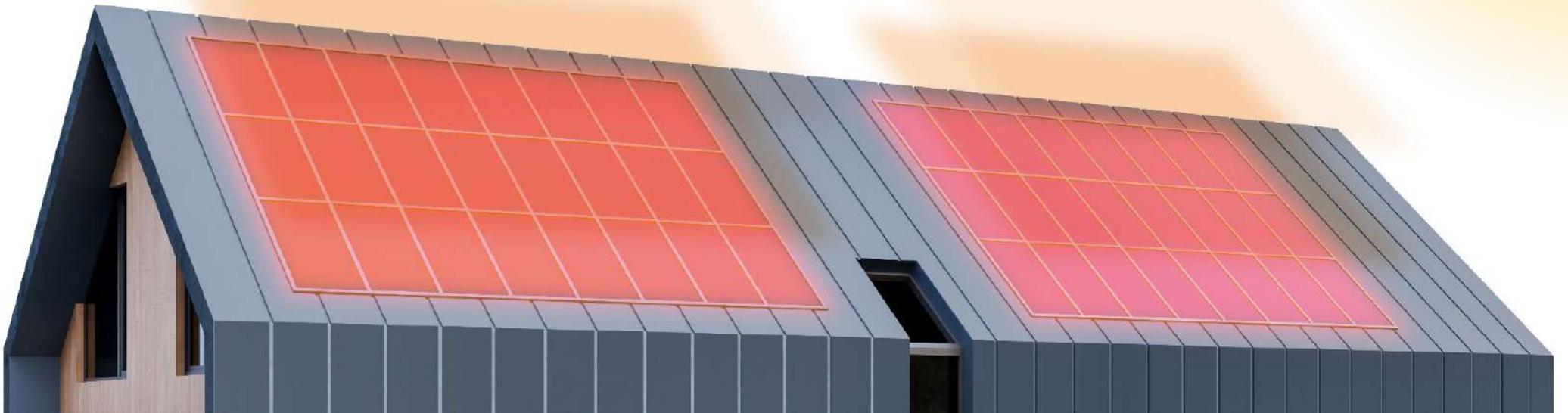


The solar plants problem

**25% ENERGY  
LOST BY  
OVERHEAT**



# ADDITIONAL PROBLEM

**Underachieved**  
**15 000 kWh per year**  
**(\$2-6k by an average 5**  
**kW SPP)**

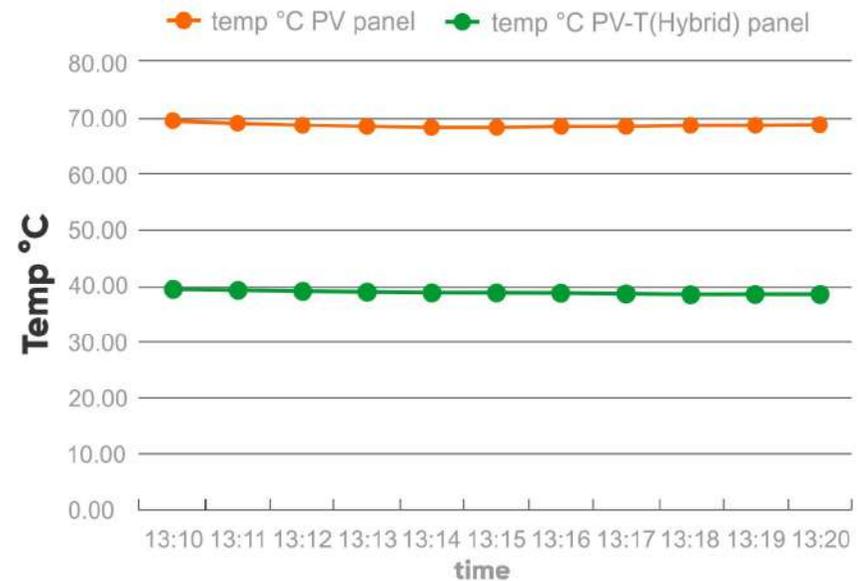
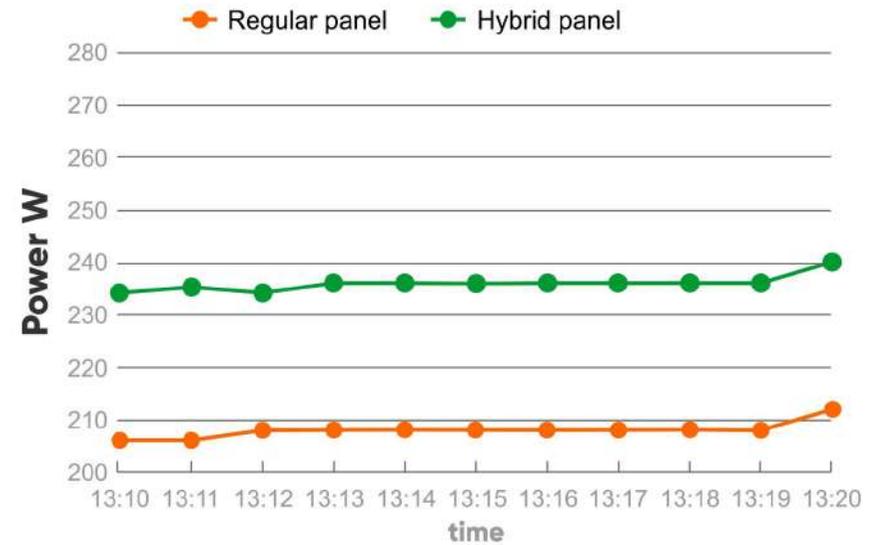
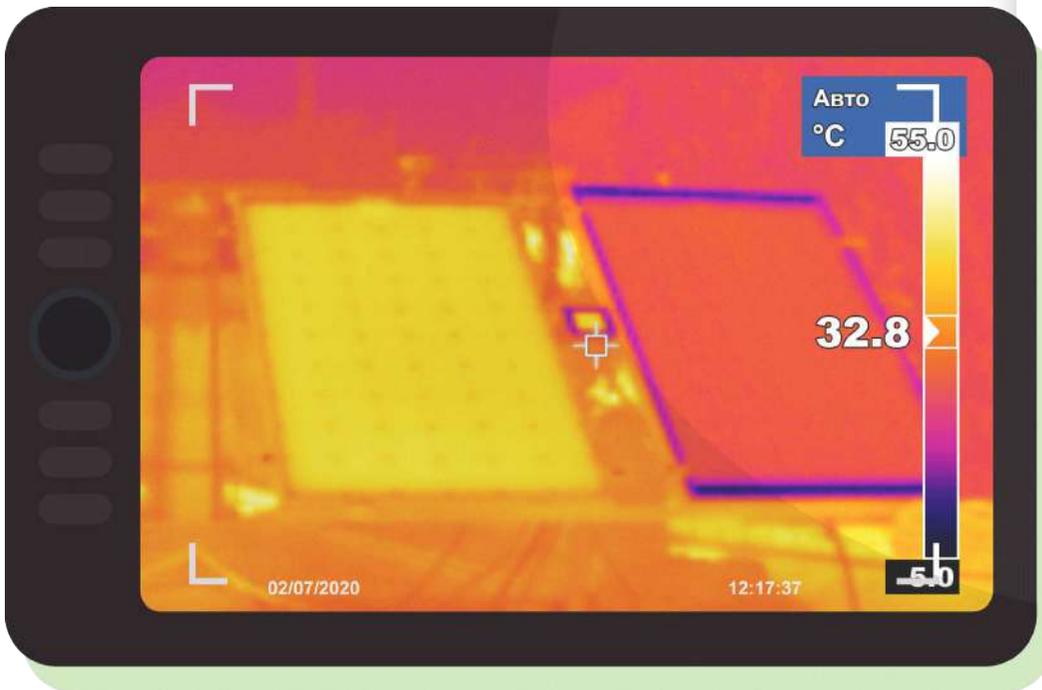


