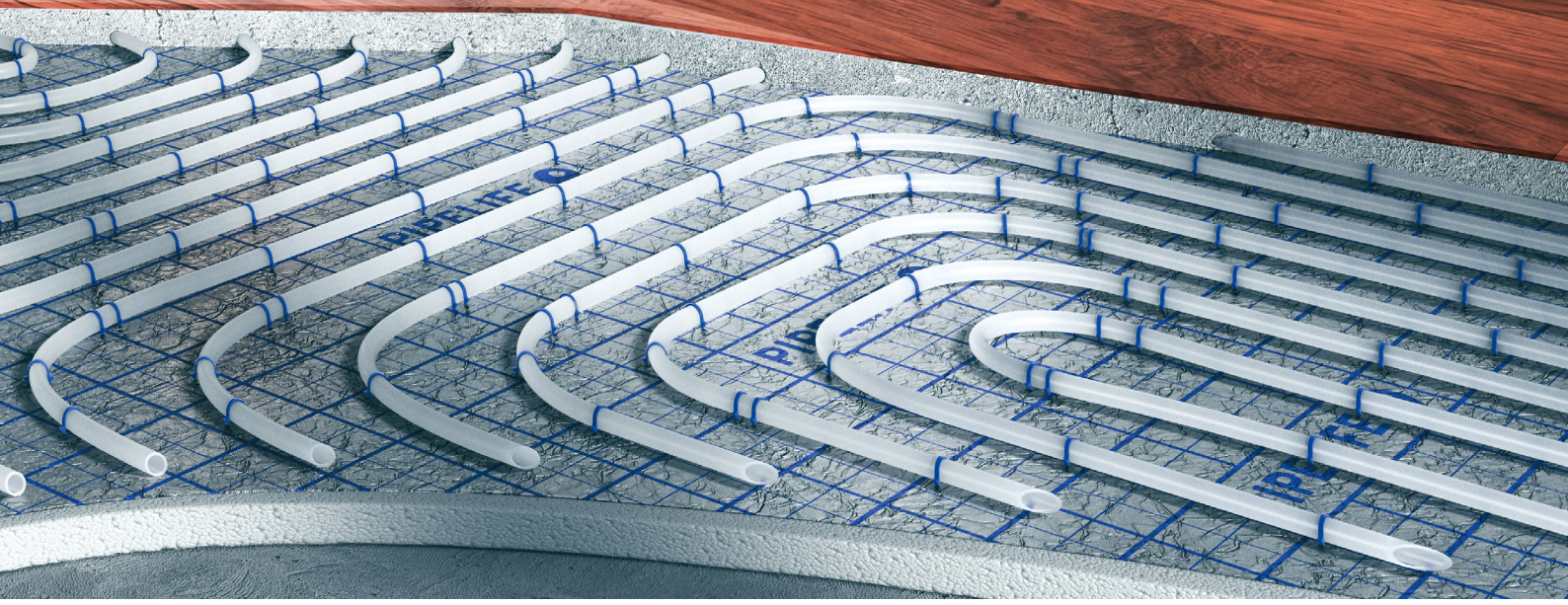
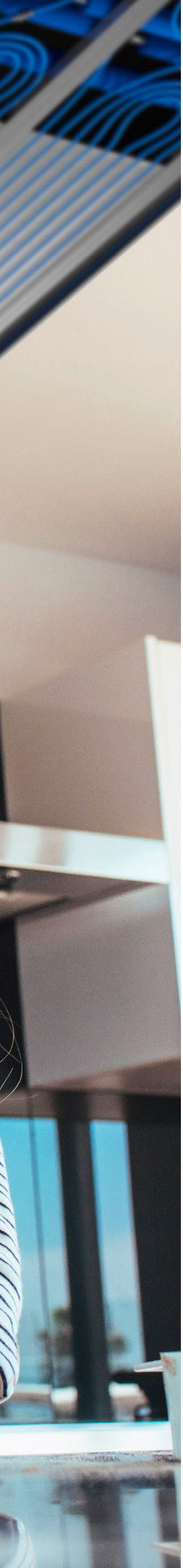
pipelife.com

EMBRACE ENERGY-EFFICIENT HEATING AND COOLING



HYDRONIC HEATING AND COOLING SYSTEMS
FOR INDOOR AND OUTDOOR APPLICATIONS

PIPELIFE
always part of your life



CONTENTS

COST-EFFECTIVE COMFORT 4

ADVANTAGES OF HYDRONIC EFFICIENCY 6

COMBINATION POSSIBILITIES 8

SMART COMFORT 12

ECONOMICAL AND ECOLOGICAL SOLUTIONS 14

COST-EFFECTIVE COMFORT WITH LOW-ENERGY HYDRONIC SYSTEMS

PIPELIFE hydronic solutions prepare your home for efficient and low-cost comfort throughout the year.

