



ALTEO: Renewable, Circular, Sustainable



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With energy in mind.



alteo

Our vision is to create sustainable business advantage to our clients with the best available energy solutions of today, in order to become the enterprises of tomorrow. Together.

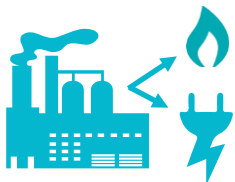


INTRODUCTION OF ALTEO

ALTEO'S ACTIVITIES AT A GLANCE

INTEGRATED ENERGY COMPANY WITH SERVICES ALONG THE WHOLE ENERGY VALUE CHAIN

ENERGY GENERATION



COMBINED HEAT AND
POWER GENERATION



DISTRICT HEAT
PRODUCTION



SOLAR POWER
GENERATION

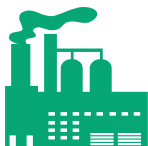


WIND POWER
GENERATION



HYDRO POWER
GENERATION

ENERGY SERVICES



INDUSTRIAL
ENERGY
SUPPLY



UTILITY
SYSTEM O&M



DESIGN &
BUILDING



SOLAR
PROJECTS



PROJECT ENGINEERING
AND MANAGEMENT



BIOGAS POWER
PLANT O&M



WASTE
MANAGEMENT

ENERGY TRADING



POWER
RETAIL



NATURAL GAS
RETAIL



POWER PLANT
MANAGEMENT,
SCHEDULING



ANCILLIARY
SERVICES



POWER
TRADING



ENERGY
STORAGE

E-MOBILITY



E-MOBILITY
SOLUTIONS

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INTRODUCTION OF ALTEO

ALTEO's MAIN FIGURES AT A GLANCE

11 MW

energy storage capacity

60 000 t/a

organic waste traded

636 GWh/a

electricity sold

2010

year of entering Budapest Stock Exchange

130 MW

Own power plant capacity

316 MW

own heat generating capacity

270

employees

587 GWh/a

electricity generated

8210 TJ/a

heat generated

33 Bn HUF

turnover (2020)

270 GWh/a

traded natural gas

193 MW

operated power plant capacity

ALTEO

Story of ALTEO

2008

Establishment of
ALTEO

2010

Listing on the Budapest
Stock Exchange (BÉT)