**Not enough space**  
**to use PV and Thermal**  
**solar systems**



# OUR APPROACH

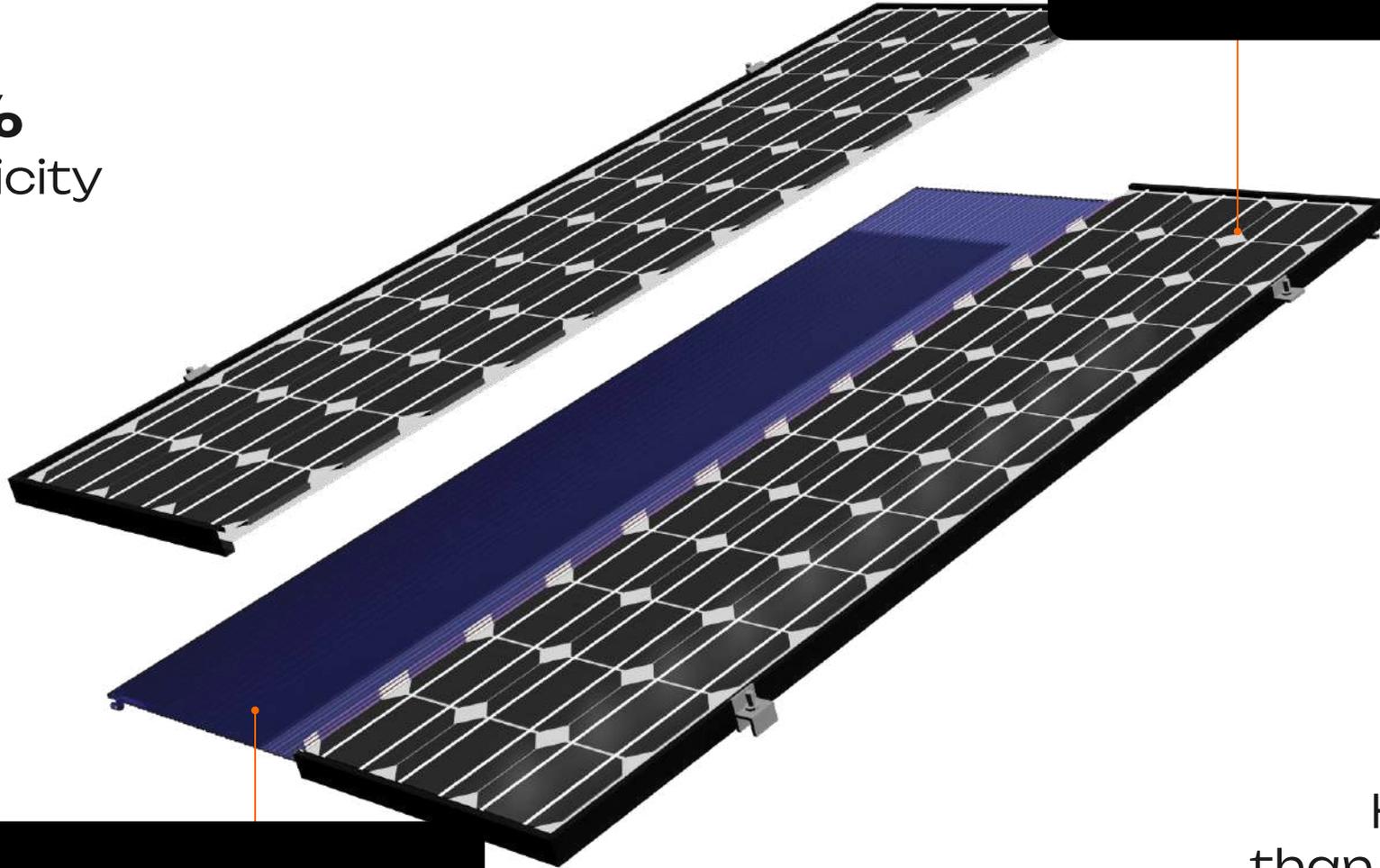
Preventing solar panels from overheating by removing heat and using it to heat water



# OUR PRODUCT



**+10%**  
Electricity



**New or installed PV-panel**

**SolarPlex Upgrade Pack**

TRL-7

**+400%**  
Heat more  
than Electricity

# TARGET MARKET SEGMENTS



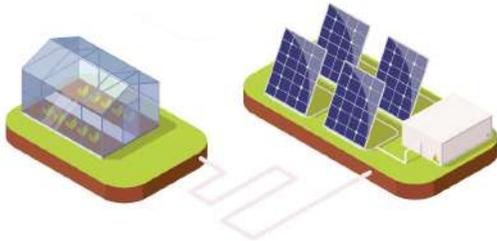
**BeachHead market  
Home Solar Plants**



**Hotels  
and resorts**



**High-rise  
buildings**



**Greenhouses  
and farms**



**Factories, which  
use low-temp heat  
for production**



**Biogas production  
and desalination  
of sea water**

\* Based on the results of project validation

# SALES CHANNELS: B2B/B2B2C



**PV-panel  
Upgrade  
Solution**

**Solar plant  
installers/sellers  
and builders**

**Solar plant  
customer**



**PV-panel  
UPGRADE SERVICE**



 **\$150/M<sup>2</sup>**



**Hybrid(PV-T)  
Panels**



 **\$200/M<sup>2</sup>**



**+PV-panel**



# BeachHead Market

(ANNUAL GROWTH)



