

Company Profile 2025

KS Orka is one of the most ambitious geothermal developers in the country. The projects are led by geothermal experts and power project developers with over 30 years of experience in some of the most significant geothermal development projects.

Management Greetings

KS Orka began to operate in Indonesia in 2016 with the vision to develop its abundant geothermal resources in a clean, safe, and responsible way for the benefit of the people of Indonesia by applying an innovative business model. Since then, we have acquired the 240 MW PT Sorik Marapi Geothermal Power (SMGP) project in North Sumatra and the 30 MW PT Sokoria Geothermal Indonesia (SGI) project in Flores.

Both projects have shown tremendous progress: three years after drilling the first exploration well, SMGP project delivers electricity from the first unit of a total 45 MW in commercial operation since September 2019, followed by the second unit of 45 MW since July 2022, the third unit of 50 MW in October 2022, the fourth unit of 35 MW in December 2023, then the fifth unit of 42 MW in February 2025. Meanwhile, SGI project delivers electricity from the first unit of a total of 5 MW in a commercial since March 2022, and is marked as the first medium enthalpy geothermal project in Indonesia. SGI then continued to expand into Unit II with a total of 3 MW in July 2023.

The modular power plant technology from Kaishan Manufacturer, our sponsor, allows KS Orka to be flexible i developing projects from both financial and technical aspects which eventually enables the company to develop projects faster and more efficiently. We believe that our business model and technology will unlock geothermal development.

KS Orka is constantly looking for new opportunities to develop and expand in Indonesia with a target of 1,000 MW by 2026. By working with the Indonesian Government, our partners, and local communities, we are confident that we will be the leading geothermal energy developer in Indonesia.



Greetings From

Cao Kejian
CEO - Chief Executive Officer

PT Sorik Marapi
Geothermal Power

PT Sokoria Geothermal
Indonesia

Table of Contents

04	What We Do Our Core Values	06	Our Commitment to Safety
05	Where We Are Our Project Location	08	Our Technology
10	Our Milestone	18	Sokoria Geothermal Indonesia
12	Sorik Marapi Geothermal Power	22	Our Community
16	Our Community		

