ORMAT

RENEWING EARTH'S ENERGY FUTURE

GEMS WORKSHOP
NOVEMBER 20, 2024
MARIO MARTINEZ

A LEADING RENEWABLE ENERGY PROVIDER
WITH A PROVEN TRACK RECORD

60
Years of experience

Own & operate
1.5GW
Geothermal, Storage, Solar PV & REG[1]

~1,600
Employees

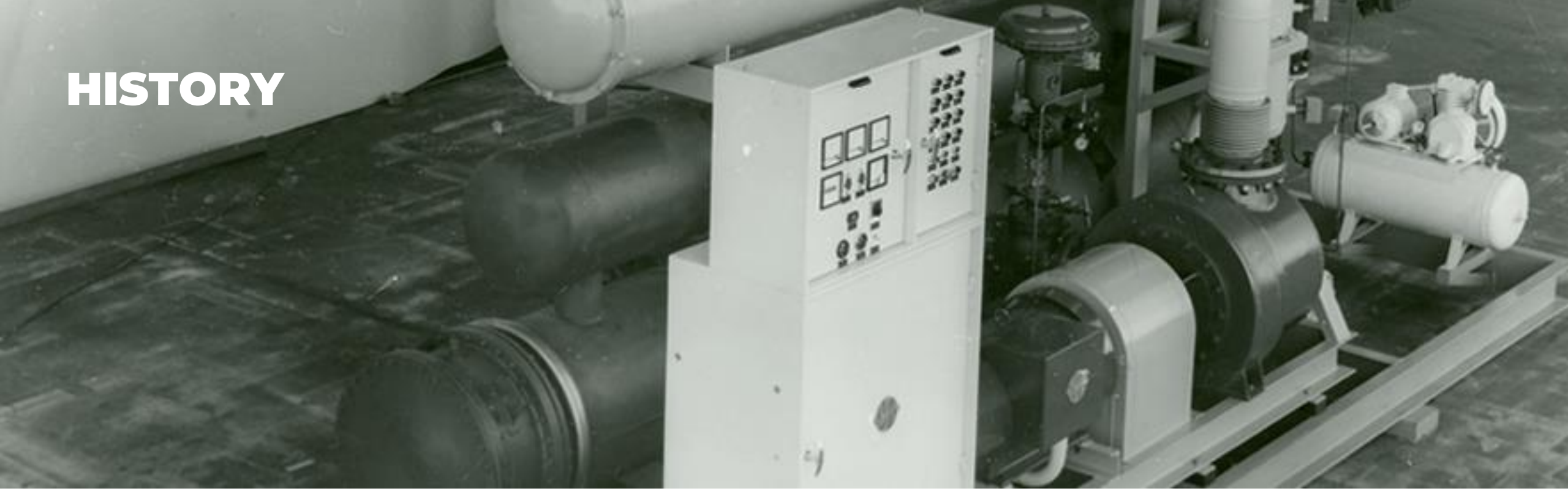
$829M
2023 revenues

$482M
2023 adj. EBITDA[2]

$124M
2023 Net income[3]

(1) REG – Recovered Energy Generation
(2) See appendix for reconciliation of non-GAAP financial measures.
(3) Net income attributable to the company stockholders

HISTORY



Ormat was established in 1965 by the Bronicki family, who shared a bold vision to export breakthrough technology in the renewable energy sector.

At that time, Ormat was primarily known as a pioneer of proprietary turbine designs, capable of generating electricity from low enthalpy energy resources. In its early years, Ormat focused exclusively on manufacturing power generation equipment.

