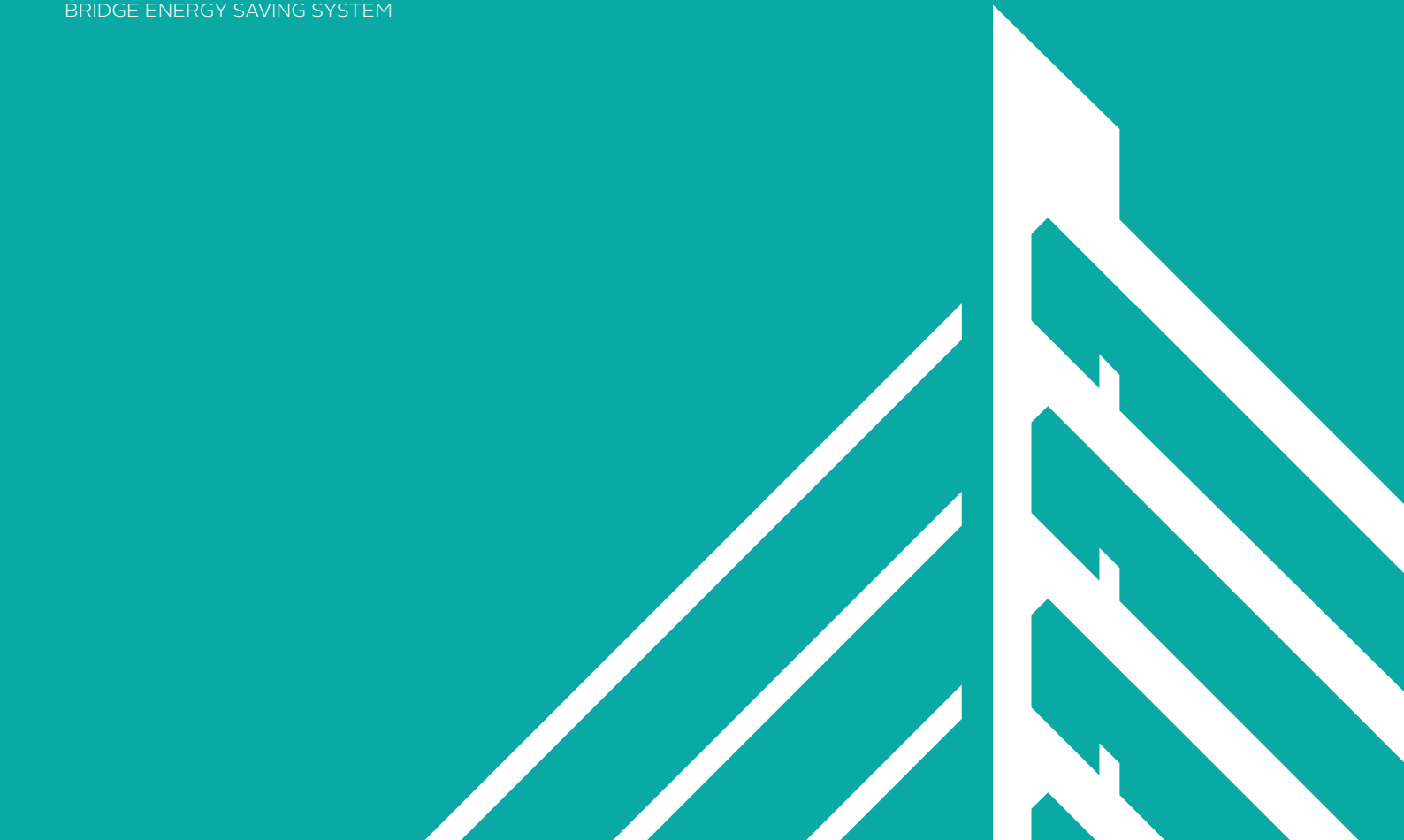
BEPIPE

BRIDGE ENERGY SAVING SYSTEM



BEPIPE

BRIDGE ENERGY SAVING SYSTEM

BEPIPE.
COST-SAVING.
ECO-FRIENDLY.