While the demand for hydronic heating and cooling continues to grow, PIPELIFE stands out with a proven record of combining hydronic systems into comprehensive energy-saving solutions — no matter the stage of development you're at or the type of building you're in.

Our expert engineers and designers will plan your setup for optimal comfort and efficiency while exploring ways to minimize emissions.

WHAT ARE HYDRONIC SYSTEMS?

Hydronic systems run fluid through pipes installed in floors, walls and ceilings to maintain comfortable ambient temperatures with less energy than traditional setups.

Unlike radiators or forced-air appliances, hydronic systems avoid hot and cold spots thanks to an all-encompassing layout that provides even coverage with less energy. The versatile design ensures each system is optimally positioned for its purpose and enables the distribution of both heating and cooling through a single solution.

Hydronic systems outperform radiators and air-conditioning appliances by effectively harnessing thermal radiation.

Radiant heat directly warms the people in a room — not just the air. This, combined with the fact that hydronic heating systems cover such large surfaces, means you feel comfortable with less heat output and, therefore, less energy.

Radiant cooling works in the opposite way. Circulating cold fluid cools surfaces so that they can absorb the excess heat your body emits and make you feel more comfortable during the warmer months.

The efficacy of these systems is also down to their positioning. We perceive warmth more comfortably when targeted at our legs and feet, while cooling is more effective around the head and neck. This is why we suggest heating systems are ideally placed under the floor while cooling systems are best integrated into the ceiling. Wall panels are also available as an excellent alternative — for both heating and cooling — where floor or ceiling integration isn't possible.

TAKE ADVANTAGE OF HYDRONIC EFFICIENCY

+ REDUCE YOUR RUNNING COSTS

As they achieve thermal comfort at lower ambient temperatures than radiators or forced-air appliances, hydronic systems reduce running costs by using less energy. They are also particularly compatible with renewable energy sources for even greater savings.

+ EXPERIENCE MORE EFFECTIVE THERMAL COMFORT

With full surface coverage, hydronic systems can provide more effective and consistent heating and cooling than other appliances. For example, pipes that run beneath the entire floor ensure every square meter experiences the same radiant heat. This avoids drafts, uneven temperatures and excessive energy consumption.

+ FULFILL ALL YOUR HEATING AND COOLING NEEDS

PIPELIFE hydronic systems cover the entire heating and cooling spectrum — from underfloor heating and ceiling cooling to thermally activated building systems (TABS) and outdoor ice melting. Expert advice is available throughout the process to ensure your setup is optimized for maximum comfort.

+ BENEFIT FROM BETTER AIR QUALITY

Unlike forced-air systems that circulate dust and exacerbate allergens, hydronic systems heat spaces without disturbing particulates or impacting air quality.

+ MAINTAIN A PEACEFUL HOME

Circulating fluid through covered pipes is significantly quieter than the ventilation of a forced-air system — achieving optimal thermal comfort without drafts or disturbance.

+ ENJOY GREATER INTERIOR DESIGN FREEDOM

Embedded in walls, ceilings and floors, hydronic systems avoid the need for unsightly appliances and accommodate a variety of interior design aesthetics.

+ GO GREEN WITHOUT COMPROMISE

Since PIPELIFE hydronic systems operate at lower temperatures than traditional appliances, they are easily integrated with sustainable energy systems, such as heat pumps.

+ EXPECT SHORTER INSTALLATION TIMES

Minimize the installation process with prefabricated products. Pre-assembled to the highest production standards, our prefab options set you up for fast, error-free installation without compromising quality.

+ INCREASE YOUR PROPERTY VALUE

By moving from radiators or forced-air systems to a tailor-made hydronic solution that satisfies EU building efficiency regulations, you can create a property that is attractive in terms of comfort and energy consumption. PIPELIFE hydronic heating and cooling solutions are comprised of high-quality, long-lasting product systems that ensure an excellent return on investment.

EXPLORE EXTENSIVE COMBINATION POSSIBILITIES

PIPELIFE hydronic systems can take on various combinations to suit your heating, cooling and construction requirements. From thermally activated building systems (TABS) to classic underfloor heating or ceiling cooling, our product systems encompass the entire spectrum of thermal comfort. All products are also available as prefabricated setups for faster installation.

	New build	Property renovation	Heating	Cooling
TABS	+		+	+
Underfloor heating	+	+	+	
Gypsum wall panels	+	+	+	+
Gypsum ceiling panels	+	+		+
Suspended ceiling cooling	+	+		+

While all system combinations are technically possible, our experts have put together their suggestions for the ideal setup depending on your property's stage of development.

NEW BUILDS

UNDERFLOOR HEATING

Hydronic underfloor systems circulate warm fluid around pipes laid beneath the floor. The radiant heat this produces directly warms you — not just the air around you.

