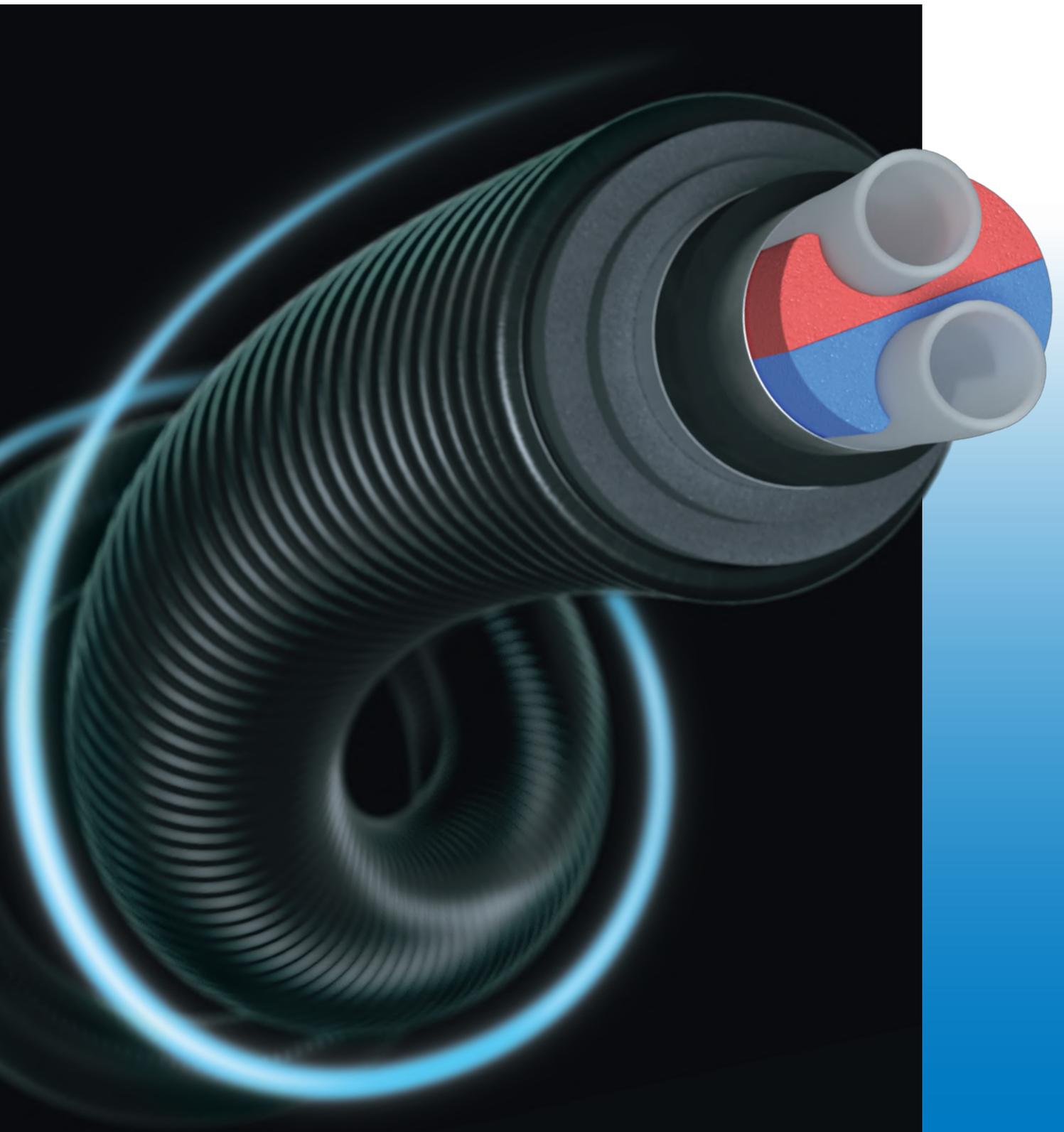


**Outstanding insulation
performance.
Incredible flexibility.**

Uponor Ecoflex VIP

Uponor



➤ Not an evolution. But a pipe revolution.

