



Engineer - Install - Maintain

Kings Cross District Energy CHP – Case Study

Cogen World Coalition

Alex Marshall, Group Director, Clarke Energy



Introduction to Clarke Energy



Global

Operating in 27 countries with 8GW of power generation solutions deployed globally.



Supporting net-zero

Our projects support the transition to a net-zero carbon economy



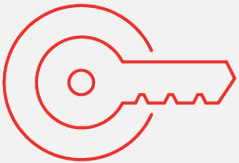
Resilience

Installations supporting local and grid-level resilience



Lower costs & carbon

Reduced operational costs and carbon emissions through fuel efficient power



Turnkey EPC

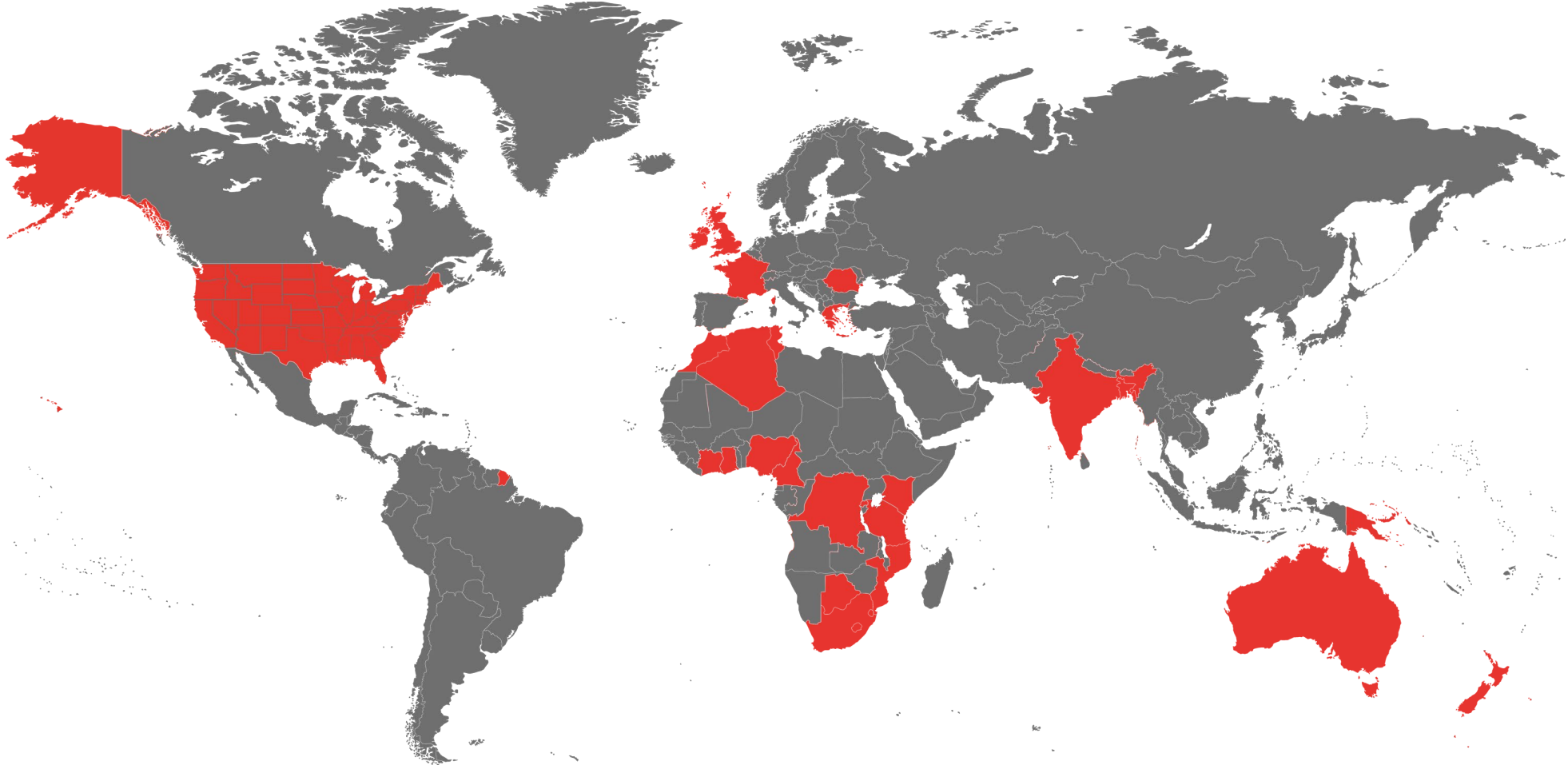
Single point of contact with, turnkey design, engineering, procurement and construction (EPC) services.