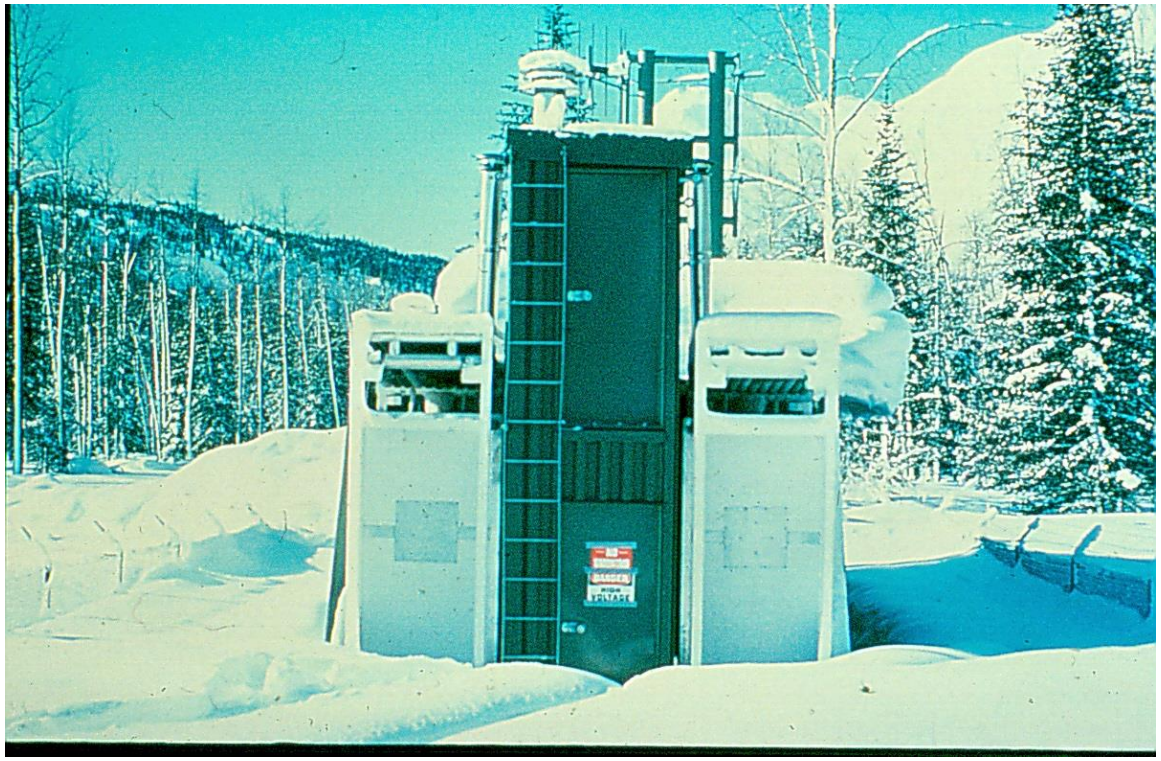
HISTORY

1965 – THE DREAM

- Goal: exporting breakthrough technology
- Expertise: Clean energy from low enthalpy source
- Creating “Green Energy” before “Green” was “In”

1966 Mali, Africa, Village Power

IN THE 1970S, ORMAT EXPANDED ITS TECHNOLOGY AND EXPERTISE IN THE REMOTE POWER UNIT (RPU)



EARLY TECHNOLOGIES – REMOTE POWER UNITS (RPU)





