

**Commercial heating** and hot water solutions

# **BAXI HELPS**

Our portfolio includes some of the best-known and most-respected brands in the industry.

To meet the UK Climate Change Act's target of We are integrating these solutions into our reducing greenhouse gas emission to net-zero by 2050, we all have to change and improve how we do things – including how we heat and cool our homes and businesses.

Here at Baxi, we're rising to the challenge by streamlining our processes, investing in energy-saving technologies and creating some of the most efficient heating and hot water solutions on the UK & Ireland market. Our parent company, BDR Thermea Group, has recently acquired three low carbon HVAC manufacturers who specialise in the latest generation heating technologies: Hitecsa, Clint Energy and Fortes Energy Systems.

UK portfolio so you can benefit from greater flexibility and options when planning your projects.

Drawing on our heating expertise built from over 150 years' experience we understand the challenges faced by multi-occupancy property developers and both residential and commercial occupants alike – and our experience enables us to create the seamless, effective solutions that

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# **HOW CAN WE SUPPORT?**



#### Packaged plant solutions

We're specialists in prefabricated, modular heating for residential, commercial and industrial developments. Our all-in-one or sectional solutions are meticulously designed to suit any project, using the very best in low-carbon heating technologies from across the Baxi range.



#### Heat networks

Our skilled team can provide design support, manufacturing expertise and service and maintenance plans to supply a fully tested solution for your multivalent centralised plant – covering packaged energy centres, thermal substations, heat interface units and prefabricated utility cupboards.



#### HVAC

Together with specifiers, contractors, wholesalers and commercial end-users, we put in place the most suitable HVAC products from our vast portfolio, to make sure we deliver the right solution, every time.

#### Sectors









# **OUR SOLUTIONS OFFERING**



#### The challenge

Our expert teams have specialist product, technical and legislative knowledge that means we can identify and deliver a solution based on each individual project and bespoke to its requirements.



#### Consultation

We have a dedicated Technical Applications Team on hand to discuss your project requirements and answer any technical questions you may have.



to achieve the most from one product without needlessly overcomplicated design or sacrificing the efficiency of another component. By consulting with Baxi Solutions from the outset, you could save time and fees in producing a holistic design that achieves premium performance and savings.

#### Build

art manufacturing site in Preston can facilitate projects of any size designed and delivered across the UK and Ireland, from initial concept to final delivery. Adopting modern methods of construction (MMC) results in significant reductions in time and costs as well as improved onsite safety, reduced waste and enhanced quality control.

#### Install and commission

There are many ways we can support you when it comes to installation from bespoke training to on site and remote commissioning\*. Our prefabricated systems arrive on site fully-tested, ready to install and simple to commission resulting in up to 64%\*\* quicker installation than onsite builds to minimise disruption.

#### **Monitor and** support

We use the Mercurius platform for remote monitoring of HIUs and SMART Meters giving visibility of errors, supporting remote triage and improving first-time fix rates.

#### Service and maintain

We can offer bespoke service and maintenance packages and we stock a complete range of genuine spare parts for all our products. Most parts are available for next-day delivery, and we even stock spares for at least 10 years after a product has been discontinued.

\* Remote commissioning of HIUs, reducing time on site and enabling heat network performance improvements. \*\* Source: CIBSE.





# **HEAT NETWORKS**

Heat networks are vital to making net zero a reality in the UK & Ireland. In high density urban areas, they are often the lowest cost, low carbon heating option.

With legislative changes in the pipeline the government is working with industry and local authorities and investing over half a billion pounds in funds and programmes, to develop new heat networks and improve existing ones.

As demand grows, we're firmly at the forefront. Our skilled team is able to provide design support, manufacture and supply fully tested energy centres, thermal substations and prefabricated utility cupboards with heat interface units as well as remote monitoring and servicing to provide an end-to-end solution for your heat network.