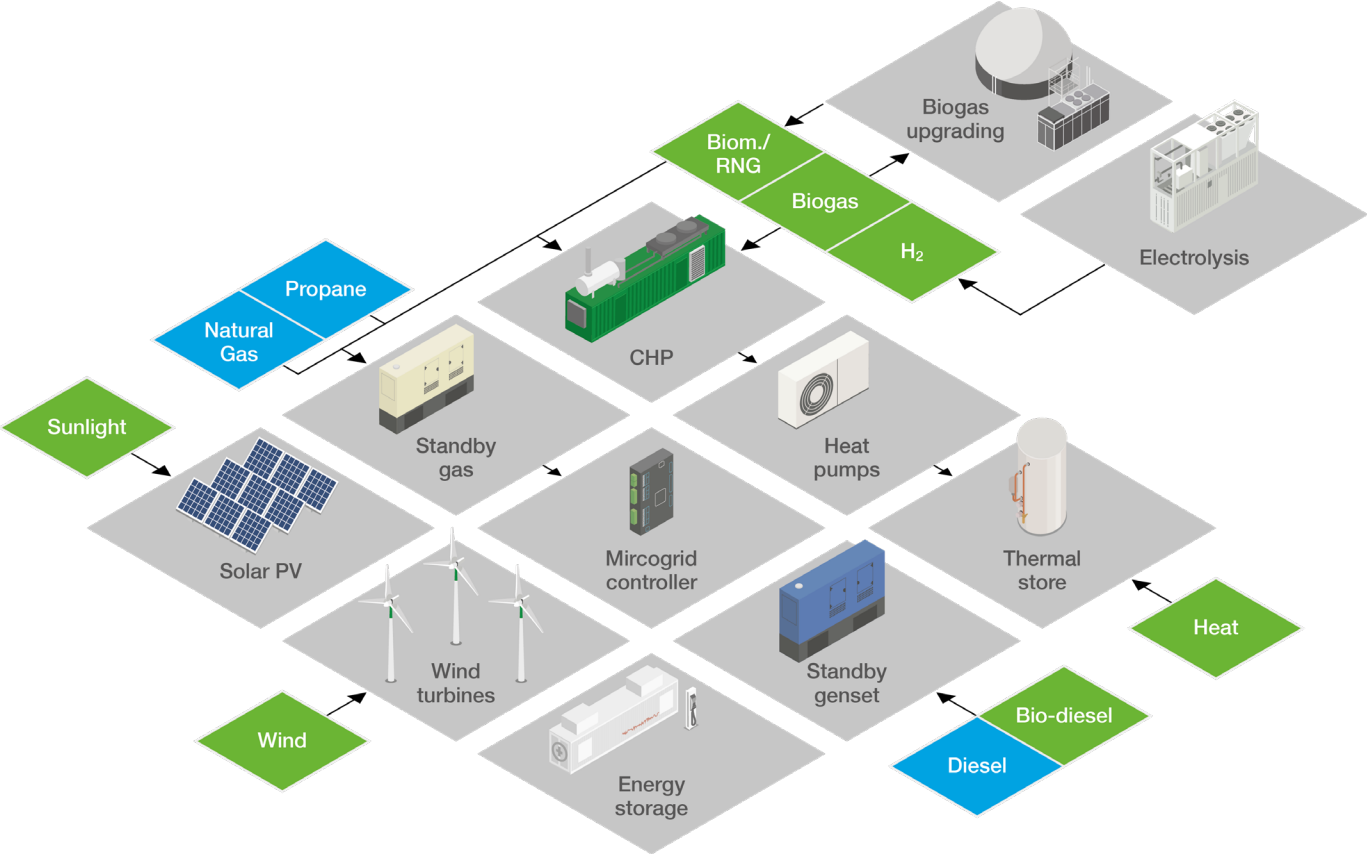
Maintenance

Full maintenance, operation and overhaul services maximising equipment run hours.