ENERGY COST SAVING

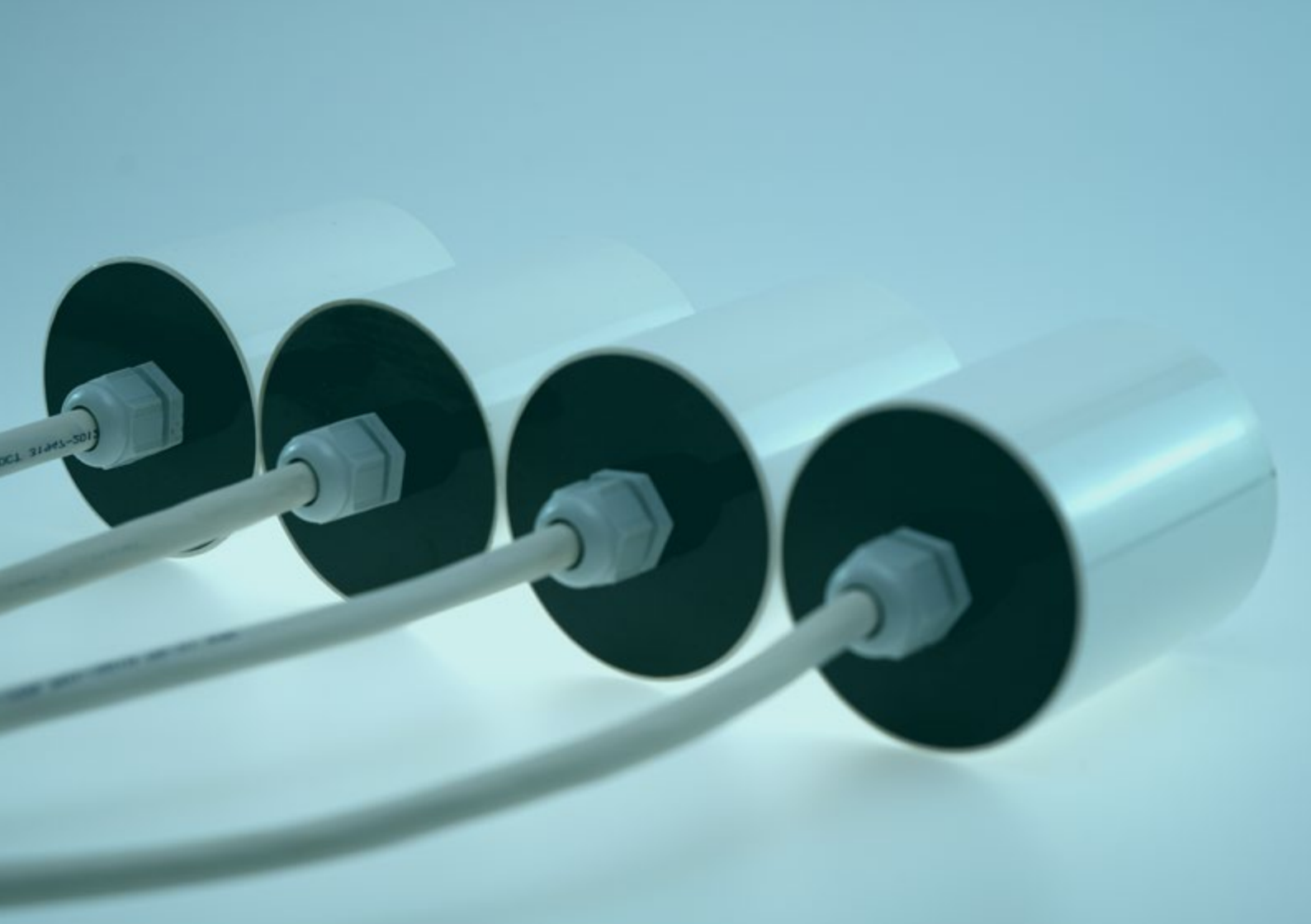
It is well known that managing a company is becoming an increasing economic challenge. Especially if you are a large electricity consumer.

