



SOLAR ENERGY. LOCAL POWER.

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**Bringing solar thermal technology  
to every community under the sun**

AORA - Member of the EDIG group

## Going 'BIG' by going 'small'

The breakthrough in AORA's concentrating solar power (CSP) technology followed years of research at the Weizmann Institute of Science, a world leader in the field of solar energy. Unlike most solar thermal applications that power a steam turbine engine, a unique technology was developed to power a **gas turbine** engine on solar energy.

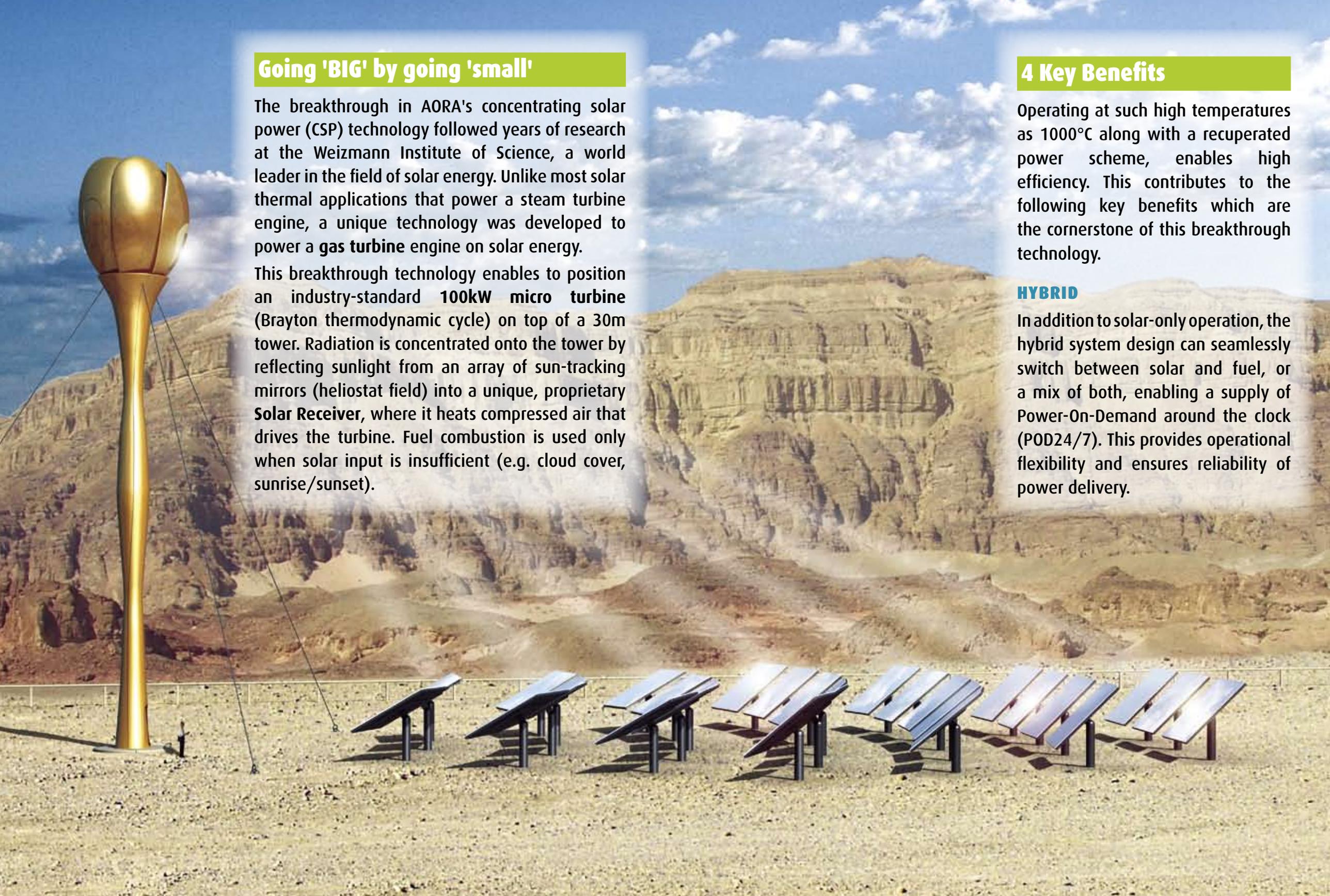
This breakthrough technology enables to position an industry-standard **100kW micro turbine** (Brayton thermodynamic cycle) on top of a 30m tower. Radiation is concentrated onto the tower by reflecting sunlight from an array of sun-tracking mirrors (heliostat field) into a unique, proprietary **Solar Receiver**, where it heats compressed air that drives the turbine. Fuel combustion is used only when solar input is insufficient (e.g. cloud cover, sunrise/sunset).