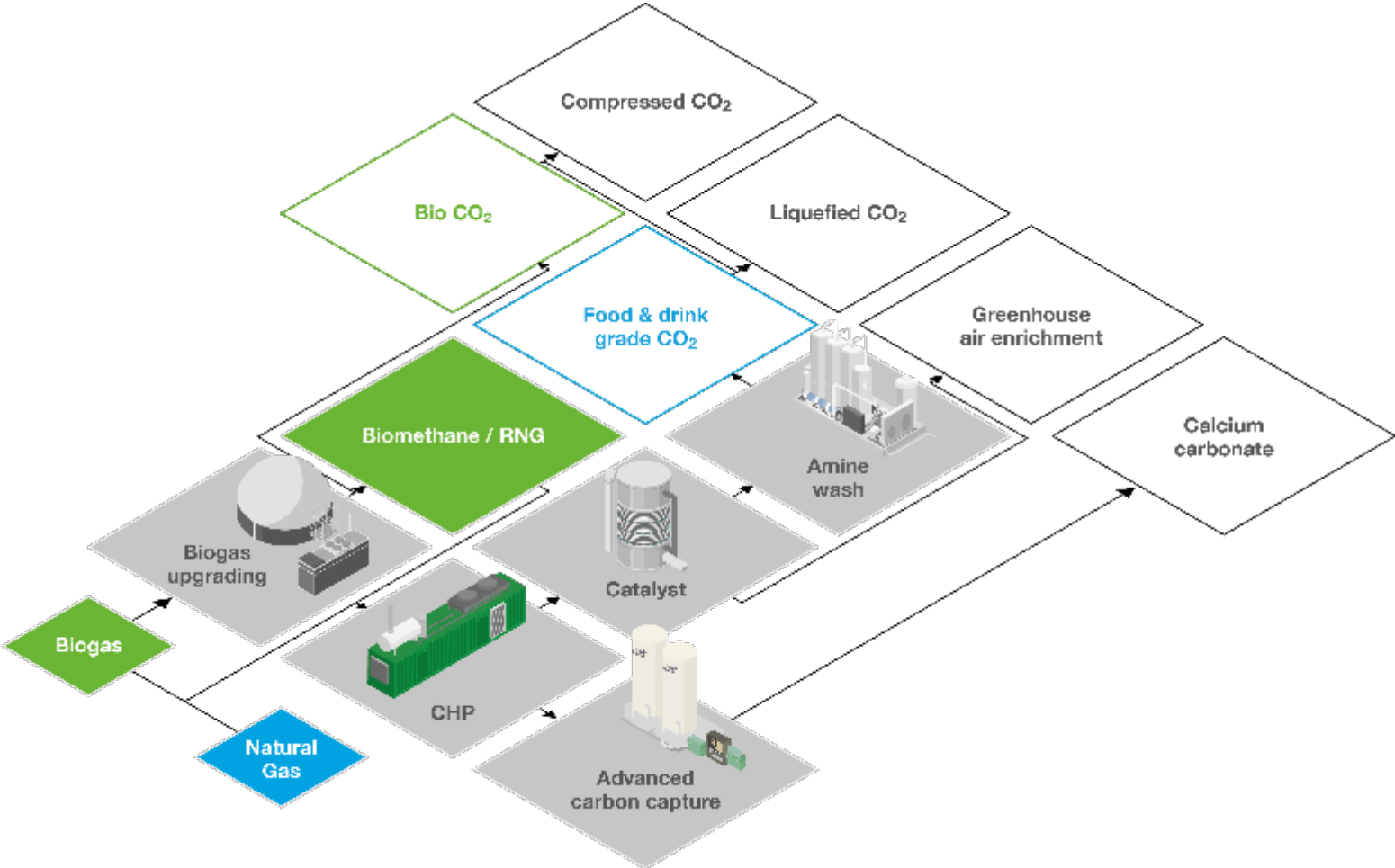
Global Reach, Local Focus



Microgrid Building Blocks



Carbon Dioxide Removal Building Blocks for Decentralized Power



Turnkey, adaptive *energy solutions*



RELIABLE SINGLE POINT
OF CONTACT ACROSS
THE WHOLE PROCESS



RESILIENT, ALWAYS-ON
POWER FOR YOUR
SITE



ADAPTIVE INTEGRATION
WITH ANY ENERGY
ASSET



Case study: Kings Cross CHP Scheme



Kings Cross Development

Re-development of 67 acre site in North London, North of King's Cross Railway Station.