2016

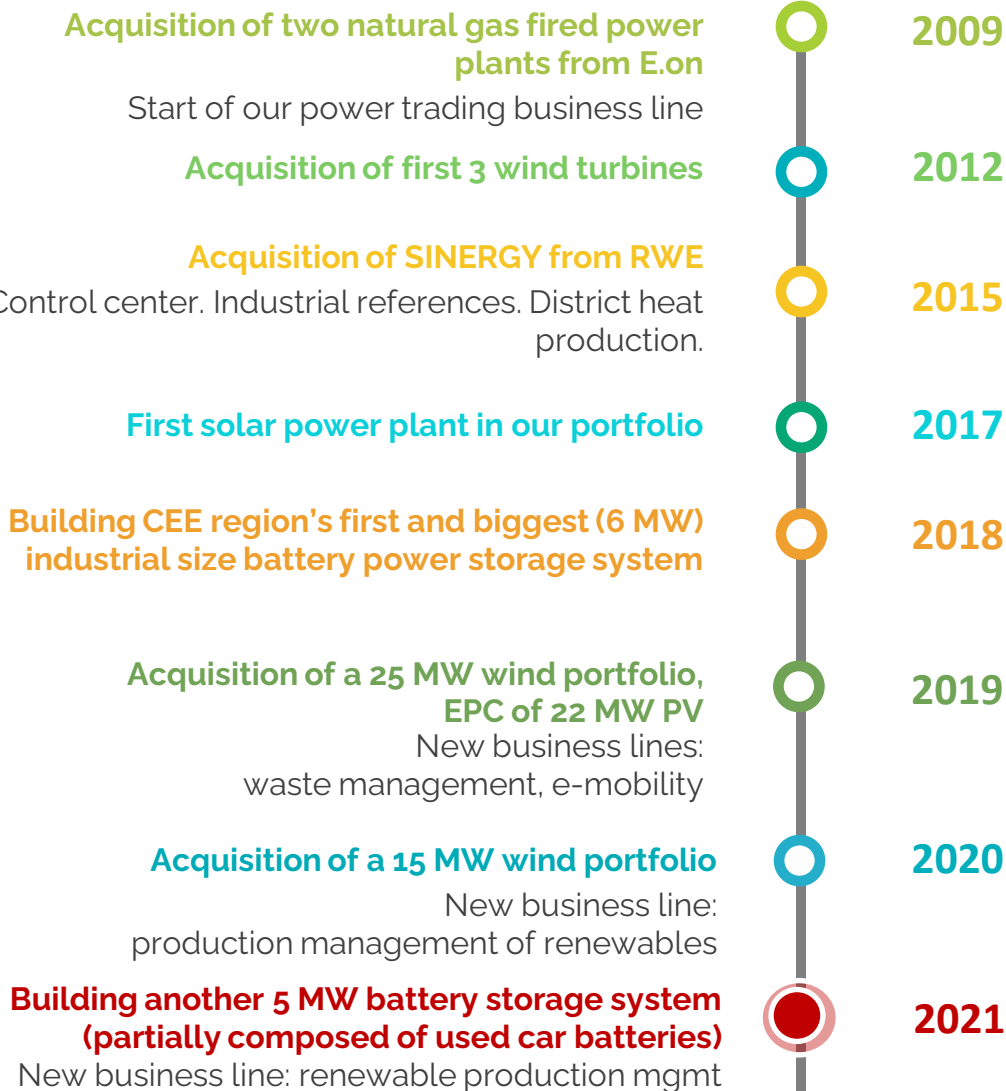
First IPO (BÉT)

2021

BUX membership (BÉT)