# Home Rooftop Solar Plants



**EU**

**\$1.6 Billion**

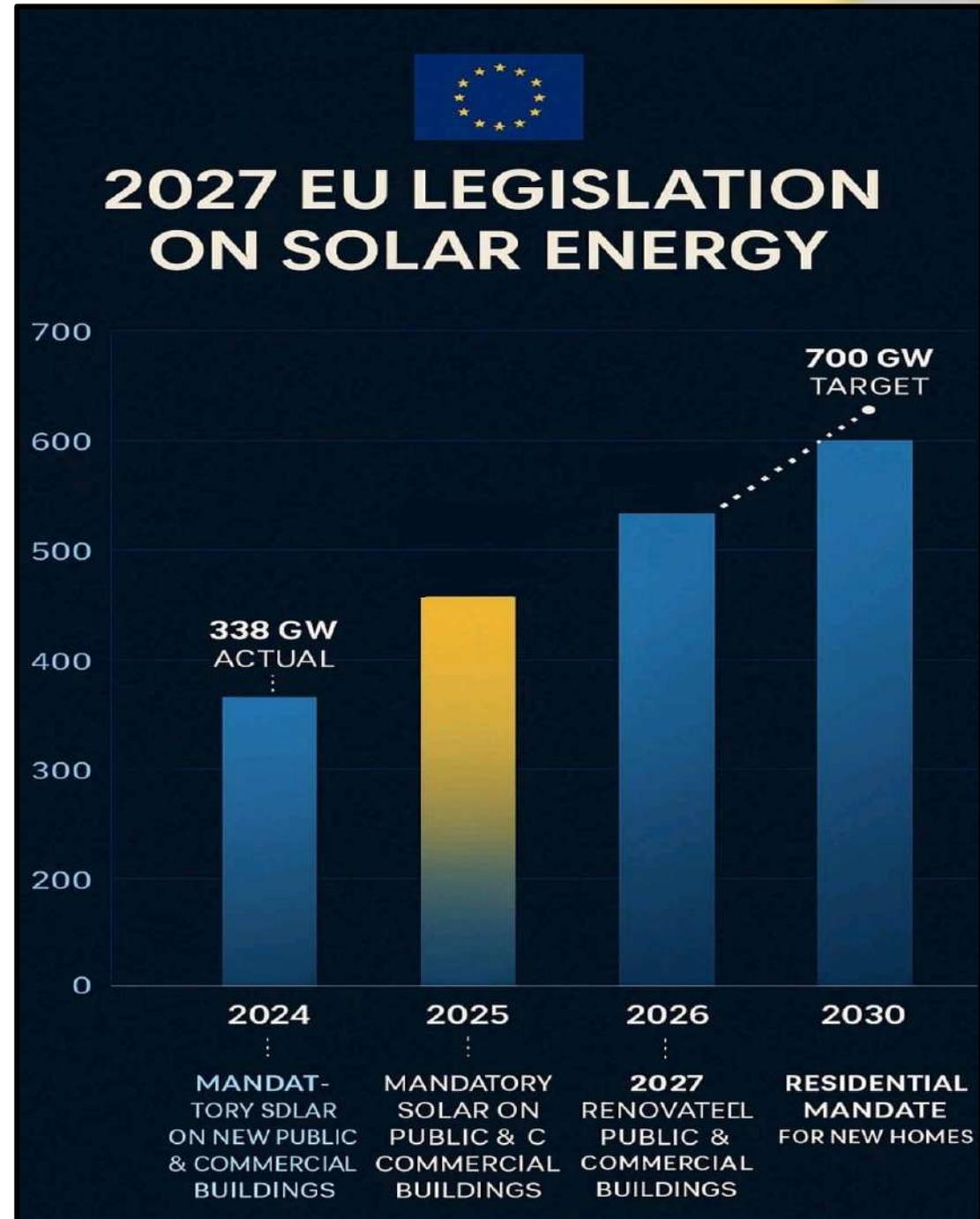
# new EU plan

Regulatory Growth Driver

## EU Solar Boom:

338 → 700GW

by 2030



# Patents



Patent for the invention 2002



Utility model patent 2010



Utility model patent 2020

# TEAM



**Olena Bahirova**

**SCO & Co-founder**

Responsible for science and technology with 20 years of experience in solar energy.