Rising energy costs and ever-increasing CO_2 taxes are cost drivers. Then comes responsibility for the climate. Using energy efficiently and keeping one's CO_2 footprint as low as possible is more important than ever before.

RESSOURCE-SAVING AND CO_2 EMISSION-REDUCING

With BEPIPE, you save between 6 and 18 % electricity and thus reduce your electricity costs. Without voltage and power loss. Depending on which electrical loads are connected to your local power grid.

At the same time, you protect the environment. Every saved kilowatt-hour of electricity reduces CO_2 emissions by 0.45 kilograms.



SAVINGS-*POTENTIAL*

BEPIPE achieves the best results in large, widely branched electrical networks where the primary consumers are AC motors.

12 - 18 %

BEPIPE saves electricity wherever electric motors are used, e.g., air conditioning, heating, cooling systems, heat pumps, elevators, and escalators.

10 - 14 %

power savings are achieved by BEPIPE in the industry without voltage and power drop.

10 - 15 %

BEPIPE achieves power savings in networks where computers, printers, etc., are connected to the grid, such as data centres.

6 - 8 %

BEPIPE also achieves electricity savings in office buildings or supermarkets, where many fluorescent lamps are often used.

DURABLE.
LOW MAINTENANCE.
PROFITABLE.

BEPIPE
BRIDGE ENERGY SAVING SYSTEM

SIMPLE INSTALLATION

BEPIPE can be used everywhere where – as constantly as possible – alternating current is consumed.

Installation is simple and achievable within a few hours. The disconnection of the power is not mandatory for this.

As soon as electricity flows through the device, power savings begin immediately.

Depending on the length of the placements, it takes about three to four weeks for BEPIPE to reach its full efficacy.

The company has developed the most efficient and cost-effective solution for its customers.

