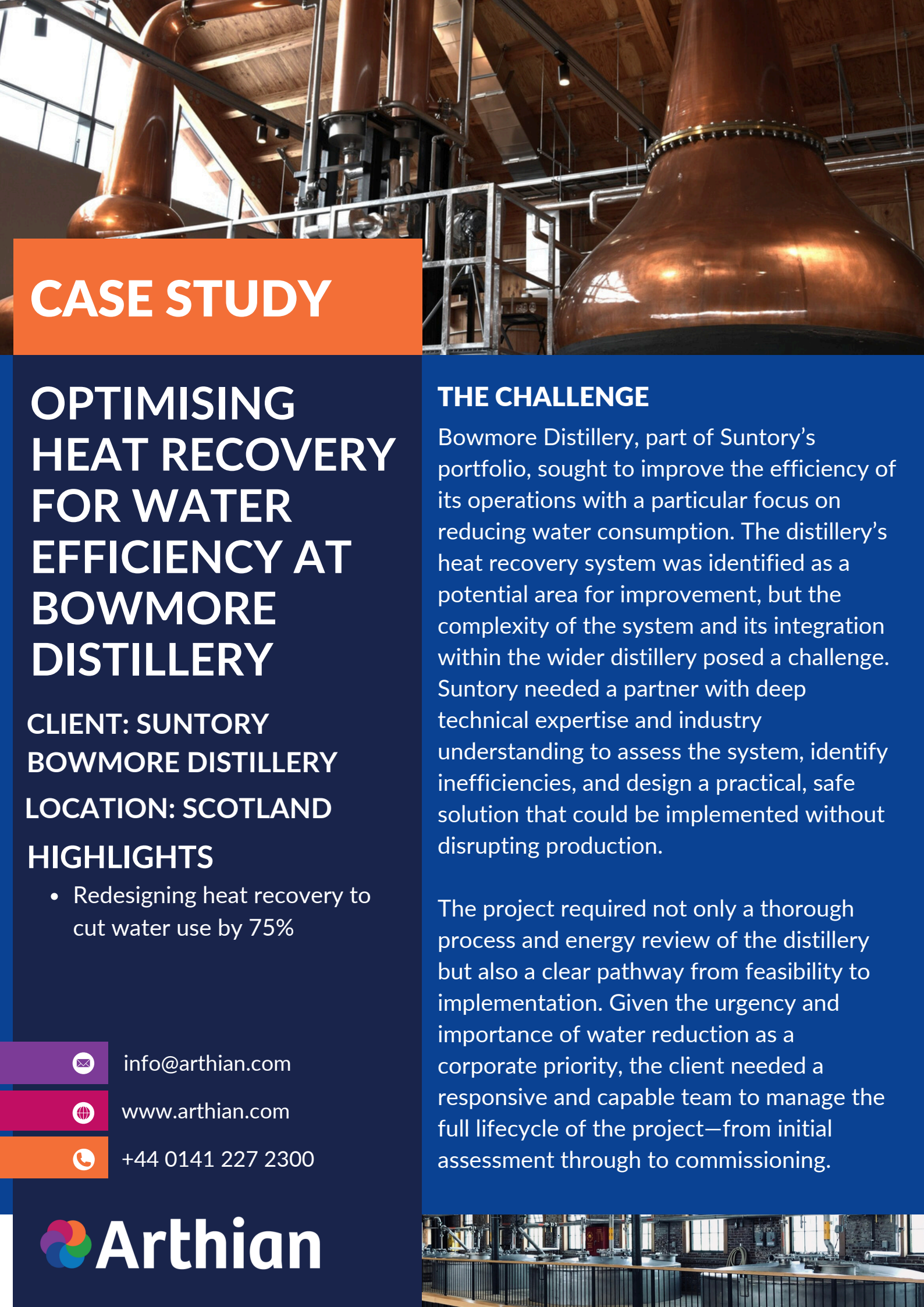




CASE STUDY

OPTIMISING HEAT RECOVERY FOR WATER EFFICIENCY AT BOWMORE DISTILLERY

CLIENT: SUNTORY
BOWMORE DISTILLERY
LOCATION: SCOTLAND

HIGHLIGHTS

- Redesigning heat recovery to cut water use by 75%



info@arthian.com



www.arthian.com



+44 0141 227 2300

THE CHALLENGE

Bowmore Distillery, part of Suntory's portfolio, sought to improve the efficiency of its operations with a particular focus on reducing water consumption. The distillery's heat recovery system was identified as a potential area for improvement, but the complexity of the system and its integration within the wider distillery posed a challenge. Suntory needed a partner with deep technical expertise and industry understanding to assess the system, identify inefficiencies, and design a practical, safe solution that could be implemented without disrupting production.

The project required not only a thorough process and energy review of the distillery but also a clear pathway from feasibility to implementation. Given the urgency and importance of water reduction as a corporate priority, the client needed a responsive and capable team to manage the full lifecycle of the project—from initial assessment through to commissioning.



THE SOLUTION

Arthian's process engineers were commissioned to undertake a comprehensive review of the distillery's heat recovery system. The initial phase involved a detailed energy and process assessment, which identified significant inefficiencies in both water and energy use. These findings were summarised in a concise memorandum report, supported by feasibility modelling to validate potential improvements. Recognising the opportunity to make a meaningful impact, Suntory retained Arthian to deliver the full process design for the proposed alterations. This included closing the cooling loop and introducing control mechanisms for several heat users within the system. Our engineers conducted safety studies to ensure compliance and operational integrity, and managed contractor engagement throughout equipment procurement and installation.

Arthian provided hands-on engineering support during implementation and oversaw the successful commissioning of the upgraded system. As-built documentation was delivered to ensure traceability and support future maintenance.

The project resulted in a dramatic improvement in water efficiency, with over 75% reduction in water consumption achieved through the redesigned heat recovery system.



info@arthian.com



www.arthian.com



+44 0141 227 2300