**Oleksii Kurhuzov**

**CTO & Co-founder**

Oversees management, engineering, and automation with 6 years of experience in solar energy.



**Alex Riabtsev**

**BizDev & Communication Partner**

Handles communications and business development with 20 years of expertise in the field.

# OUR GOALS

**Build several production facilities around the world**

**Grow unicorn in 5 years**

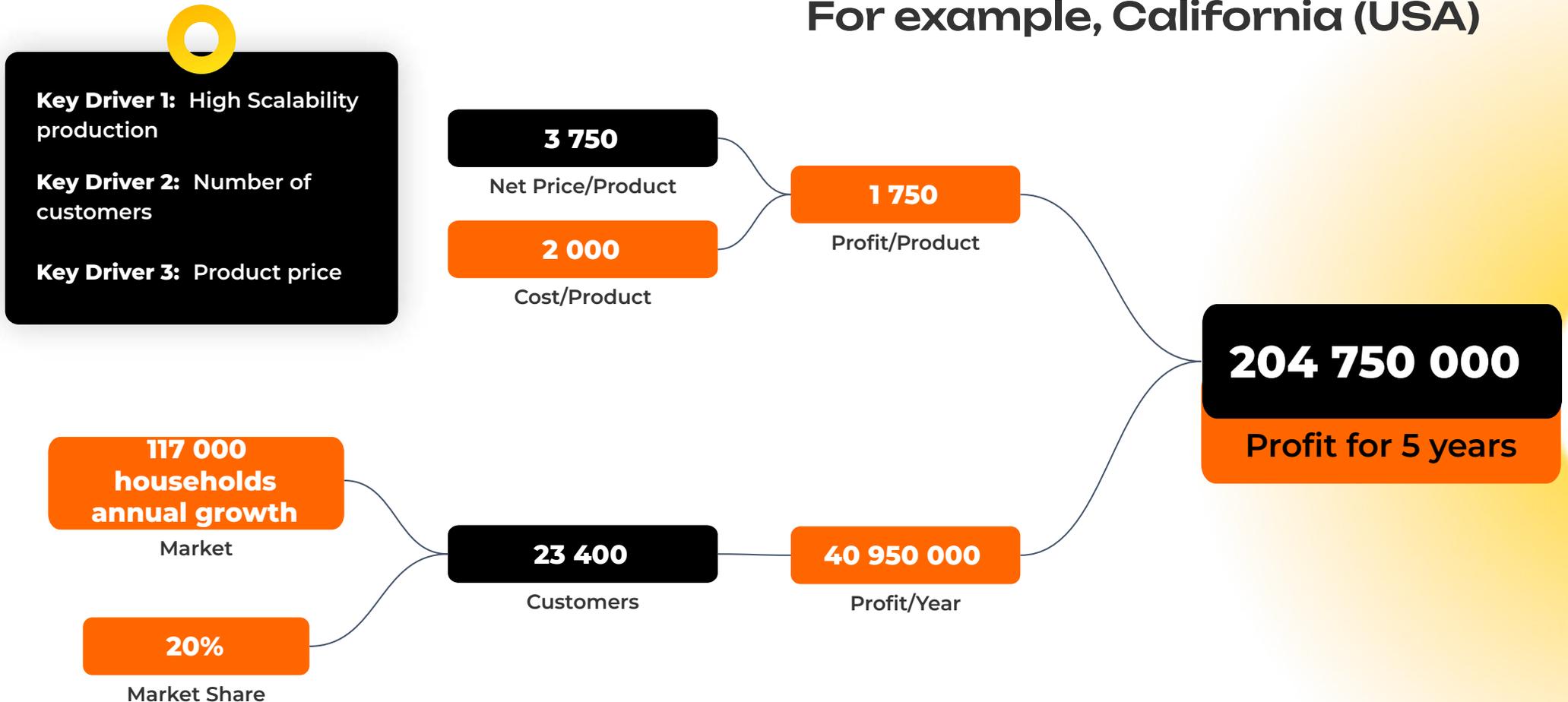
# Revenue & Payback Period Comparison (Romania, 5 kW SPP)

