

**DUAL FUEL PNG SYSTEMS
CO-POWERED BY
YOUR LOCAL CGDs**

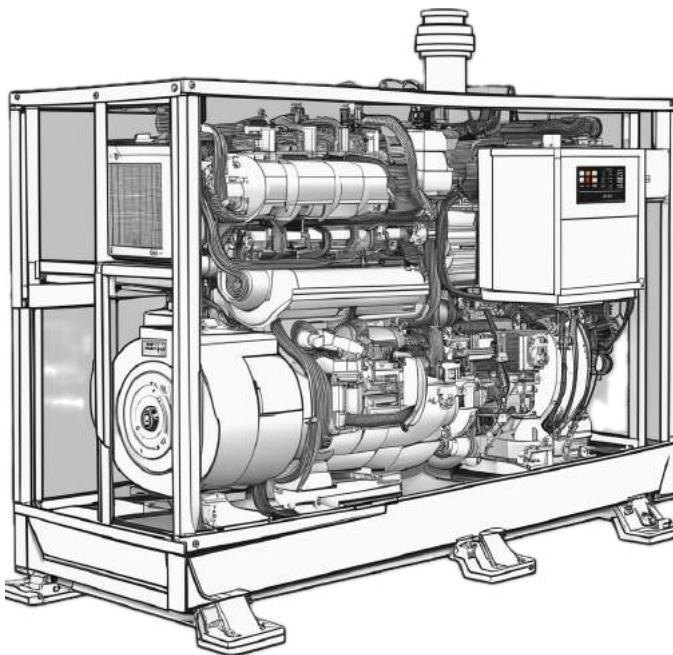
**DUAL FUEL LPG SYSTEMS
CO-POWERED BY**



**ADVANCED SEQUENTIAL
DUAL FUEL SYSTEM
FOR DIESEL GENERATOR**

TECHNOLOGY FROM STAG OF POLAND

**DIESEL-ONLY GENERATORS ARE BANNED IN MAHARASHTRA,
DELHI NCR, GUJARAT, GOA, KARNATAKA, HARYANA, RAJASTHAN & PUNJAB**



**DIESEL
+
NATURAL GAS
OR
LP GAS**



**SWITCH TO ECONRG
DUAL FUEL SYSTEMS
FOR COMPLIANCE!**

**Our Systems Provide
the Path Forward!**

USAGE OF DIESEL REDUCED BY 50%

**UNLEASHING DIESEL POWER WITH EMISSION REDUCTION
AND GUARANTEED RETURN ON INVESTMENT**

**DIESEL
+
LPG**

**DIESEL
+
PNG**



PIONEERING DIESEL GENERATOR EFFICIENCY ENHANCEMENT THROUGH ADVANCED DUAL FUEL SYSTEMS

Welcome to Econrg, your premier destination for cutting-edge Gaseous Fuel Systems tailored specifically for Diesel Generators, ensuring conversion to Dual Fuel Operations. (Diesel + LPG/PNG).

Our commitment to innovation shines through in our Dual Fuel Systems, designed to elevate industrial energy efficiency, achieve faster ROI, and significantly reduce emissions.

In collaboration with esteemed European partners, Econrg has developed fully electronic systems leveraging in-house manufacturing capabilities and pioneering technology. This ensures cost competitiveness, advanced engineering, and superior emission reduction capabilities, surpassing any other available technology in the Indian market.









ANNUAL SAVINGS CALCULATOR

Genset Capacity (KVA)	Only Diesel Fuel consumption rate at 100% load (lt/hr)	Diesel consumption on dual fuel mode (lt/hr)	LPG Consumption on dual fuel mode (kg/hr)	Only Diesel Cost/Hr	LPG Dual Fuel Cost/Hr	Savings Per hour	Yearly Savings (Avg 300 hours)
25	6.2	3	2.1	583.1	482.2	100.9	30261
62.5	15.1	8	5.1	1407.1	1163.6	243.4	73022
82.5	20.3	10	6.8	1888.8	1562.0	236.8	98022
125	28.0	14	9.4	2604.0	2153.5	450.4	135137
180	41.6	27	13.9	3877.2	3206.5	670.7	201210
250	54.1	27	18.1	5031.3	4160.9	870.3	261105
320	70.5	35	23.6	6558.3	5423.8	1134.5	340353
500	103.6	52	34.6	9638.5	7971.2	1667.3	500201
650	132.3	66	44.2	12311.3	10181.6	2129.7	638910
750	165.0	83	55.1	15345.0	12690.5	2654.5	796346
810	175.8	88	58.8	16355.9	13526.5	2829.4	848808
1010	220.0	110	73.5	20460.0	16920.7	3539.3	1061795
1250	256.0	128	85.6	23808.0	19689.5	4118.5	1235543
1500	309.0	155	103.3	28737.0	23765.9	4971.1	1491339
1750	338.0	169	113.0	31434.0	25996.3	5437.7	1631303
2000	363.0	182	121.3	33759.0	27919.1	5839.9	1751961