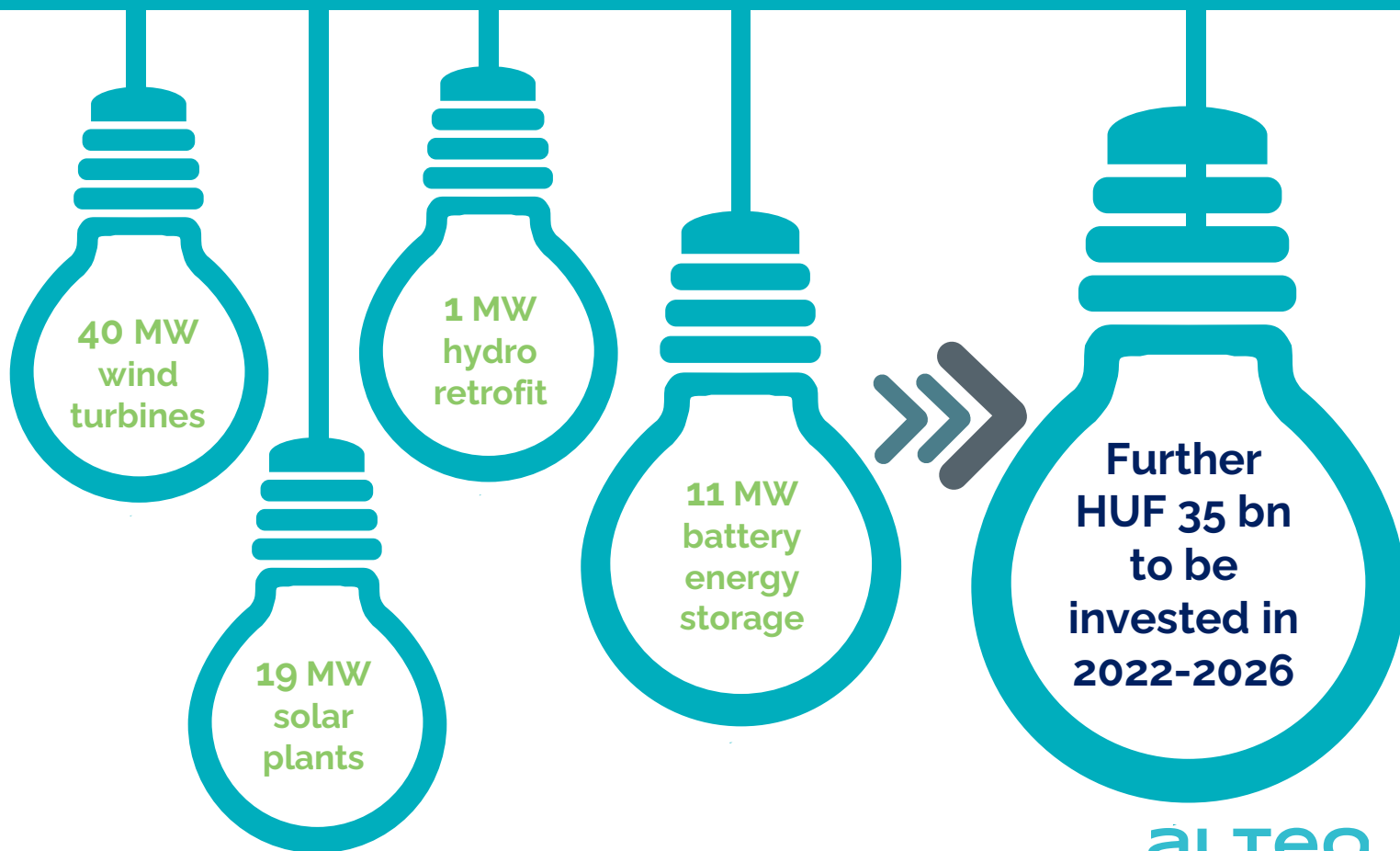
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INTENSE INVESTMENT IN SUSTAINABILITY...