What we do

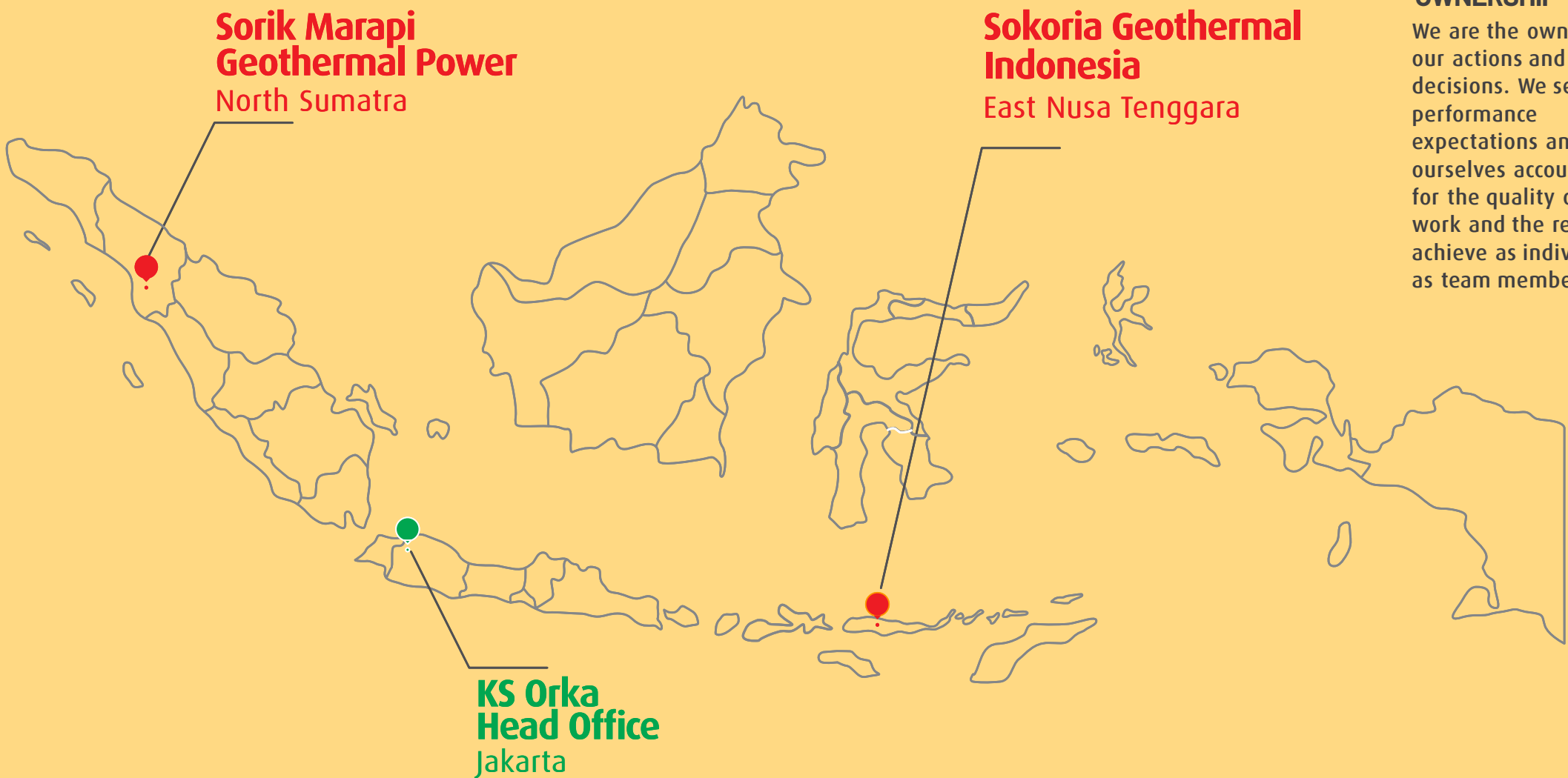
KS Orka is a geothermal resources project developer with over 30 years of experience in geothermal energy and power project development, management, and financing.

Our vision: Deliver geothermal power in a clean, safe and responsible way for the benefit of the people of Indonesia.

Our mission: Apply KS Orka’s innovative business model to develop and accelerate geothermal power Project in Indonesia.

Where We Are

Our Project Location



Our Core Values



SAFETY

We believe that safety is an overriding commitment and we share the vigorous responsibility of establishing and maintaining a safe work environment.



RESPECT

We are sincere, fair, and forthright, treating our colleagues and community with dignity and respecting our differences, feelings, and contributions.



TEAMWORK

We share ideas and best practices. We help our colleagues to grow personally and professionally.



OWNERSHIP

We are the owners of our actions and decisions. We set high-performance expectations and hold ourselves accountable for the quality of our work and the results we achieve as individuals, as team members, and



AGILITY

We respond quickly and effectively to new information. Our work is dynamic, requiring us to be open-minded and flexible in our approach.

Our Commitment to Health, Safety & Environment

KS Orka is committed to promoting and achieving high standards of safety, health, and welfare in all of its project locations.

We ensure compliance with all relevant legal obligations related to health and safety at work which include rules and policy.

Everyone is responsible for safety implementation, aligning our mission to continuously create a safe and healthy work culture at all levels within our project area, for all employees and our stakeholders including contractors, visitors, and the community surrounding our working area.

We believe that through our strong commitment, efficient management, and active involvement of our employees and stakeholders, all types of accidents can be prevented, sustaining our achievements in ZERO-HARM.

