



Business critical Service

For restaurants and catering facilities, hot water with its regular peaks in demand, is a business critical service.



Generating around a third, on average, of total energy costs for buildings in the hospitality industry, heating and hot water applications can be costly when systems are not optimised to deliver the intensive demands.

The provision of hot water alone equates to almost 20% of total energy usage within restaurants, servicing high temperature water demands, throughout the day. Heating, on average, consumes another 15% of total energy usage, with fluctuating needs for ranges of capacities within the building.



www.adveco.co





With more than 50 years of experience designing, supplying and providing ongoing support for highly efficient heating and hot water applications that leverage the best of traditional technologies, as well as the latest low carbon and renewable systems, Adveco understands your needs.



To keep diners comfortable, and support kitchen staff in the delivery of efficient and hygienic service, we provide design recommendations tailored to your exact requirements.

With a broad range of appliances available to you, we can work together to provide optimised systems for restaurants built

from the ground up, or help to move your restaurant to the latest renewable resources in the most cost-effective manner.







WHY ADVECO?

50 years of expertise

• Adveco Ltd. is the sister company to Adveco (AWP) Ltd, who trade as A.O. Smith Water Heaters in the UK

Highest quality products and services

• We prioritise our clients' needs to deliver bespoke, practical systems

Full aftersales support

- Training
- Maintenance and service packages, commissioning, spares, warranty, servicing and technical support for your application.















How environmental sustainability can be achieved



IMPROVE EFFICIENCY

Improve efficiency for a calculable reduction in energy consumption.



REDUCE EMISSIONS

Reduce or completely remove emissions from estate building.



ADAPT EXISTING SYSTEMS

Adapt or replace existing hot water and heating with low carbon hybrid systems that economically bridge to future sustainable technologies.













Become more versatile

Ensure your hot water system reflects the changing demands of service, as restaurants define eating out on their own terms.

Meeting the challenge of unpredictable dining habits and improving work-life balance for both kitchen and front of house teams has seen restaurants have to adapt quickly to a changing industry.

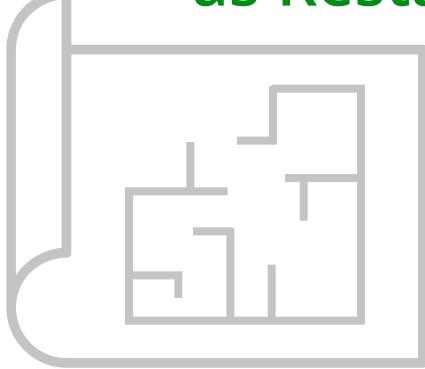
Prioritising staff and customer needs means a shift in peak demands for hot water, from preparation, to washbasin, to clean down.

Adveco's bespoke application designs, controls and metering give restaurant owners and operators the power to define their needs and ensure demands are met in the most efficient, cost-effective manner, no matter the operational changes to dining service now and in the future as the market continues to recover to and beyond its pre-pandemic value.





Repurposing Buildings as Restaurants



The simplification of planning use, enabling former shops, offices and professional services spaces to be altered into restaurants without seeking consent from local authorities is creating fascinating new opportunities for the food service industry.

From pop-ups to permanent restaurants, the opportunity is clear, especially for restaurant chains that have specialised in refurbishing existing High Street buildings and revitalising suburban areas, latterly for those opting to continue to work from home.

One thing we know well at Adveco is the potential complexity, and therefore hidden cost, of refurbishing a property when the site was not originally conceived as a restaurant. Landlords and new property owners need to recognise that heating and especially hot water are business critical functions, with suitable hot water storage needed to meet consistent and peak-hour demands. That water also must be supplied at a minimum of 60°C to ensure a hygienic cleaning of the environment, utensils and provide handwashing for both staff and customers.





Five Guys Restaurant

Our work includes systems in listed buildings and large-scale projects, such as for Five Guys, revitalising building hot water systems throughout the UK. In all these cases, our customers are not only securing modern, highly efficient fit-for-purpose heating and hot water systems, they are also reducing their costs and either better controlling their carbon emissions or excising them with renewables for a more sustainable workplace.

Adveco will size the needs of the premises, design a bespoke application, and supply the necessary system components for installation.





















Heat Recovery - be more sustainable by recovering waste heat from kitchen freezers

The Adveco HR001, a standalone Heat Recovery Unit providing a convenient, packaged unit to recover refrigerant system waste heat.