Ecoflex VIP at a glance

- Reduce heat loss
- Reduce operational costs
- Reduce installation time and costs
- Reduce CO₂ emissions

The new standard for local and district cooling networks

District cooling is becoming increasingly popular with municipalities, planners and construction companies. Particularly in urban areas, these networks are considered to be the energy distribution of the future. Local cooling networks that operate at higher-temperature levels are expected to have a very long service life – even exceeding 50 years. And saving the costs of chiller installation, operation and maintenance is an attractive added value for many property users.

Until now, pipes with the best heat loss performance for supplying cooling, heating and hot tap water in energy networks have been very stiff and not as flexible as pipes insulated with soft foam. Imagine how much better it would be if there were a pipe that combined the best of both types of product.

At Uponor, we decided it was high time to create such a pipe. Taking our successfully established Ecoflex line as a starting point, we finally achieved a revolutionary pipe design that represents nothing less than a completely new product category.

Ecoflex VIP combines the best heat loss performance for flexible foam insulation pipes on the market with outstanding flexibility. By adapting the ground-breaking Vacuum Insulation Panel (VIP) technology, heat losses can be reduced by up to 60%. The flexible design and small diameter help to reduce the installation time of the pipes by up to 20% compared to hard foam insulated flexible pipes, and by more than double compared to steel pipes.

Jacket pipe

Extremely flexible and durable

Soft insulation

Flexible and easy to install

PE-XA service pipe

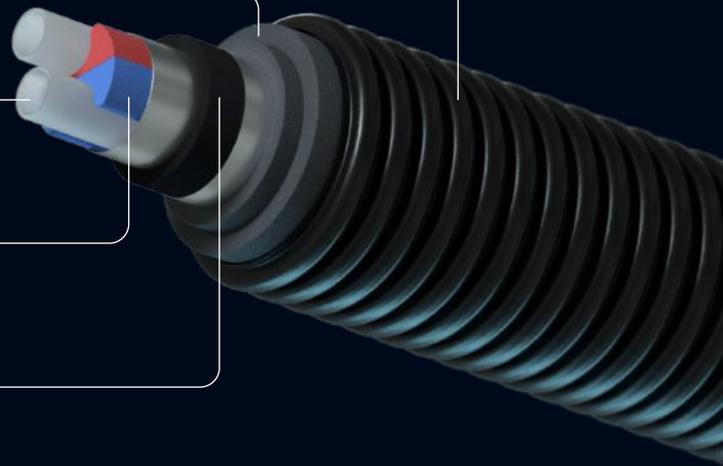
The most robust pipe available

Centring profile

Clear identification of flow & return pipe

VIP insulation

Outstanding insulation performance



With Ecoflex Thermo VIP, it is possible to make energy distribution more sustainable while simultaneously speeding up installation processes. The safe and durable system can be used in house-to-house connections or entire local distribution networks. Future-proof your planning and build today's cooling networks using tomorrow's technology - with the new standard in local district cooling.

60%

Possible reduction of heat loss through VIP technology.

Ecoflex VIP

Our innovative pipe technology is available for heating and cooling networks with **Ecoflex Thermo VIP** and for warm tap water distribution with **Ecoflex Aqua VIP**.