Mixed use development including commercial and residential buildings.

Metropolitan King's Cross is a Joint Venture Energy Supply Company (ESCO) between Argent and Metropolitan Kings Cross

Location







The Technology

INNIO's J612 Jenbacher gas engines (previously a GE product)

Reciprocating gas engine

Installed in 2 phases, room for 3 units total

Engine capable of generating 2MW of electrical power and 2MW of thermal power.

District energy scheme capable of delivering electricity, heating and cooling (trigeneration)

CHP Quality Assurance Certificate of 116, 10 points over expected



The Project – Phase 1

Clarke Energy's customer – Argent and Metropolitan King's Cross

Phase 1 installed in 2012

District energy centre and cooling scheme installed by Vital Energi

According to Metropolitan, the scheme achieves CO2 emissions in excess of 60% above baseline carbon emissions.

Biomethane is now sourced to fuel the scheme with renewable energy



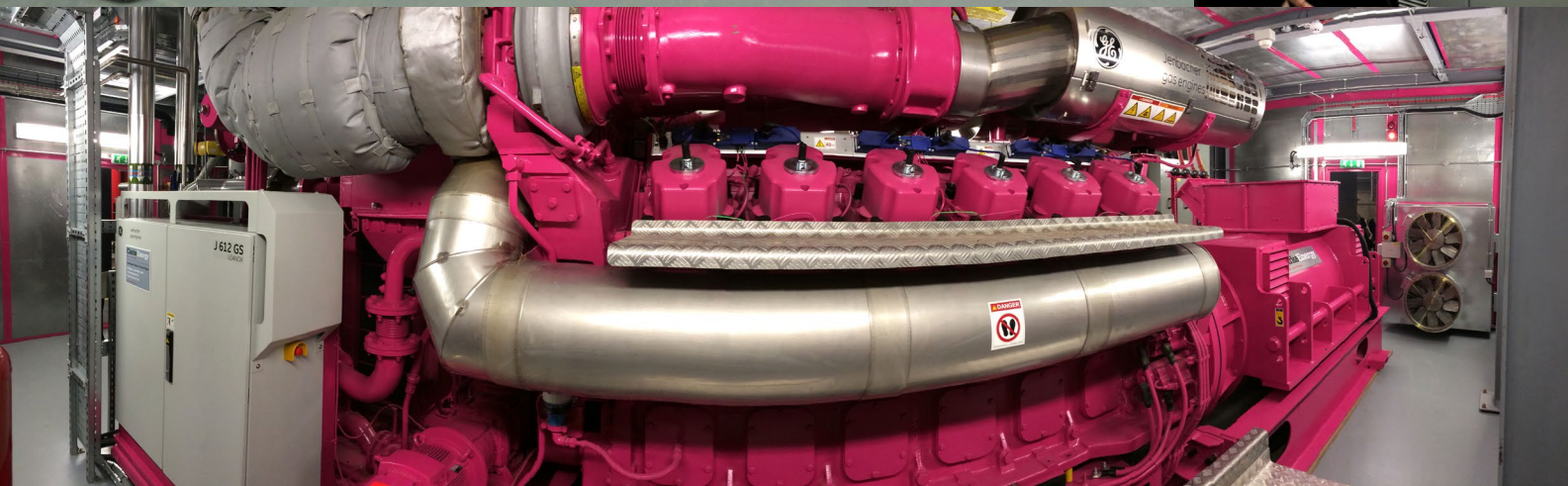
The Project – Phase 2

Clarke Energy's customer – Argent and Metropolitan King's Cross

Phase 2 officially started 2014

Addition of second J612, with opportunity to expand to 3 units.