## 4 Key Benefits

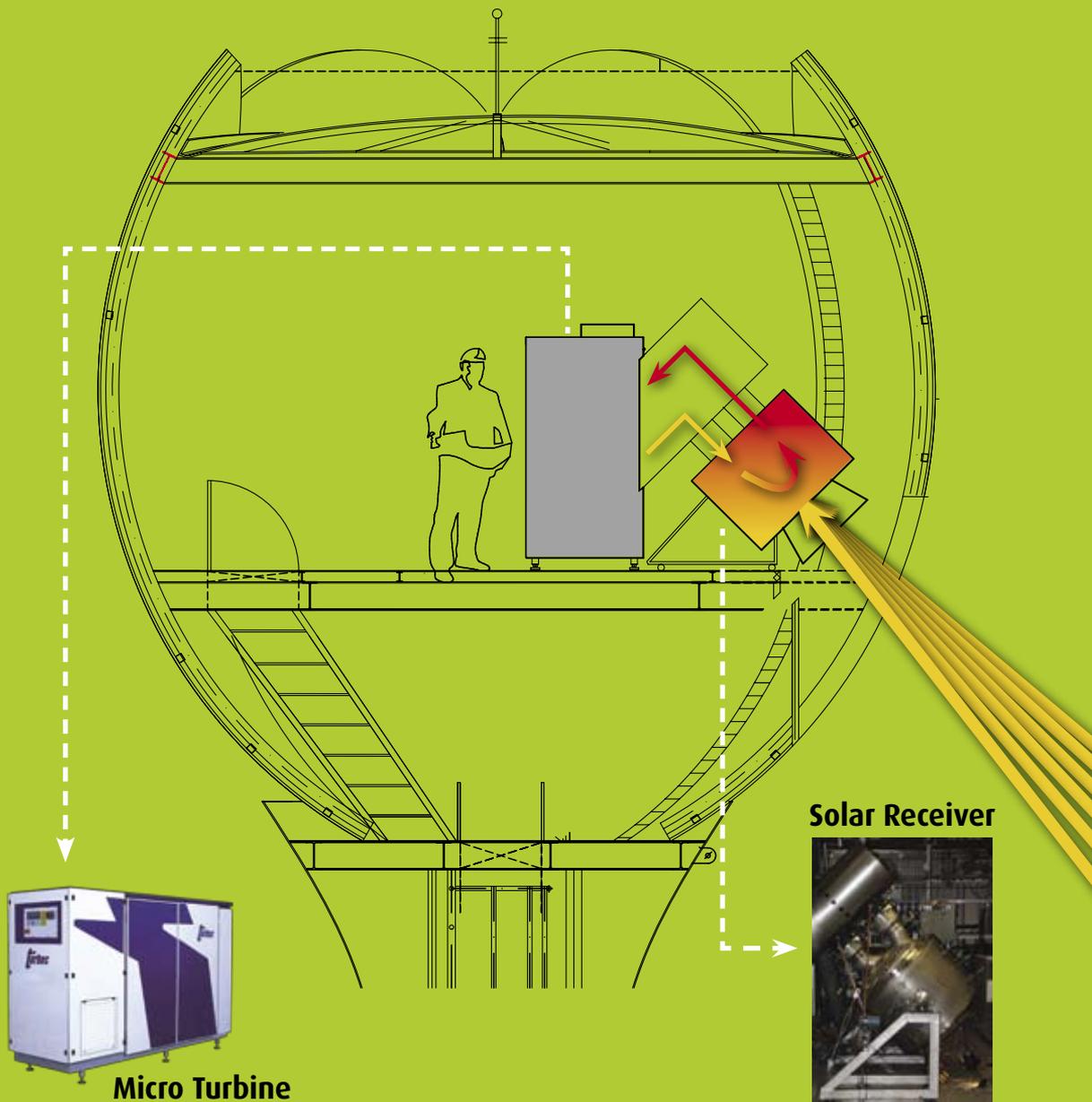
Operating at such high temperatures as 1000°C along with a recuperated power scheme, enables high efficiency. This contributes to the following key benefits which are the cornerstone of this breakthrough technology.

### HYBRID

In addition to solar-only operation, the hybrid system design can seamlessly switch between solar and fuel, or a mix of both, enabling a supply of Power-On-Demand around the clock (POD24/7). This provides operational flexibility and ensures reliability of power delivery.



# Power Conversion Unit (PCU)



**Converting solar energy into 100kW electricity and 170kW heat**

## MODULARITY

The unique **modular solution** (100kWe solar units) allows for quick and easy construction of power plants that fall into the **Distributed Generation** philosophy of power generation. Such power stations can be extended over time, by erecting more units on different land assets, each one connecting locally to the distribution grid.