➤ **Lowest lambda value. Exceptional insulation performance.**

Keep the heat where it belongs

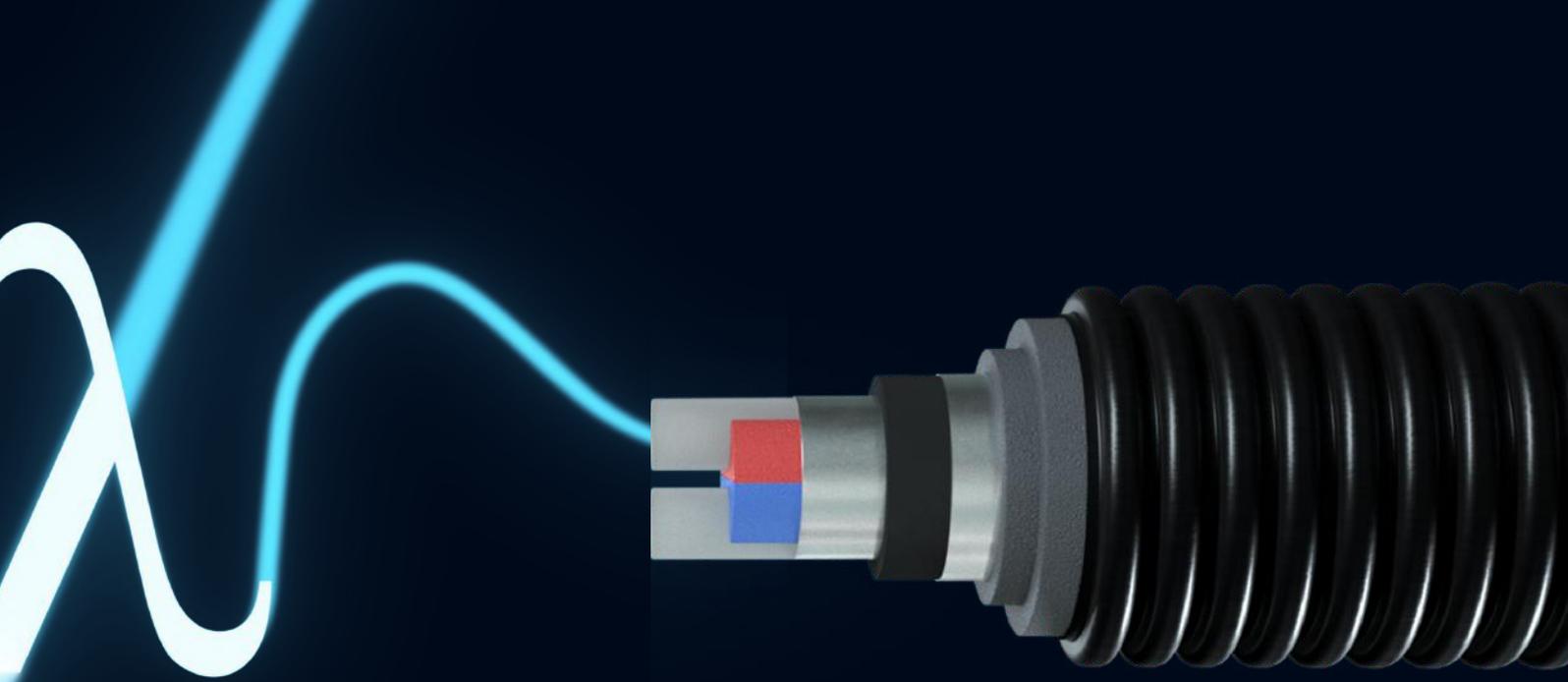
Vacuum insulation panels have already proven to be one of the best insulation materials, as they are widely used for applications in healthcare, vehicles, construction and household appliances. By adapting this technology to Ecoflex VIP, we managed to achieve high insulating performance with less insulation material. The panel with the flexible, multi-layer aluminium diffusion barrier also makes our pipe extremely compact and easy to handle.

< 0.004 w/
mK

**Revolutionary low
lambda value**

Key facts

- Ecoflex VIP offers a revolutionary low lambda value of insulation material $< 0,004 \text{ W/mK}$
- Ecoflex VIP has up to 30% smaller diameter compared to conventional soft foam insulated pipes
- Up to 60% reduction in heat loss through VIP technology
- Lower temperature change of the media even over long distances



VIP insulation performance is 10 times better than soft foam insulation and 5 times better than hard foam insulation

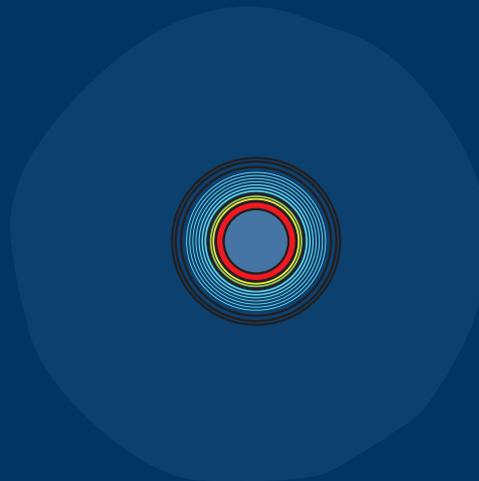
Without VIP

Heat loss visualisation of a pipe without VIP material.