Metric	PV	Solar Plex
 Annual Revenue \$	1320	6732
 Revenue Increase		5X
 Payback Period years	2.5-3.0	1.3-1.5

# FINANCIAL PROJECTIONS

An average house needs a 10pcs \*500W / 5 kW / 25m<sup>2</sup> Solar Plant . Just capturing 20% of the market in a single location yields significant profit.

For example, California (USA)



**Just ONE US state or EU country and can be replicated across many other**

# COMPETITIVE LANDSCAPE

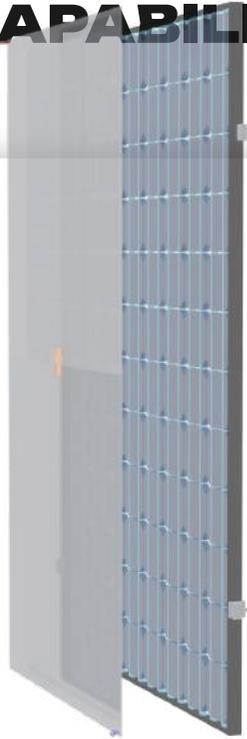
	SolarPlex	Solimpex	DualSun	TripleSolar
Model range pcs				
Electricity power W				
Heat power W				
Dimensions mm				
Weight kg				
Adsorber	<b>Polymer</b>	<b>Copper</b>	<b>n/a</b>	<b>Copper</b>
Dual Face version	<b>YES</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
Landscape/portrait Orientation				
Panel price(425-450 W) \$	<b>350</b>	<b>715</b>	<b>800</b>	<b>1000</b>

# Competitive advantages

	PV-panel	PV-panel+ Thermal panel	Hybrid(PV-T) Solar Plex	Hybrid(PV-T) DualSun
<b>LCOE (Romania) panel only \$/kWh</b>	0,006	0,018	<b>0,007</b>	0,012
<b>Panel price \$</b>	50	800	<b>350</b>	600
<b>Total energy (per module) W</b>	425	1995	<b>1874</b>	1279
<b>Energy Production W/m<sup>2</sup></b>	217	511	<b>960</b>	656

