

REENERGY 1.618

TECHNOLOGIES & INNOVATIVE SOLUTIONS FOR “GREEN ENERGY”



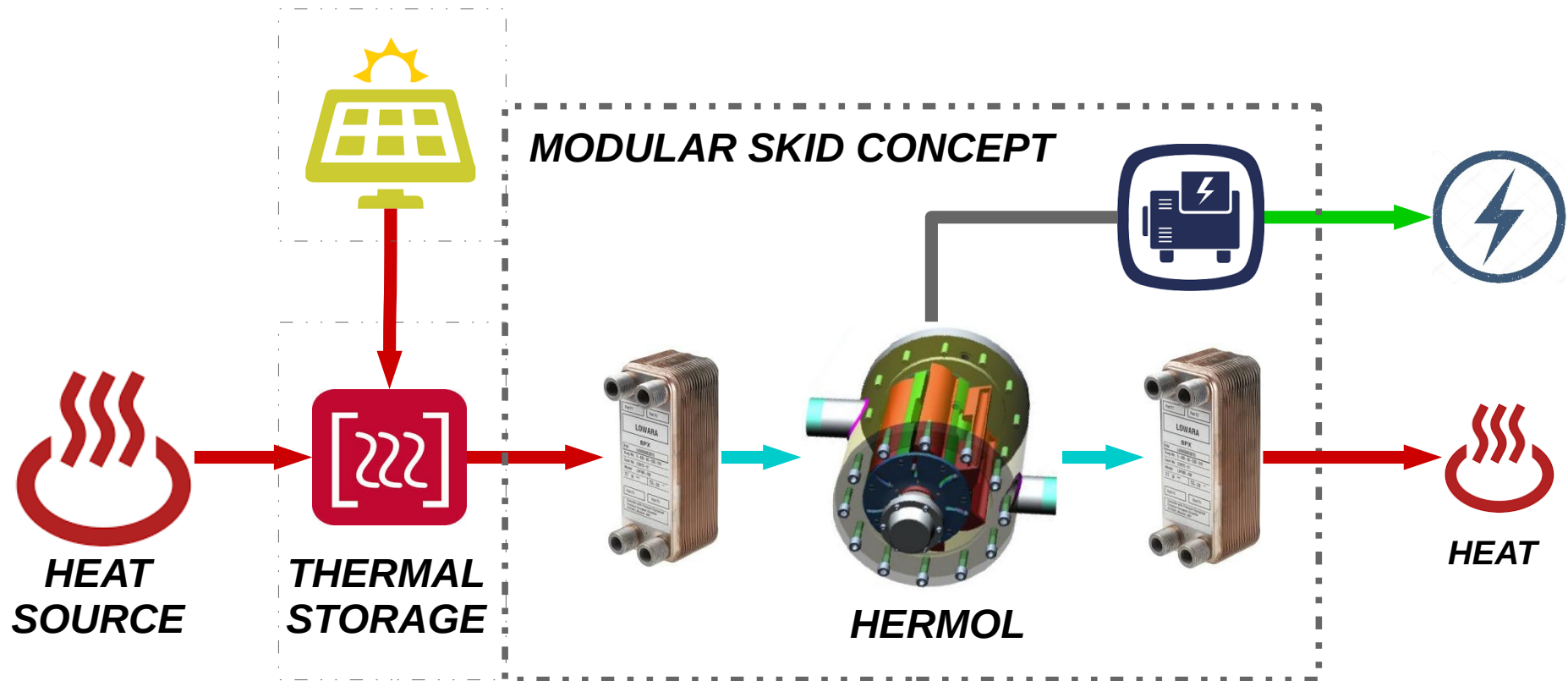
RENERGY 1.618 s.r.l.

