



KAB GROUP OF COMPANIES
POWERING A SUSTAINABLE TOMORROW

INNOVATIVE ENERGY SOLUTIONS FOR FORWARD-THINKING BUSINESSES

Kinergy Advancement Berhad (KAB) (Formerly known as Kejuruteraan Asastera Berhad), a public-listed company listed on the Main Market of Bursa Malaysia Security Berhad since 2020, noticed a paradigm shift in the market as the growing sustainability movement moved from the fringes of science into the mainstream. With this insight, KAB captures opportunities by becoming a **One-Stop Energy and Engineering Solutions Provider** for Sustainable Energy Solutions (SES). Equip the many types of business industries with customisable services.

CLEAN ENERGY GENERATION

Deliver twice as efficient power stations and the opportunity for cost savings, reduced emissions and carbon footprint.

COGENERATION

Utilises a single fuel source, which may be Natural Gas or Biogas to produce electrical power while harnessing heat released from the combustion of the fuel to generate thermal power in the form of steam, hot water, or cold water. This reduces businesses' reliance on local energy distributors.



WASTE HEAT RECOVERY (WHR)

Utilises the technology of the Organic Rankine Cycle (ORC) to capture, transfer and convert heat released from factories into mechanical and electrical power in a repeated cycle. WHR does not only promote greener operation processes, but also helps industries reduce costs and improve efficiency.



GAS-FIRED POWER PLANT

Utilises Natural Gas as fuel to spin the turbine generator and produce electrical power. A gas-fired power plant has no standby losses and can be started very quickly to meet load demand. It is an efficient and low-carbon power generation alternative that supports renewable energy development.



RENEWABLE ENERGY GENERATION

Help businesses achieve sustainable development goals and reduce significant energy costs.

SOLAR PV SYSTEM

It is a representation of a proven clean energy technology that converts sunlight directly into electricity using semiconductor cells on solar panels. KAB has an experienced team and a full product suite for small to medium-sized solar plants.



HYDROELECTRIC POWER

One of the oldest, and largest sources of renewable energy converts moving water (kinetic energy) into electrical power. It is less dependent on the weather yet very responsive to fluctuating power demands. Its operation can achieve an efficiency of up to 90%.



BIOGAS/BIO MASS ENERGY

It is a waste-to-energy system that utilises biofuels to generate thermal or electrical power. Biofuels are produced from the breakdown of organic materials such as agricultural or animal waste through a process called Anaerobic Digestion. It is a direct replacement for non-renewable and carbon-intensive fossil fuels.



ENERGY EFFICIENT SOLUTIONS

Manage overall energy consumption and efficiency of the building, and tailor solutions customised for individual sites.

CHILLER OPTIMISATION

Uses software to predict the required cooling load and needs of the building to perform proactive energy-saving strategies, while retaining the building's comfort conditions. This solution is able to generate 8-20% of energy savings.



BUILDING MANAGEMENT SYSTEM (BMS)

It is a centralised energy management software that helps businesses understand the energy usage on their premises and transform the collected data into actionable information.



TRACK RECORD

WASTE HEAT RECOVERY

KAB's wholly-owned subsidiary, KAB Energy Power (KABEP) owns and operates a **2.2 Mega-watt** Organic Rankine Cycle facility in Seremban which supplies power for Safran Landing Systems (M) Sdn Bhd through recovering waste heat from its production.

