

Acumulación de Calor para incrementar la flexibilidad y reducir el uso de gas



GENERA 2023 - 21 Febrero 2023

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OMNIGREEN / bGen™ – key advantages



Hybrid

Connects different
Energy Sources



Modular

From Industrial to
large-scale Power Plants



Lifetime

30+ Years

Flexibility

Decoupling generation
from demand



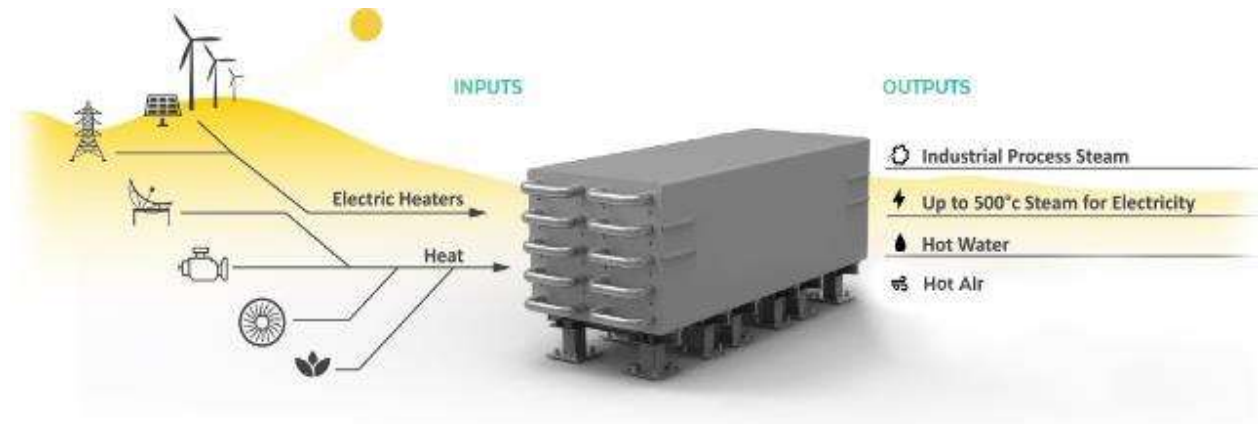
Performance

Unlimited cycles with
minimal daily losses



Clean

Environmentally friendly
materials (crushed rocks)



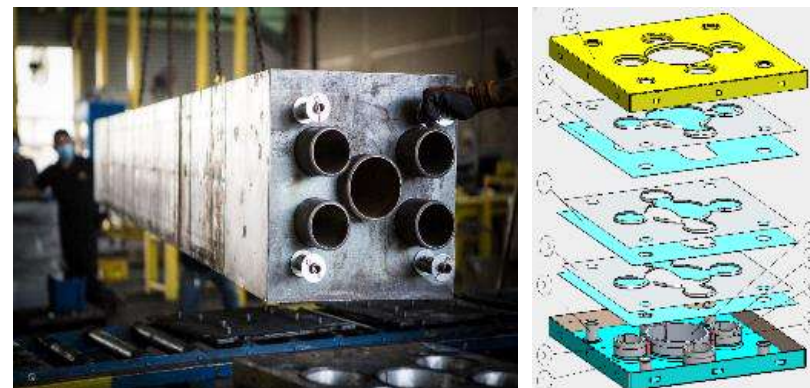
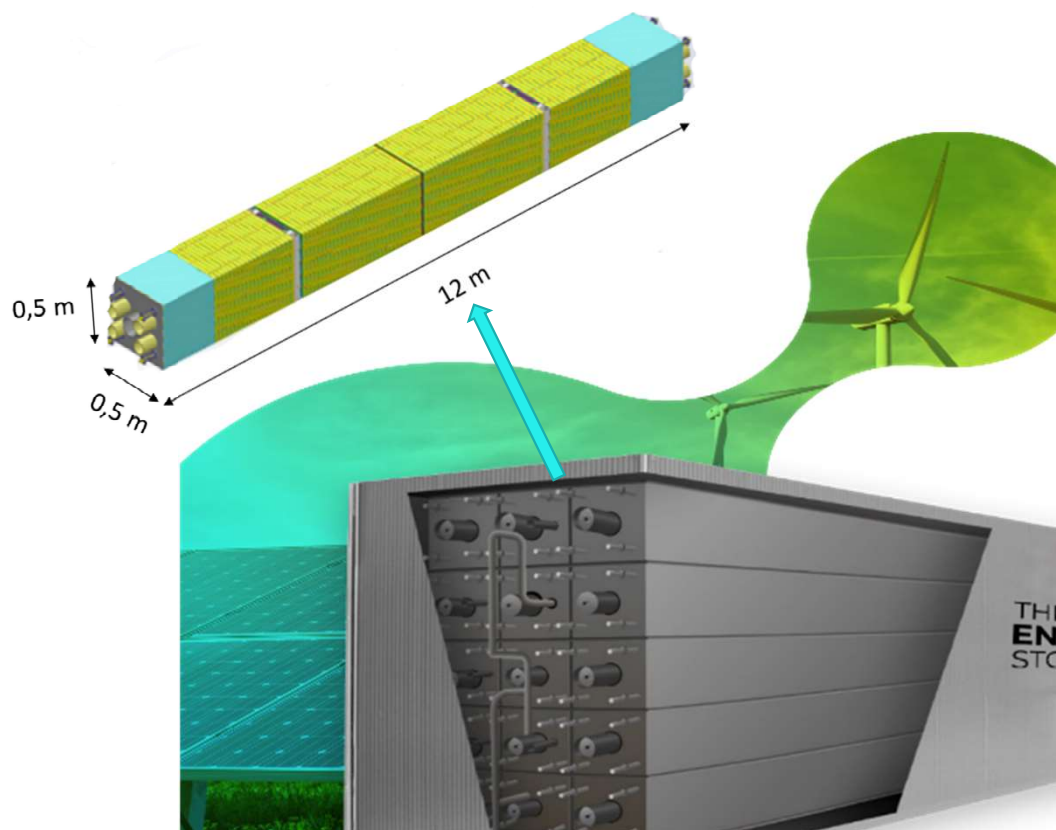
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Basic principle of the Omnigreen / bGen™