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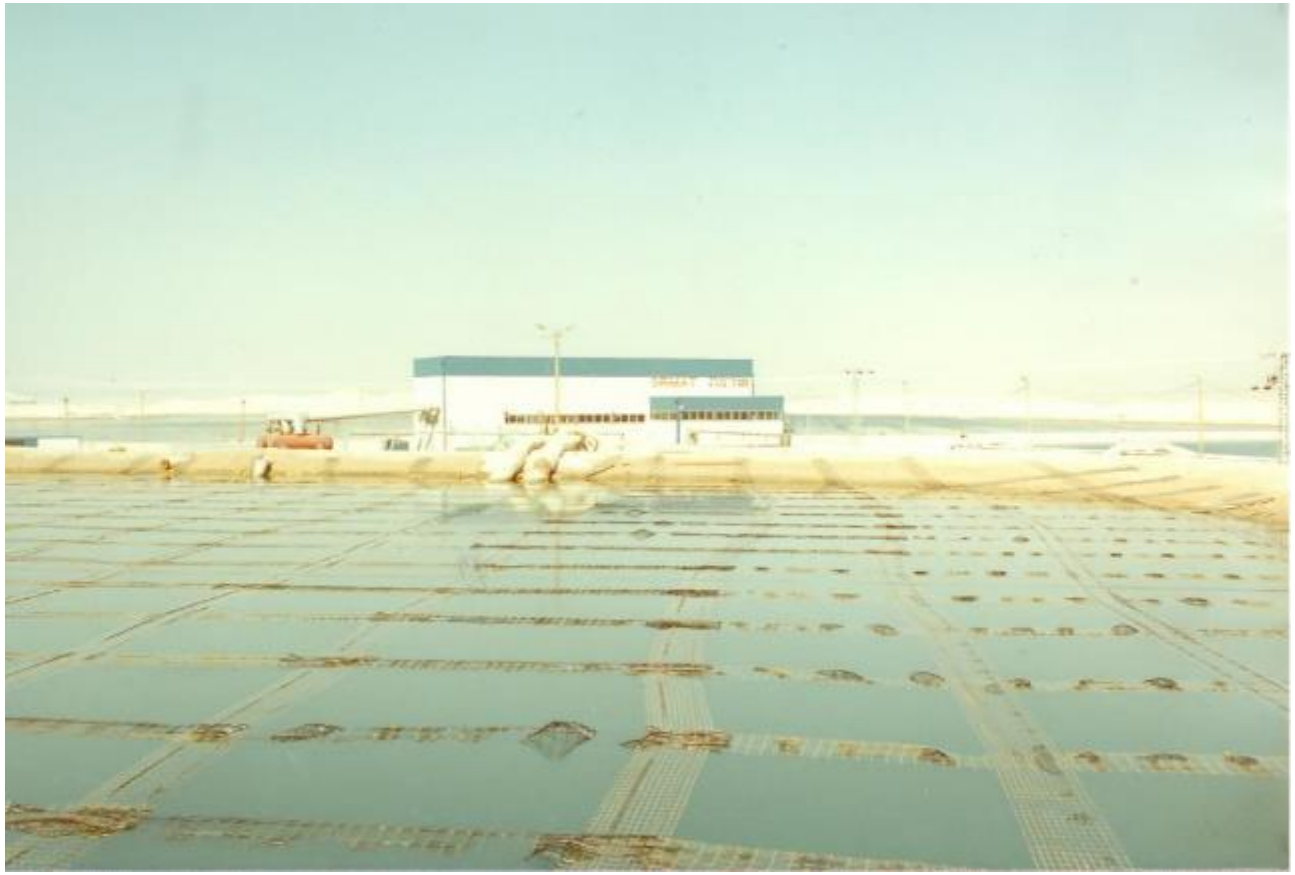
EARLY TECHNOLOGIES – SOLAR POND



A WORD FROM OUR SPONSOR – OR-MOBIL

- Hybrid (Electric/Flywheel) vehicle developed in the 70's.
- Maximum speed – 44mph
- 7200RPM motor
- Regenerative braking
- CVT Transmission