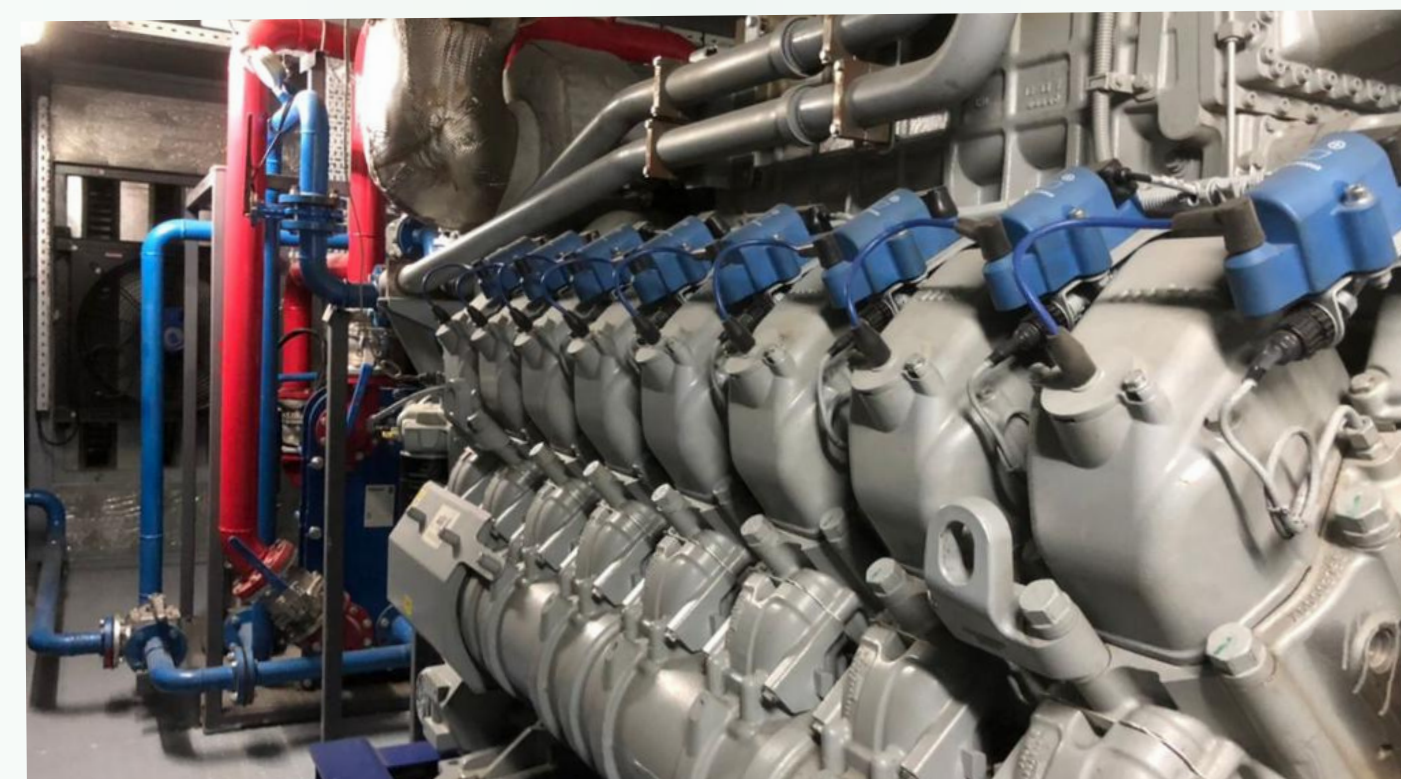
Expected emissions mitigated: 8,452.00 tCO₂e over 10 years.



COGENERATION

KABEP through a SPV named KIEV CRG Sdn Bhd has a contract to build, own, and operate a captive Cogeneration plant in Seremban for Careglove Global Sdn Bhd with the capacity to generate **1.5 Mega-watt** of electricity and useful heat in the form of hot water back to the production line.

Expected emissions mitigated: 30,146.00 tCO₂e over 8 years.



