

A large, stylized sunburst graphic composed of numerous overlapping, semi-transparent teal rectangular segments radiating from a central point, creating a circular effect. The segments vary in length and are arranged in a fan-like pattern.

Italy – Kenya Business & Investment Forum on Geothermal

Erdogan Arpaci, Sales Manager MEA & Turkey

March 27th, 2023
Nairobi, Kenya





WHO WE ARE

- ✓ Pioneers in the design and supply of new generation high efficiency Organic Rankine Cycle (ORC) systems
- ✓ The unique developer of the **Radial Outflow Turbine (ROT)** technology
- ✓ The ORC provider with the fastest growth and most disruptive technology evolution in the market
- ✓ The second ORC supplier in the world for geothermal application with approx. **500 MWe** in portfolio

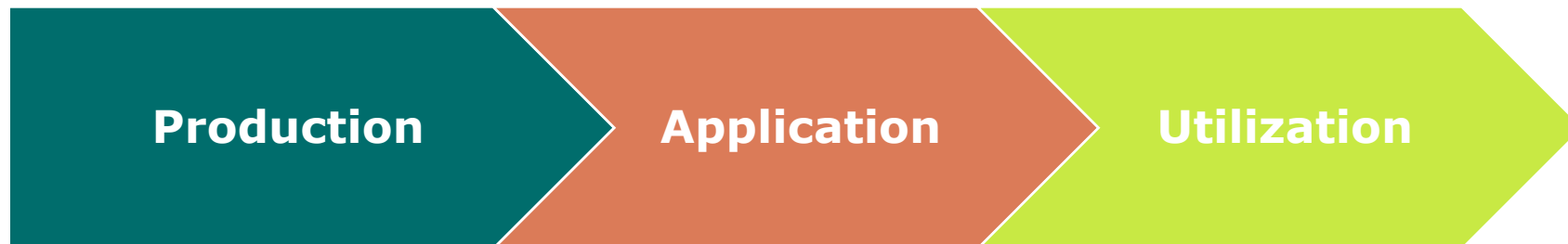




WHO WE ARE | SHAREHOLDERS



The Full Clean Energy Supply Chain





WHAT WE DO | SERVICES

- ✓ Development of ORC system
- ✓ Engineering
- ✓ Manufacturing and testing
- ✓ Project management
- ✓ Long term after sales service





TECHNOLOGY | THE ROT

- ✓ Conceptualized by Exergy, the Radial Outflow Turbine (ROT) is unique in the ORC marketplace.
- ✓ The Radial Outflow Turbine is an extremely highly efficient and reliable arrangement in ORC applications

ADVANTAGES

- ✓ **Radial development of the stages**
match between volumetric flow and cross section
- ✓ **Higher number of stages (9+)**
higher isentropic efficiency per stage
better off-design performance
- ✓ **Low speed (direct drive)**
low noise and vibrations
- ✓ **Single-disk, overhung configuration**
possibility for multiple admissions on one disk
- ✓ **Built-in mechanical group extraction slide**
reduced downtimes





GEOHERMAL

- ✓ Kind of geothermal resources:
 - steam only
 - mixed steam and liquid
 - liquid only
- ✓ Range of plant configuration:
 - ORC only
 - ORC bottoming of steam turbine (brine recovery ORC)

