Achieving **80%**

Gen-Set Efficiency

Simply by recovering waste heat from your engine, overall gen-set efficiency can be increased to **80%** ...and beyond!

Up to 50% of all fuel input into the gen-set can be recovered and used as valuable heat energy.

This valuable energy source can be harvested and used at no additional cost, in terms of fuel used or CO₂ generated.

And it can be used for a wide range of domestic, commercial or industrial uses, including district heating and hot water, process heating, generating electricity, or running a chiller for cooling.

Recovering waste heat from a Gen-set

By recovering waste heat energy, overall gen-set efficiency can be increased from around 30% (power only) to 80% (combined heat and power), or even more.

Bowman Heat Exchangers can recover heat from virtually every part of the engine, as shown on the adjacent chart.

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*Association of Decentralised Energy
**Digest of United Kingdom Energy Statistics (DUKES) 2015
A ‘total solution’ to heat recovery

Waste heat can be ‘recovered’ from virtually every part of the engine using Bowman’s ‘total solution’ approach to heat recovery.

55% heat recovery from
Engine Exhaust Stream
Exhaust Gas Heat Exchangers
A highly efficient solution for waste heat recovery from the exhaust stream. Suitable for Biogas, Diesel and Natural Gas applications up to 1MW.

24% heat recovery from
Engine Cooling
Header Tank Heat Exchangers
Bowman’s unique design combines high efficiency engine cooling, with long life durability. Suitable for engines up to 1400kW.

12% heat recovery from
Turbo Charged Air
Charge Air Coolers
Improves fuel efficiency and engine performance by cooling turbocharged air. Suitable for engines up to 800 kW.

9% heat recovery from
Engine Lubrication
Oil Coolers
Recovers valuable heat energy from the engines lubrication system. Suitable for applications up to 1900 kW.

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Global heat recovery solutions

British Antarctic Survey
Bowman Exhaust Gas heat exchangers are a vital part of the CHP system that sustains life on the Halley VI research station.

Grain Drying, Finland
A ‘closed loop’ heat recovery system, using Bowman technology has reduced a farms fuel consumption by 18,000 litres pa.

Canadian Northwest Territories
Bowman Exhaust Gas and Charge Air Coolers have increased energy recovery by 60%, helping reduce cost per kWh by over 50%.

‘Zero waste’ Recycling, UK
Heat recovered from the generators cooling system is being used for space heating and hot water, plus process cleaning operations.