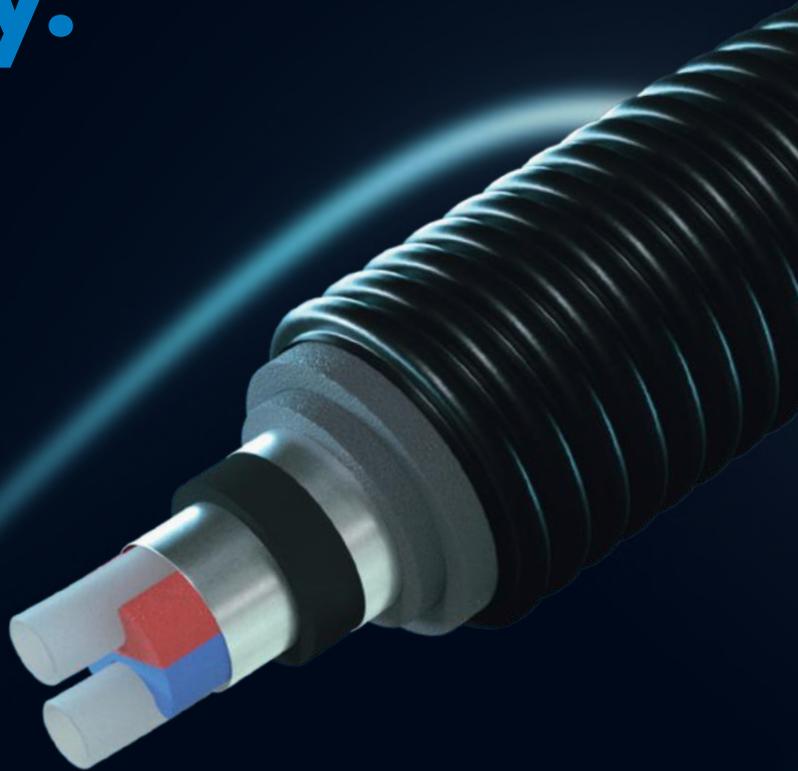
With VIP

The hybrid insulation of VIP and PE-X material reduces heat emission by up to 60%.