- ✓ ***Listed in the Italian Innovative Startup Register***
- ✓ ***Patent DE 10 2017 002 286 A1***
- ✓ ***From Thermal Energy to Mechanical Energy***
- ✓ ***Highly Innovative Generation of Green Energy***
- ✓ ***Energy Saving & Circular Economy Solutions***

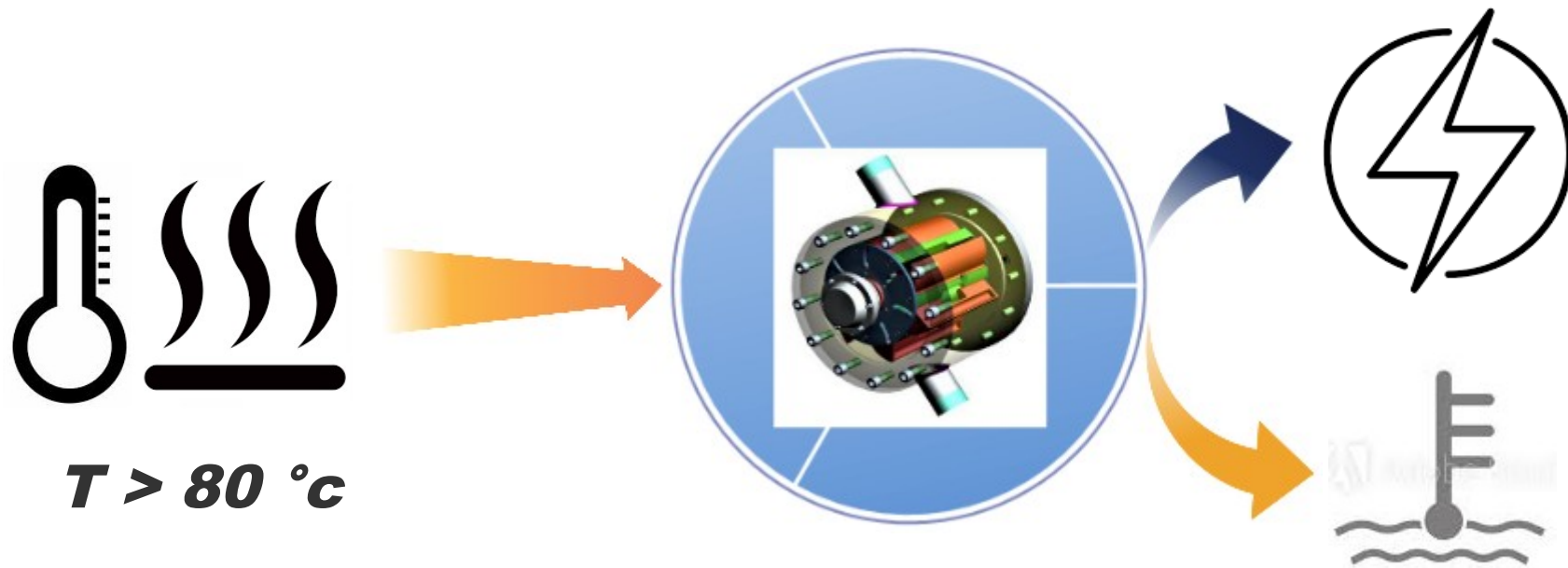
TEAM

- ✓ **Ing. Klaus Herrmann:** Piping and Instrumentation designer for nuclear plants, chemical facility manager, energy facilities development manager, researcher, patent co-developer “HERMOL - SOLARIA”
- ✓ **Ing. Manlio Molinari:** Supervisor & project manager for nuclear plants, researcher for special materials to be used for combustion optimization and thermal insulation, founder of a hi-tech company for metal coatings, patent co-developer “HERMOL - SOLARIA”
- ✓ **Ing. Federico van der Velden:** Mechanical Engineer Master Degree; marketing & system Management (IBM), technical manager for HVAC & cogeneration control facilities; developer of control, supervision, measuring and energy monitoring systems; industrial energy management expert (ICMQ)
- ✓ **Dott. Gianluca Pelizzoni:** Law Master Degree, insurance agents network HR Manager, Head of Anti-Fraud Unit of an Italian insurance company, certified neuro linguistic programming (NPL) Coach, study center manager (Unione Italiana Agenti RAS – Allianz Group)
- ✓ **Dott. Luca Pacifico:** Economy Master Degree, business & marketing Analyst, Risk Manager and Head of Credit in the Egyptian subsidiary of Intesa Sanpaolo Bank

