

# **FREE ENERGY TRANSFORMATION PROGRAM** EFFECTIVE ENERGY, MONEY AND ENVIRONMENT SAVING



### **ENERGY COST REDUCTION BY 30%-50%**



#### WE KNOW, THAT ...

FOR THE IMPLEMENTATION OF THEIR GOALS, REGARDLESS OF THE TYPE OF ACTIVITY, ENTERPRISES NEED CHEAP AND CLEAN ENERGY.

#### **MEANWHILE:**

- The cheapest is the energy that we do not consume and obtain from the environment at the place of use.
- The cleanest energy carrier is electricity, with the condition that it is obtained without emission.

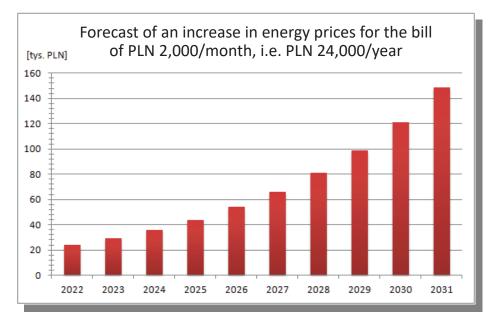






# WE KNOW, THAT ENERGY PRICES RISE







- Energy prices are rising and so is Goldman Sachs analysts predict that they will continue to grow in the coming years.
- The situation on the Balancing Market r flects the situation on the Intraday Market (IDM) of the Polish Power Exchange, which breaks previous price records every month.
- The analysis of the Jagiellonian Institute shows that energy prices will increase at least until 2031.
- Experts from Brokerage Office mBank claim that the average annual increase in energy prices in 2022-31 will range from 20 to 25% y/y.

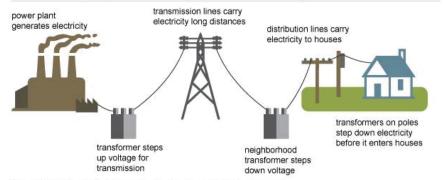
A COMPANY WHICH CURRENTLY PAYS PLN 2,000 MONTHLY FOR ENERGY, OR PLN 24,000/YEAR, IN 2031 WILL PAY AS MUCH AS 148,600 PLN, WHICH MEANS AN INCREASE BY 620%!!!



# WHY IS THIS HAPPENING?



#### Electricity generation, transmission, and distribution



Source: Adapted from National Energy Education Development Project (public domain)

#### **MACROECONOMIC REASONS**

- Increased demand for energy carriers caused by the COVID-19 pandemic,
- Limited supply of fossil energy carriers caused by the war in Ukraine,
- The growing climatic pressure caused, among others, by climate package "Fit for 55".

#### REGULATORY AND LEGAL REQUIREMENTS

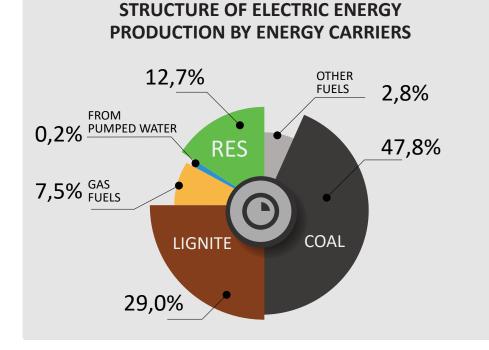
- Outdated power grids and generation sources (mostly 40 years old and older),
- Energy mix based in 87% on fossil fuels,
- Natural energy monopolies based on transmission and distribution.

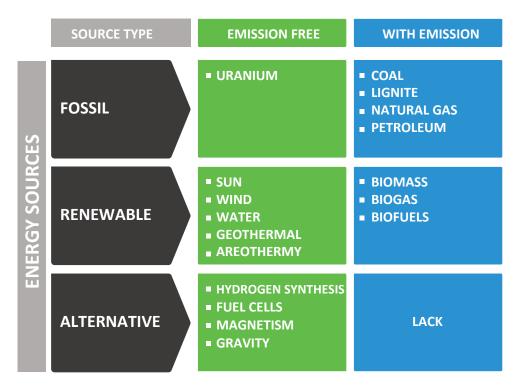


# **METHODS OF ELECTRIC ENERGY CONVERSION**

#### PRINCIPLE OF CONSERVATION OF ENERGY FORMULATED BY ÉMILIE DU CHÂTELET

"IN AN ISOLATED SYSTEM, ENERGY CAN BE NEITHER CREATED OR DESTROYED, ONLY TRANSFORMATIONS OF ONE FORMS OF ENERGY INTO OTHERS CAN OCCUR."