GAS-FIRED POWER PLANT

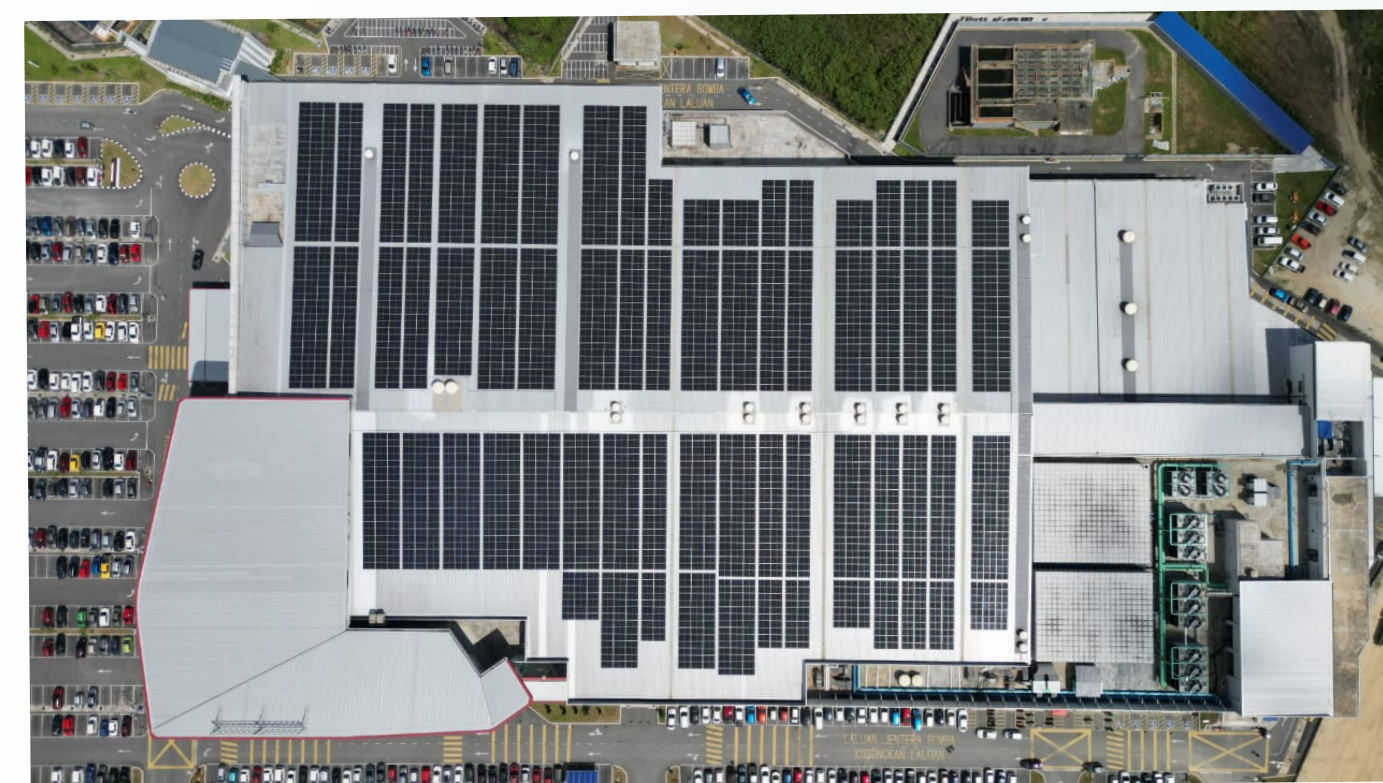
KABEH has secured an EPCC contract from PETRONAS Gas Berhad to develop a **52 Mega-watt** gas-fired power plant and its associated facilities.

Expected emissions mitigated: 4,405,752.00 tCO₂e over 20 years.



BUILDING MANAGEMENT SYSTEM

Partnership with Resource Data Management Asia (RDMA) whom with **over 70 years of experience** in the field of Building Management System (BMS) and has **direct control over 22,000** buildings worldwide to provide comprehensive BMS solutions to clients.



SOLAR PV SYSTEM

To date, KAB's Solar portfolio consists of 12 Solar projects in both Malaysia and Thailand with a total combined installed capacity of **14 Mega-watt**.

Expected emissions mitigated: 197,328.16 tCO₂e over 25 years.



BIOGAS ENERGY

KAB's wholly-owned subsidiary, KAB Energy Holdings (KABEH) is in the progress of acquiring a biogas power plant in Kulim, Kedah with an installed capacity of **2.4 Mega-watt** to supply electricity from organic waste.

Expected emissions mitigated: 52,506.07 tCO₂e over 11 years.



HYDROELECTRIC POWER

KAB's wholly-owned subsidiary, KAB Energy Holdings (KABEH) has acquired a mini hydroelectric power plant in North Sumatera, Indonesia with an installed capacity of **11 Mega-watt** to supply electricity to a state-owned utility company in Indonesia.

Expected emissions mitigated: 818,882 tCO₂e over 21 years.



CHILLER OPTIMISATION

KAB has executed chiller optimisation projects for large-scale buildings such as luxury hotel and shopping malls in Malaysia and Thailand.

Expected electricity savings: An average of 15%-20%.