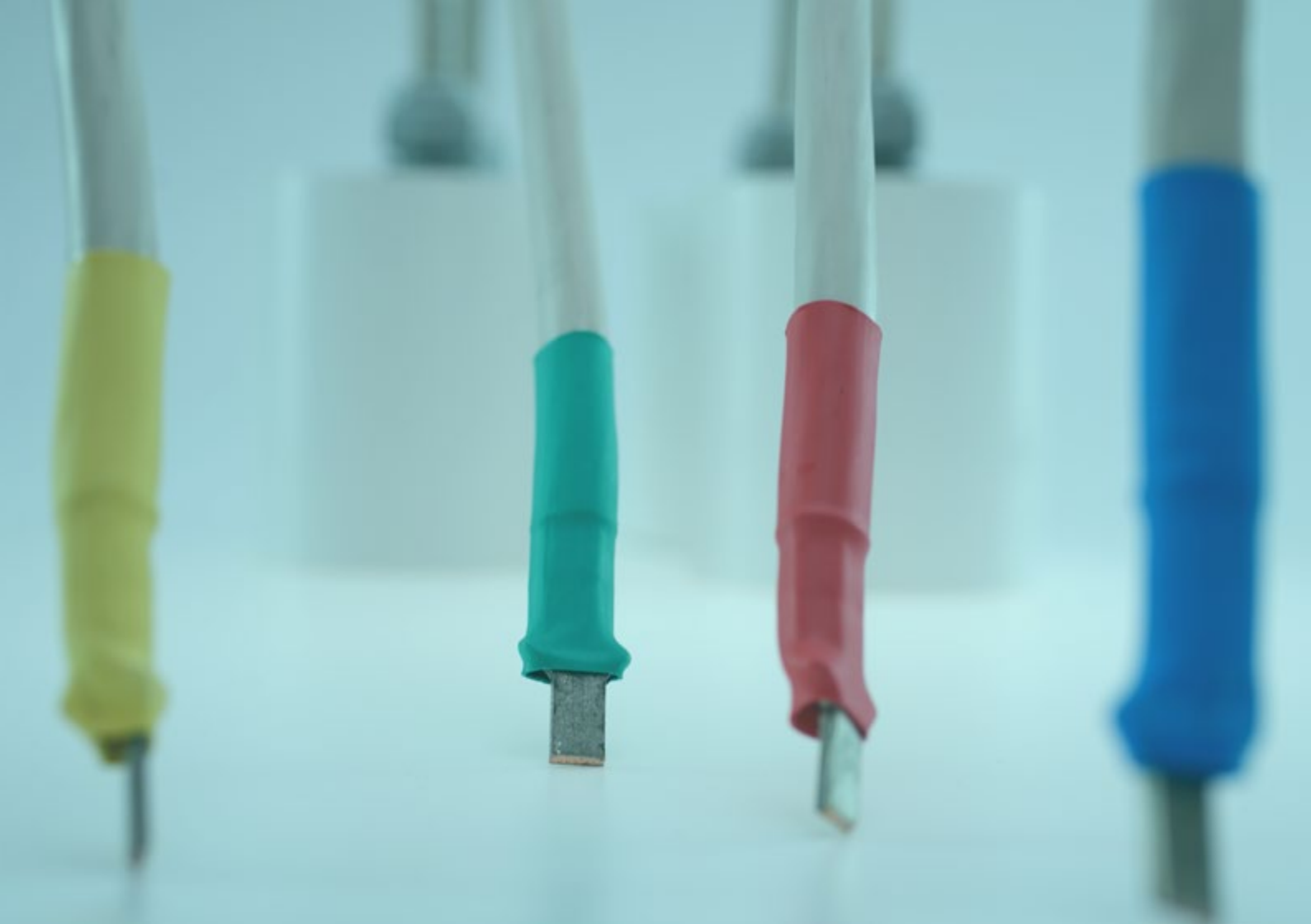
SAVE COSTS PERMANENTLY AND WITHOUT RISK

The amortization for BEPIPE is only a few years.

In return, the function is guaranteed for twenty years. This means that you will save costs permanently for the next two decades without any risk.

BEPIPE is sold as a contracting model. For you, this means no investment costs, risks or effort. Instead, you benefit from falling electricity costs from day one.

Best of all, you make a valuable contribution to environmental protection at the same time.



THE ADVANTAGES *AT A GLANCE*

BEPIPE
BRIDGE ENERGY SAVING SYSTEM

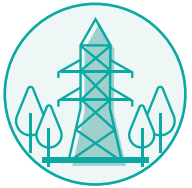
6 – 18 %
Electricity saving

Reduction of
energy costs

Reduction of
reactive power

Reduction of
CO_2 emission

Easy
installation



Relief of
power grids

HIGHTECH.
PATENTED.
UNIQUE.

THE MODE OF OPERATION

BEPIPE is a high-tech device that generates high quantities of free electrons by chemical reaction and injects them into the local power grid. This increases the electrical conductivity and reduces both the resistance of all conductors in the distribution network and the reactive power.

The reduction in ohmic losses in the pipe network results in significant savings in energy consumption.

EASILY EXPLAINED

What does this mean, easily explained? Imagine a tube filled with spheres (Fig. 1). The tube symbolizes a copper wire of a power line.

The spheres, the free electrons, i.e. negatively charged particles.

CURRENT FLOW

The free electrons must be set in motion for the current to flow.