THE FIRST GEOTHERMAL UNIT – WABUSKA, NV, USA, 1984, 1 MW

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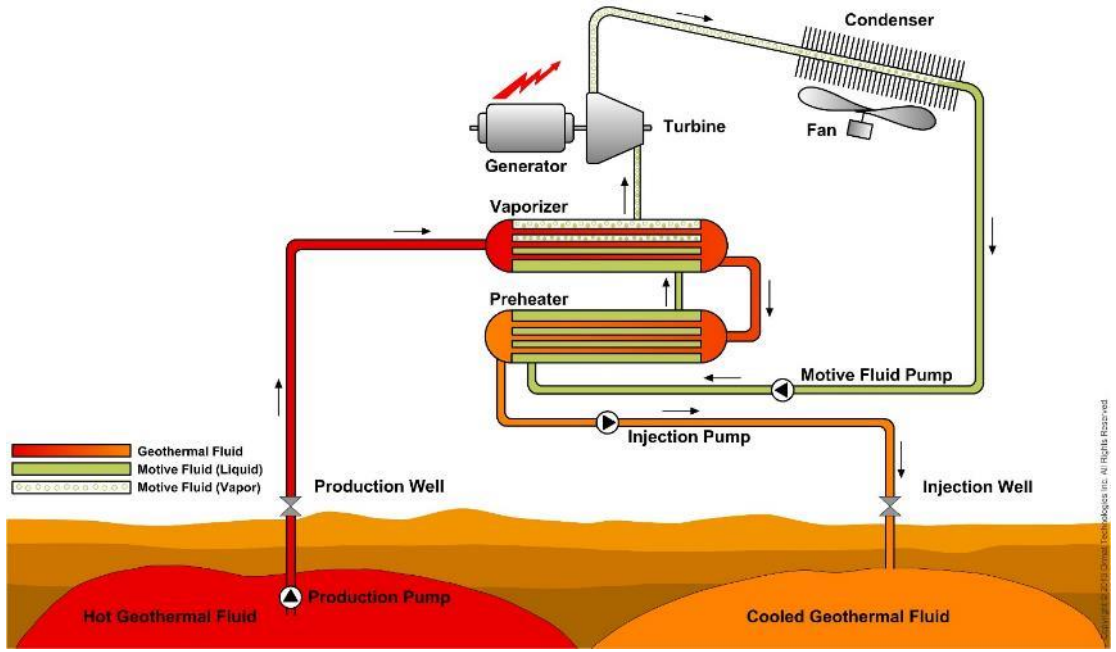
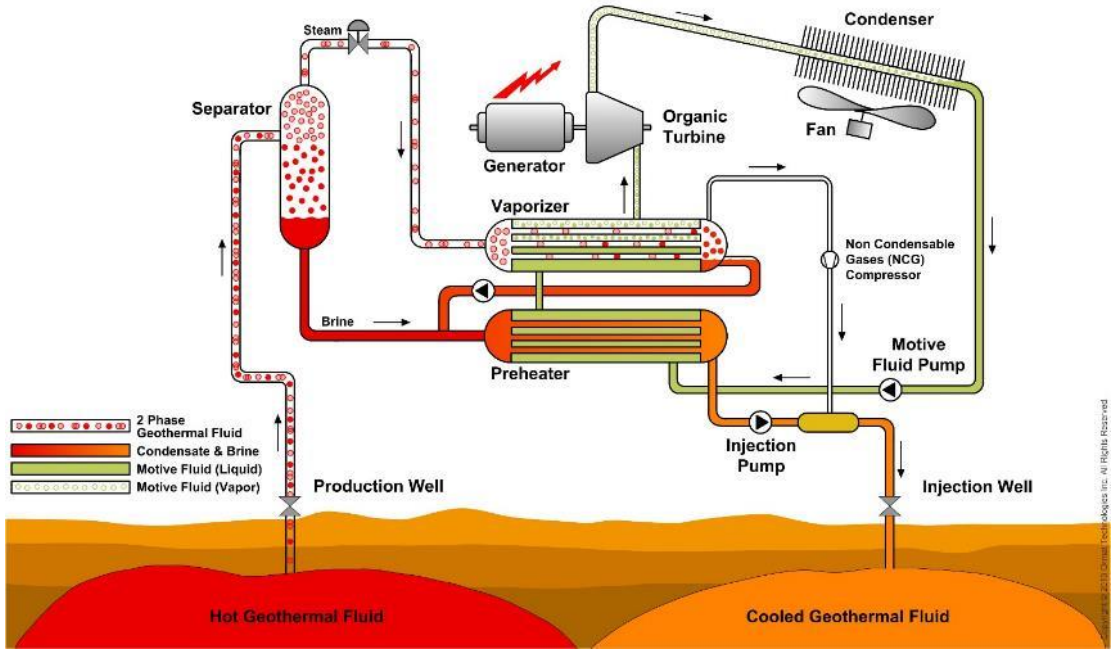
ORMAT GEOTHERMAL TECHNOLOGIES