INVESTMENT IN SUSTAINABILITY

ALTEO TO INVEST OVER HUF 25 bn IN SUSTAINABILITY PROJECTS SINCE 2018



INTRODUCTION OF ALTEO

ALTEO OPERATED POWER PLANTS

RENEWABLE BASED 72,4 MW_e



WIND: 47,5 MW_e

Bőny: 25,0 MW_e

Bábolna: 15,0 MW_e

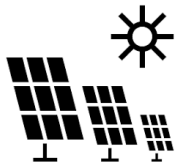
Ács: 2,0 MW_e

Pápakovácsi: 2,0 MW_e

Jánossomorja: 1,8 MW_e

Törökszentmiklós: 1,5 MW_e

SOLAR: 19,2 MW_e



Nagykőrös: 7,0 MW_e

Balatonberény: 6,2 MW_e

Monor: 4,0 MW_e

Domaszék: 2,0 MW_e

BIO: 3,1 MW_e

Nagykőrös (biogas): 2,0 MW_e

Debrecen Cavis1 (landfill): 0,6 MW_e

Debrecen Cavis2 (landfill): 0,5 MW_e



HYDRO: 1,9 MW_e

Felsődobosza: 0,9 MW_e

Gibárt: 1,0 MW_e

NATURAL GAS FIRED 150 MW_e / 781 MW_{th}

DISTRICT HEAT: 42 MW_e / 125 MW_{th}

Budapest (Zugló) heating plant: 18,2 MW_e / 16,5 MW_{th}



Kazincbarcika heating plant : 9,6 MW_e / 58,2 MW_{th}

Tiszaújváros heating plant : 9,4 MW_e / 45,8 MW_{th}

Ózd heating plant : 4,8 MW_e / 4,9 MW_{th}

INDUSTRIAL: 107 MW_e / 655 MW_{th}