SALIENT FEATURES OF ECONRG DUAL FUEL SYSTEM

-  **Intelligent Control:** Seamlessly integrates gas and air with diesel for enhanced performance.
-  **Compatibility:** Engineered for 2-16 cylinder diesel engines for various applications.
-  **Low-Pressure Gas Injectors:** Electronically controlled for zero wastage, precision and longevity.
-  **Sequential Fuel Injection:** 100% precision, eliminates traditional gas train.
-  **Safety Mechanism:** Robust safety through knock sensors, exhaust gas temperature sensor, and lambda sensor.
-  **Zero Derating:** Similar output as diesel even at 110% load.
-  **Zero Modification:** No modification made to engine
-  **Seamless change-over:** Generator continues to operate on both dual fuel as well as 100% diesel mode and can be switched easily.



Genset Capacity (KVA)	No. of Hours of Usage	Genset Capacity (KVA)	No. of Hours of Usage
25	900	500	254
62.5	540	650	223
125	446	750	278
180	284	1000	189
250	257	1250	170
320	238	1500	150
380	230	2000	135

#Depending on operational efficiency of existing diesel generator set

ECONRG DUAL FUEL SYSTEM FOR DIESEL GENERATOR

**SYSTEM SUPPLIED TO MAJOR GENSET OEMs
OUR TECH PARTNER IS STAG FROM POLAND**



ECONRG Gas Controller

EcoNrg Diesel, an alternative fuel system, adapts to Diesel engines with 2 to 16 cylinders, using technical solutions to mix air with Diesel fuel in the cylinders. It facilitates seamless integration without altering engine internals, promoting a smooth transition to Diesel fuel supply.



Exhaust Gas Temperature Sensors

Exhaust Gas Temperature Sensors (EGTS) relay exhaust system temperature to the GENSET's ECU, safeguarding crucial components like turbos and catalytic converters, ensuring cleaner emissions.



Knock Sensor

The knock sensor detects engine vibrations signaling knocking, optimizing ignition timing for maximum energy yield, reducing fuel consumption, and enhancing torque in equipped engines.



Temperature & Pressure Sensor

A versatile 3-in-1 device measures gas pressure, manifold vacuum, and temperature, designed for CNG injection systems in all gensets, accommodating various mounting configurations and offering rapid response to temperature changes.



Controller Harness

Original harness sets for fourth-gen sequential injection in the volatile phase include complete bundles with original plugs and sockets, featuring a version compatible with pressure sensors.



Switch LED-600 AC

The Digital Diesel/gas (P/G) switch facilitates fuel type selection, featuring gas level indication via LEDs, low fuel warning, adjustable buzzer volume, and optional emergency engine start on gas.

ECONRG DUAL FUEL SYSTEM FOR DIESEL GENERATOR

**SYSTEM SUPPLIED TO MAJOR GENSET OEMs
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Lambda Sensor

The Lambda/oxygen sensor with Genset-specific connector enhances engine combustion efficiency by aiding the ECU in measuring the air-fuel mixture, optimizing engine performance.



Temperature Sensor

The Coolant Temperature Sensor measures engine coolant temperature, relaying readings to the engine control unit (ECU) for adjustments in fuel injection and ignition timing, optimizing engine performance.



Solenoid Valve

The solenoid valve, with corrosion-resistant steel internals, guarantees reliability against voltage surges, featuring options like epoxy square coil, metallic round enclosure, IP-67 flameproof, and IP-68 weatherproof enclosures, along with a special high flow rate for low-pressure or gravity-pressure applications upon request.



Rubber pipe- 5 mm & 12 mm

This premium rubber hose meets international gas and fuel standards, conveying petroleum products with up to 50% aromatic content, designed for automotive and engine applications, offering flexibility and resistance to oils, fuels, heat, ozone, and weather.



Injector rail

The STAG AC W02 BFC gas injector, suitable for LPG and CNG systems in all engine types, boasts superior performance and compatibility with other AC products, featuring a heatsink-encased coil and a lightweight casing ensuring stable performance across varying ambient conditions.