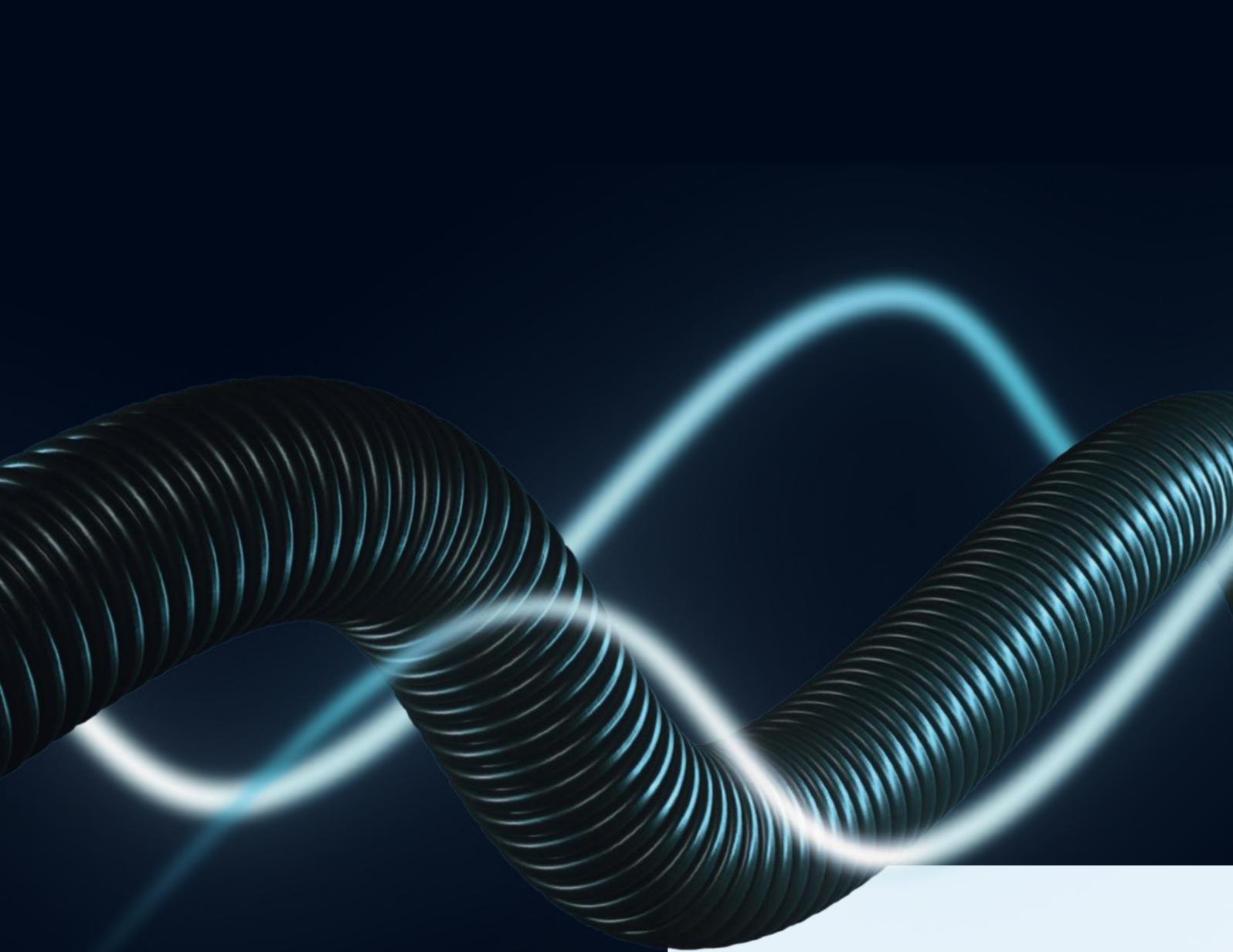
For the same heat loss as with VIP, an outer diameter of more than double the size is required.