Air-Cooled Binary Geothermal Power Plant



Two-Phase Binary Geothermal Power Plant



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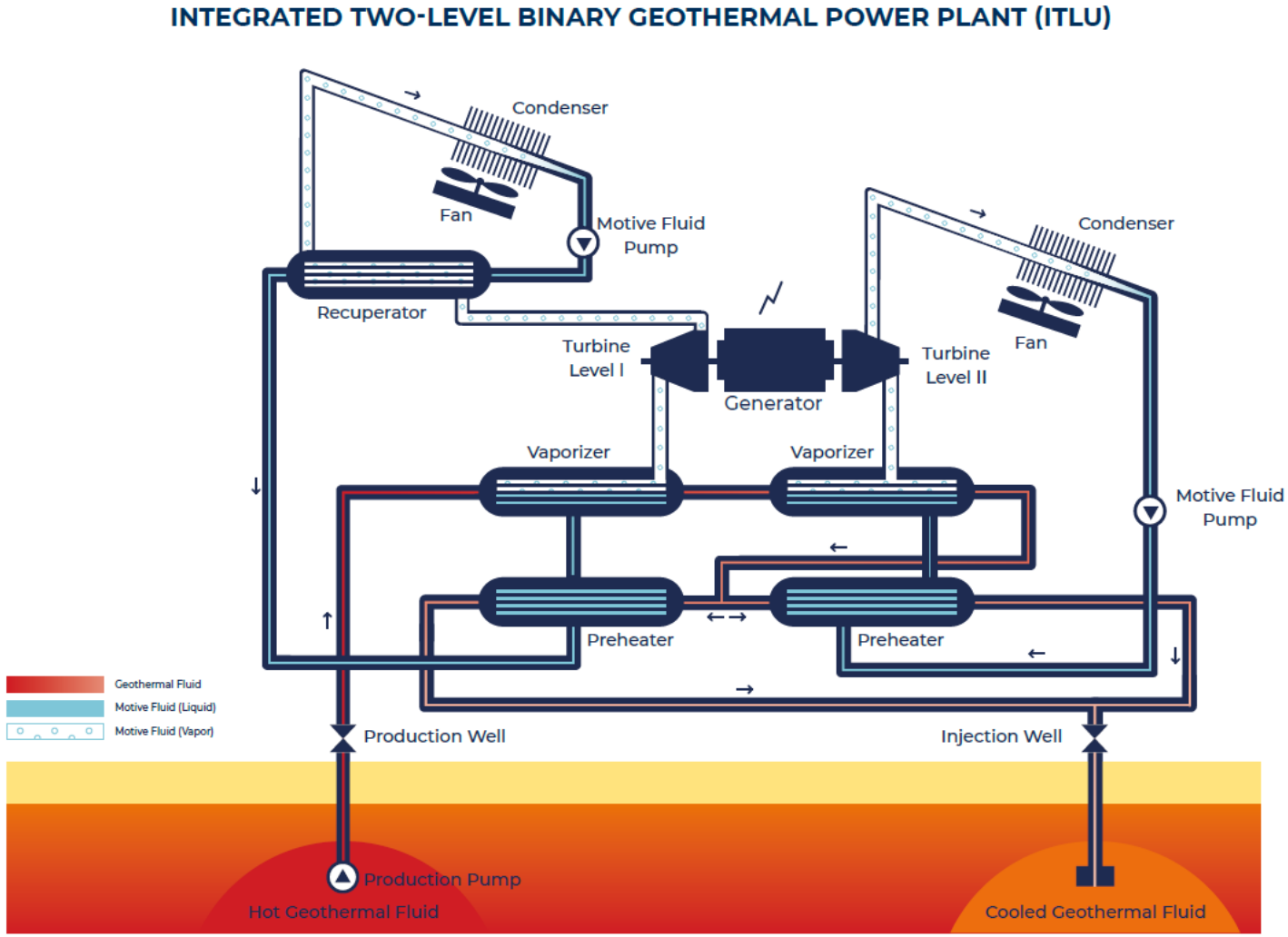
ORMAT GEOTHERMAL TECHNOLOGIES ITLU



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THE POWER OF EXPERIENCE

Over 50 years of dependable, economic, green energy solutions


Cerro Pabellon


Ala 1


Solar Pond


Pun
a


Amatitlan


AP Cement


Olkaria III


BM


offshore


Fang


Upper Mahiao


Peetz


Mokai


Ngatamariki


MGH


Mali


pipeline


Wabuska


Enterprise


Rogner


Steamboat


Dora I


Sarulla

1960's
- 600W Solar pump, Mali, Africa
- 100 kW RPU Worldwide

1970's
- 0.1-1 kW RPU

1980's
- 5 MW Solar Pond
- 0.3-10 MW Geothermal
- 0.1-0.9 MW REG

1990's
- 0.3-30 MW Geothermal
- 0.2-0.9 MW REG

2000's
- 0.4-50 MW Geothermal
- 0.4-7 MW REG

2010's
- 1-100+ MW Geothermal
- 1-9 MW REG
- Solar
- Storage

In 2006, Ormat entered **Turkey**, delivering our first geothermal power plant, the DORA 1, with a capacity of **7.4 MW**.

Turkey is one of the world's fastest growing geothermal energy markets and our presence here has grown significantly, with 900 MW of capacity across over 40 geothermal power plants now operating in the country. This is more than half of Turkey's total geothermal operating capacity.