#### Benefits of our heat network solutions include:



Optimum performance and efficiency



Flexible configurations to suit any property



Centralised plant from one supplier which can be prefabricated to reduce material waste, installation time and cost

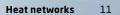
# **THERMAL SUBSTATIONS**

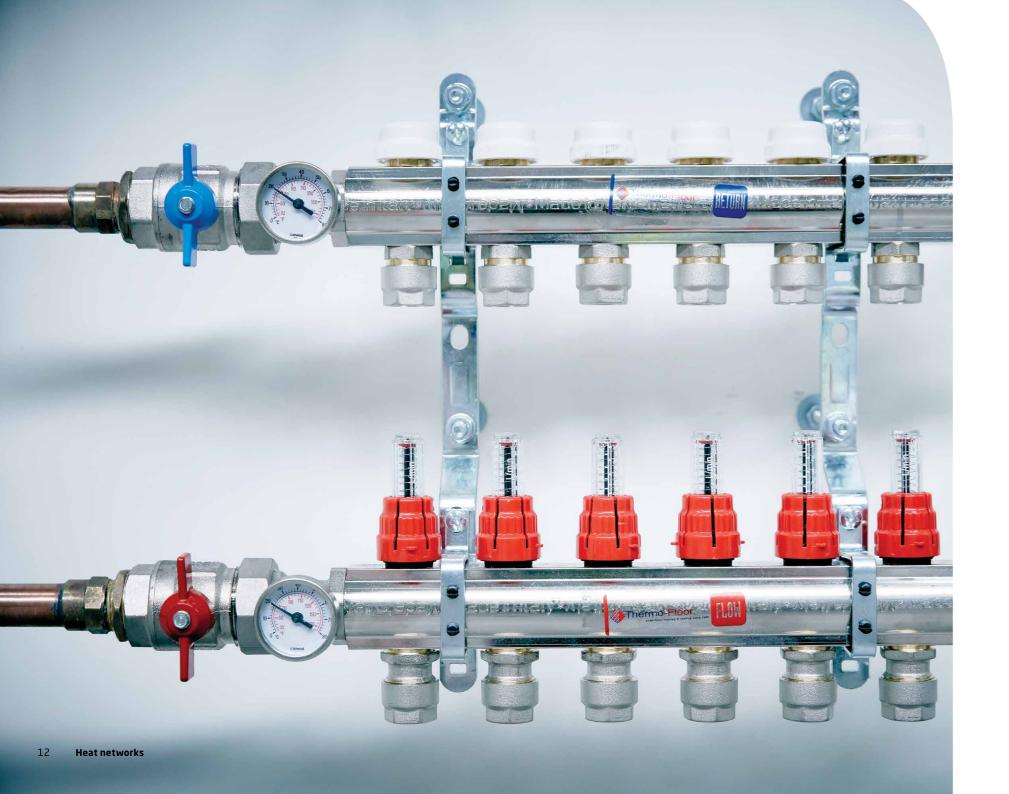
By utilising the technology from Fortes who are market leaders in The Netherlands we can provide heat units and large prefabricated delivery stations for hot and cold distribution systems.

In a capacity range from 20kW to 500MW, for residential, utility and industrial projects.









### HEAT INTERFACE UNITS (HIUS)

#### Instantaneous Hydraulic Interface Units

For homes fed with heat from a heat network, the Baxi AquaHeat HI / HWI (Heating Indirect / Hot Water Indirect) is the answer to your apartments' heating and hot water requirements, and the Baxi AquaHeat HI (Heating Indirect) is perfectly suited to supply heat to communal and commercial premises in your development.



#### Baxi AquaHeat HI / HWI



Flexible outputs up to 57kW DHW & 14kW space heating



Remote monitoring and control through Mercurius platform



5 years parts and labour warranty\*



Option for built-in Heat Meter

\* Warranty subject to our commissioning.

### PREFABRICATED UTILITY CUPBOARDS

Our prefabricated utility cupboards are the perfect fit for heat networks, supplying multi-occupancy buildings that are connected to a central plant room or energy centre.