“SOLARIA” SYSTEM



HERMOL ***FROM HEAT TO ELECTRICITY*** ***(patented)***



WORKS WITH ANY HEAT SOURCE



GEO THERMAL

HEATING PUMPS



SOLAR

THERMODYNAMIC CONCENTRATOR



INDUSTRY

ENERGY RECOVERY FROM
STEAM – HOT WATER – HOT AIR & GASES



BIO GAS

HIGH EFFICIENCY



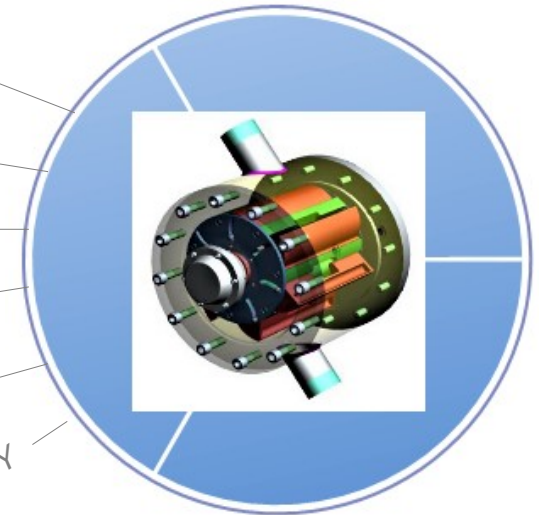
AIR

ISOTHERMAL (CONSTANT VOLUME)



COGENERATION

+30% MORE MECHANICAL EFFICIENCY



HERMOL

CONVENIENT



Service Continuity: 8.200 h per year



Efficiency > 20%



25 Years Lifetime



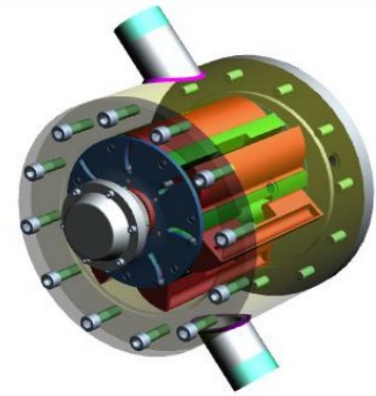
Less Replacement Parts



Self-Lubricating



IoT – industry 4.0



HERMOL
800 ... 1100 rpm

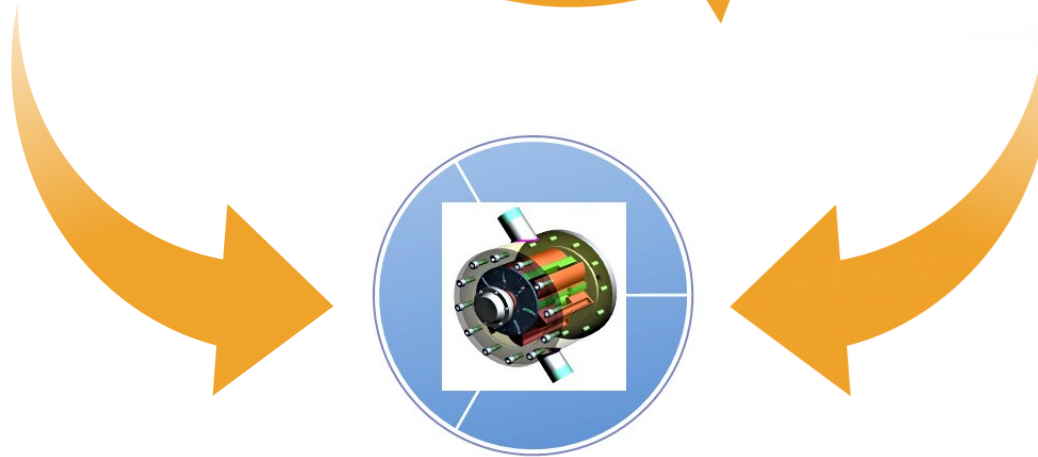
THERMAL STORAGE TANK

(patent pending)