➤ **Small diameter.** **Supreme** **flexibility.**



Incredibly easy to install

Time and space are two important factors in today's construction industry. Ecoflex VIP helps you use both economically. We designed our new pipe to be as flexible as soft foam insulated products, but with a diameter up to 30% smaller. This makes a significant contribution to simplifying the planning of low-temperature networks, making installation more convenient and construction processes faster - even in densely populated areas.



30%
smaller diameter

Key facts

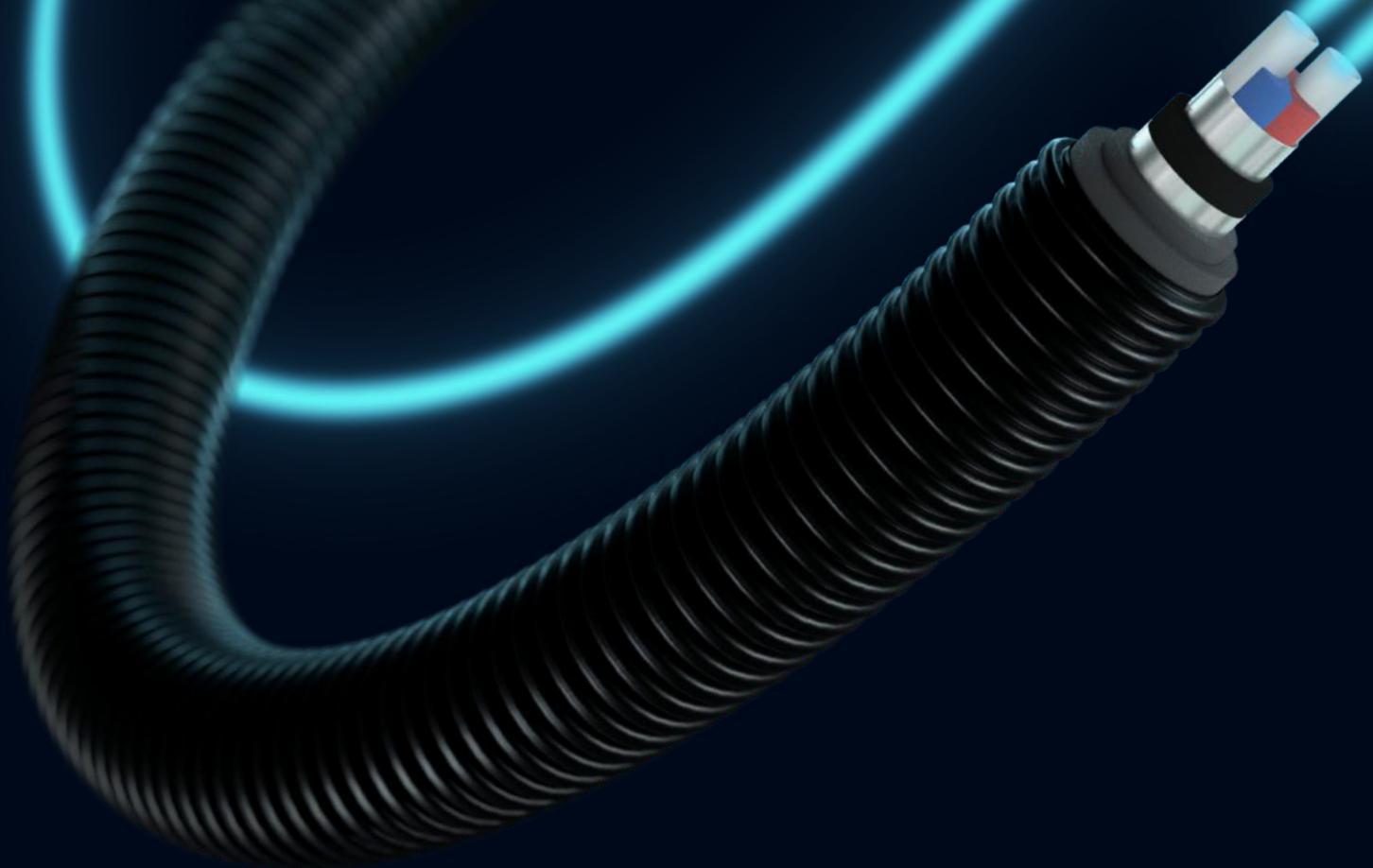
- ▶ Faster installation and less on-site disruption
- ▶ Savings of up to 60% in installation time compared to steel pipes, and up to 20% compared to hard PUR foam pre-insulated flexible pipes
- ▶ Easier handling, even in confined spaces
- ▶ Lower installation costs due to the reduced time and labour required
- ▶ The proven design of the outer jacket profile can withstand traffic loads of up to 60 tons
- ▶ Ecoflex VIP is compatible with all Ecoflex accessories and fittings