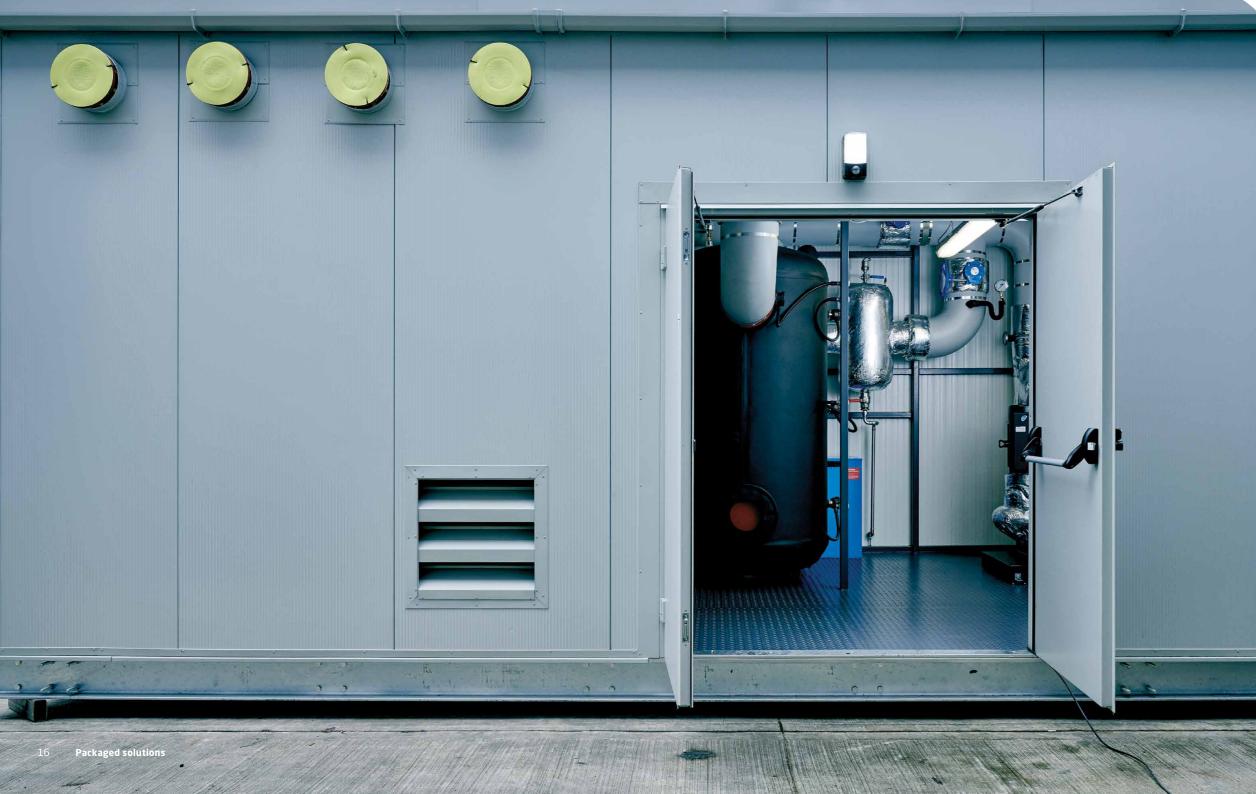
They're tailored to meet the exacting needs of each property, from layout and spatial requirements to service connections.

Our utility cupboards are built to the highest standards and delivered pre-tested and pre-insulated. Units arrive on site with HIUs, mechanical heat recovery ventilation, underfloor heating fittings and digital connections already in place, making installation incredibly quick and straightforward.









# PACKAGED ENERGY CENTRES

Our energy centres combine a mix of low-carbon technologies to generate and supply efficient, environmentally-friendly heating and hot water to multi-occupancy sites.

Our bespoke installations can be sited externally to the main building, in rooftop schemes or an internal centralised plant room – whatever works best in maximising performance, efficiency and cost-effectiveness.

They remove the need for individual heating products in each separate dwelling, providing sustainable heating and hot water from a single source and creating a heat network. We also provide a range of skid solutions for base applications to connect heat network systems.

At our state-of-the-art facility in Preston, we design and build prefabricated energy centres to match your specific requirements and in line with the latest legislation. Then, we deliver them either in sections or as a single lift, depending on the project. Either way, you can be sure of a configuration that's safe, quick and easy to install.

# **PLANT ROOMS**

We create dedicated heating and hot water spaces for multi-occupancy residential, commercial or industrial projects of any size and complexity.