Any HEAT Source: $T > 80\text{ }^{\circ}\text{C}$

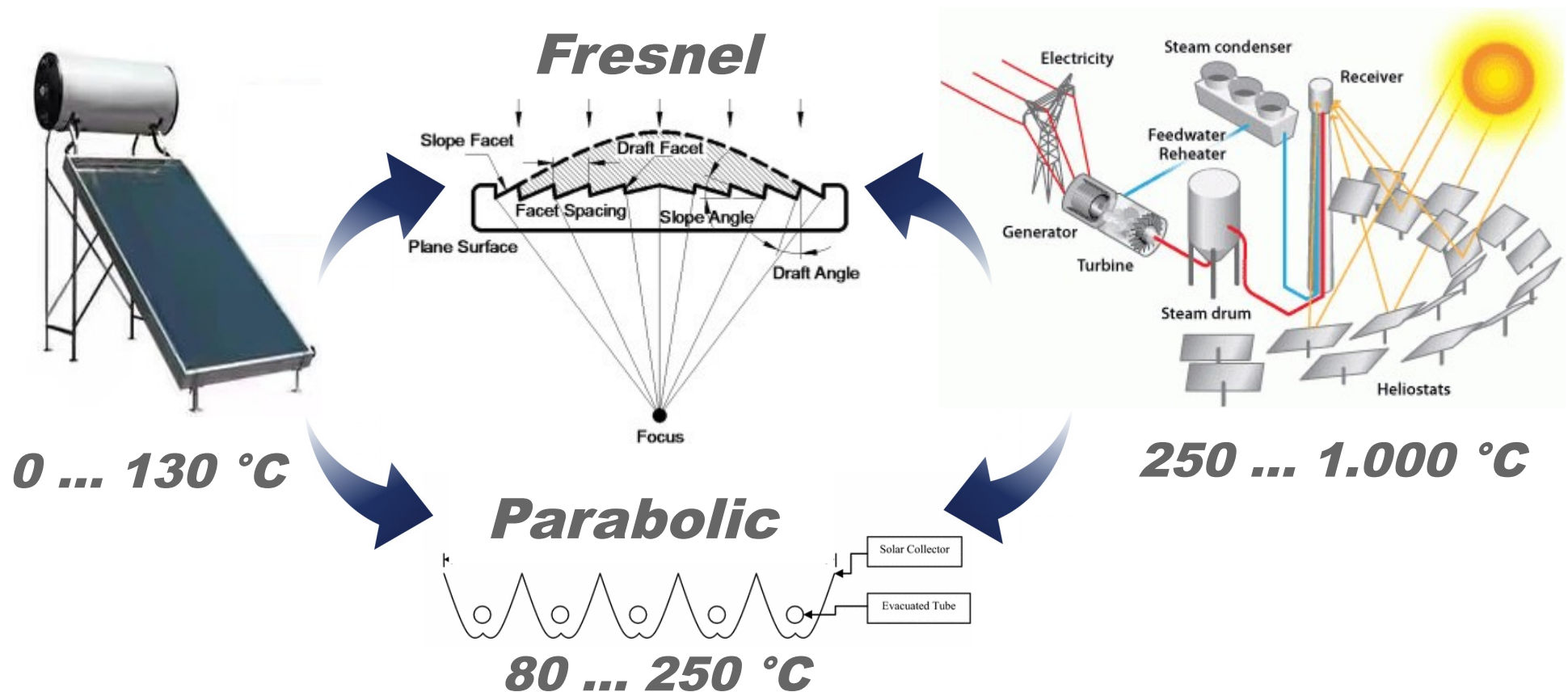


Innovative Technology: keeps temperature up to 20 Hours



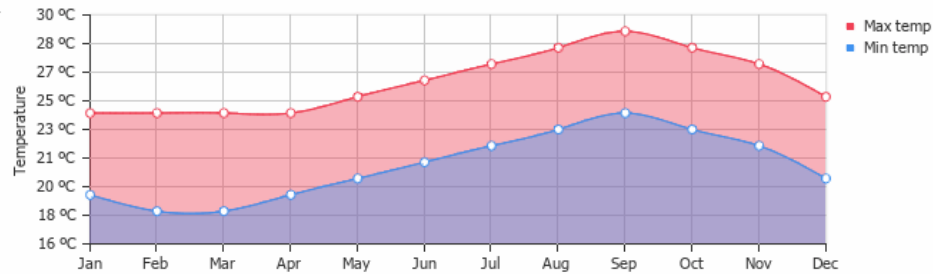
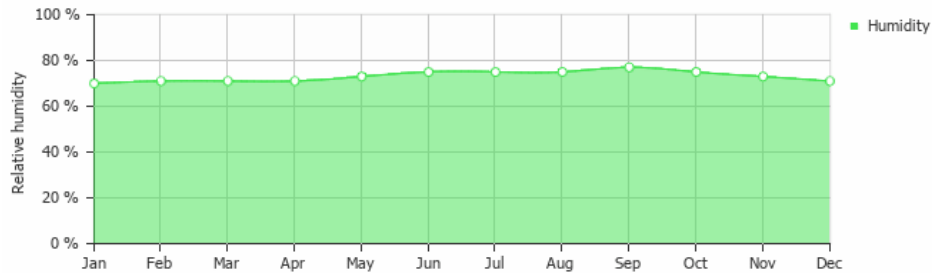
HERMOL: continuous operating 24 / 7

COMPOUND THERMAL SOLAR PANELS



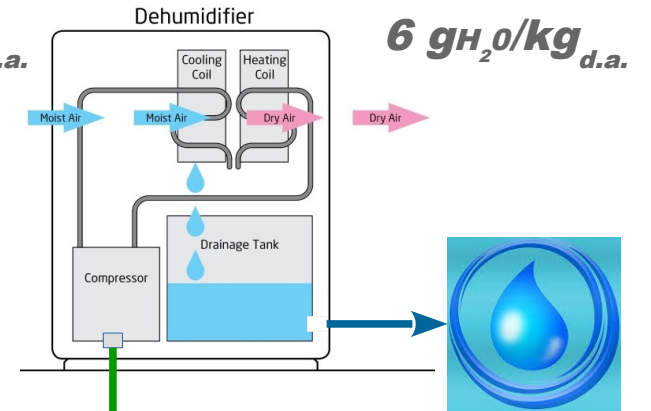
WATER FROM AIR

(under development)



Average min and max temperatures in Sal, Cape Verde Copyright © 2019 www.weather-and-climate.com