Tiszaújváros (TVK Power Plant): 36 MW_e / 297 MW_{th}

Kazincbarcika (BC Power Plant): 47 MW_e / 206 MW_{th}

Kazincbarcika (BC Therm): - MW_e / 90 MW_{th}

Sopron Power Plant : 6 MW_e / 38 MW_{th}

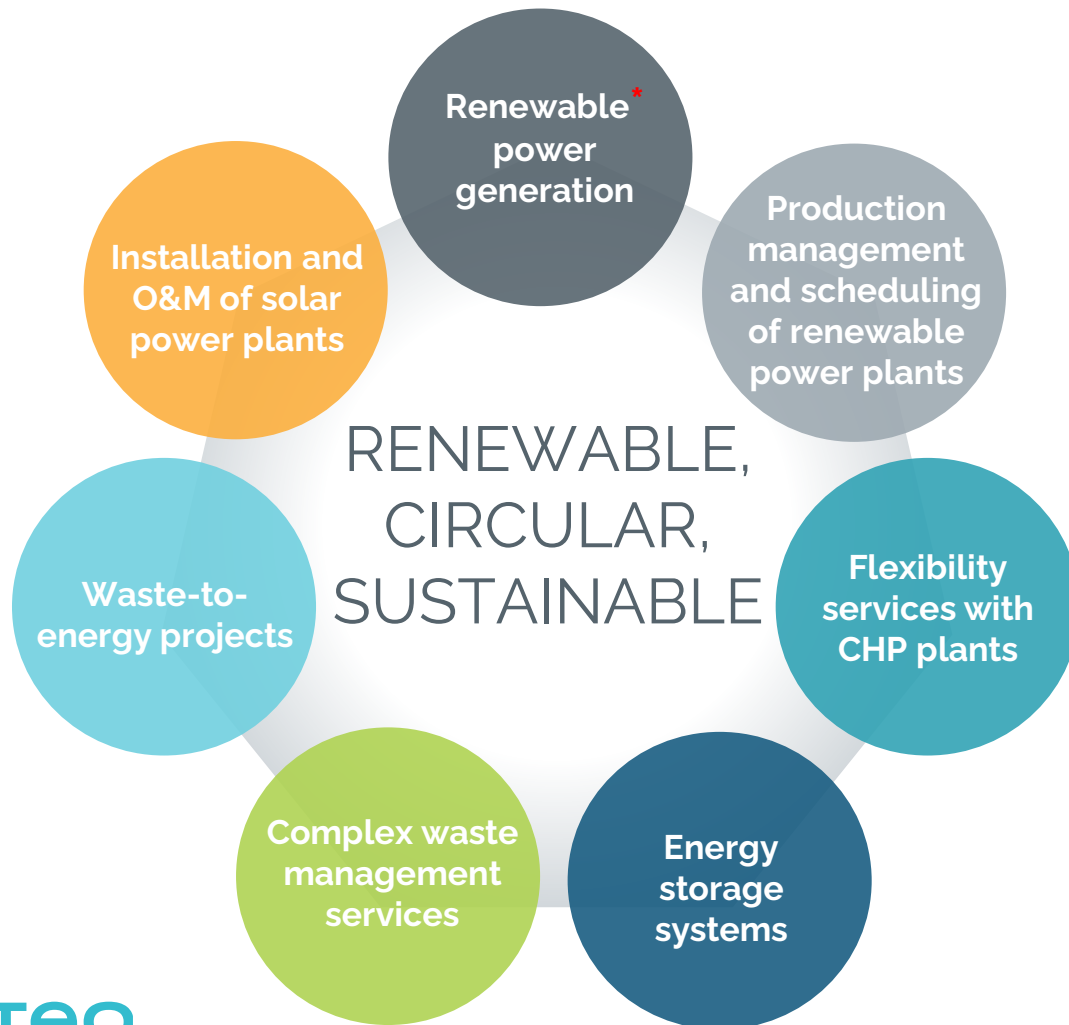
Győr Power Plant : 18 MW_e / 24 MW_{th}



COMMERCIAL: 1 MW_e / 1,3 MW_{th}

Agria Park 1 MW_e / 1,3 MW_{th}

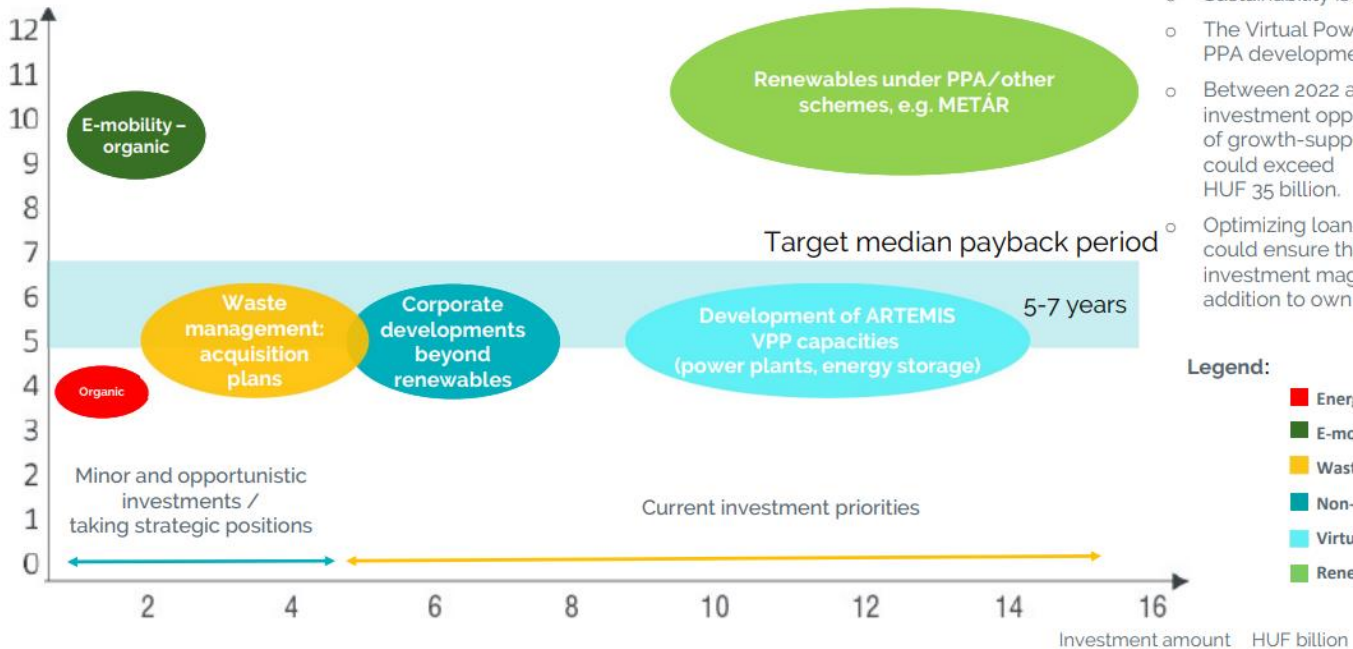
ALTEO's ACTIVITIES: SUSTAINABLE IN MANY ASPECTS



ALTEO's INVESTMENT STRATEGY 2021-26

Investment in sustainability is core to us

Payback period (years)



FUNDAMENTAL INVESTMENT PRINCIPLES:

- Sustainability is a key aspect.
- The Virtual Power Plant and renewable PPA developments are a priority.
- Between 2022 and 2026, depending on investment opportunities, the amount of growth-supporting investments could exceed HUF 35 billion.
- Optimizing loan/bond opportunities could ensure that the targeted investment magnitude be financed in addition to own funds.