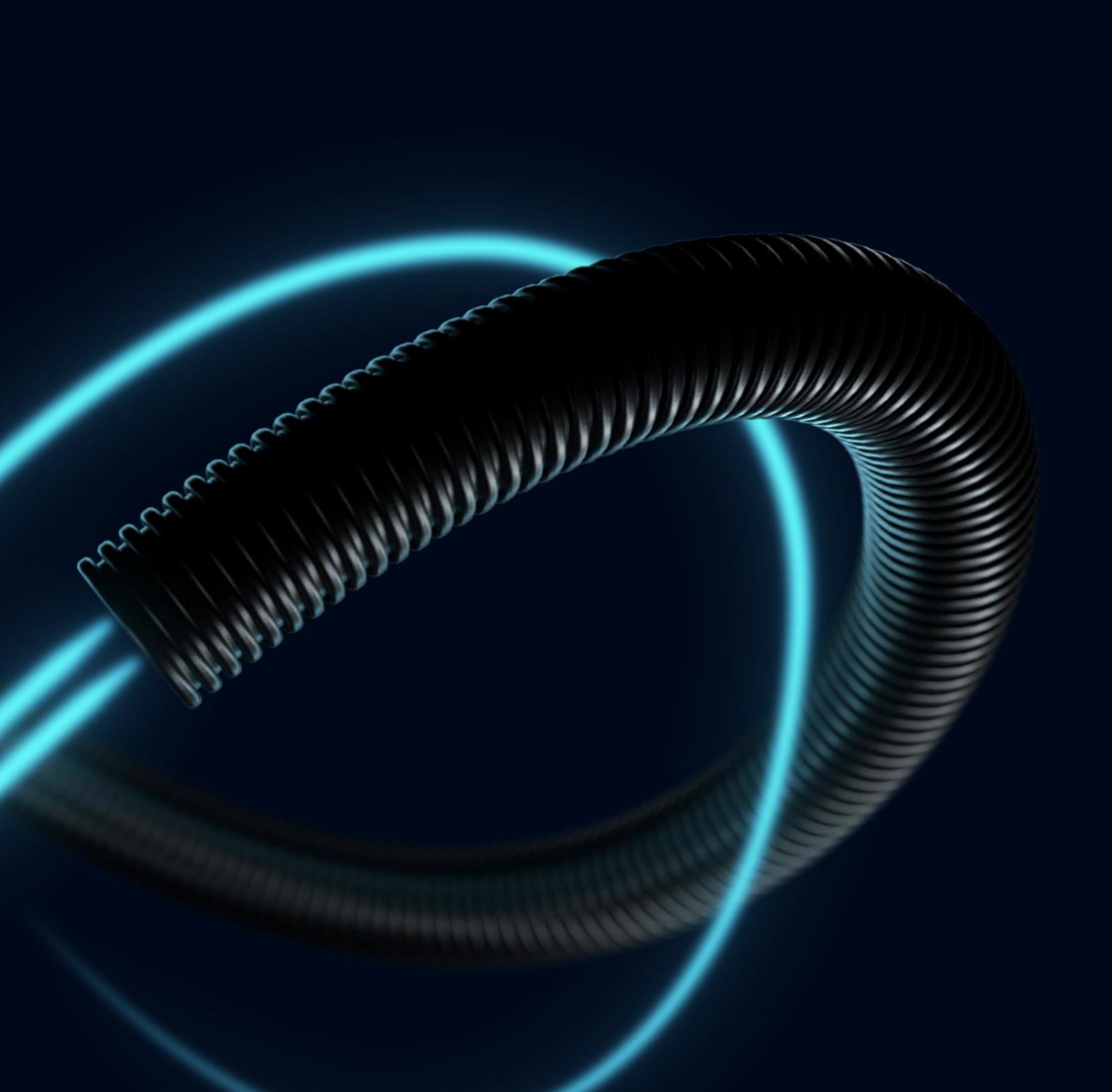
➤ Saving resources. Today and tomorrow.

Paving the way for net zero

Singapore is expected to reduce domestic greenhouse gas emissions by at least 3 million tonnes per year by 2030. District cooling is seen as an important contribution to this target.

Ecoflex VIP can help make such networks more sustainable and future-proof. Our pipes enable the effective use of energy and help operators reduce thermal waste. Ecoflex VIP has a ~20% lower CO₂ footprint than conventional products with comparable insulation performance.





Key facts

- ▶ Fewer oil-based materials used during production
- ▶ Lower CO₂ emissions over the life cycle of the installation.
- ▶ Positive contribution to meeting global sustainability standards.

~20%
lower CO₂ footprint

➤ **From design. To installation.**

Uponor offers a wide range of services to support our customers in the installation of Ecoflex VIP. With over 30 years of experience and more than 35 million metres of pipe installed worldwide, our service teams can support every phase of a project with digital training, design services, product delivery and on-site support.

And with a local presence in most markets, there is always an Uponor sales unit near you.

Our services include:

High availability of the complete system, direct deliveries to the construction site.

Design support and AutoCAD plug-in software for the easy design of networks and installations.

Installation support on site.

Find out more:

The Ecoflex VIP portfolio contains a comprehensive range of products for both heating and cooling networks as well as for hot water distribution and drinking water. The pipes are fully compatible with the proven Ecoflex system fittings and accessories. For details, refer to the technical information.

For further information on Ecoflex VIP and our other products and services, please contact our sales representative.

Join the district cooling revolution

#LambdaHero

Experience Ecoflex in augmented reality

1. Scan the QR code with your phone.

Placeholder
The final QR Code will be provided by marketing

2. Click on the AR symbol, to the right of the pipe on the right-hand side.



3. Place the pipe on any surface, zoom in and out, move around it and catch a glimpse of the future.



Moving
> Forward

uponor

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