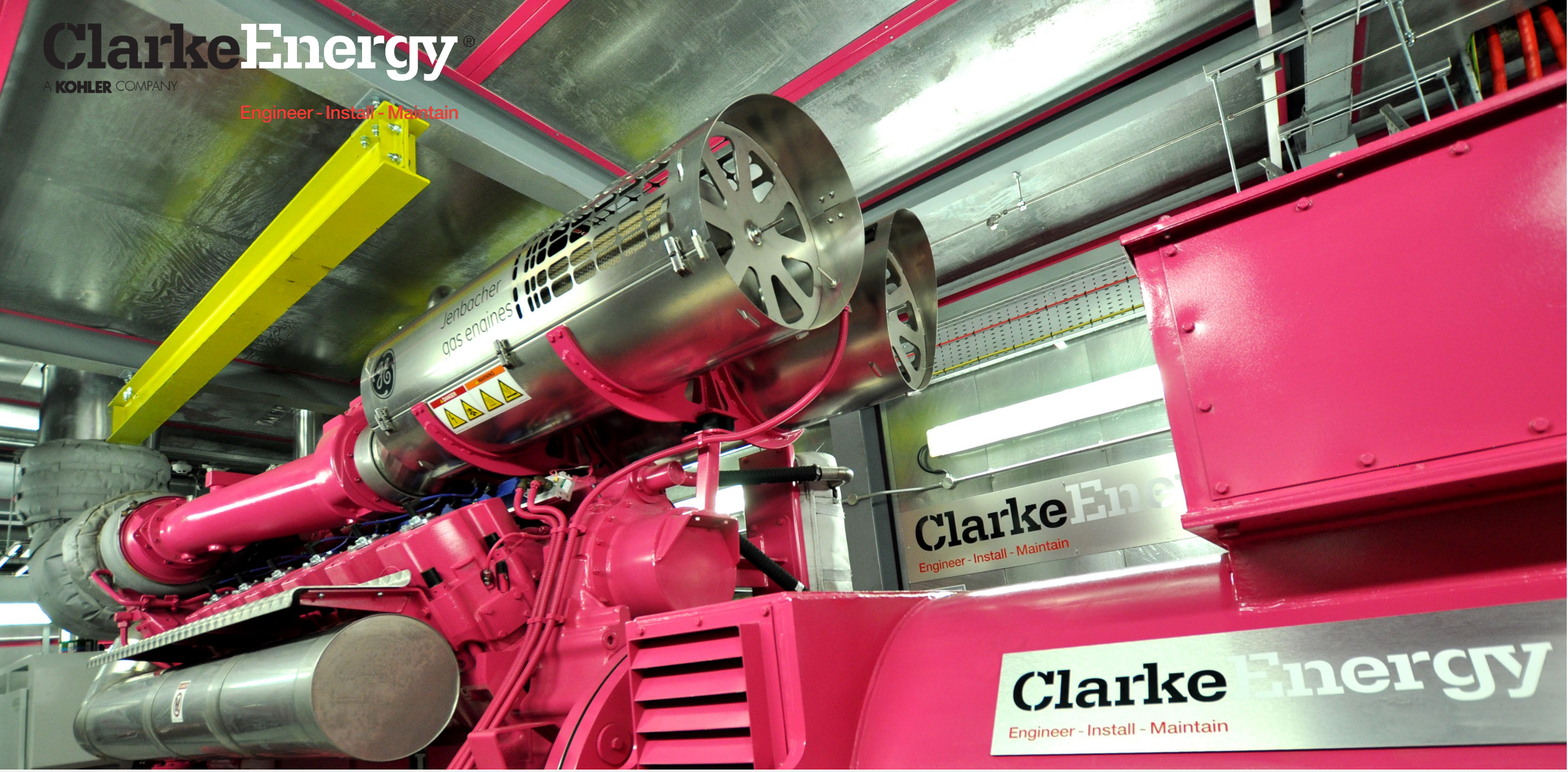
Painted bright pink in line with breast cancer awareness



ClarkeEnergy[®]

A KOHLER COMPANY

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For More Information Contact

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