Gas filter

If any impurity enters the filter, it is removed, ensuring clean gas output—a crucial component in the distribution system—especially designed for auto gas to safeguard injection rail and engine, ensuring optimal performance and accessory protection.

EXPERIENCE THE ECONRG ADVANTAGE

UNLOCK BENEFITS WITH OUR DIESEL DUAL FUEL SYSTEM:



SERVICE, MAINTENANCE & WARRANTY

- All India Network
- Installation by OEM Directly
- Virtual Calibration Globally
- Warranty: 1 year



INSTALLATION TIME:

2 DAYS

MAXIMUM DOWNTIME:

ONLY 2 HOURS



GENERATOR TYPE:

7 KVA to 3000 KVA:

- Naturally Aspirated
- Turbo Charged

OPERATING PRESSURE:

- LPG - 1.5 bar
- PNG - 0.3 to 2 bar



EMISSION CONTROL:

This technology reduces*

- CO2 by 15%-27%
- NOX & SOX by 40-62%
- Particulate Matter by up to 70%

*Based on results obtained during emission testing conducted in Poland

TRUSTED BY:

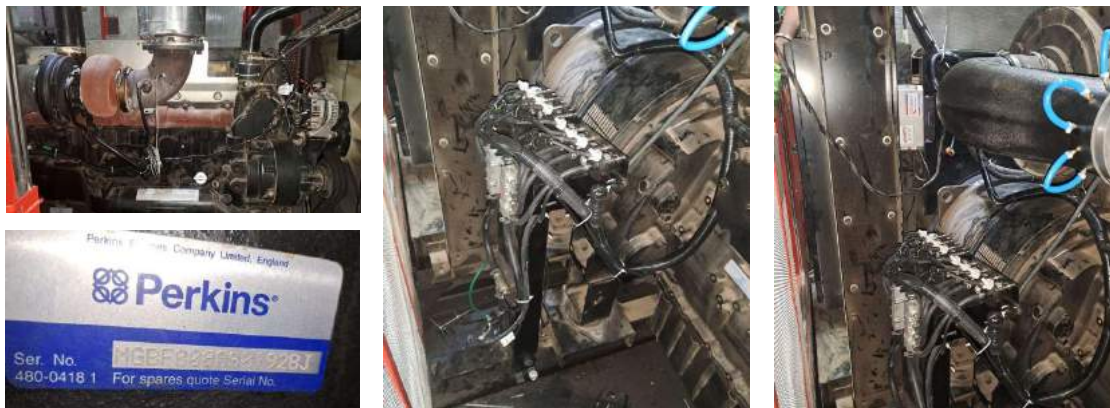


INNOVATIVE ADAPTATIONS: DUAL FUEL INTEGRATION ACHIEVEMENTS

✓ REAL TIME IMAGES OF CONVERSIONS DONE

WITH A PROVEN TRACK RECORD OF OVER 500 INSTALLATIONS NATIONWIDE AND TRUSTED PARTNERSHIPS, ECONRG IS THE PREFERRED CHOICE OF MAJORITY GENSET OEMS FOR OPTIMIZING DIESEL GENSET OPERATIONS.

➤ Mahindra Powerol 500 kVA (Perkins) Diesel Generator Set



➤ Cummins KT 1150G 380 kVA Open Diesel Generator Set



➤ Kohler: Diesel + LPG - Installed gas bank compatible for diesel generator set





INNOVATIVE ADAPTATIONS: DUAL FUEL INTEGRATION ACHIEVEMENTS

**JOIN ECONRG IN DRIVING THE TRANSFORMATION OF
INDUSTRIAL ENERGY EFFICIENCY AND SUSTAINABILITY.**

➤ **Cummins KTA 38 G5- 1010 kVA - 12 Cylinder Engine**



➤ **KOEL Genset - 62.5 kVA**



**YOUR JOURNEY TOWARDS ENHANCED PERFORMANCE AND ENVIRONMENTAL
STEWARDSHIP STARTS HERE!**

CONTACT US

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Ltd. (Unit - III), HP Chowk, Pune- 41050

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ALL INDIA NETWORK

📍 DELHI NCR	📍 AGRA	📍 NOIDA	📍 GURGAON	📍 PUNE	📍 MUMBAI
📍 BANGALORE	📍 CHENNAI	📍 CHANDIGARH	📍 JAIPUR		
📍 AHMEDABAD	📍 KOLKATA	📍 HYDERABAD	📍 KOCHI		