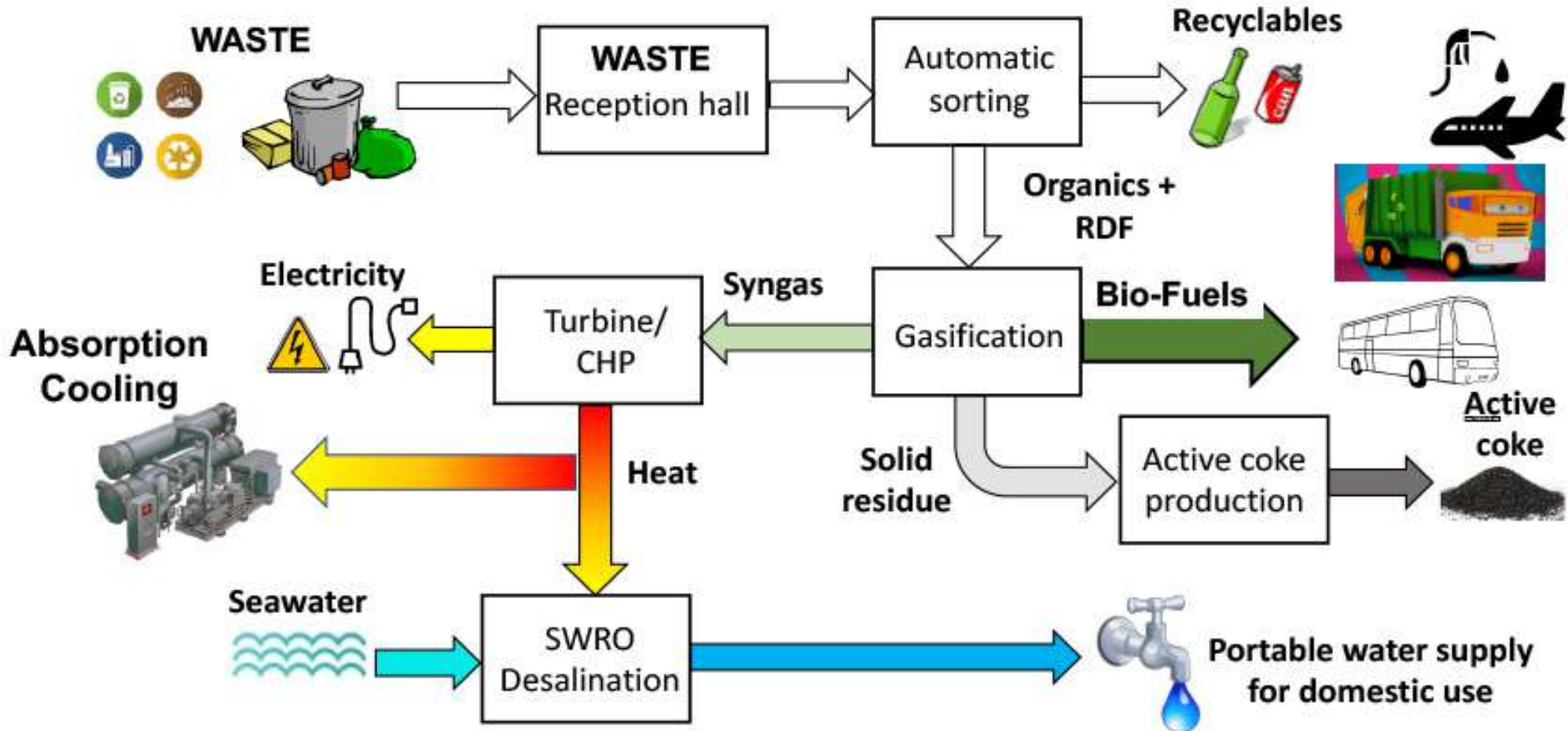




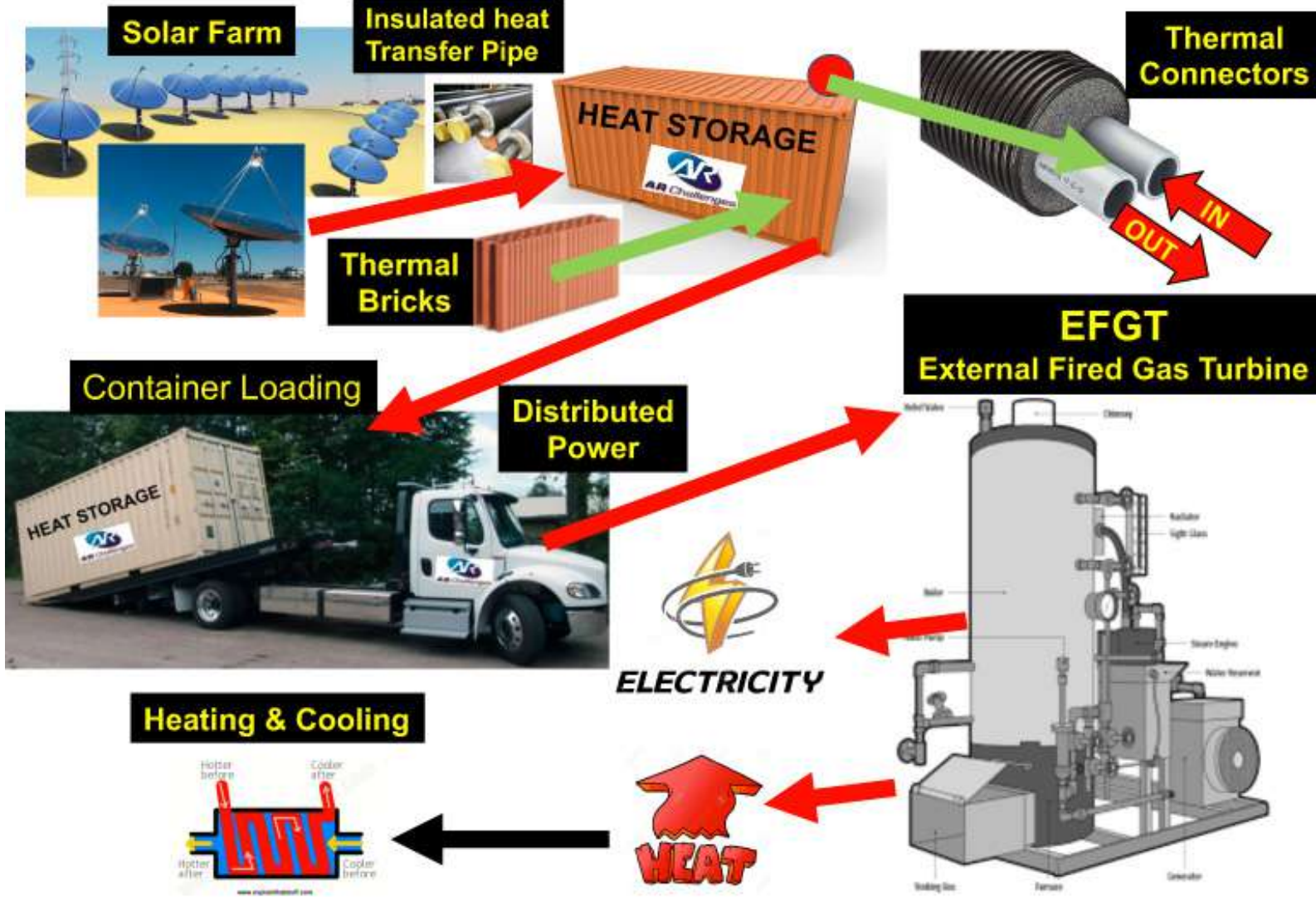
Unique Bio Mass & Solar Thermal Power Plants – BOT projects

General System Overview





Solar Thermal Solutions





System Description

The system is based on HEAT!!! The system utilizes heat to produce energy.

The heat is produced from solar thermal and waste gasification. The Solar Thermal system has an efficient footprint (5% compared to PV) and high capacity, and the gasifier provides clean heat from any waste (C&D & hazardous excluded).

The combined system provides 24/7 energy with heat storage (mobile or stationary).

The patented heat storage is based on clay bricks and 10' containers. No pollution and end of life recyclable. (metals and bricks). Storage is only 5% of PV storage cost.

The containers can be mobile and eliminate the high cost of electrical grid supply.

The heat is directly fed into EFGT (Externally Fired Gas Generators) specially adapted to heat (Patent), and CHP (Combined Heat & Power) via steam power generation. Total power supply efficiency is 42%!!

Residual heat can be supplied to cooling and A/C systems. (absorption).

30%-50% energy cost savings via a complete self-contained system. No outside energy supply needed.



ROI 5-6 Years





Eco Systems Ltd.

Thermo-Solar Energy System

24/7 energy Supply & Heat Storage



206 E 81 St. #5C NYC, NY 10028 USA Ph: +1(914)-294-3138 email: rafi@ar-challenges.com



AR Challenges



Eco Systems Ltd.