**Operation cost the same as for PV or Thermal systems**

# CUSTOMER CAPABILITIES



 **Electricity**

**AND**

-  **Hot water**
-  **swimming pool heating**

**4-12 months a year  
(depending on region)**



## current heat system

-  **Hot water**
-  **Heating**

**Year round**



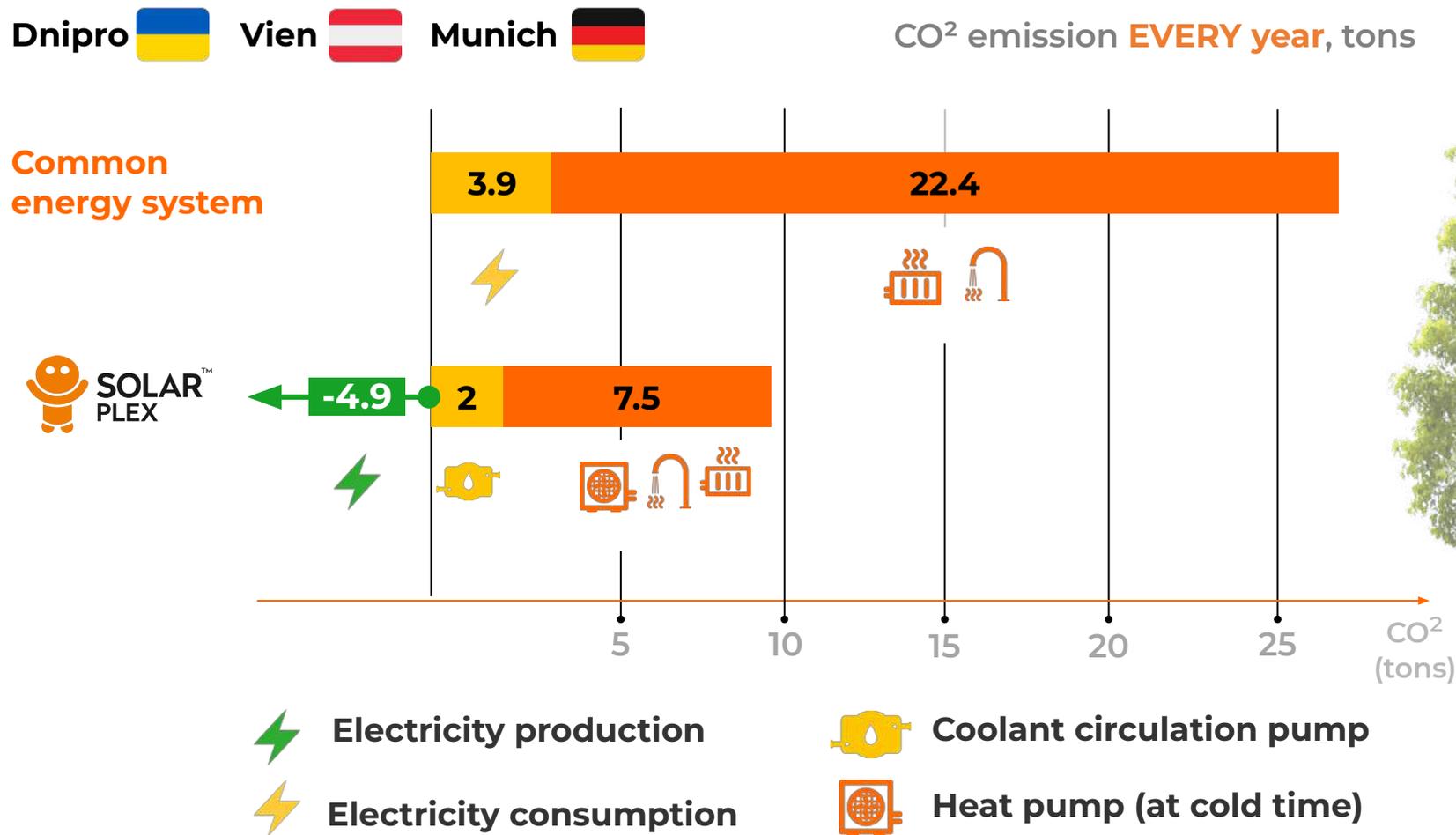
## with heat pump ECO Solution

-  **Hot water**
-  **Heating**
-  **AIR conditioning**

**Year round**



## One Family House CO2 Decrease 25 Tons/Year



Source: [www.destatis.de](http://www.destatis.de)

PV GIS EC PHOTOVOLTAIC GEOGRAPHICAL INFORMATION SYSTEM



each 5kW RTSPP Reduce 25T CO2 in Romania region



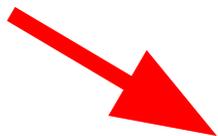
10% + GREEN Electricity  
400% GREEN Thermal



