



Stationary, two-stroke power

02/12/2009

## Green Energy in London with MAN B&W Engines

**Blue-NG, the UK-based renewable power company, has ordered two MAN B&W 7K60MC-S engines to power two environmentally friendly power plants in London.**

Each sister plant, located in the Southall and Beckton districts, will have one MAN B&W 7K60MC-S engine at its heart, manufactured by MAN Diesel's Polish licensee H. Cegielski – Poznan S.A. Each engine develops 13.9 MW at 150 rpm and is installed with an Organic Rankine Cycle (ORC) turbine and Turbo Compound System (TCS) for increased efficiency.

The heat from the two plants will be used in the gas pre-heating process, which is a necessary part of the pressure reduction process for liquid natural gas, and will supply renewable electricity, corresponding to the consumption of up to 100,000 homes. Blue-NG signed a turnkey construction contract with Land & Marine Project Engineering Ltd. for the design and construction of the power plants in June 2009.

The engines represent the latest generation of the popular, two-stroke, low-speed MAN B&W K60MC-S engine and will run on crude rapeseed oil. In general, the development of this latest generation has targeted lower heat rates and lower CO<sub>2</sub> emission. The table below illustrates the K60MC-S's performance improvement since its introduction in 1989:

<b>MAN B&amp;W K60MC-S</b>	<b>1989 parameters</b>	<b>2009 parameters including TCS</b>
<b>Bore (mm)</b>	600	600
<b>Stroke (mm)</b>	1,650	1,740
<b>rpm</b>	136.4	150.0
<b>Output (kW/cyl)</b>	1,720	1,980
<b>ISO 3046 (efficiency %)</b>	48.5	51.6
<b>CO<sub>2</sub> emission* (g/kWh)</b>	600	560

\*when running on HFO

**MAN Diesel Group**  
Teglholmegade 41  
DK-2450 Copenhagen SV  
DENMARK  
[www.mandiesel.com](http://www.mandiesel.com)

**Group Marketing**  
Further information:  
Peter Dan Petersen  
Tel.: +45 33 85 14 70  
[peterd.petersen@man.eu](mailto:peterd.petersen@man.eu)

Graphics and images:  
Mia Glarborg  
Tel.: +45 33 85 15 90  
[mia.glarborg@man.eu](mailto:mia.glarborg@man.eu)

# Press Release

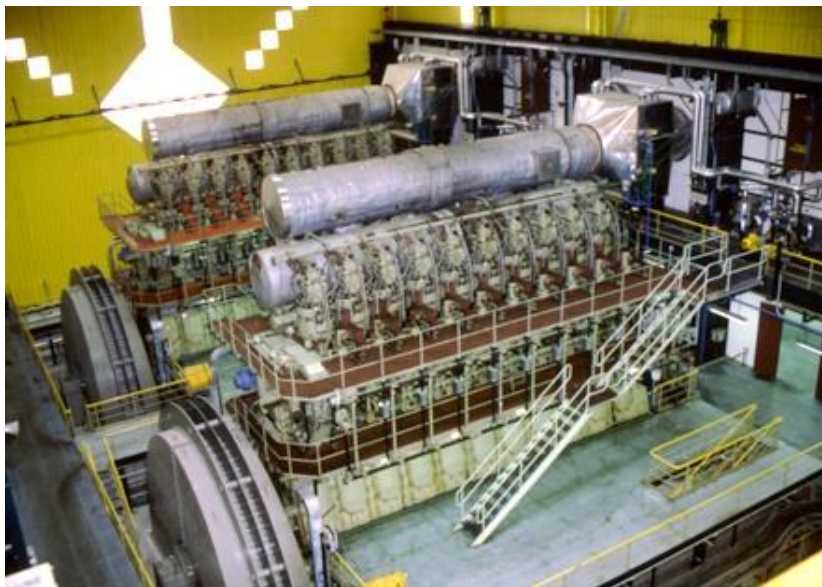
## MAN Diesel



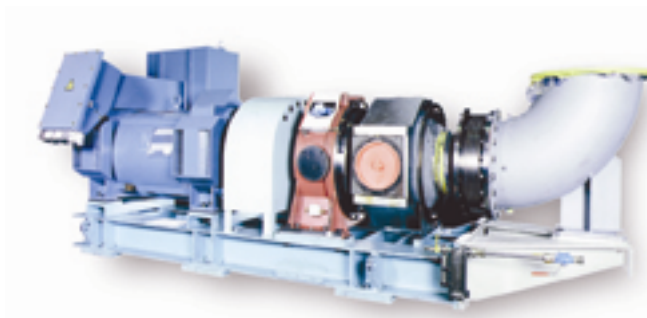
Press Release  
Page 2 / 3

Blue-NG is a renewable power company that builds and operates generating plants that produce electricity and heat locally. The company is a joint venture between the National Grid, the UK's gas and power-distribution company, and 2OC Ltd., a company well known in geothermal energy and natural-gas pressure-reduction station projects, applying proven technology to generate carbon free electricity.

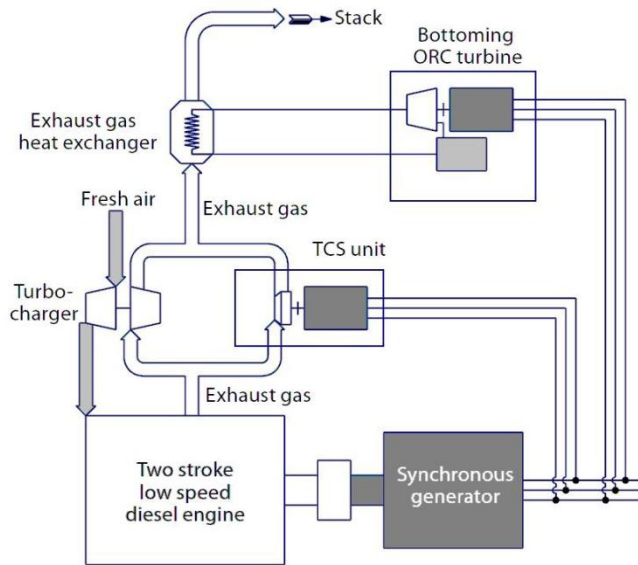
Land & Marine Project Engineering Ltd. is a Wirral-based, international engineering and contracting company with business activities in many segments, including commercial and industrial CHP (Combined Heat and Power) plants and direct injection and co-fired biomass plants.



*Picture of two MAN B&W 10K60MC-S engines at Ibiza power plant in Spain*



*MAN TCS unit for exhaust gas energy recovery*



*Two-stroke, low-speed diesel engine of MAN B&W design in combined cycle*

**About MAN Diesel**

MAN Diesel is the world's leading provider of large bore diesel engines for marine and power plant applications. The company designs two-stroke and four-stroke engines, generating sets, turbochargers, CP propellers and complete propulsion packages that are manufactured both by MAN Diesel and its licensees. The engines have power outputs ranging from 450 to 97,300 kW. MAN Diesel employs approx. 8,000 staff, primarily in Germany, Denmark, France, the Czech Republic, India and China. The global after-sales organisation, MAN Diesel PrimeServ, comprises a network of the company's own service centres, supported by authorised partners. MAN Diesel is a company of MAN SE, which is listed on the DAX share index of the 30 leading companies in Germany.

Ref no 6510-0156