Not only does this result in a more efficient use of heat energy, but it also avoids disturbing airflows that can exacerbate dust and other indoor air pollutants. Coverage underneath the entire floor provides additional comfort as warmth is equally distributed without hot or cold spots.

Underfloor heating systems are also particularly compatible with low-energy heat pumps. Together, they offer extremely efficient comfort with minimal running costs.

CEILING COOLING

Complete the setup by installing a ceiling cooling system. During the hotter months, radiant cooling achieves indoor comfort by running cold fluid through pipes installed inside your ceiling to reduce its surface temperature. The cooled ceiling surface then absorbs the excess heat your body emits, making you feel more comfortable.

In new builds, these cooling systems can be integrated into your initial design to maintain a seamless aesthetic without bulky fixtures. This proactive installation approach also avoids compromising the structural integrity of your ceiling post-construction.

THERMALLY ACTIVATED BUILDING SYSTEMS

For properties at the beginning of the construction process, thermally activated building systems (TABS) are one of the most efficient ways of incorporating hydronic heating and cooling throughout your property.

Hydronic system pipes are laid inside the concrete structure of your building to run under, around and above every room in the building. You can also extend the system beyond the structure with pipes that run beneath footpaths and driveways to ensure they remain snow and ice-free during winter.

TABS advance the energy efficiency of your hydronic system by harnessing the thermodynamic properties of concrete — whether heating or cooling, the concrete structure will absorb thermal energy and maintain desired ambient temperatures for longer.

By installing a heating and cooling system during the initial construction phase, you can take advantage of added production efficiencies and avoid managing separate projects.

PROPERTY RENOVATION

While our standard setups are well-suited to integrated construction projects, we still offer plenty of solutions for existing homeowners looking to revamp their heating and cooling systems.

WALL & CEILING PANELS

Our pre-assembled gypsum panels are easily mounted on walls or ceilings for both heating and cooling purposes. Once installed, they can be plastered over for a completely concealed solution that provides the benefits of a hydronic system without invasive construction methods.

The panels can be installed across entire wall and ceiling surfaces to provide the same comprehensive coverage associated with standard hydronic systems.

While wall panels are suitable for both heating and cooling, ceiling panels are best reserved for cooling as their overhead placement facilitates more effective comfort during the warmer months.

We also offer suspended ceiling panels for setups that require room for additional fixtures, such as lighting, ventilation units or electrical wires. The panels are easily slotted between drop-ceiling substructures that hang below the main ceiling.

EXPERIENCE SMART COMFORT

Maximize temperature control and unlock additional energy savings. Ideal for both new builds and renovation projects, our climate control systems offer cutting-edge smart home solutions, including multi-zone regulation, virtual assistant compatibility and cloud-based machine learning for carefree comfort and optimal efficiency.

BASIC

Our Basic dial thermostat is a straightforward option that provides homeowners with standard on/off temperature control for heating setups.

ADVANCED

The Advanced control offers a sleek LCD screen design, displaying current and desired temperatures.