06



07



Our Technology



KS Orka applies modular power plant technology from Kaishan Manufacture in all projects. Kaishan Group, our sponsor, has 60 years of experience in design, research and development, production, service, and general machinery solutions, including screw expanders. As the largest air compressor manufacturer in Asia and the second-largest worldwide, Kaishan is ranked the highest in sales and production scale in China. With numerous and wide-ranging industry experience to improve the performance of our screw expanders, we optimize the reliability from a technical perspective by maximizing generation capacity and utilizing the minimum thermal energy consumption while reducing cost.



Kaishan ORC Screw Expander uses an organic medium such as working fluid; preventing the use of diesel or gasoline during operation, and achieving thermo technical conversion without emission, consumption, or pollution. The power generated by the plant can be directly connected to the power grid when the original power supply and operation methods are maintained, making our technology genuinely green and environmentally friendly.



Our technology has a wide heat source application range, from steam, steam-water mixture, hot water, and other thermal fluids, with its excellent ability to adapt to variable working conditions. It has low maintenance cost as the equipment is free from overhaul for dozens of years, easy for minor repair, maintenance, and operation, and very convenient to install and move without disrupting the user's original system.

More importantly, our technology is safe and reliable; with a three-phase asynchronous and synchronous generator, the electric energy is directly inputted into the power grid to drive all-electric equipment after power grid connection and power transmission without causing any adverse effect on the power supply quality of the power grid. In the event of an emergency, the safety protection device of the generator system will be automatically disconnected from the power grid to ensure the safety of the power grid and generator.

We believe that our technology is the key enabler to unlocking the development of abundant geothermal resources in Indonesia.



Our Milestones



August 2016

KS Orka acquired
95%
of PT Sorik Marapi
Geothermal Power
(PT SMGP).



October 2016

1st
Well Drilling in
Sorik Marapi
Geothermal Power
Plant.



January 2017

KS Orka acquired
95%
of PT Sokoria
Geothermal
Indonesia
(PT SGI).



March 2017

Well Test began on
Well Pad A Sorik
Marapi Geothermal
Power Plant.



August 2017

PT SMGP submitted
Feasibility Study Result to
PT PLN and Ministry of
Energy and Mineral
Resources confirming at
least **50 MW** of proven
resources based on
drilling activities in Well
Pad A.



October 2017

Drilling of first
well in Sokoria
Geothermal
Power Plant.



November 2017

PT SMGP began
construction of
Power Plant for Unit
I in Well Pad A.



February 2018

Well Test began on
Sokoria
Geothermal Power
Plant.



February 2021

70KV/150KV
Transmission Line
Connection SGI
Substation to Ende
Ropa Transmission Line
was completed.



September 2020

PT SMGP receive
National Vital
Object Status.



September 2019

COD Unit 1
45 MW
Sorik Marapi Geothermal
Power Plant.



March 2019

Feasibility Study result
for Sokoria Geothermal
Indonesia has been
approved by the
Minister of Energy and
Mineral Resources.



February 2019

150 KV
Transmission Line
Connecting PT SMGP
substation and PLN
substation is ready.



August 2018

5
Wells were drilled
on I Wellpad in
Sokoria Geothermal
Power Plant.



August 2018

18
Wells were drilled
on 5 Well Pads on
Sorik Marapi
Geothermal Power
Plant.



June 2018

Construction of
First Phase of
Unit I Sorik
Marapi.



July 2021

COD Unit II
45 MW
Sorik Marapi Geothermal
Power Plant.



October 2021

SGI received
National Vital
Object Status.



March 2022

COD Unit I
5 MW
Sokoria Geothermal
Indonesia Power Plant.



October 2022

COD Unit III
50 MW
Sorik Marapi Geothermal
Power Plant.



July 2023

COD Unit II
3 MW
Sokoria Geothermal
Power Plant.



December 2023

COD Unit IV
35 MW
Sorik Marapi Geothermal
Power Plant.