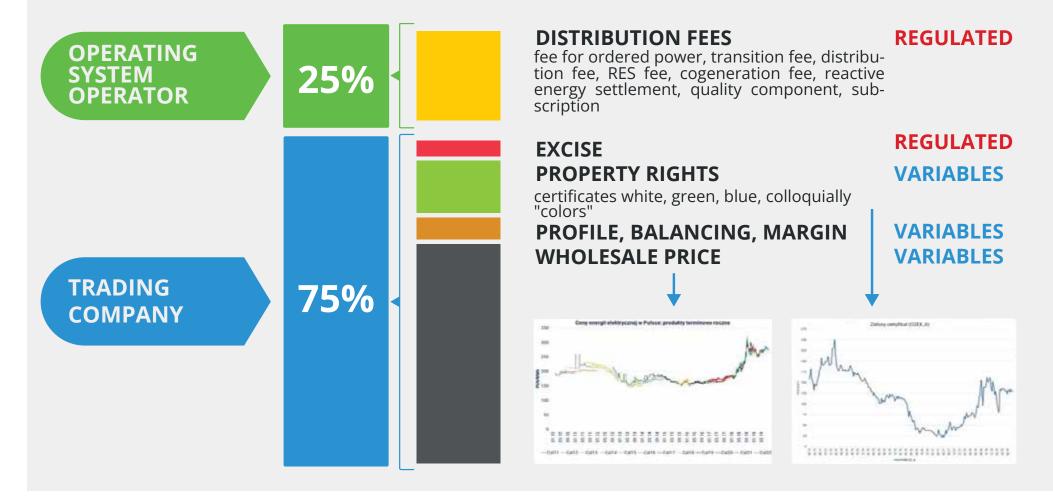
# FOSSIL ENERGY SOURCES CONSTITUTE 87% OF THE POLISH ENERGY MIX.

CONVERSION OF 1 MWH OF ELECTRICITY EMITS APPROX. 770 KG CO<sub>2</sub>, WHICH TRANSLATES TO THE COST OF PURCHASING EMISSION ALLOWANCES, AMOUNT OF APPROX. PLN 380 AND MORE.