The bGen™ is comprised of multiple bCubes:

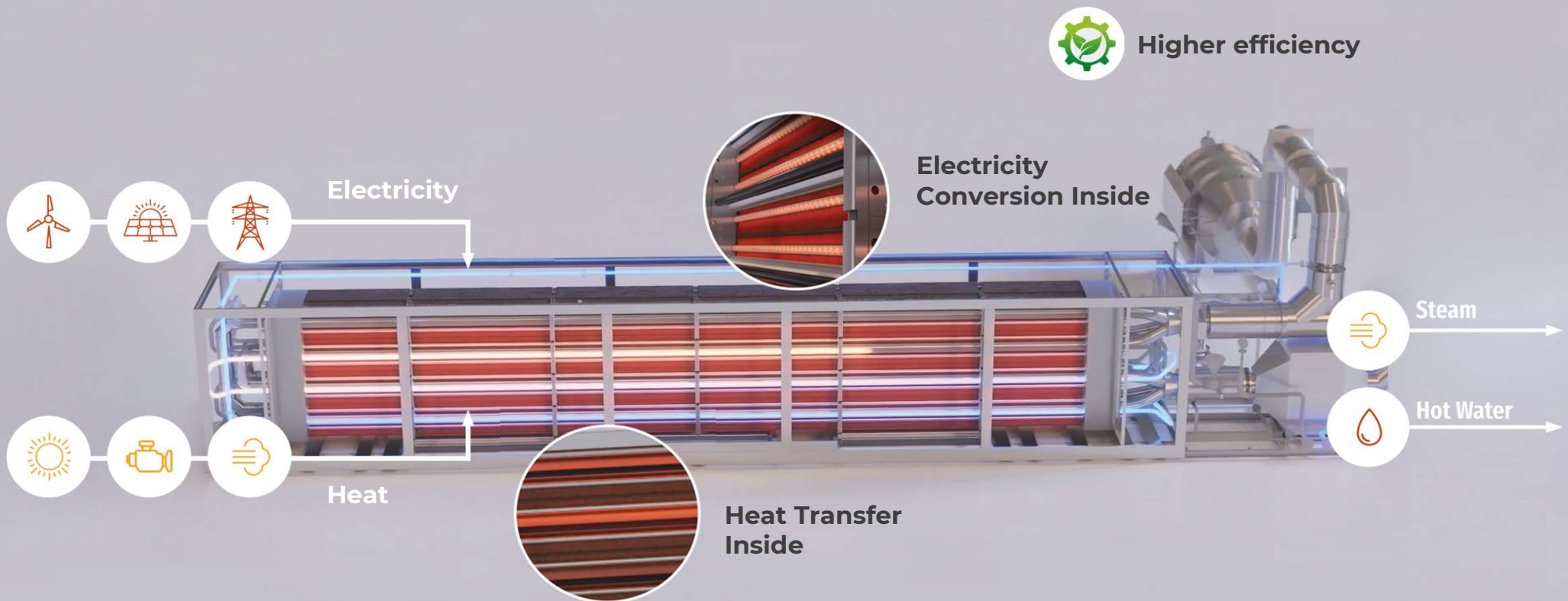


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Omnigreen / bGen

How it works





Omnigreen / bGen
Commercial and Industrial Projects

NYPA IDF

Thermal Storage from Gen-Set
1 MWh, hot water from flue gases



OPERATION

FORTLEV

Biomass to heat storage system
Continuous biomass combustion while
delivering fluctuating output



OPERATION



