

KMSD POWER

Company Profile

Our Company

KMSD Power is an alternate energy company focused on delivering innovative and real-world energy solutions to our customers. The company was founded in 2016 as the energy arm of KMSD CC., who have operated in South African for the last 30 years.

The company is a level 1 BBB-EEE contributor and is committed to empowering youth and developing green solutions for the country. We are constantly looking for partnerships with likeminded companies that want to make a difference to the country and the environment.

We offer alternate energy solutions that are fuelled by a variety of models with the focus being harnessing fuels or processes that would otherwise be wasted, allowing customers greater efficiency and with this greater cost savings.

We are headquartered in KZN but have the capability to service the country and Southern Africa through our integrated partner network.

The flexibility of our product offering allows us to develop energy solutions in the following segments:

- Manufacturing and production facilities
- Hospitals
- Waste-water treatment plants and bio-gas
- Resorts, hotels and apartment buildings
- Chemical and petro-chemical plants
- Mining
- Residential and commercial developments

Our scope of product can provide energy solutions from 100kW to 10MW. Through our supplier network we are also able to facilitate larger (heavy duty) turbine requirements (>75MW) for grid allocation.



Our partners

Ansaldo Energia (AEN):

AEN is a 160-year turbine energy company headquartered in Genoa, Italy. The company has extensive experience in electricity generation in Africa and SA with more than 17 Gigawatts across seven (7) countries in Africa. They have an even larger footprint in Europe and now the Far East.

They built and commissioned over R15bn (project value) in heavy duty turbines in Durban and PE from 2011 to 2016. Their attention is now on establishing the micro turbine with KMSD Power. Their African head office is in Johannesburg, South Africa.



Opra Turbines:

Opra has been operating since 1991 and is headquarter in Amsterdam, Holland. OPRA has demonstrated market success for oil & gas as well as industrial and commercial CHP applications and sold more than 130 gas turbines with OP-16 accumulating over 2million operating hours.

Opra was introduced to the KMSD portfolio late in 2017 with support from AEN. We are currently in advanced discussions to install a turbine before June 2018.

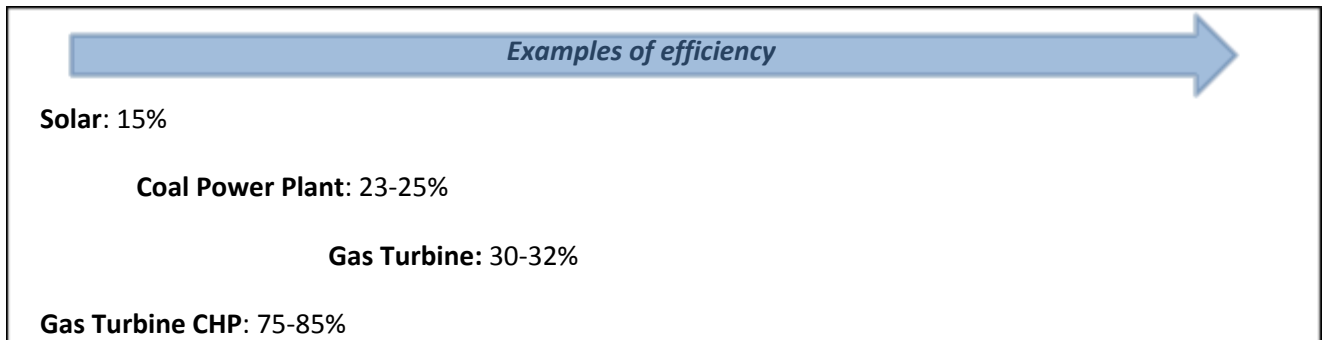


Egoli Gas:

Egoli Gas (Pty) Ltd is a natural gas reticulator based in Johannesburg and servicing more than 7 500 domestic, central water heating, commercial and industrial businesses in the Johannesburg area and offers environmentally-friendly, safe, reliable and energy-efficient natural gas. KMSD Power has engaged with Egoli Gas as a preferred partner to supply CNG to our turbines in the Gauteng area.

Our Products

- **Our products are CHP (Combined Heat and Power) turbines.** Our solution is therefore able to produce electricity (from 100kW to 10MW) and simultaneously produce hot water or steam. This allows us to achieve incredibly high efficiency rates versus your traditional electricity producer.

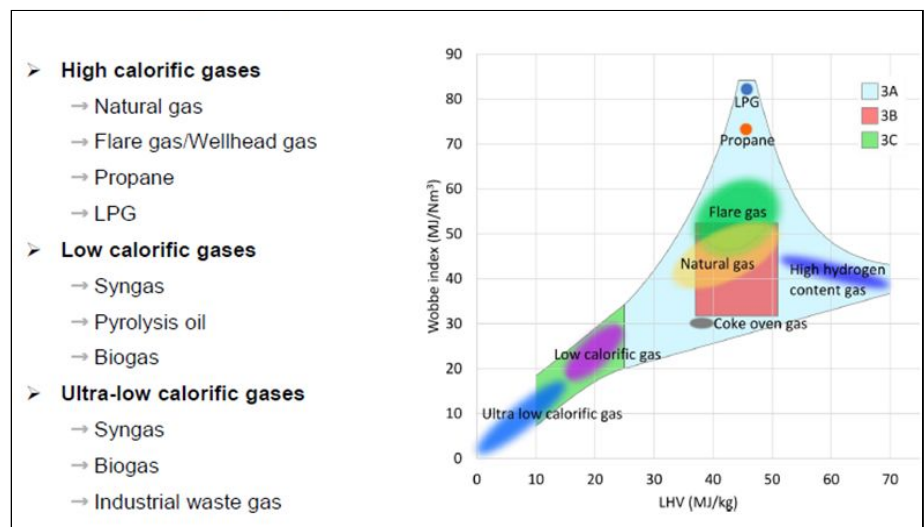


This allows maximum utilisation of your fuel source, reducing wastage and maximising profit. With our turbine taking care of your heating and cooling needs, this leave sufficient power to support just your electrical components and lighting.

A single 100kW turbine has the capacity to meet all the electrical, heating and cooling requirements of a 250-bed hospital or hotel and is performing this function in Europe already.

- **Our products have flexible fuel options** and can run off various fuel types (light and heavy oils and various gases).

Our model range can run off exhaust and waste gas covering a wide calorific range from bio gas to LPG. We have models that are also able to be modified after installation should the gas fuel source change as well as dual fuel systems.



- **Our products are quiet and compact.**

Our 100kW turbine is less than four (4) square meters and under 2m tall and can operate indoors as well as outdoors, in extreme conditions (snow to high humidity).

The operating noise is less than that of a shower and the emissions are within every regulation.

This ensure that our turbines will support your green initiatives and credentials as you are relying less of 'dirty' electricity.

Our larger turbines (1.5MW) are neatly housed in two (2) 20ft containers which allows them to be transported easily and are quick to install and commission.

- **Our units work in conjunction with the existing electrical grid** to provide 50Hz three (3) phase power. They allow you to reduce your total load requirement from the national electrical provider through its CHP application. It will also enable you to apply for reduced grid access in the planning of new developments or facilities.

There are options available for completely off grid solutions (Island Systems) which allow you to operate in remote sites without grid access.

- **Our units have a remarkable life span** of over 90 000 hours (10 years on 24hr cycle) with an option to increase to 15 years with a minor overhaul.

This combined with the low running costs and simple service schedule allows very few hours lost to maintenance and repairs when compared to reciprocating engines and solar solutions.



Easy access to engine & generator compartment



Open louvers to exchange filters