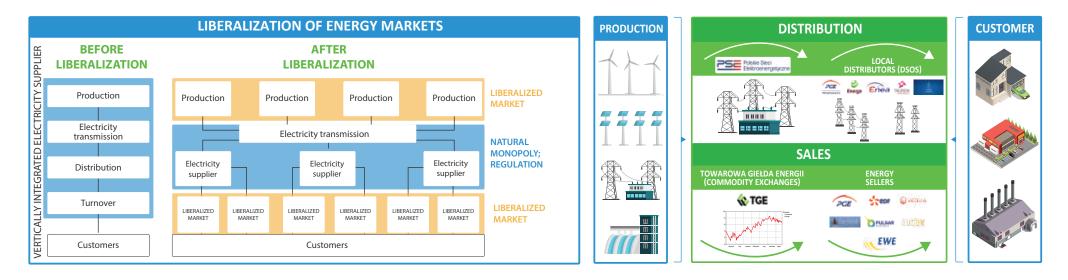
# **ELECTRICITY CHARGES**

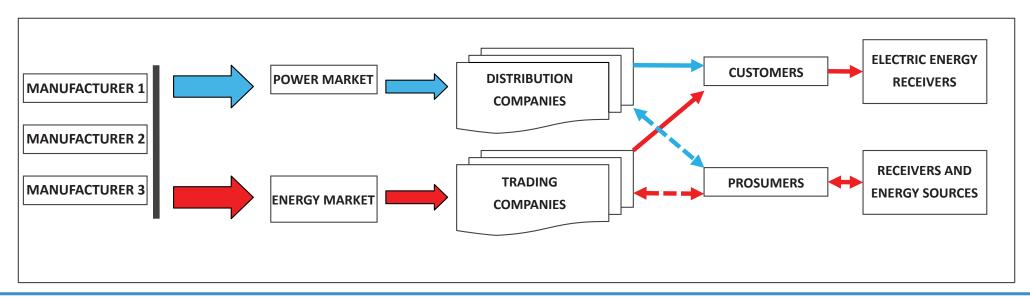
#### **ELECTRICITY PRICE COMPONENTS**





### FROM CONSUMPTION TO PROSUMPTION OF ELECTRIC ENERGY





# WHAT CAN YOU DO TO CHANGE IT?

#### "PASSIVE" SCENARIO

We leave matters of energy supply to their own course, maintaining the status quo of the current situation.

#### "ACTIVE" SCENARIO

We optimize energy consumption by investing in improving energy efficiency and installing renewable energy sources (RES).

#### "TRANSFORMATIONAL" SCENARIO

We are starting to participate in the "Free Energy Transformation" program implemented with the use of alternative energy sources (AES) installations. While maintaining the status quo, as a result, we have to take into account the deterioration of competitiveness, a decrease in margins and, in the long term, loss of profitability.

Optimization of energy consumption is able nto ensure only partial energy independence and requires the involvement of extensive knowledge, competence and capital resources.

Without capital expenditures, you get access to cheaper energy, and additionally you gain energy security, climate neutrality and competitive advantage.



### WHO WE ARE

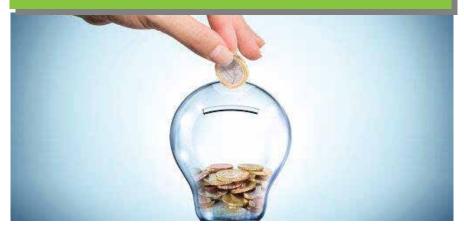
We are the first and so far, the only "Energy Services Company" in Poland (Energy Group) providing comprehensive energy services as defined in Directive 2006/32/EC of the European Parliament and of the Council of April 5, 2006, on energy end-use efficiency and energy services

#### and

"Energy service provider" referred to in Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency.



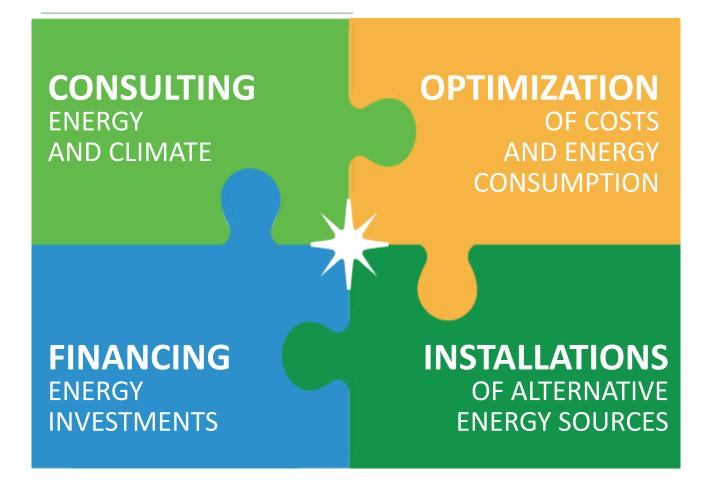
WE - INVEST YOU - SAVE WE EARN TOGETHER





### **WHO WE ARE**

#### WE OFFER COMPREHENSIVE ENERGY SERVICES:





# **"FREE ENERGY TRANSFORMATION" PROGRAM**

# THE "FREE ENERGY TRANSFORMATION" PROGRAM ASSUMPTS:

Construction, financing and maintenance of the Autonomous Power Supply System implemented by means of the Emission-Free BSA Power Plant with an installed capacity of 5 MW or its multiple, operating for 8760 hours a year and generating up to 43 GWh of absolutely clean energy obtained from the environment.





