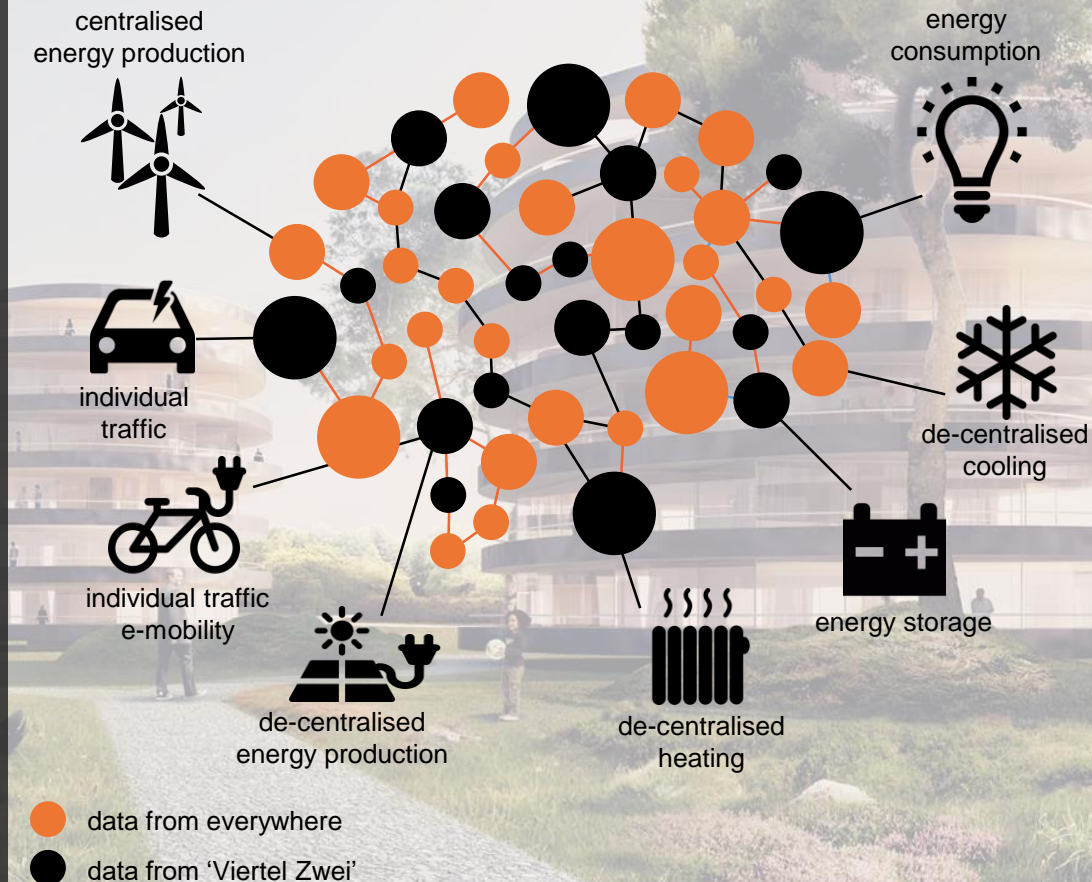
# OBJECTIVES

- SET UP BLOCKCHAIN
- INTEGRATION WITH FILING SYSTEM
- DEVELOPMENT API
- ADAPTATION OF DATA STRUCTURES
- SMART ENERGY CONTRACTS
- HARDWARE POC FOR STORAGE/ CHARGING STATIONS
- BILLING SYSTEM

# WHY BLOCKCHAIN DATABASE?

- SPEEDS
- TRANSACTION COSTS
- ASSETS

# BLOCKCHAIN DATABASE





# Benefits outweigh the risks

- € REDUCE COSTS
- 🤝 REDUCE INTERMEDIARIES
- 🚀 NEW BUSINESS MODELS

**BENEFITS**



CYBER  
SECURITY



REPLACE  
EXISTING  
BUSINESS  
MODELS

**RISKS**



# WHAT'S NEXT?

---

OUR PLANS FOR  
THE FUTURE



# NEXT STEPS

---

#1

IMPLEMENT PROTOTYPES TOGETHER  
WITH OUR PARTNERS

#2

START OWN DEVELOPMENTS AND BUILD  
UP KNOW-HOW

#3

DEVELOP AND IMPLEMENT COMPLETELY  
NEW BUSINESS MODELS









**This was only the beginning.  
We will continue our journey.**

**Stay tuned...**