THE POWER OF EXPERIENCE

In 2013, the world's largest single binary geothermal power plant – the Ngatamariki in **New Zealand** – began commercial operations.

Ormat provided the engineering, procurement and construction for the **100 MW** geothermal project that delivers sustainable energy to power 80,000 homes annually.

THE POWER OF EXPERIENCE

In 2017, **Honduras**' first utility-scale geothermal facility –

the **35 MW Platanares power plant** – was commissioned for commercial operation.

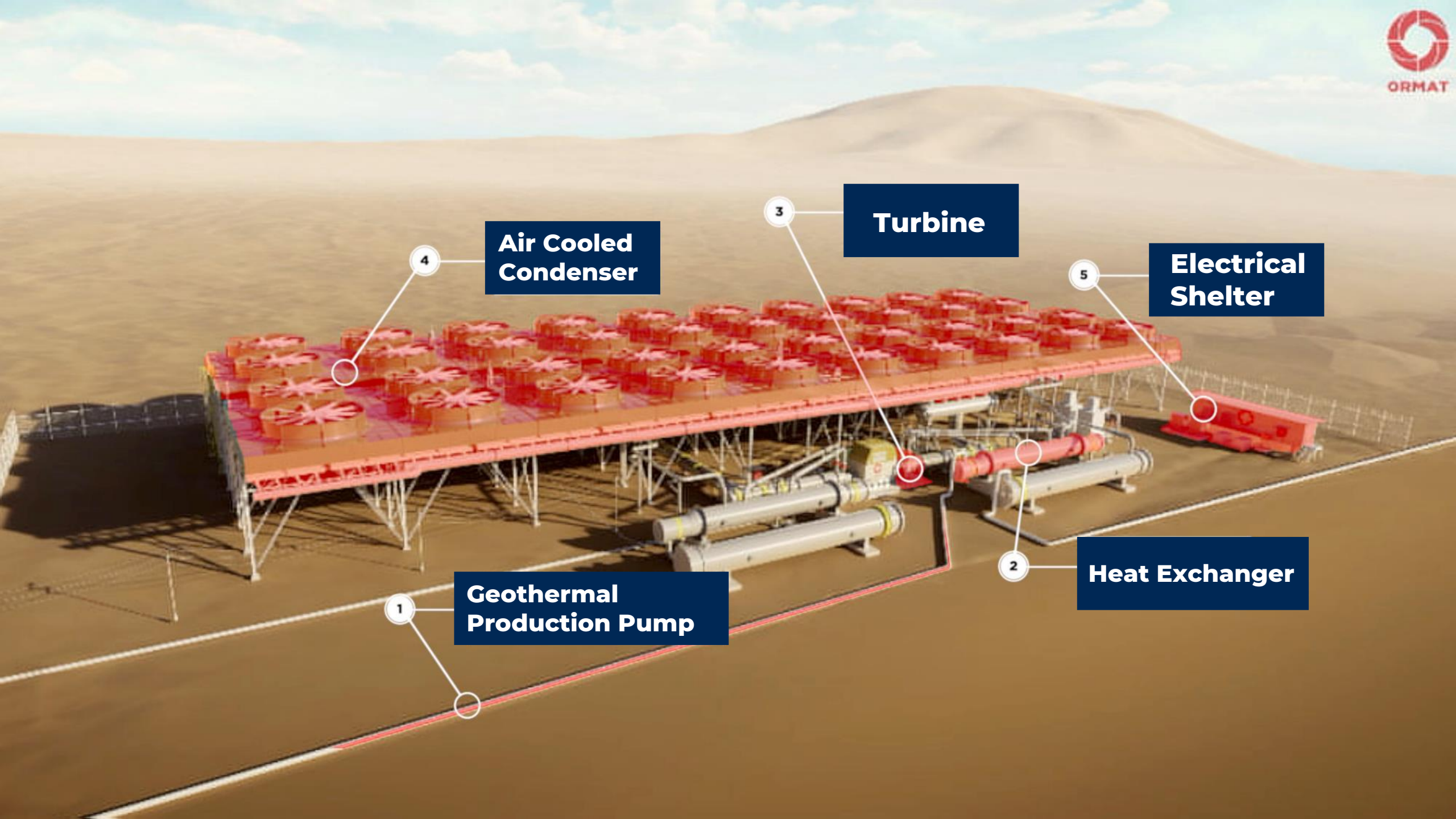
The official opening ceremonies in September with a country's goal of generating 80 percent of its energy from renewable sources by 2032.