Omnigreen / bGen
Commercial and Industrial Projects



Thermal Storage based co-generation
Hybrid charging: Exhaust gas and electricity

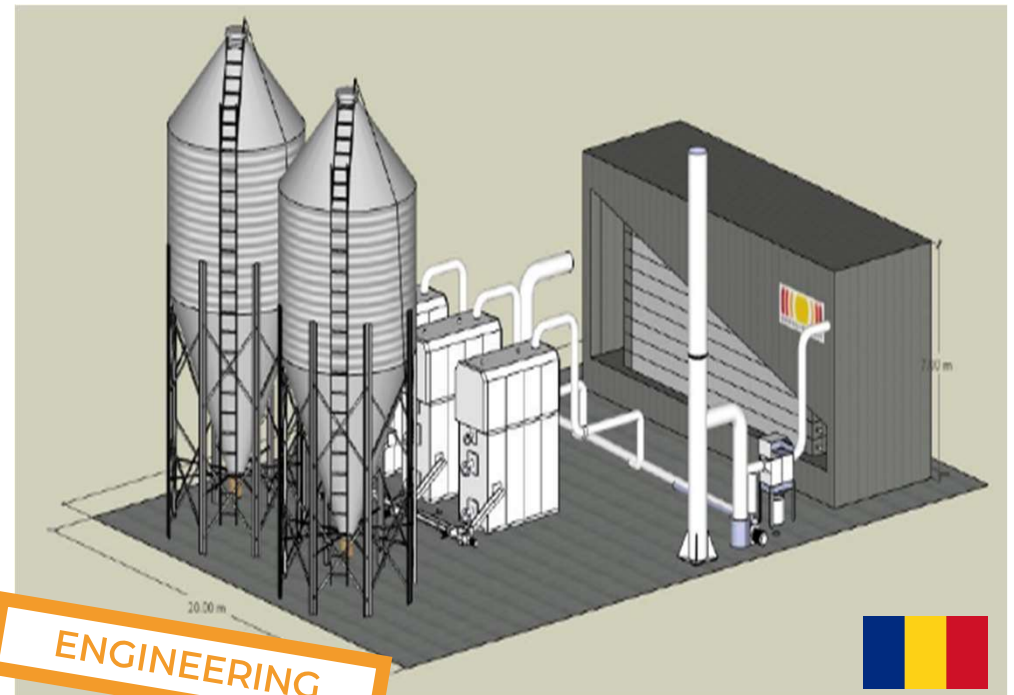


OPERATION



PHILIP MORRIS
INTERNATIONAL

Biomass to steam TES
Continuous biomass combustion while delivering fluctuating output



ENGINEERING



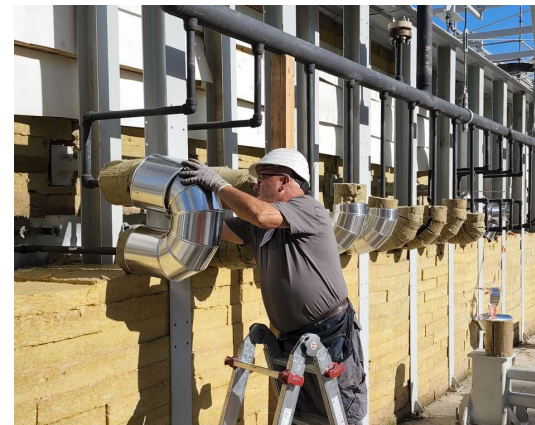
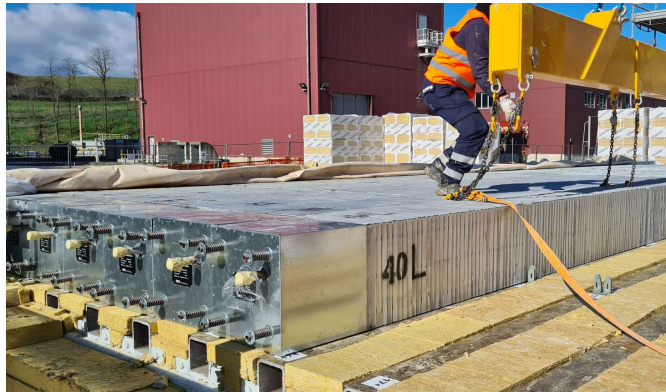
Omnigreen / bGen