decrease PV-panel degradation 2x times



Local energy production  
-NO transportation loses



**ASK**

Establish company in EU and Run  
manufacture in CEE country

**Rising**  
**€ 350 000**  
**GRANT/non-**  
**refundable**



# CONTACTS



**Olena Bagirova**  
CSO & CoFounder



**Oleksii Kurhuzov**  
CTO & CoFounder

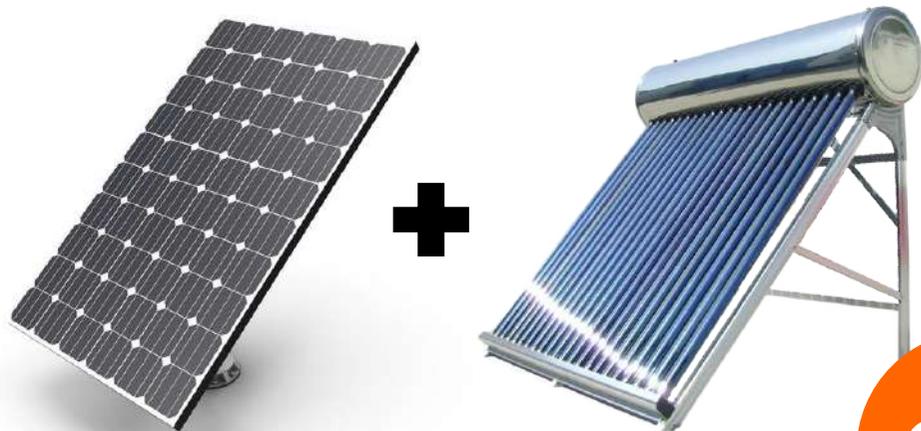


**Alex Riabtsev**  
CCO & Bizdev

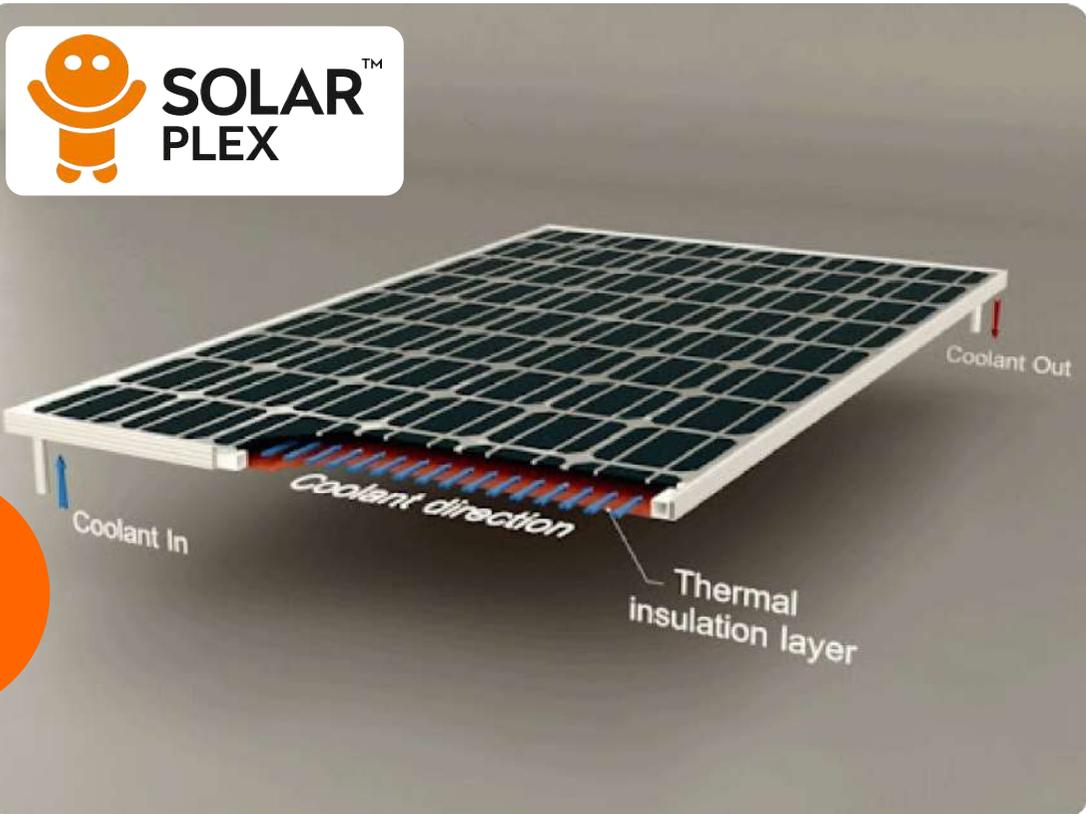


[partners@solarplexlab.com](mailto:partners@solarplexlab.com)