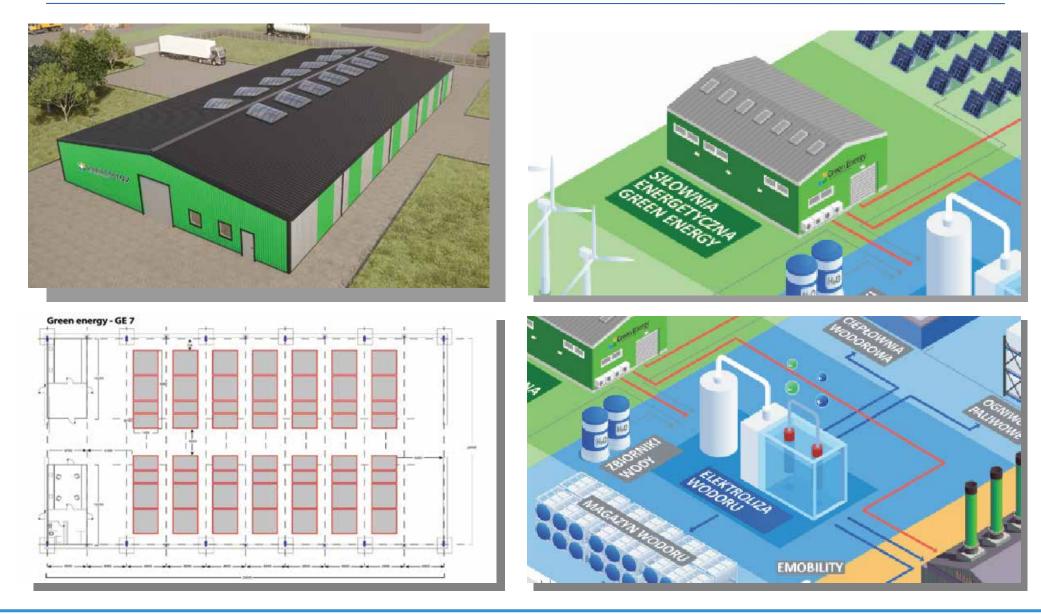
Improvement of energy efficiency through electrification and/or hydrogenation of industrial processes.

Provision of energy and climate consulting services, optimization of energy consumption cost optimization and innovative solutions in the field of alternative energy.

Financing energy investments, Energy Trading and EU Subsidies.



### **ZERO-EMISSION ENERGY POWER PLANT - GREEN ENERGY 7 MW**



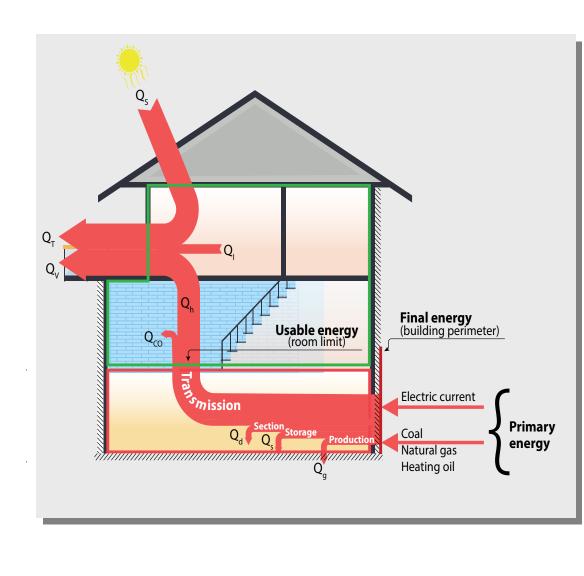


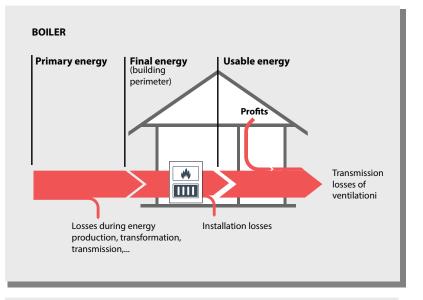
### **ZERO-EMISSION ENERGY POWER PLANT**