Commercial and Industrial Projects



Thermal Storage in Combined Cycle 23 MWh steam charging and discharging

- Energy shifting
- Increase max load & reduce min load
- Reduce ramp-up time





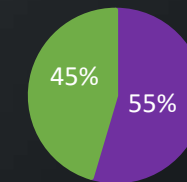
Omnigreen / bGen

Thermal energy storage from electrification to district heating / grid services



HUNGARY 13 MWh

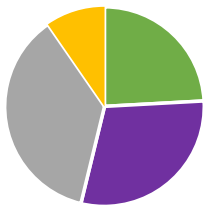
- ✓ TES charged with negative aFRR/FCR balancing energy
- ✓ Grid off peak price



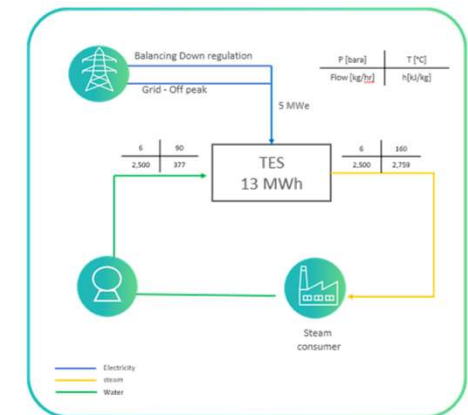
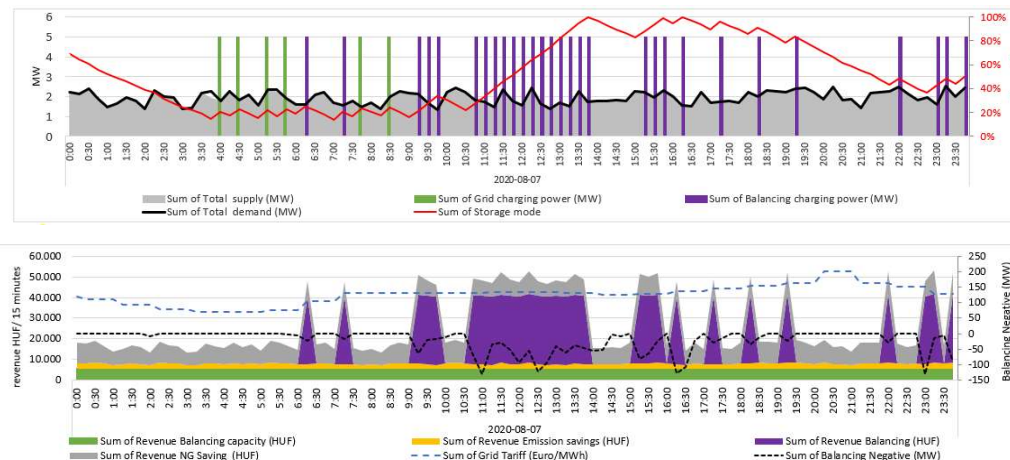
Energy Sources (MWh)

- Balancing
- Grid off peak

Revenue Break down



- Balance capacity payments
- Revenue Balancing services
- Saving on natural gas
- Saving on Emissions



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Contact Information

Muchas Gracias

Dr. José Luis Morán

Director Integrated Energy Solutions

Pº de la Castellana 140, 15ª-A, 28046 Madrid, Spain

Phone: +34 606 344 994 | +49 15 15 90 87 236

joseluis@greenenesys.com

Julia Reig

Senior Process Engineer

Pº de la Castellana 140, 15ª-A, 28046 Madrid, Spain

Phone: +34 613 003 608

julia@greenenesys.com