# ADDITIONAL INFORMATION



**OR**



**PV-Panel**  
**Size: 1956 x 992 x 35**  
**Weight: 21,1**  
**Power: 390W**  
**Price: ~\$140**

**Solar Water Heater**  
**Size: 2018 x 1037 x 90**  
**Weight(w/o fluid): 39**  
**Power: 1300W**  
**Price: ~\$375**

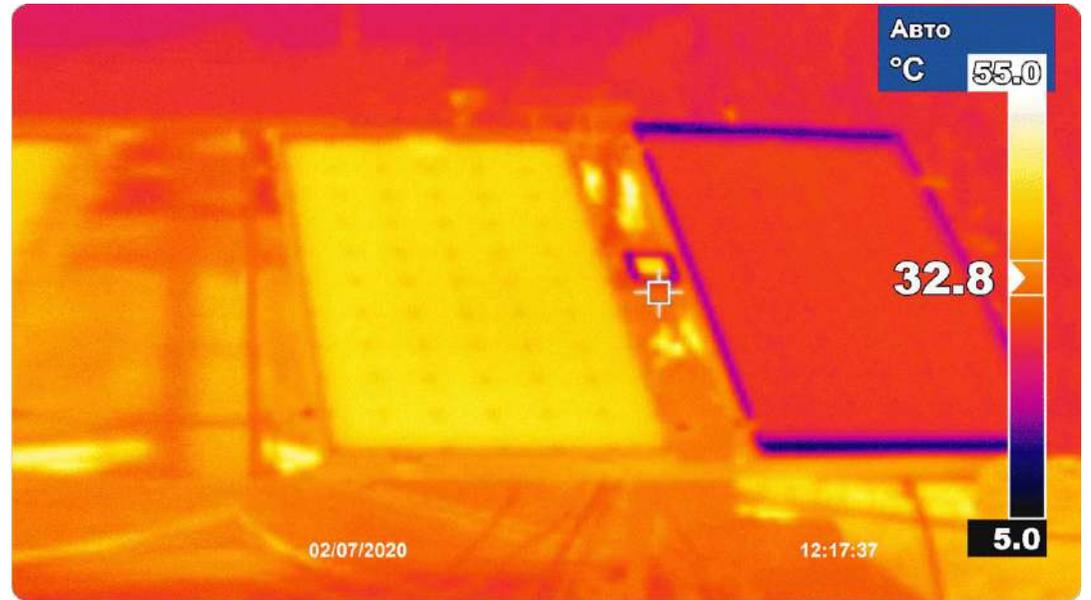
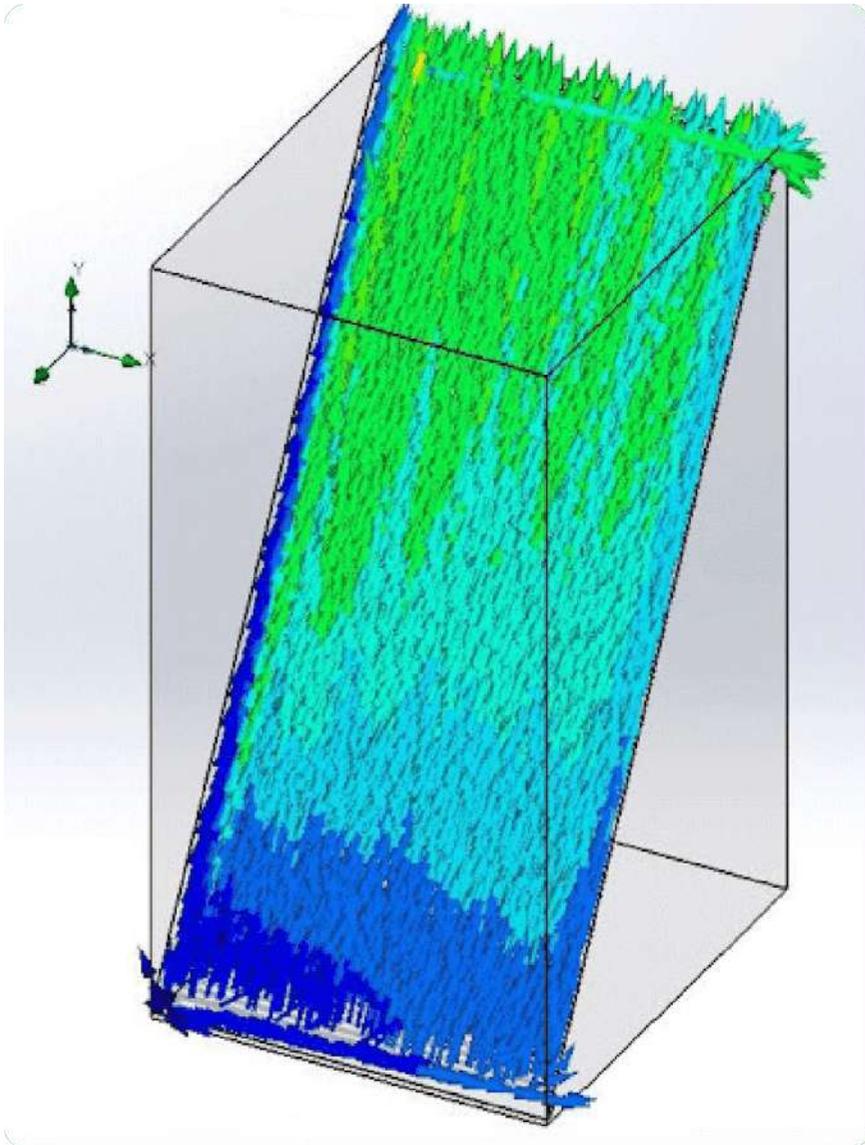
**Space total: 3974 x 1014 x 90**  
**Total Weight: 51**  
**Total Power: 1690W → 419W/m<sup>2</sup>**  
**Total Price: ~\$515 + Double Mounting System**

**HYBRIDised PV-Panel(PV-T)**

**Size: 1956 x 992 x 35**  
**Weight(w/o fluid): 25 → 35**  
**Liquid capacity: 10L → 35**  
**ElectroPower: 390W+10%\* → 1629W → 839 W/m<sup>2</sup>**  
**HeatPower: 1200W → 1629W → 839 W/m<sup>2</sup>**  
**Price: \$430-450**

# Technology

MVP is testing for 4 years in real conditions



**PROBLEM**

**SPP**  
**ANNUALLY**  
**LOSES 7 TW**  
**OF ENERGY**