Perfect for restaurants and hotels, connecting between fridge and freezer condenser units and a hot water installation, the **HR001** utilises the waste heat generated by the compressor to indirectly pre-heat the incoming mains within a hot water installation.

Capable of achieving preheat working flow temperatures as high as 50°C, comprehensive tests on the HROO1 with a restaurant customer comparing both gas and electric heating systems shows weekly heat recovery averaging at 155 kWh/wk per site. Customers therefore not only save money by recovering 'free' heat, but this saved energy means less overall power demands and reduced building emissions helping a building towards new sustainability goals.

The **HR001** connects directly to Adveco's control panels for seamless integration into a water heating installation.







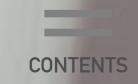














Sustainable Refurbishment F with Solar Thermal

For existing buildings that are being repurposed as restaurants, so long as they already have a gas connection can take real advantage of solar thermal for their hot water provision.

A proven and extremely reliable technology, which, when correctly designed and sized to the application, offers a clear path to reducing CO₂ emissions.

Solar thermal system will generate a considerable proportion of the hot water requirements with relatively short payback periods on the initial capital expenditure, while leveraging lower-cost gas to meet peak demands.

Restaurant, bar and catering applications might typically employ a small 300L twin-coil water heater with three to four panels sized to supply up to 100% of hot water demand to ensure consistent hot water availability throughout the year. The addition of solar thermal preheat on the cold feed reduces the need to fully employ the gas water heaters, reducing energy demands, costs and emissions.

Using Adveco's application design specialists is especially valuable when assessing the demands and limitations of a building. For instance, flat roofs will find up to 25% of the total space available for solar panels will be limited by the allowance for access and prevention of shade which would otherwise compromise system efficiency.



Solar thermal panels, London



Solar thermal plant installed in basement

A proven and extremely reliable technology, which, when correctly designed and sized to the application, offers a clear path to reducing CO₂ emissions.













Our packaged plant rooms can be dropped into any crane accessible space



Packaged plant rooms

Adveco can help by smartly combining renewable technologies, from air source heat pumps, and solar thermal to heat recovery with existing gas-fired systems or new all electric appliances in prefabricated structures that relocate heating and hot water plant to previous 'dead spaces' such as yards, alleys and in particular roof tops, reclaiming valuable indoor space to provide for extend dining or bar space.

Refurbishing plant to a new location may sound drastic, but that needn't be the case. Increasingly the construction industry has embraced the idea of offsite construction, creating modular units or systems that are pre-installed and ready for relatively quick and simple connection once delivered to a site. The process streamlines a construction programme along with offering numerous savings as site work is dramatically sped up. Now, this process can be as easily applied to refurbishment projects as it is to new build.

0800

Designed for the restaurant sector, and perfect for new build drive-thru properties, the Adveco Packaged e32-Hot Water System leverages

all the advantages of off-site construction to provide a standardised, resilient, environmentally friendly, low carbon, hot water system pre-sized to help reduce both a building's energy consumption and operational costs across its lifetime.

www.ainscough.co.uk

LIEBHERR























Heat Pumps for Net Zero Restaurants & Bars

Under the right circumstances, such as new builds with a high degree of insulation, air source heat pumps (ASHP) represent an efficient way to significantly reduce the carbon emissions from hotel buildings.

As the cost of grid electricity closes on that of gas, ongoing savings garnered from operating a hybrid ASHP based system, plus the reduction in CO_2 emissions makes the technology a truly attractive prospect for new build projects.

However, commercial hot water (DHW) applications using ASHP are going to be complex and, compared to gas-fired alternatives, are going to have higher up-front costs.

ASHP based hot water systems not only have a tendency to be oversized, but also require separate units be dedicated for heating and for water heating. The oversizing starts with multiple and larger heat pumps being specified to ensure demands are met and system redundancy is in place. This is particularly important for food & drink service where hygiene demands consistent availability of hot water throughout the year. The knock on effect of this oversizing means more robust and costly electric supply is required in the design, more space is taken up by the heat pumps, which being more complex will also have greater embodied carbon that smaller systems.

Make sure your Bar is Warm & welcoming

Designing the system for peak efficiency, and therefore sustainability, is a must to help avoid the worst of this additional capital investment and ensuring a faster return on investment.

With more than 50 years of specialist experience in creating bespoke commercial

DHW systems for food & drink service,

Adveco is well-positioned to support projects with a wide range of air source heat pumps, electric water heaters, indirect tanks and electric immersions.













