



Department for  
Business, Energy  
& Industrial Strategy

# Pilkington Technology Management Ltd Heat Recovery Project

Industrial Heat Recovery Support (IHRS)  
Programme Case Study

August 2021

# Context

*Pilkington Technology Management Limited is part of NSG Group, a global manufacturer of glass and glazing products for the automotive and architectural sectors. There was potential identified to utilise waste heat produced as a by-product from the WS2 sag-bend furnace, so the European Technical Centre in Lancashire became the site of an Industrial Heat Recovery Support (IHRS) programme.*

## How IHRS supported the project

The IHRS programme supported with funding for Heatcatcher Ltd. to carry out the feasibility study. The chosen site undertakes processes there are primarily for R&D purposes so was the perfect location for the study, which targeted the best available use of the heat exhausted by the WS2 sag-bend furnace. Without the funding from the IHRS programme it is unlikely that the study would have been undertaken due to the costs involved.

### Benefits and added value

The study analysed flow rates, air temperatures and gas usage and provided great insights into the furnace operation – including a possible reduction in gas consumption by adjusting firing patterns during specific periods of the day.

The heat project also stated the potential for:

- a) a 9.6.% reduction in site's annual natural gas energy usage with a cost saving of over £25k, and;
- b) a reduction of 264 tonnes of CO2 emissions.

The Feasibility Study report recommended the best available use of the heat exhausted by the WS2 sag-bend furnace was to recover the heat and reuse it for space heating the large-scale building production line and glass storage area. Accounting for cost and carbon savings, this project's return on investment is sensitive to the utilisation rate of the WS2 sag-bend furnace

### Lessons learned

There were many challenges encountered during the project and we are tremendously grateful for the opportunity provided by the IHRS. Unfortunately, the only viable technical solution that is described above is not commercially viable. As a result, the project has been suspended without proceeding to the preliminary engineering stage.

*“The project has been a very valuable opportunity to evaluate waste heat opportunities from our automotive furnace. We have identified some opportunities to improve our efficiency through adjusting firing patterns.”*

*(Chris Dye, Category Manager for Renewable Energy)*



The entrance to the WS2 sag-bend furnace located at the Lathom site

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This publication is available from: [www.gov.uk/guidance/industrial-heat-recovery-support-programme-how-to-apply#case-studies](https://www.gov.uk/guidance/industrial-heat-recovery-support-programme-how-to-apply#case-studies)

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