Solar Thermal - 1 MW = 1 Hectare
Photovoltaic – 1 MW = 10 Hectare

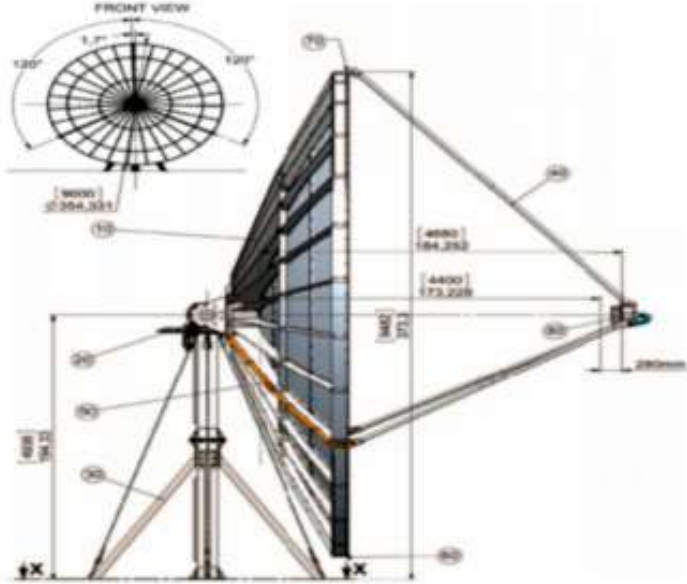




AR Challenges

Eco Systems Ltd.

Private User System



20 KW HCPV POWER	45 KW THERMAL POWER	270°c FLUID TEMP 518° F	1000X NUMBER OF SUNS	55 KPH TRACKING SPEED 34 MPH
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ZU PASSENEN FINANZIERUNGSMÖGLICHKEITEN BERÄT SIE INVENSOR-FACHPARTNER – ODER FRAGEN SIE EINFACH UN

BEISPIEL BÜRORAUM:
KOMFORTABLE RAUMTEMPERATUR
AM ARBEITSPLATZ.

BEISPIEL SERVERRAUM:
OPTIMALE TEMPERATUREN UND
SICHERE KÄLTEBEREITSTELLUNG.

LÄSEN, KÜHLDECKEN,
TEXTILSYSTEMEN U.V.M.

ENERGIEVERSORGUNG
FÜR KÄLTETECHNIK IN
MIT EINEM BHKW

IM WINTER
Kühlen
Heizen
Strom erzeugen

IHRE ENERGIEZENTRALE:
KLEINE EINHEITEN KÖNNEN FLEXIBEL
ANGEORDNET WERDEN.



Private User system Description



- The 9-meter dish is mounted in open areas, facing the sun (Rooftop, Yard, Parking lots, etc.)
- Insulated special piping system supplies the heat to the “battery” (basement, yard, etc.)
- The Thermo-Electric system is installed near the Heat storage (Basement, yard, etc.)
- A heat exchanger supplies hot water and heating in the winter.
- The heat exchanger supplies heat to the cooling (A/C) system (absorption).
- The system is designed to supply the TOTAL energy consumption of a large residence.

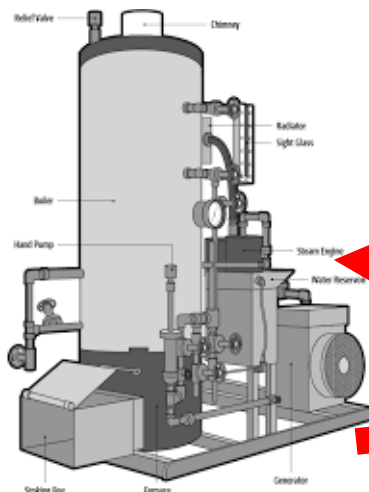
Eco Systems Ltd.





Commercial System Description

- A system based on several Dishes is installed facing sunlight (rooftop, parking lot, yard, etc.)
- The mobile heat storage is placed at the bottom of the dishes.
- Each user will get a complete energy system with the right number of heat storage units
- The hot water and heating will be connected to the heat exchanger.
- The current A/C will be replaced with a thermal one and heat from storage, (absorption)
- System is designed to supply TOTAL energy use day and night.





ADVANTEGES

- ✓ The system is a “Stand Alone” design and completely safe.
- ✓ Outside energy supply for emergency only
- ✓ 25%-35% total energy savings (electricity & HVAC)
- ✓ Simple space saving installation (rooftop, parking lot, yard, etc.)
- ✓ Outside heat supply available to enhance usage.
- ✓ Complete renewable energy eligible for CARBON CREDITS
- ✓ Local, assembly, installation, maintenance & service.





Eco Systems Ltd.

AR Challenges



AR Challenges Ltd.

Security Defense & Green Energy

Consulting Integration & Training

5815 Edson Ln. #201 N. Bethesda, MD 20852 USA

219 Kensington High St., Kensington, London W8 6BD UK

Rafael (Rafi) Sela

CEO - Founder

US (Off)+1240-350-6454 US (Cell) +1914-294-3138

rafisela@gmail.com

www.ar-challenges.com

ZERO WASTE TO LANDFILL



206 E 81 St. #5C NYC, NY 10028 USA Ph: +1(914)-294-3138 email: rafi@ar-challenges.com