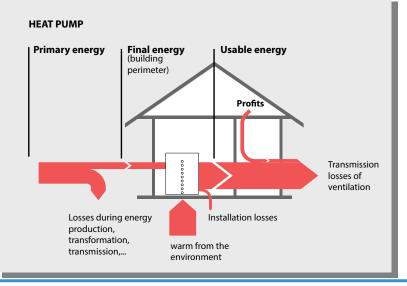




### PRINCIPLE OF OPERATION OF THE AUTONOMOUS SUPPLY SYSTEM

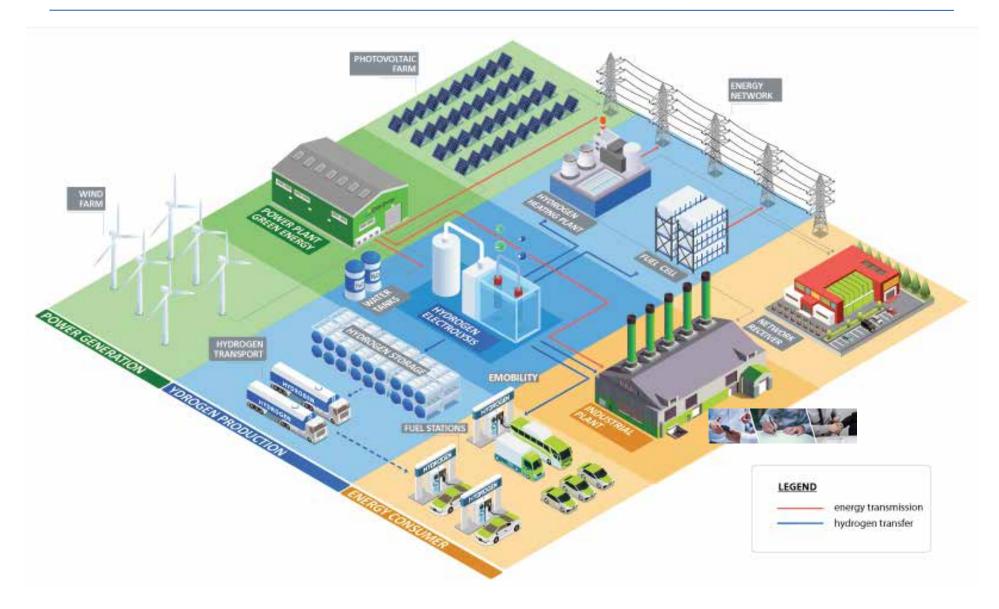








### **HYDROGEN HUB - AUTONOMOUS POWER SYSTEM**



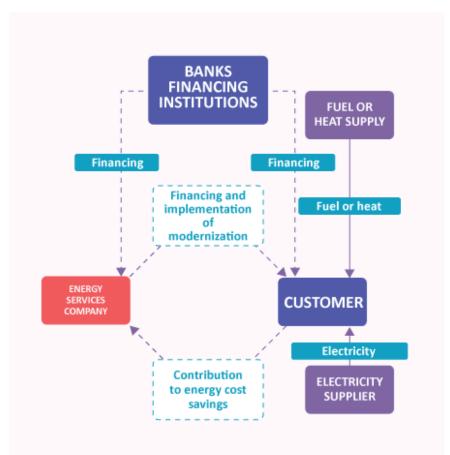


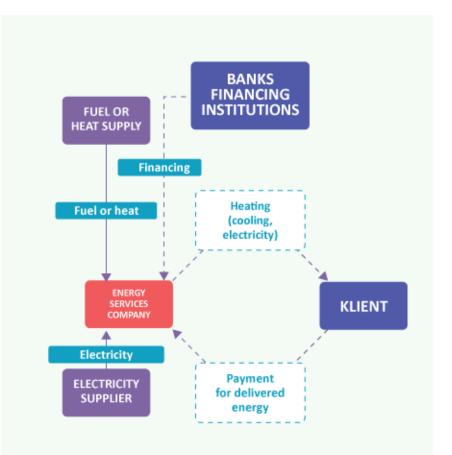
# **FINANCING ENERGY INVESTMENTS**

#### WE ARE IMPLEMENTING INDEPENDENTLY WITHOUT FINANCIAL INVOLVEMENT OF THE CUSTOMER

#### MARKET MODEL OF FINANCING

#### **OUR FINANCING MODEL**







### **EFFECTS OF SAVINGS RESULTING FROM THE INSTALLATION OF Z-EEPP/BSE**

#### CONSUMER VARIANT

TURNOVER FEES		Rate	
Black energy PLN/MWh	PLN	785.00	
Supplier's margin, balancing, PLN/MWh margin	PLN	20.00	
White Certificate PLN/MWh	PLN	2.45	
PLN/MWh excise tax	PLN	5.00	
Green Certificate PLN/MWh	PLN	42.55	
Blue Certificate PLN/MWh	PLN	1.50	
Total PLN/MWh	PLN	856.50	

