MITSUBISHI HEAVY INDUSTRIES AIR CONDITIONING EUROPE, LTD.

MHI GROUP MITSUBISHI HEAVY INDUSTRIES

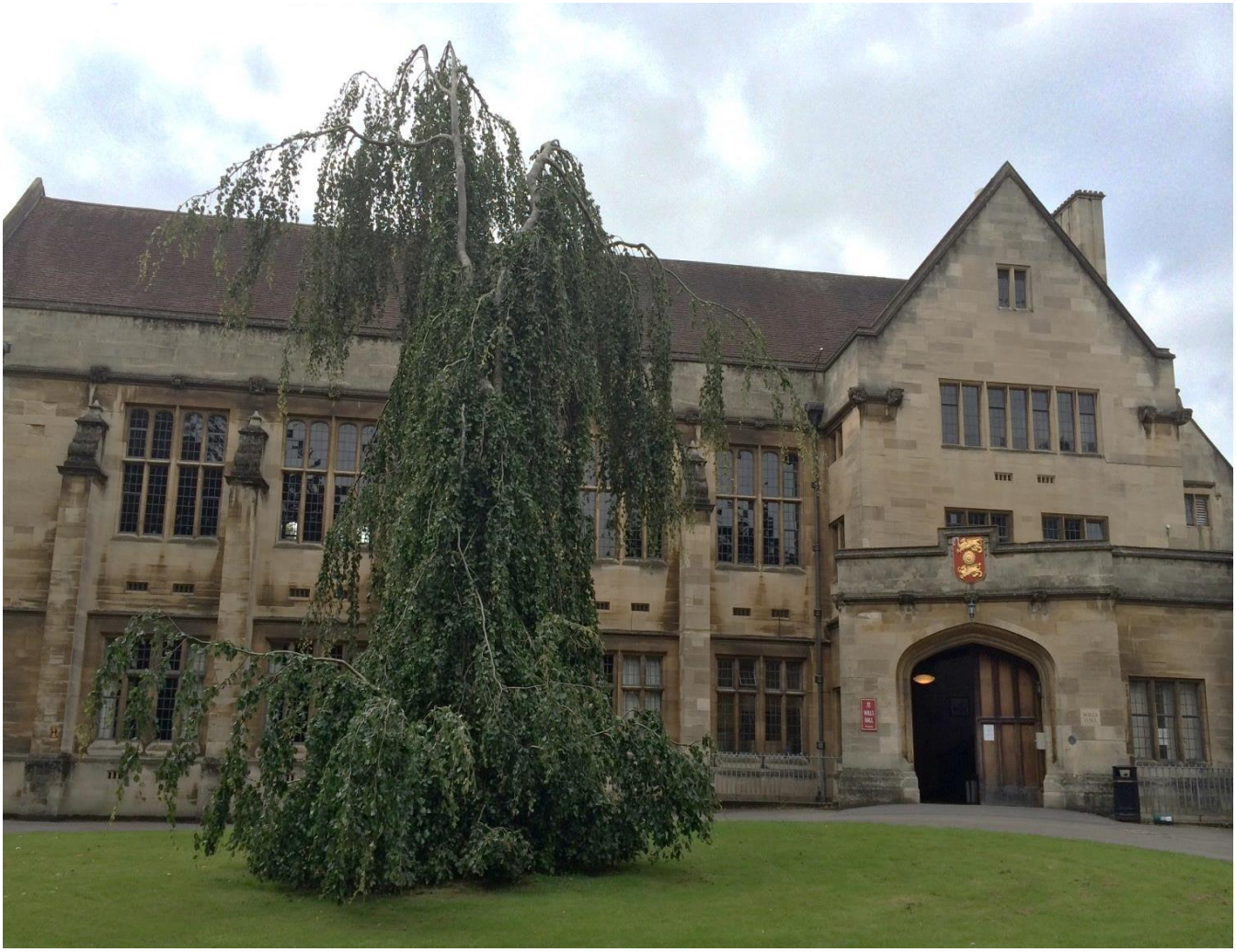
Case Study: University of Bristol

# Q-ton provides an effective Domestic Hot Water retrofit solution to the University of Bristol

## Fact File

**Project:** University of Bristol
**Project outline:** Replace existing sanitary hot water heating.
**Installer:** Air Source Heat & Power (ASHP)

**Products:** MHI Q-ton system
1,000 litre hot water enamel cylinder
300 litre cylinder to service recirculation circuit with 2 x 3kw immersion elements connected to an intelligent pump.



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# Q-ton provides an effective Domestic Hot Water retrofit solution to The University of Bristol


Mitsubishi Heavy Industries Air Conditioning Europe, Ltd (MHIAE) worked closely with ASHP and the engineering consultants to provide sanitary hot water to students at the University of Bristol by installing MHI's highly efficient Q-ton heat pump.

The accommodation block facilitates up to 48 students from September through to July. Most halls of university residence within the UK currently use expensive conventional immersion elements for heating water.

The site energy manager was looking for a sustainable solution to replace the outdated immersion elements.

MHIAE in conjunction with ASHP connected one Q-ton to a 1,000 litre hot water storage tank to deliver sufficient sanitary hot water to students. At the same time the new domestic hot water system has been bought in compliance with the current building regulations.

The system is now fully operational and delivers 2,500 litres per day of sanitary hot water at 65°C. Q-ton is currently reducing the annual running costs by 75% and saving $CO_2$ emissions by 67%.

MHIAE have successfully supplied an effective sustainable retrofit solution in line with BREEAM.

***"The Q-ton $CO_2$ heat pump was definitely the best product for this job…"***

**Mr Lee Sibthorpe**
**Engineering Director (ASHP)**