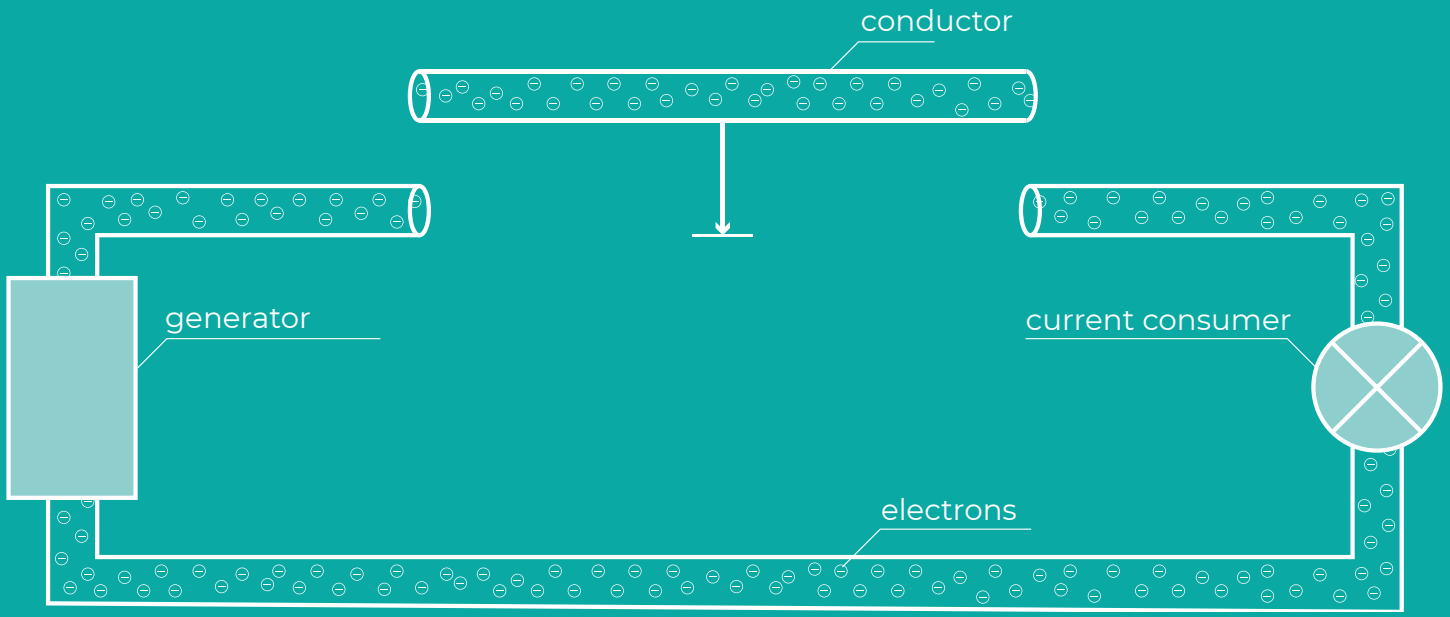


Fig. 1

By nature, they are inactive and require an external impulse. A current generator provides this. In simple terms, the generator pushes new spheres into the tube.

Now the spheres slowly start moving until they are pushed out again at the end of the tube – into the current consumer.

MORE CONNECTED DEVICES – MORE RESISTANCE

Every device connected to the power grid generates a resistance, thus slowing down the spheres. What's more, they are released into the environment as they try to avoid resistance – especially where the temperature of the electrical conductors reaches a critical value as in light bulbs, heating wires, relays, switches and co.

The result: fewer free electrons. Less current reaches the power consumer. It needs a constant source that continuously adds free electrons to compensate for this loss. And this is precisely the function that BEPIPE performs.

MORE FREE ELECTRONS THROUGH CHEMICAL REACTION

But what is behind it? BEPIPE consists of four insulated containers, containing mineral and environmentally harmless substances. The containers are connected – similar to a bypass – via copper cables to each phase of the AC network with one pole. The same applies to the neutral conductor after the transformator. This ensures that there is no galvanic connection to the next higher voltage level, i.e., the free electrons flow back to the power source.

A chemical reaction begins as soon as an alternating current flows through the containers, releasing large quantities of electrons. The concentration increases constantly.

If more free electrons are now formed than circulate in the consumer network, these are automatically pumped into the line network.

In the process, they not only push the electrons ahead of them but also, to put it simply, over flute the resistors.