FIXED DISTRIBUTION FEES	Rate	
Distribution Fee	PLN	12.60
Transition Fee	PLN	0.19
Total PLN/MWh	PLN	12.79

VARIABLE DISTRIBUTION FEES		Rate	
Variable component of the network rate morning peak	PLN	4.21	
Variable component of network rate afternoon peak	PLN	8.78	
Variable component of the network rate for the rest of the day	PLN	10.03	
Quality rate	PLN	9.49	
RES fee	PLN	0.14	
Cogeneration fee	PLN	0.61	
Power fee	PLN	17.44	
Total PLN/MWh	PLN	50.70	

VARIABLE DISTRIBUTION FEES	PLN	50.70
FIXED DISTRIBUTION FEES	PLN	12.79
EXCISE	PLN	5.00
PROPERTY RIGHTS	PLN	46.50
PROFILE, BALANCING, MARGIN	PLN	20.00
WHOLESALE ENERGY PRICE	PLN	785.00
TOTAL PLN/MWh	PLN	919.99

#### SAVING VARIANT

TURNOVER FEES	F	Rate	
Black energy PLN/MWh	PLN	549.50	
Supplier's margin, balancing, PLN/MWh margin	PLN	20.00	
White Certificate PLN/MWh	PLN	-	
PLN/MWh excise tax	PLN	-	
Green Certificate PLN/MWh	PLN	-	
Blue Certificate PLN/MWh	PLN	-	
Total PLN/MWh	PLN	569.50	

FIXED DISTRIBUTION FEES	R	Rate	
Distribution Fee	PLN	12.60	
Transition Fee	PLN	0.19	
Total PLN/MWh	PLN	12.79	

VARIABLE DISTRIBUTION FEES		Rate	
Variable component of the network rate morning peak	PLN	-	
Variable component of network rate afternoon peak	PLN	-	
Variable component of the network rate for the rest of the day	PLN	-	
Quality rate	PLN	-	
RES fee	PLN	-	
Cogeneration fee	PLN	-	
Power fee	PLN	-	
Total PLN/MWh	PLN	-	

VARIABLE DISTRIBUTION FEES	PLN	-
FIXED DISTRIBUTION FEES	PLN	12.79
EXCISE	PLN	-
PROPERTY RIGHTS	PLN	-
PROFILE, BALANCING, MARGIN	PLN	20.00
WHOLESALE ENERGY PRICE	PLN	549.50
TOTAL PLN/MWh	PLN	582.29

37%

SAVING:

0%

#### PROSUMPTION VARIANT

TURNOVER FEES	- 1	Rate	
Black energy PLN/MWh	PLN	549.50	
Supplier's margin, balancing, PLN/MWh margin	PLN	20.00	
White Certificate PLN/MWh	PLN		
PLN/MWh excise tax	PLN	-	
Green Certificate PLN/MWh	PLN		
Blue Certificate PLN/MWh	PLN	-	
Total PLN/MWh	PLN	569.50	

FIXED DISTRIBUTION FEES	R	Rate	
Distribution Fee	PLN	12.60	
Transition Fee	PLN	0.19	
Total PLN/MWh	PLN	12.79	

VARIABLE DISTRIBUTION FEES	Ra	ite
Variable component of the network rate morning peak	PLN	
Variable component of network rate afternoon peak	PLN	
Variable component of the network rate for the rest of the day	PLN	
Quality rate	PLN	
RES fee	PLN	
Cogeneration fee	PLN	
Power fee	PLN	
Total PLN/MWh	PLN	-

SAVING:		55%
TOTAL PLN/MWh	PLN	409.43
REVENUE FROM ENERGY SALES	PLN	172.86
TOTAL PLN/MWh	PLN	582.29
WHOLESALE ENERGY PRICE	PLN	549.50
PROFILE, BALANCING, MARGIN	PLN	20.00
PROPERTY RIGHTS	PLN	
EXCISE	PLN	•
FIXED DISTRIBUTION FEES	PLN	12.79
VARIABLE DISTRIBUTION FEES	PLN	-



SAVING:

# LIST OF REFERENCE SAVINGS

Optimization of electricity consumption costs by replacing existing electricity sources with an Autonomous Power Supply System implemented using the socalled "Emission-free Power Plants" with a guaranteed capacity of 18.0 MW will generate reference savings shown in the table below.