THE POWER OF EXPERIENCE

In May 2018, Ormat announced that NIL 2, the third unit of the Sarulla geothermal power plant in North Sumatra, **Indonesia**, began commercial operation, bringing the three-facility complex to its full capacity of **330 MW***.

This places Sarulla among the world's largest geothermal power plants. Each of the three 110 MW units uses both steam and brine from the geothermal resource to optimize power plant efficiency. The facility's other two units began operating in March and October 2017 respectively.

* 12.75% owns by Ormat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3
Turbine
4
Air Cooled Condenser
5
Electrical Shelter
2
Heat Exchanger
1
Geothermal Production Pump

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+16.5MW in 24 years

+19MW in 5 years

1.5MW
2 stage
Until 1993

4MW
2 stage
1993-2002

10MW
3 stage
2002-2007

15MW
3 stage
2007-2017

First Between-Bearings Turbine

18MW
3 stage
2017-2018

23.5MW
4 stage
2018-2020

37MW
4/5 stage
2020-2023

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TURBINE SIZE EVOLUTION

Just add water

Fabulous (Taiwan) – 1.2MW

CD4 – 23MW

Geothermal Production Pump

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Heat Exchanger

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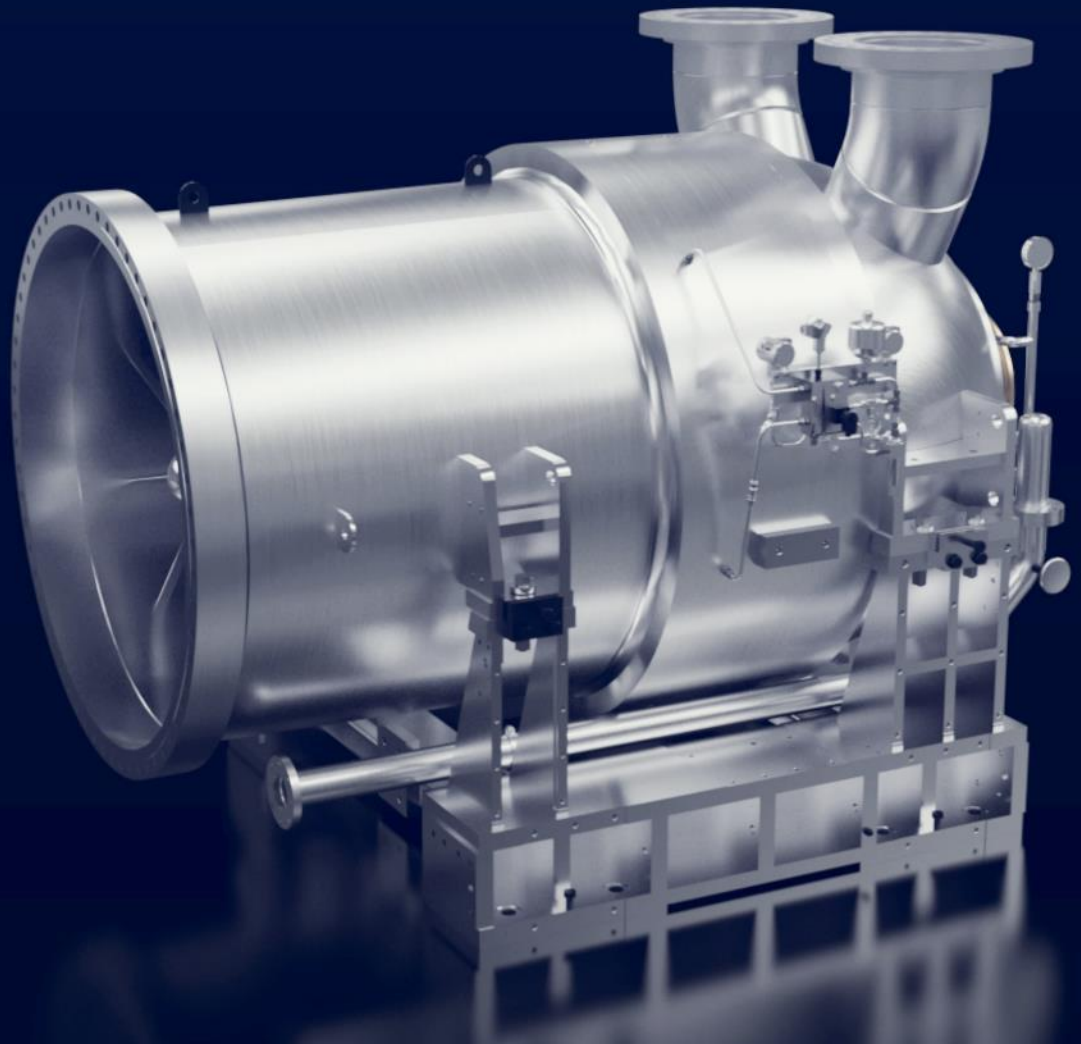
Turbine