February 2025

COD Unit V
42 MW
Sorik Marapi Geothermal
Power Plant.



Project Name:
**Sorik Marapi-Roburan-Sampuraga Geothermal
Work Area**

Geothermal Permit Number:
2765 K/30/MEM/2015

Geothermal Permit Award Date:
April 21st 2015

PPA Signing Date:
August 29th 2014

PPA 1st Amendment Signing Date:
August 8th 2016

PPA 2nd Amendment Signing Date:
June 29th 2019

National Vital Object :
159.K/90/MEM/2020

National Vital Object Award Date:
September 3rd 2020



Total Surface Area

62,900 Ha



Potential Resource

240 MW



Installed Capacity

220 MW



October 1st, 2019
COD Unit I

45 MW



July 27th, 2021
COD Unit II

45 MW



September 2022
COD Unit III

50 MW



December 16th, 2023
COD Unit IV

35 MW



February 2025
COD Unit V

42 MW

Sorik Marapi Geothermal Power

Sorik Marapi Geothermal Power project is one of Indonesia's largest geothermal greenfield developments. Located in Mandailing Natal Regency, North Sumatra, the concession covers an area within a graben feature transacted by several segments of the Sumatran Fault System. The electricity generated by this geothermal power will be dispatched to PT PLN (Persero) based on a Power Purchase Agreement (PPA) for 35 years.

In August 2021, the project completed drilling for 38 wells and successfully achieved COD Unit I of 45 MW. In October 2019, followed by the COD of Unit II of 45 MW in July 2021, and most recently with the COD of Unit III 50 MW in September 2022 making a total of 140 MW. Currently, we are gearing up to towards the COD Unit IV 35 MW and Unit V 42 MW.

Sorik Marapi won the Subroto Awards – Bronze Level from The Directorate General of New Renewable Energy and Energy Conservation in the Occupational Health and Safety category in the Non-Producing Work Area in September 2019.



Our Community

Sorik Marapi Geothermal Power

Sorik Marapi Geothermal Power project is located on the foothills of Sorik Marapi Mountain, a part of the legendary Bukit Barisan, covering nearly 1,700 km and spans from the north to the south of the island.

Since 2016, we have gone hand in hand with all elements for the Mandailing Natal community's welfare. We are seeing businesses grow one by one alongside our project development. Investing in people's health, infrastructure, education, community empowerment, and local human resources prioritization are number among many of our efforts to grow alongside Mandailing Natal.

The majority of livelihood in Mandailing Natal focuses on agriculture; rubber and palm

plantations dominate the area, alongside small numbers of coffee plantations and chili farms. Aiming at farmers' welfare whilst empowering the local community, we provide assistance and guidance to 10 local coffee farmers to produce an end-to-end process for local coffee that reaches the international market, 9 local business-women to produce pumpkin chips that escalate the local economy, 13 local business-women to produce tempeh chips, 17 local catfish farmer, 17 local chili farmer, and 17 local businesswomen to produce brown sugar. Our support for local businesses in Mandailing Natal also resulted in their success in obtaining a Geothermal Certificate of Registration from the Directorate General of New and Renewable Energy and Energy Conservation (EBTKE) in 2021.

We invest in the long-term development of human resources in the Mandailing Natal by prioritizing the local workforce in our recruitment program. Our projects in partnerships with the local community, vendors in the regency, and the North Sumatra area, also resulted in numerous new businesses, making a great boost for local economic growth. We look forward to continuing our contribution to sustainable development in the area.