Investor details:							
Location address:							
				Construction of an emission-free power plant with an installed capacity of 24MW			
	ed power [kWp]					24000	
Guaranteed power [kWp]:						18000	
Percentage increase in energy prices [year/year]:						10%	
Average weighted price of EE on TGE November 2022 [PLN/kWh]:						0.785	
Current weighted average EE billing rate trade + distribution [PLN/kWh]:						0.91998	
Offered weighted average billing rate EE trade + distribution [PLN/kW					0.58229		
Lp.	Current No. electricity consumption	Electricity production	Excess electricity	The amount of energy consumed	Value of energy produced	Value of energy resold	TOTAL PROFIT
[year]	[kWh/year]	[kWh/year]	[kWh/year]	[th. PLN]	[th. PLN]	[th. PLN]	[th. PLN]
1	41 948 841	157 680 000	115 731 159	38 592,288	91 815,487	23 459,863	62 052,151
2	41 948 841	157 680 000	115 731 159	42 451,516	100 997,036	25 805,850	68 257,366
3	41 948 841	157 680 000	115 731 159	46 696,668	111 096,740	28 386,435	75 083,103
4	41 948 841	157 680 000	115 731 159	51 366,335	122 206,413	31 225,078	82 591,413
5	41 948 841	157 680 000	115 731 159	56 502,968	134 427,055	34 347,586	90 850,554
6	41 948 841	157 680 000	115 731 159	62 153,265	147 869,760	37 782,344	99 935,610
7	41 948 841	157 680 000	115 731 159	68 368,592	162 656,736	41 560,579	109 929,171
8	41 948 841	157 680 000	115 731 159	75 205,451	178 922,410	45 716,637	120 922,088
9	41 948 841	157 680 000	115 731 159	82 725,996	196 814,651	50 288,300	133 014,296
10	41 948 841	157 680 000	115 731 159	90 998,596	216 496,116	55 317,130	146 315,726
11	41 948 841	157 680 000	115 731 159	100 098,455	238 145,728	60 848,843	160 947,299
12	41 948 841	157 680 000	115 731 159	110 108,301	261 960,300	66 933,728	177 042,029
13	41 948 841	157 680 000	115 731 159	121 119,131	288 156,330	73 627,101	194 746,231
14	41 948 841	157 680 000	115 731 159	133 231,044	316 971,963	80 989,811	214 220,855
15	41 948 841	157 680 000	115 731 159	146 554,148	348 669,160	89 088,792	235 642,940
TOTAL							1 971 550,830



# LIST OF REFERENCE SAVINGS

#### IN ORDER TO JOIN THE "FREE ENERGY TRANSFORMATION" PROGRAM, WE EXPECT:

- Submission of a declaration of will in the form of a "Confidentiality Agreement NDA" and Acceptance of our offer,
- Filling out the Survey Providing data on the demand for energy carriers (electricity, gas, coal, etc.) in the form of current energy audits, invoices and bills documenting energy consumption in the last 12 months,
- Having an area of approx. 1000 m2 / 2,500 m2 to be leased for a period of 10-15 years, intended for the construction of a Zero-Emission Power Plant, with an installed capacity of 1MW / 5MW, or an area with an appropriate multiple of this area in the event of greater energy demand,
- Conclusion of an Energy Supply Agreement with a cost reduction of 30-50%,
- Technical cooperation at the stage of design, construction and connection of the BSE Power Plant to the installation.





# PROGRAM PARTICIPANTS: FREE ENERGY TRANSFORMATION



12 TECHNOLOGY COMPANIES 2 INVESTMENT FUNDS 3 RESEARCH INSTITUTIONS 2 LAW OFFICES

**15 EXPERTS** 



### **OUR WEBSITES:**



wwwbaseid.org www.newsid.org www.tvgreen.eu www.eifund.eu

www.energyid.org www.brokerid.org www.expertid.eu www.photoeu.org



#### **THANK YOU FOR YOUR ATTENTION**





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