

# Media Release

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## **THE STATE HOSPITAL CUTS CARBON AND COSTS BY SWITCHING FROM OIL TO LPG**

In a move to enhance its sustainability credentials and become more energy efficient, NHS Scotland's high security State Hospital at Carstairs has converted part of its energy supply from gas oil to liquefied petroleum gas (LPG) from Flogas. The hospital has experienced major savings as a result. Since switching they have cut their carbon footprint by an estimated 17% and reduced energy costs by approximately 26%.

Based in South Lanarkshire, central Scotland, The State Hospital has 140 high-secure beds for male patients requiring specialist care that matches individual needs, in conditions of maximum security. Patient accommodation within its 60-acre campus takes the form of four hubs, each comprising three 12-bedded wards, domestic kitchens, and staff offices. All patient bedrooms have en-suite facilities.

The rural hospital, which is not connected to the mains gas grid, has its own district heating system that centrally provides heating, hot water and gas for cooking to each of the buildings. Originally powering this system was an 840kW biomass boiler, supported by two oil and two LPG burners. However, funding from the Scottish Government's Low Carbon Infrastructure Transition Programme (LCITP) has allowed The State Hospital to move away from oil and find a more futureproof energy solution – one that enables the hospital to become more sustainable, enhance operational efficiencies and cut costs.

A spokesperson for the Estates Department at The State Hospital said: "Although we had a renewable biomass boiler as our primary heat source, we were still using a lot of oil to meet the hospital's year-round high energy needs. By converting our oil burners to more energy efficient LPG, we are now saving anywhere between 121 and 277 tonnes of carbon a year. We are delighted that our air quality has also improved. Because LPG emits far fewer pollutants, such as nitrous oxide (NOx), sulphur oxide (SOx) and particulate matter (PM), we have been able to meet MCPD legislation years ahead of schedule.

"The switch has also had a major impact on our bottom line; our energy costs have been cut by a massive 26% and maintenance costs have also reduced. This is because oil is typically very messy, and it can take a lot of time and energy to maintain the system and clean fluids.

“As LPG is a much cleaner fuel, this is no longer an issue, and time has been freed up for the team to focus on other maintenance work.”

Flogas provided a full turnkey solution for The State Hospital with its energy experts designing, installing and commissioning a bespoke LPG system to meet specified energy needs. This custom-built LPG system for The State Hospital includes six 4000 litre tanks, mounded above ground, in a location outside of the main perimeter fence.

Installing a fuel source externally off site was a key requirement for the high security facility. Previously the hospital was bringing in 50,000 litres of oil on site every week, which not only took up valuable space, but increased site traffic. Now the tanks are accessible 24/7, and feature auto ordering technology, so Flogas can always keep them topped up.

The Estates Department spokesperson added: “The installation was incredibly straight forward, and the Flogas team managed it all against a very tight deadline. From initial consultation through to the actual installation process, Flogas met all our expectations and communication was excellent.”

Gary Jenkins, Chief Executive of The State Hospital said: “The Board is committed to sustainable development and takes its environmental responsibilities seriously. We have a well-established Sustainability Action Plan and Carbon Management Programme which ensures sustainability and energy efficiency through minimising environmental impacts and ensuring the protection of environmental resources in line with national targets.”

## **ENDS**

### **The State Hospital**

The State Hospital has 140 high-secure beds for male patients (12 specifically for patients with a learning disability), requiring specialist care that matches individual needs, in conditions of maximum security. It is unique because it has the dual responsibility of caring for very ill, detained patients under mental health law and other related legislation whilst protecting them, the public and staff from harm. It is a national resource for Scotland and Northern Ireland. The Hospital aims to rehabilitate patients ensuring safe transfer to appropriate lower levels of security, and hosts the Forensic Mental Health Services Managed Care Network.

[www.tsh.scot.nhs.uk](http://www.tsh.scot.nhs.uk)

### **Flogas Britain Ltd**

As ‘Experts in Energy’, Flogas has more than 35 years’ experience in providing tailored energy solutions to commercial, industrial and domestic customers across the UK. From Liquefied Petroleum Gas (LPG) and Liquefied Natural Gas (LNG) to propane enrichment of biomethane – the company delivers high-performance, reliable, cost-effective energy solutions to suit customers’ exact needs. [www.flogas.co.uk/business](http://www.flogas.co.uk/business)

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