ADVANTAGES

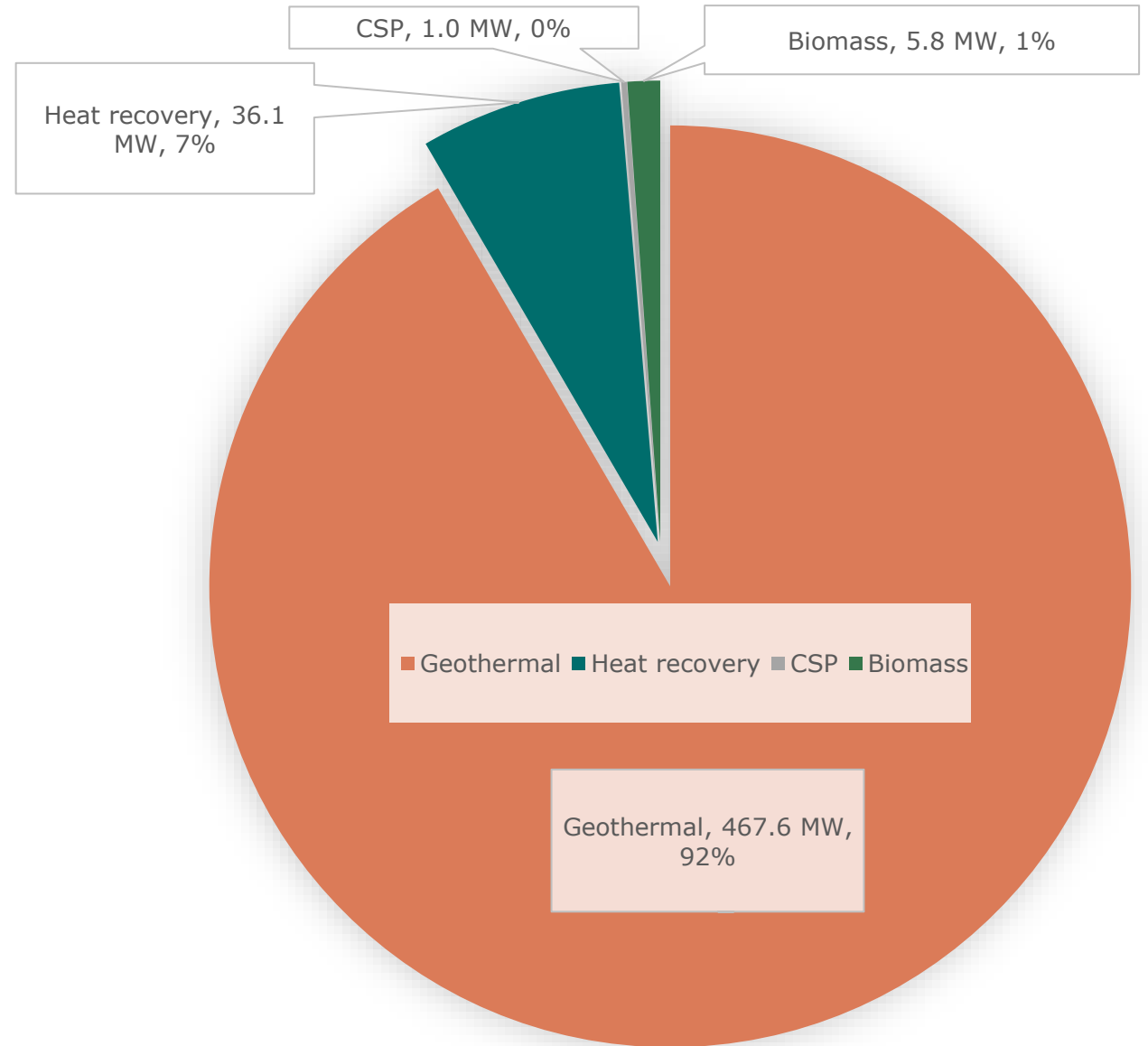
- ✓ Superior efficiency
- ✓ High flexibility in off design conditions
- ✓ Multi-pressure level plant with single turbine disk
- ✓ Cost effective configuration
- ✓ Better exploitation of high enthalpy resources
- ✓ Suitable for low temperature sources $> 90^{\circ}\text{C}$
- ✓ Low maintenance





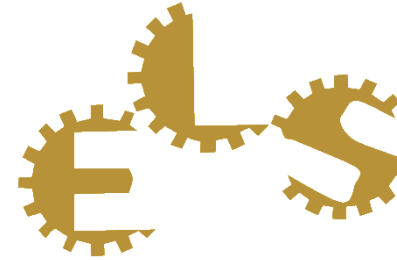
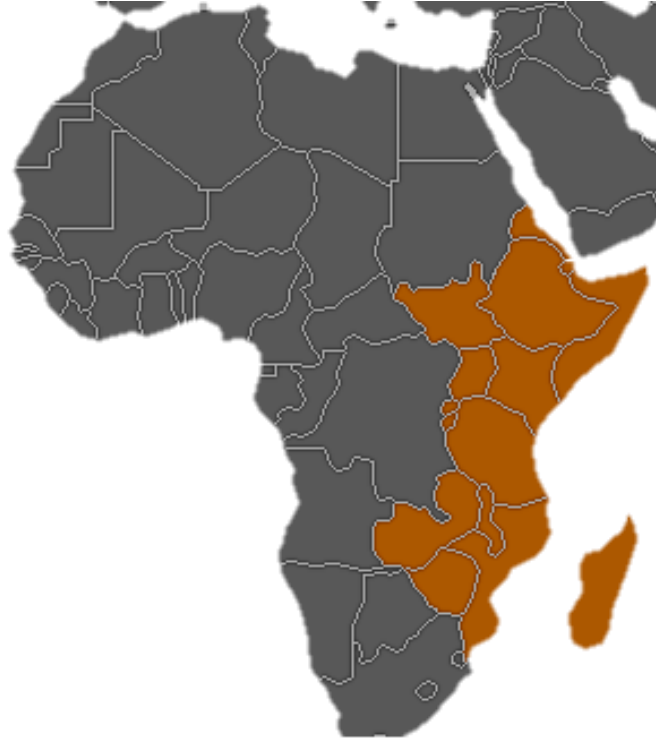
REFERENCES

APPLICATION	MW
GEOTHERMAL	467
HEAT RECOVERY	36
BIOMASS	6
CSP	1
TOTAL	510





EXERGY PRESENCE/ OPERATIONS IN EASTERN AFRICA



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- ✓ **Equipment & Logistics Suppliers Ltd.**, part of Unique Group of Companies, is the sole agent for Exergy in Eastern Africa

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