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Air Cooled Condenser

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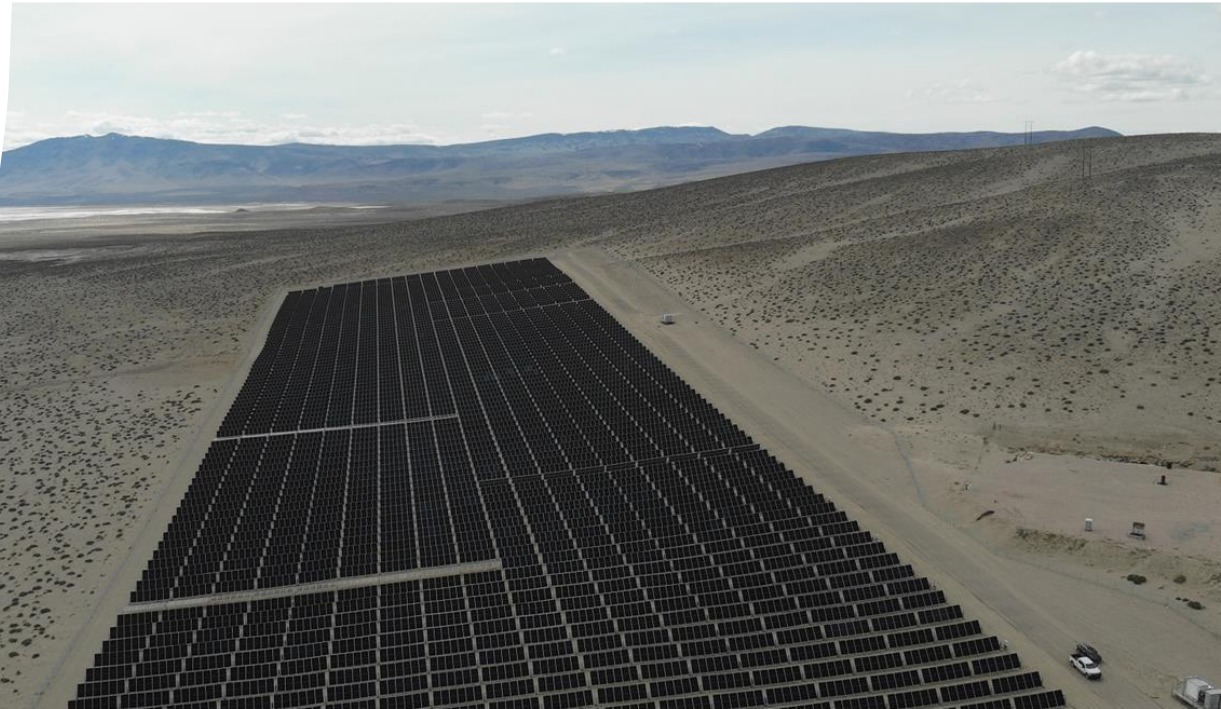
PLAIN BEARINGS TURBINE

SOLAR PROJECTS

- Recently commissioned projects –
  - Brady Solar – 5MW
  - SB2_3 Solar – 6.5MW
  - North Valley – 5MW
  - SBH Solar EXP – 3MW
- Projects in design / construction
  - Beowawe Solar – 4MW – Permit phase
- Total – 23.5 MW



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Thank You