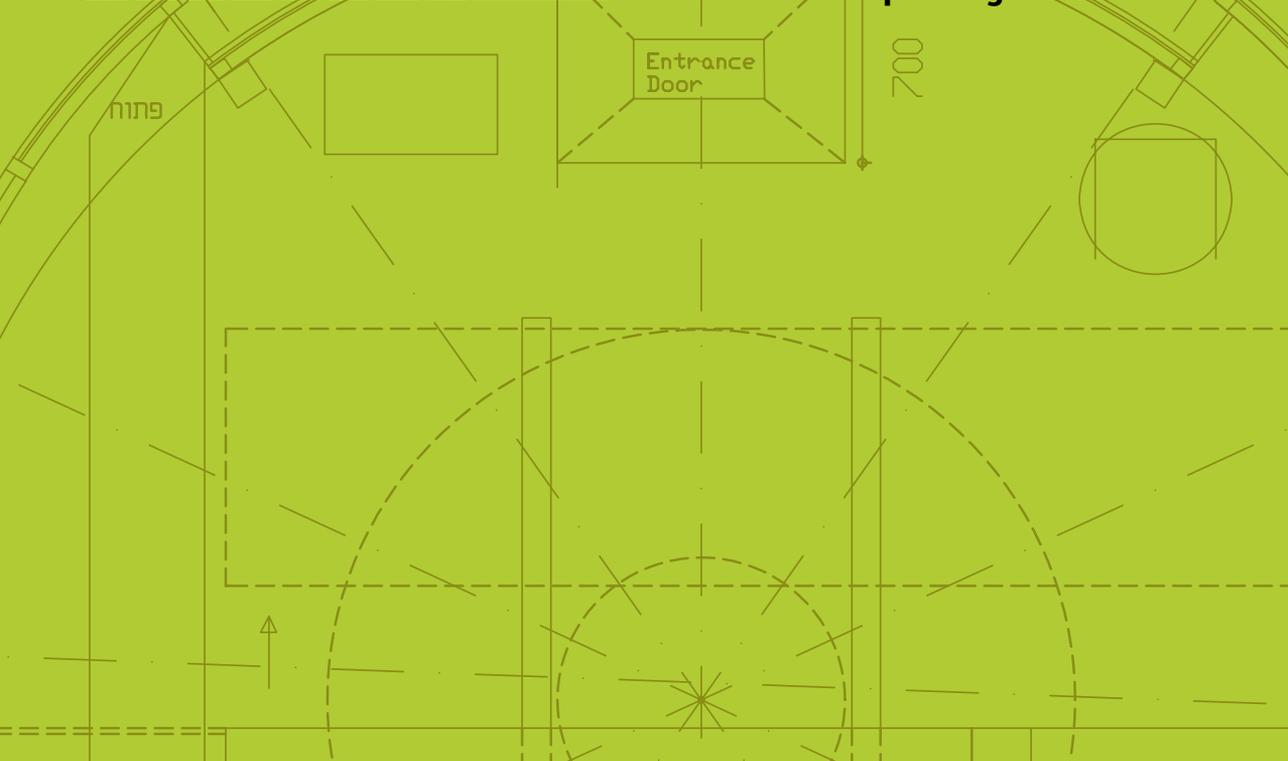
## ALTERNATIVE FUEL SOURCES

If hybrid mode is selected (not “solar-only” mode), the microturbine offers operational flexibility as the turbine is capable of running on any type of fuel, be it fossil fuel (natural gas, diesel) or bio fuel (bio gas, bio diesel).

## COMBINED HEAT & POWER (CHP)

The micro turbine of each solar unit provides both **100kW electric power** and **170kW of thermal power**. This mix offers a rich energy offering for industrial customers, who can benefit from both forms of energy supply.

**Combining these 4 key benefits into a single, clean, power module offers an innovative solution to the world of renewable power generation.**





**EDIG Construction Management Ltd.**

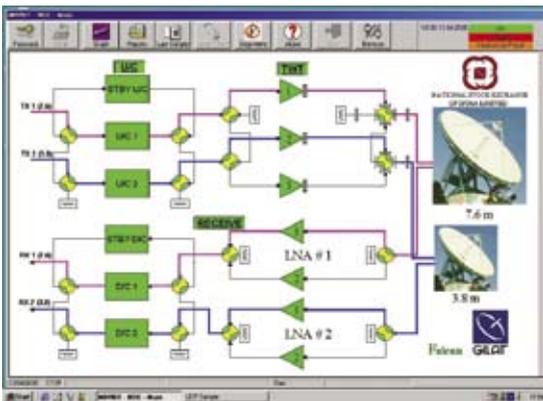
## About the EDIG group

The privately owned EDIG group of companies (established in 1971) offers a wide range of electro-mechanical engineering services.

EDIG Construction Management Ltd. (EDIG) performs systems construction and integration, including distributed and backup power systems; Air cargo security inspection systems; Pumping stations; Specialty metal piping systems and more. Falcon Technologies Ltd. (Falcon) specializes in Monitoring and control systems,

such as Laboratory instrumentation and monitoring, development of customized software, control of satellite ground stations, illumination systems, security-related systems

The group has a reputable track record in implementing large scale projects with such customers as the Ministry of Defence, Rome Airport Authority, Gilat Satellite Networks, National Stock Exchange of India, EL AL Airlines and the National Health Services.



**Control systems for satellite ground tracking stations**



**Decompression chambers for air cargo inspection for El-Al Israel Airlines**

### Contact information for both EDIG and AORA

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