$14 \text{ gH}_2\text{O/kg}_{d.a.}$

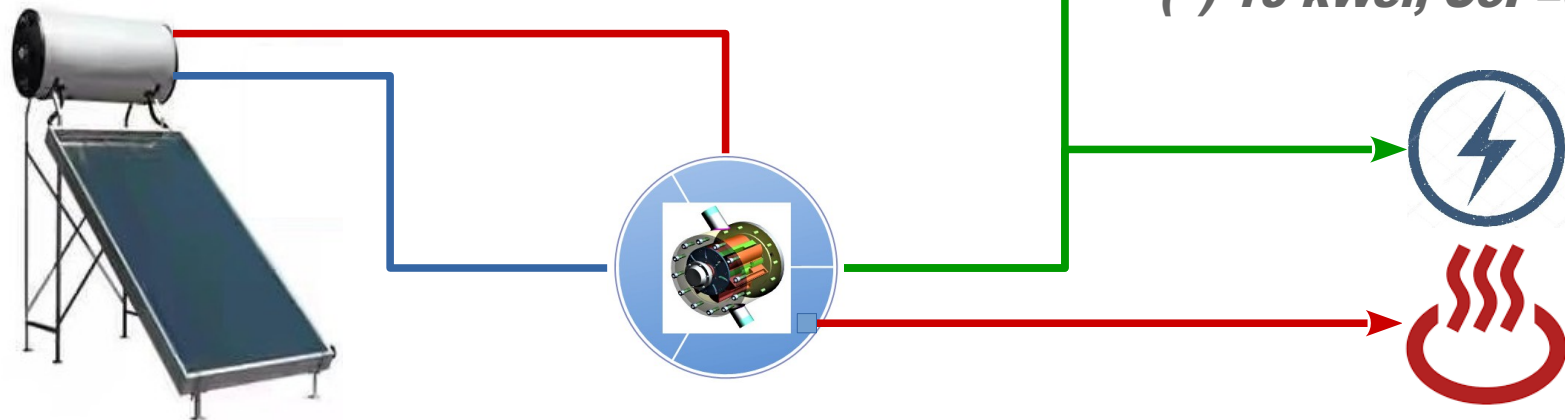


$6 \text{ gH}_2\text{O/kg}_{d.a.}$

$8 \text{ gH}_2\text{O/kg}_{d.a.}$
 $40 \text{ kJ/kg}_{d.a.}$

$\approx 20 \text{ kg/h H}_2\text{O} (*)$

$(*) 10 \text{ kWel, CoP}=3$

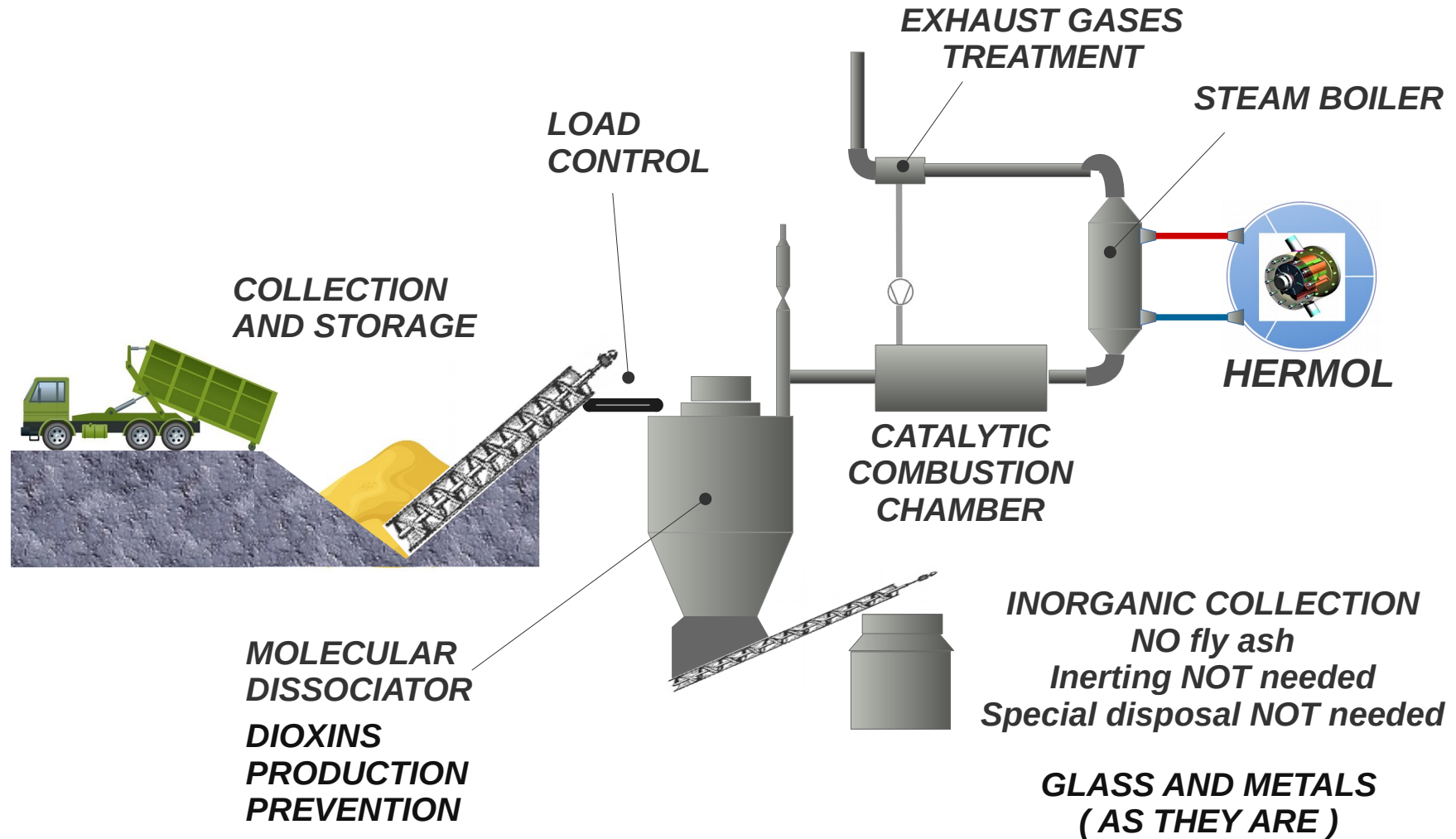


WASTE TO ENERGY SOLUTIONS

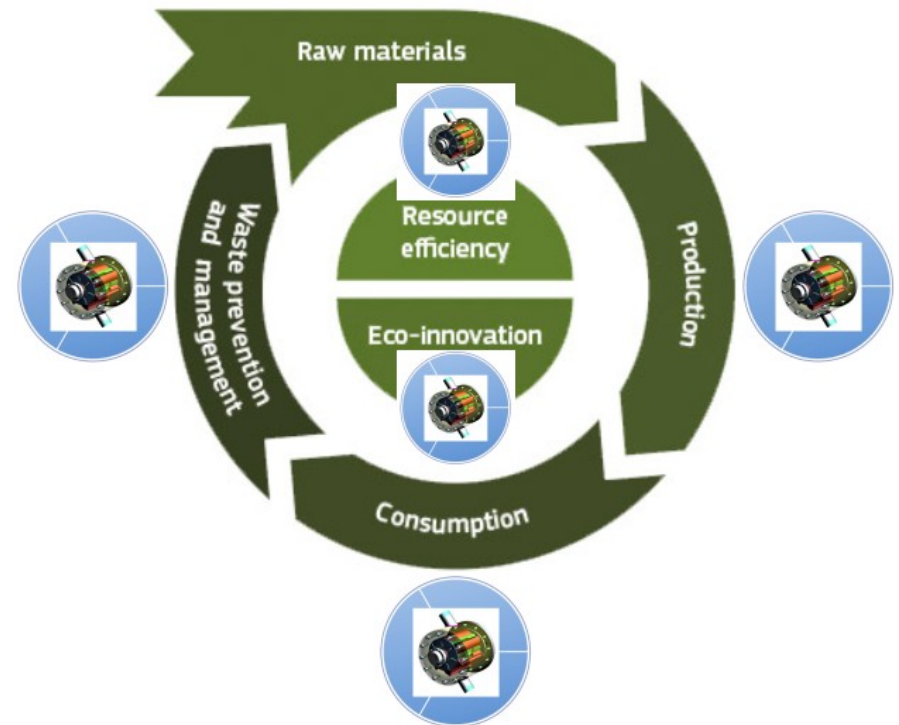
(feasibility study proposal)

- ✓ ***Universal technology for domestic & industrial waste processing***
- ✓ ***NO need of waste separate collection***
- ✓ ***Recovery of glass, metals and other raw materials, as they are, with limited amount of ash***
- ✓ ***Low temperature molecular separation technology: NOT dangerous and NOT polluting, because of temperature control and catalytic combustion system***
- ✓ ***Modular design: the plant size fits the waste amount***
- ✓ ***NO emission of PMs and toxic substances***
- ✓ ***The produced syngas will be straight converted into thermal and electrical energy***

WASTE TO ENERGY: OUR PLANT



SUSTAINABLE, CLEAN ENERGYIN A CIRCULAR ECONOMY



WHAT CAN WE DO TOGETHER

NOW Green Energy From Heat

SOON Sun & Water

NEXT Waste Management Solution
(Feasibility Study) - (Pilot Project)

CONTACTS

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