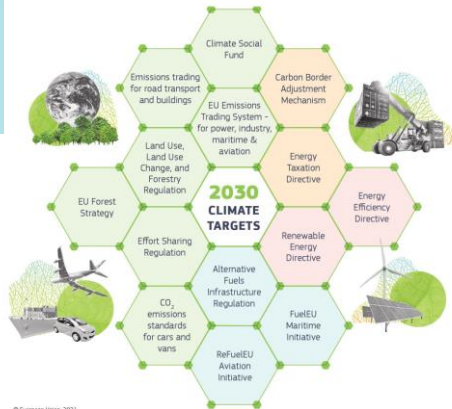
Legend:

- Energy trade
- E-mobility
- Waste management
- Non-renewables industrial PPA
- Virtual Power Plant
- Renewables developments PPA

OBLIGATIONS, CHALLENGES



EU Taxonomy!



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„Clear energy for all Europeans!“ /COM, 2016/



THE BUSINESS MODEL OF BIOGAS PRODUCTION



1. Vegetable and animal origin by-products, wastes and expired warehouse food are delivered to a biogas plant

2. We process and mix the material and keep it warm in a closed process. Goal: gas production.

3. The gas (biogas) is combusted in gas engines that produce heat and electricity.

4. We market the power produced by the biogas plant, we earn money from which the plant is managed. The 2 MW biogas plant in Nagykőrös can secure the energy needs of 4500 households.

5. Residues of the process will also be managed (homogenized) and delivered away by ALTEO. This is a valuable natural fertilizer for the agriculture that helps to avoid the usage of chemical manure.

Bioogas is a source of renewable energy that unites environmental protection with energy generation.

We use renewable energy sources, decrease CO₂ and CH₄ emissions, manage a lot of waste, while we are generating energy and fertilizers.

VALUE CREATION FROM ORGANIC WASTE

The business model of biogas production

THE PROCESS OF CREATING VALUE FROM WASTE

YOU MANEGE
THE WASTE OF
INDUSTRIAL /
COMMERCIAL
SECTORS...

GET HOLD
OF
VALUABLE
ORGANIC
MATE-RIAL

PRODUCE
AND SELL
RNEWABL
E GAS
AND / OR
ELECTRI-
CITY

PRODUC
E GREEN
FERTILIZE
RS

YOU CAN REUSE YOUR PRUDUCED MATERIAL IN YOUR
BIOGAS PLANT

CLIENTS EXPECT COMPLEX SOLUTIONS FROM US



ELECTRICITY SUPPLY FROM THE GRID (TRADING)



INSTALLMENT AND O&M OF EV CHARGER INFRASTRUCTURE



CLIENT'S PREMISES



INSTALLMENT OF SOLAR SYSTEMS



INSTALLMENT AND O&M OF BATTERY ENERGY STORAGE SYSTEMS



TAYLOR-MADE E-MOBILITY CHARGING SOLUTION, OPTIMIZED ENERGY MANAGEMENT

E-MOBILITY = DECENTRALIZATION



E-car (EV) charging is „hand in hand ” with energy generation, storage and energy management

Energy storage

It will be worth to store unconsumed energy and unused energy capacity locally and use it for EV charging



Energy generation

EV fuel can be generated and stored on-site where EV's spend most of the time parking (homes, offices, companies)

Energy management

EV charging can be adjusted to the buildings' actual energy needs. Time to say goodbye to energy demand peaks.

EV charging

Cars park on average 20-22 hours a day. This amount of time is ideal for charging at different locations

ALTEO's SUSTAINABLE OPERATIONS – VISUALIZED



Wind turbines



Solar power plant



Biogas plant



Hydro power plant



Public EV charger



Private EV charger



EV charging app

alteo



Battery electricity storage facility
(from outside...)



...and inside



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THANK YOU

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