Project Name:
Sokoria-Ndonga Timur Geothermal Work Area

Geothermal Permit Number:
2951 K/30/KEM/2015

Geothermal Permit Award Date:
April 26th 2015

PPA Signing Date:
September 30th 2014

PPA Amendment Signing Date:
December 23rd 2021

National Vital Object:
202.K/HK.02/MEM.S/2021

National Vital Object Award Date:
October 18th 2021



Total Surface Area

42.570 Ha



Potential Resource

30 MW



March 2022
COD Unit I

5 MW



July 2023
COD Unit II

3 MW



Installed
Capacity

8 MW



2028*
COD Unit III

11 MW



2029*
COD Unit IV

11 MW

*Future development



Sokoria Geothermal Indonesia

PT Sokoria Geothermal Indonesia develops a geothermal field in Ende Regency, East Nusa Tenggara, Flores Island. Situated in hilly terrain approximately 6 kilometres away from Mt. Kelimutu National Park, the Sokoria geothermal field is a typical volcanic hydrothermal that commonly hosts a geothermal system in Indonesia. The electricity generated by this geothermal power will be dispatched to PT PLN (Persero) based on a Power Purchase Agreement (PPA) for 35 years.

Applying Kaishan's power plant technology in maximizing geothermal resources in Ende, we are able to maximize the medium enthalpy resources in Sokoria, making it the first medium enthalpy geothermal project in Indonesia. Following the successful drilling of a total of 8 wells for the production of 10 MW, the project started generating Unit I of 5 MW in March 2022 and followed a year later by Unit II of 3 MW in July 2023.

PT SGI achieved Subroto Award in Occupational Health and Safety from the Indonesian Ministry of Energy and Mineral Resources in July 2021, followed by The Best Environmental Management Award in Ende Regency from the Ende Environmental Department in August 2021 for its outstanding commitment to environmental sustainability. SGI continued to embark on its journey until it achieved the Subroto Award in Occupational Health and Safety.

With a geothermal resources power potential of up to 30 MW, the project provides a green energy alternative for Ende Regency, fulfilling the Ende community's need for energy, and boosting the government's Flores Geothermal Island program.

Contributing to the country's energy resilience through electricity supply with low carbon emissions in its operations, this project is a part of the government's net zero agenda by 2060, or sooner.

Our Community



Sokoria Geothermal Indonesia

Ende is a cultural and beautiful jewel that lies on the southern coast of Flores Island. The land is rich in agricultural products, with coffee plantations dominating the area.

We strongly believe in investing in the community and creating a lasting impact on the lives of people together with the people. We strongly believe in investing in the community and creating a lasting impact on the lives of people together with the people in many

ways. Our utmost priority is **health, infrastructure, education, and welfare/economics, preserving cultural heritage** with the community. Despite our working site being in hilly terrain, we ensure that the culture remains rich and steeped in history and tradition, honoring local tradition and the role of Musalaki in the community, and involving them in our significant project events. We also support the preservation of the Musalaki house, the traditional house where the indigenous people live, performing traditional ceremonies and gathering for community discourse.

We collaborate with the Ende Regency Government to create a better infrastructure and build inclusive access for the people. In September 2020, PT SGI sponsored a refurbishment project of traditional houses called Anagare, followed by road repairs in Loka, Tanah Bara, and Lelepodo. We collaborate with the Ende Regency Government to create a better infrastructure and build inclusive access for the people. In September 2020, PT SGI sponsored a refurbishment project of traditional houses called Anagare, followed by road repairs in Loka, Tanah Bara, and Lelepodo. PT SGI also goes hand-in-hand with the local community in health, education, and infrastructure. By 2023, we have engineered a program to improve health education for pregnant women and toddlers, health education, and a clean lifestyle campaign for the people of WKP Sokoria, helping students with scholarships for outstanding students in Sokoria village schools, also a better infrastructure with help providing water tanker truck assistance to the Ende Regional Government, and Damaged road repairs in the Sokoria WKP area. Through "Putra Daerah Program" we provide job opportunities for the Ende community, prioritizing local talent in our recruitment programs.



Menara Sentraya 19th floor
Jl. Iskandarsyah Raya No. 1A, Kebayoran Baru, Jakarta

Phone : +62-21 72787336

www.ksorka.com