



Department for
Business, Energy
& Industrial Strategy

Solutia UK Heat Recovery Project

Industrial Heat Recovery Support (IHRS)
Programme Case Study

Context

Solutia UK Ltd is a wholly owned subsidiary of Eastman Chemicals. This medium sized chemical manufacturing operation is located in Newport South Wales, and employs approximately 200 personnel.

The Government's Industrial Heat Recovery Support (IHRS) Programme is a grant funding programme developed to help manufacturing businesses identify and invest in opportunities for recovering and reusing industrial waste heat. Waste heat can be used in many ways, including within the same industrial facility, by converting it to power to use internally or to sell onto third parties — helping businesses to grow revenue, lower fuel costs and cut emissions.

The £18m Programme has been specifically designed to encourage and support manufacturing and data centre industry investment in heat recovery technologies across England and Wales. This means helping businesses of any size to identify and invest in opportunities for recovering and reusing heat that would otherwise be wasted.

How IHRS supported the project

With the support of the Government's IHRS Programme, Solutia UK Ltd has installed a condensing economiser waste heat recovery unit on their combined heat & power (CHP) facility. The heat recovery project process began with the Solutia Energy Management Team attending a decarbonising network event. Details of the IHRS programme were obtained, which allowed them to incorporate IHRS funding into their project viability study.

The IHRS can support eligible industrial waste heat recovery projects from concept and definition through to implementation and operation start-up. So far, the IHRS has supported 20 projects (and awarded £2.5m) in cutting their energy bills and reducing carbon emissions, spanning numerous sectors including Paper, Food and Drink, Chemicals, Cement and Mineral Products, Metallic Products and Steel.

Benefits and Added Value

Solutia UK Ltd entered the IHRS process after carrying out preliminary feasibility work, which predicted project savings of; 1.1MWh and 1400tCO₂, with a total project payback of ~2 years. Thermal Energy International subsequently installed the heat recovery unit, with IHRS providing ~25% of the turnkey project costs

A further benefit of the project is the potential to capture additional waste heat in the future for use in other applications across the site. In addition, the headline energy savings project at Solutia UK Ltd has prompted them to further their energy efficiency initiatives including attaining ISO50001 energy management certification.

Feedback to the IHRS scheme suggested that the application process was relatively straightforward, with help on-hand from the delivery partners ICF Consulting Services Ltd. This helped to overcome some initial difficulties when coordinating with various stakeholders



“The condensing economiser installation is the largest heat recovery project to be undertaken and successfully implemented at the Solutia UK Ltd Newport site. It will be partially funded by the IHRS programme and will serve to improve site energy efficiency and reduce our carbon footprint. The project has also helped raise site and employee awareness of the importance of energy efficiency, and has improved employee engagement in energy related matters”

“This kind of programme participation is a first for the site, and the project met the viability criteria with assistance of IHRS funding”

Solutia UK Ltd - Energy Management Team

There is a further opportunity to apply for IHRS. Applications must be submitted by 31st July 2020. If you are interested in finding out more about the IHRS Programme, please visit the IHRS webpage <https://www.gov.uk/guidance/industrial-heat-recovery-support-programme-how-to-apply> or email ihrsprogramme@icf.com or call [020 3096 3106](tel:02030963106) to talk to BEIS's IHRS delivery partner, ICF Consulting Ltd.

This publication is available from: www.gov.uk/guidance/industrial-heat-recovery-support-programme-how-to-apply

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