Options include all-in-one or sectional plant rooms in buildings, rooftop schemes, remote self-contained units and modular skids. Each bespoke, turnkey solution is designed and manufactured to optimize the space and deliver the right heating solution for the occupier.

Our plant room solutions incorporate high-performance technologies from across the Baxi range: including our efficient boilers, heat exchangers, heat pumps, controls and pressurisation and dosing equipment. Every unique configuration is designed to provide the best possible time and cost savings and is pressure-tested off-site to ensure the highest quality.



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# **HEAT PUMPS**

Our range of air source heat pumps makes a valuable contribution to delivering reliable, efficient and flexible heating performance, ready for the low-carbon challenge of today.





### Baxi Auriga

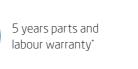


Available in four outputs of 20kW, 26kW, 30kW and 40kW



(SCOP 4.83

Uses R32 refrigerant compression



SCOP of up to 4.83 – high seasonal operating efficiencies

# UP 30 kW

Available in two outputs of 20kW, and 30kW



5 years parts and labour warranty\*



Uses R290 refrigerant compression delivering temperatures of up to 80°C



SCOP of up to 5.17 – high seasonal operating efficiencies

\* Warranty subject to our commissioning.

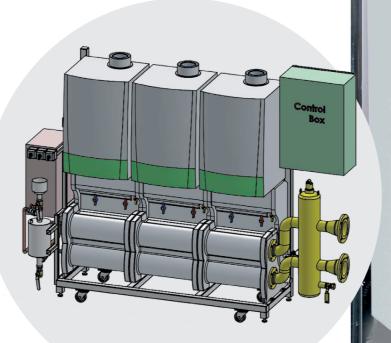
# PACKAGED PLANT EQUIPMENT

#### Boiler rig systems

Our multiple boiler rig systems are designed for wall-hung models like the Quinta Ace and the Sirius three WH, offering greater design flexibility and reliability for large commercial and light industrial applications.

Modular configurations enable more accurate matching of the heat output, for improved efficiency and greater cost savings.

Available in-line or back-to-back, our bespoke rigs can be configured to accommodate any space and access limitations. They arrive on site in a pre-tested, pre-assembled wheeled unit, improving quality control whilst reducing downtime and on-site labour.





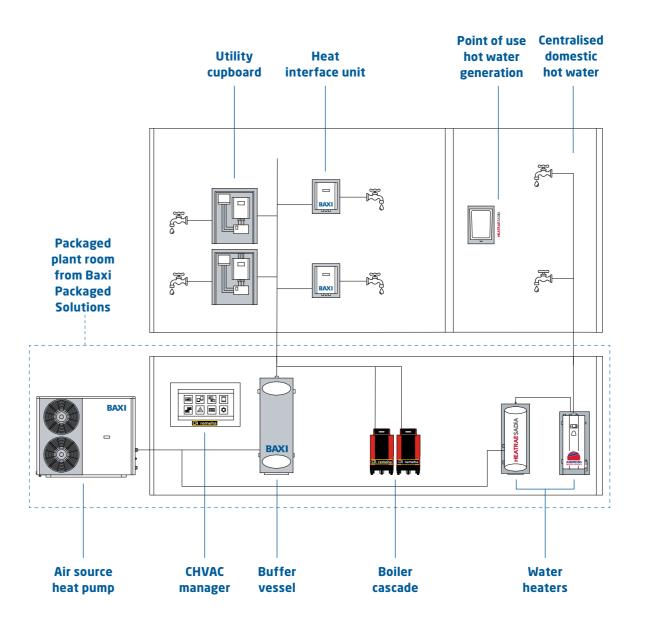


# DECARBONISING EXISTING BUILDINGS

#### Hybrid solutions

While there is no silver bullet to heating buildings more sustainably, as responsible manufacturers we are responding with the necessary products, techniques and product development that will support the required mix of solutions and approaches.

We're on hand to help clients set their own pathway to decarbonisation. Taking action now is imperative. By working together and taking a holistic approach to heat, one that supports best practice at all times, we can help clients achieve their sustainability goals.