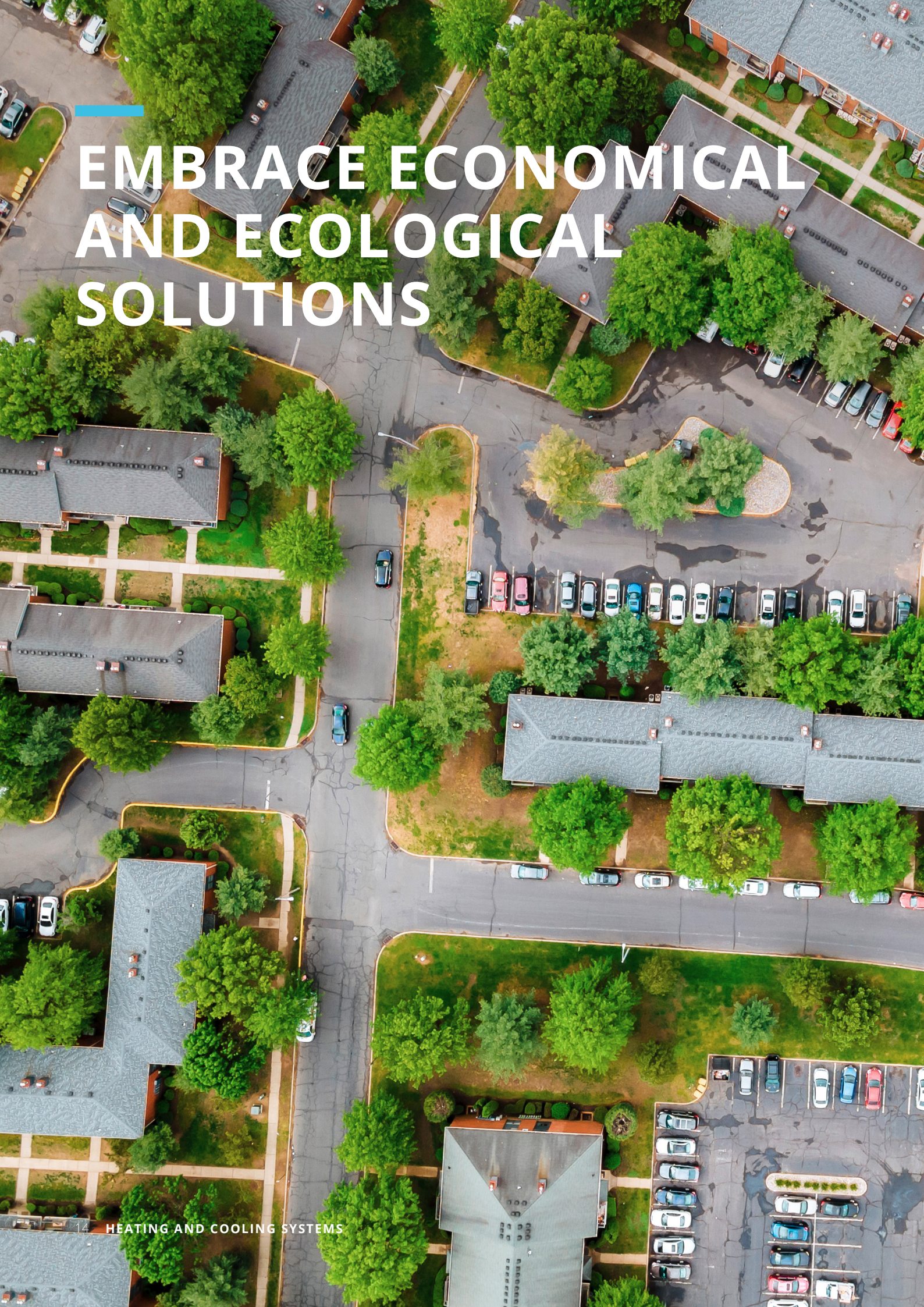
ADVANCED+

The Advanced+ option takes this a step further with a wireless setup that also enables cooling control.

PREMIUM

Our Premium climate control system offers comprehensive and remote temperature control from our Apple- and Android-compatible smartphone applications. They can also be paired with smart home setups, such as Amazon Echo, Apple HomeKit and Google Home, for virtual assistant integration, and use geolocation and machine learning to provide the optimal user experience.

EMBRACE ECONOMICAL AND ECOLOGICAL SOLUTIONS



The efficiencies of hydronic systems not only help lower household energy bills, but they can also be fundamental in reducing the carbon footprint of your building — aligning with the EU taxonomy and raising the value of your property.

ENERGY-EFFICIENT COMFORT

Hydronic systems utilize radiant heating and cooling to achieve desired comfort levels at lower ambient temperatures than radiators or forced-air systems. Since this requires less energy, the cost to both you and the environment is reduced.

GREEN ENERGY COMPATIBILITY

Similarly, the low temperatures and operating pressures of hydronic systems enable compatibility with sustainable energy systems, such as heat pumps. These are significantly better for the environment, and, with the declining cost of renewable energy, can further increase monthly savings too.

SMART SAVINGS

By taking advantage of our smart thermostats and systems, you can ensure your setup is optimized to work for your comfort and nothing more. Set ambient temperatures according to the preferences and routines of the people you live with and eliminate unnecessary energy use.

SUSTAINABLE VALUE

PIPELIFE hydronic systems are expertly produced from the highest quality materials to ensure robust longevity. All of our hydronic products have a lifespan of 50 years with minimal maintenance. Make a one-off investment in a more efficient heating and cooling solution and enjoy long-term savings from a system that is built to last.

The contents and information contained in this brochure are intended for general marketing purposes only and shall not be relied upon by any person as complete or accurate. In particular, this brochure cannot replace proper expert advice on the characteristics of the products, their usage, suitability for any intended purpose, or the proper processing method. All contributions and illustrations in this brochure are subject to copyright. Unless explicitly otherwise stated, the repetition of content is not permitted. The use of photocopies from this brochure is for private and non-commercial use only. Any duplication or distribution for professional purposes is strictly forbidden. Non-Liability: PIPELIFE has established this brochure to the best of its knowledge. PIPELIFE cannot accept any liability suffered or incurred by any person resulting from or in connection with any reliance on the content of or the information contained in this brochure. This limitation applies to all loss or damage of any kind, including but not limited to direct or indirect damages, consequential or punitive damages, frustrated expenses, lost profit or loss of business.

Date issued: March 2024

PIPELIFE International GmbH, Wienerbergerplatz 1, 1100 Vienna
T +43 1 602 2030 0, **E** info@pipelife.com, **pipelife.com**

PIPELIFE
always part of your life