# **OUR PHASED STRATEGY**

We're at the forefront of the energytransition, guiding our customers towards achieving net-zero carbon emissions in line with UK Government targets.

Ours is a multi-strand, phased approach, combining our complete range of heating and hot water solutions with expert advice, designed to ensure a smooth, cost effective route to the decarbonisation of building stock.

#### 1 Get your properties' fabric up to standard

A fabric-first approach is a fundamental way of bringing down emissions and energy bills, by making sure existing heating systems work more efficiently and the properties themselves are as efficient as possible.

#### Key points to consider include:



Are the windows modern, well insulated and draft free?



Are the walls and loft properly insulated?



Is the water quality in existing heating systems being maintained?



Does the end user know how to use the controls and TRVs?

# 2 Start planning ahead & get properties ready for low-temperature heating

When properties have maximised building envelope performance, prepare for upgrades that align with Part L of Building Regulations - new legislation that requires flow temperatures of no more than 55°C.

#### We'll advise you to:



Make small upgrades now, which may mean you won't need to make larger upgrades later



Make end-users aware that, according to the Energy Saving Trust, a 1°C increase in thermostat temperature could increase heating costs by up to 10%<sup>\*</sup>

\* energysavingtrust.org.uk





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# Upgrade what you have today with add-ons that help reduce your energy usage

Upgrade what you already have without having to make big wholesale changes. Improve the efficiency and SAP ratings of existing systems, with simple accessories that reduce the strain on a home's heating system.

#### Our range includes:



Flue Gas Heat Recovery (FGHR)

Shower Heat Recovery Unit (SHRU)

#### Baxi's accessories are:



Guaranteed to reduce emissions and running costs

#### Take a look at the potential savings a little improvement can make a big difference:

Single dwelling, semi-detached 3 bed, 2 wet rooms, 87 sq meters	Total gas fuel cost + standing charge	Extra kg CO <sub>2</sub> per year savings
Baxi Assure 36 Combi	£420.10	196
Baxi Assure 36 Combi + IFOS	£414.20	213
Baxi Assure 36 Combi + FGHR	£400.42	268
Baxi Assure 36 Combi + VSHRU	£384.06	301
Baxi Assure 36 Combi + VSHRU + IFOS	£378.16	319

Source: SAP 2012

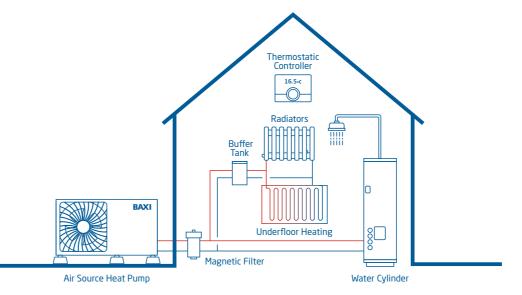
### INTEGRATION WITH WHOLEHOUSE®

Travis Perkins' WholeHouse® is a revolutionary 3D online design platform, enabling SME housebuilders to plan and design a complete, bespoke digital model of a house before beginning construction – and we're supporting this unique service with our prefabricated heating solutions.

Using WholeHouse<sup>®</sup> to specify utilities will streamline the design and delivery of low-carbon heating systems for new homes. Users can select the most suitable solution for their properties, whether it's a prefabricated understairs configuration featuring our cylinders, or a utility cupboard connecting to a heat network. Perhaps an efficient gas boiler if the home is built before 2025, or a future-proof Baxi air source heat pump – all from our comprehensive range.

Everything is calculated to achieve maximum efficiency and reliable material pricing, as well as being in line with the latest housing standards and building regulations, for complete compliance. The heating system can be crafted to complement the rest of the home, and vice versa. If structural tweaks are needed to optimise the heating system's efficiency, then WholeHouse® makes it possible. By agreeing the designs upfront, we can prefabricate the system off-site for economies of scale and ease of installation. All to ensure that new homes are equipped with systems that meet the latest sustainability standards, without having to wait for the industry as a whole to up-skill on working with these new technologies.

By working in tandem with WholeHouse<sup>®</sup>, we're helping to fast-track the industry towards achieving both decarbonisation and housing provision targets. We're enabling our clients to build new homes quickly, safely and efficiently. Safe in the knowledge that meticulously-crafted heating designs are optimized for each new home and backed by expert advice and support from Baxi.







# COMPLETING OUR SYSTEMS

High-performance, complementary products and a wide range of accessories and supporting information add the finishing touches.

#### Cascade kits

We offer a range of standard or bespoke cascade kits for both floor-standing and wall-hung arrangements. Depending on the project's requirements, they arrive complete with a floor-mounted frame, fully-insulated hydraulic pipework, low loss headers or plate heat exchangers.

#### Accessories

A full range of accessories is available to complement our equipment.

#### Accessories include:

- Controls
- Flue kits
- Plate heat exchangers
- Buffer vessels
- Low loss headers
- Pressurisation units
- Condensate treatment

# **RESIDENTIAL SOLUTIONS**

At Baxi, we believe the transition to low-carbon heating will probably see a shift to heat pumps, smart electric water-heating equipment and heat networks.

This combination of energy sources will also help to overcome any systemic constraints relating to the UK's energy supply.

And we know that deciding what heating and hot water solution is most appropriate will depend on the type, age and energy infrastructure of the building.

We provide the appropriate technologies, backed with expert knowledge and technical support, so that you can make the right choices at the right time.

Our expert teams have specialist product, technical and legislative knowledge that means we can identify and deliver a solution based on each individual building and bespoke to its requirements.

We know our products and how to optimise their performance. So, consult with us early on and use us as an expert resource. We can advise on how to achieve the most from one product without needlessly overcomplicated design or sacrificing the efficiency of another component.

By consulting with Baxi from the outset, you could save time and fees in producing a holistic design that achieves premium performance and savings.



For any residential needs please visit: **baxi.co.uk/new-build** 





"I highly recommend these courses that provide the relevant training but also valuable handy tips and tricks".

Paul Hull, Director of P R Hull Plumbing & Heating Ltd

### TRAINING

We've set up dedicated training academies across the country, to enable our customers to refine their skills and gain practical experience in a real-world environment.

It's complete training, geared towards developing all-round knowledge in heating and hot water, for everyone.

All product training is free and course content is tailored to the specific needs of the audience. For example, sessions for contractors will be more hands-on and cover practical tips about installation, commissioning and maintenance. We also offer CIBSE-approved CPD courses, and bespoke training for distributors which focuses on identifying the correct appliance for their customers' requirements.

We can also accommodate specific training requirements and work with you to develop a program, please speak to your National Sales Manager for more information.

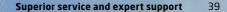
# SUPERIOR SERVICE AND EXPERT SUPPORT

We put all our energy into delivering not only the very best products, but also excellent customer service.

Our expert sales teams are on hand to support you at every stage of the project – from specification to installation and technical backup. They can help with plant room design, free site surveys, sizing, technical advice and much more.

For expert technical advice and support, day or night: **0330 678 0140** 

And for everything else, our extensive online resources provide a wealth of information and guidance, 24/7: **baxi.co.uk/knowledge** 





### CASE STUDY BATTERSEA POWER STATION

Baxi supplied offsite fabricated utility cupboards for the residential apartments. The final pods included a HIU/CIU for heating and cooling, mechanical ventilation heat recovery, underfloor heating, electrical distribution, and metering and billing devices.

The success of the utility cupboard element at the Battersea Power Station development project demonstrates the value-added benefits of using offsite fabricated heating solutions in both refurbishment and new build multi occupancy developments.

Increasing use of modern solutions like these is clearly critical if we are to tackle the heating industry's skills shortage, meet the huge demand to create new housing stock safely through increased productivity and help the UK achieve its net zero emissions goal.

# CASE STUDY

Using modern methods of construction and prefabrication enabled housing association Charlton Triangle Homes to refurbish one of its high-rise residential tower blocks to the required standards with minimum disruption.

Relocating the original rooftop plantroom – the Board's preferred option involved installing new high efficiency condensing boilers in a newly created centralised ground floor plantroom at the rear of the building. The new boilers supply new Heat interface units (HIU), unvented indirect cylinders with electric back up, and individual heat meters in each property.







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