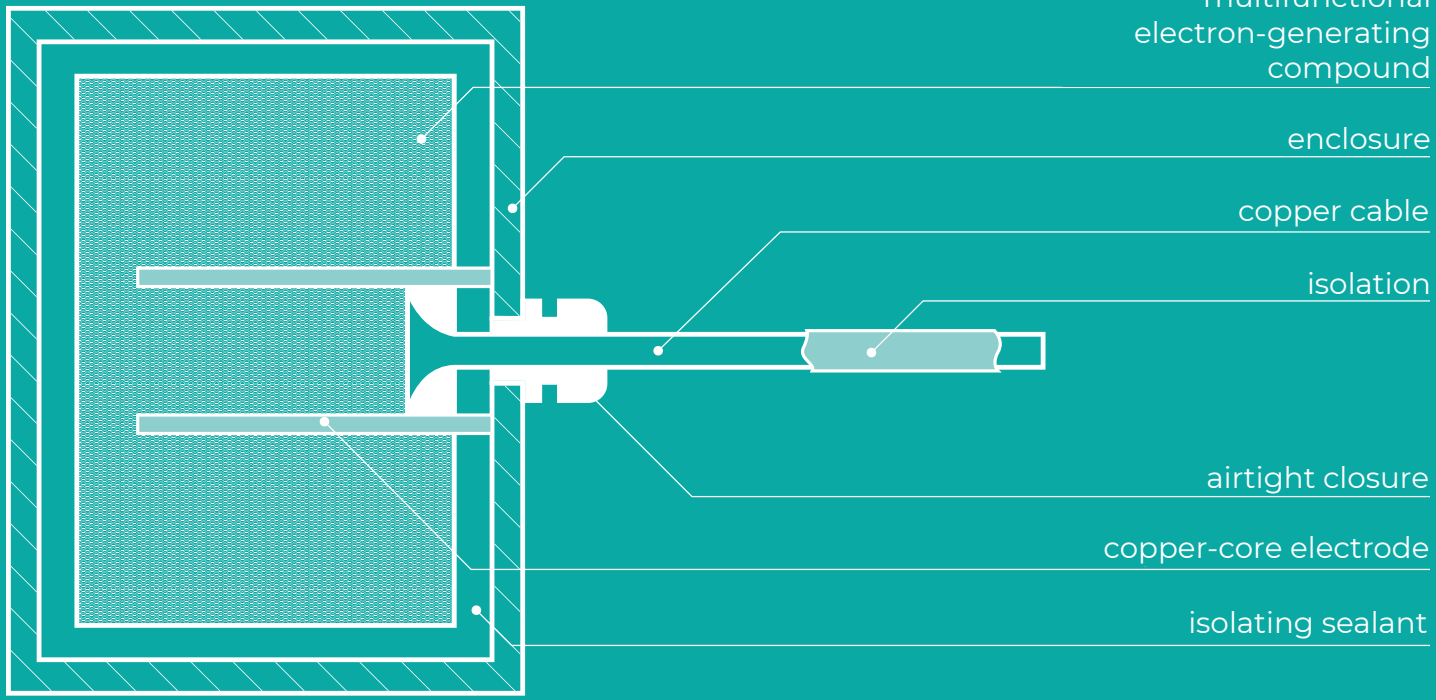

multifunctional
electron-generating
compound
enclosure
copper cable
isolation
airtight closure
copper-core electrode
isolating sealant

Fig. 2

As a result, electrical conductivity increases, resistance of all conductors in the consumer network decreases, and so does power consumption.

REACTIVE POWER REDUCTION

BEPIPE also has a positive effect on the voltage. Alternating current, hence the name, is known to change its direction, i.e. its polarity, at regular intervals.

To be precise, 50 times per second. With a frequency (span) of 50 hertz (Hz). At least in Europe. In other countries, the voltage can vary.

The change between the poles occurs smoothly and manifests itself as a sinus-shaped curve. This form of oscillation transfers energy more efficiently. The current in a line network also changes sinusoidally.

However, the current lags behind the voltage in an actual consumer network. The reason lies in the inertia of electrons, which causes them to react with a delay to the applied voltage. This leads to resistance and negatively influences the conductivity.

A high concentration of free electrons, however, results in increased conductivity. This also positively affects the lag of the alternating current with respect to the voltage.

The result: the reactive power is reduced.

This is precisely the power transformers need to build up the magnetic field through which the current can flow.

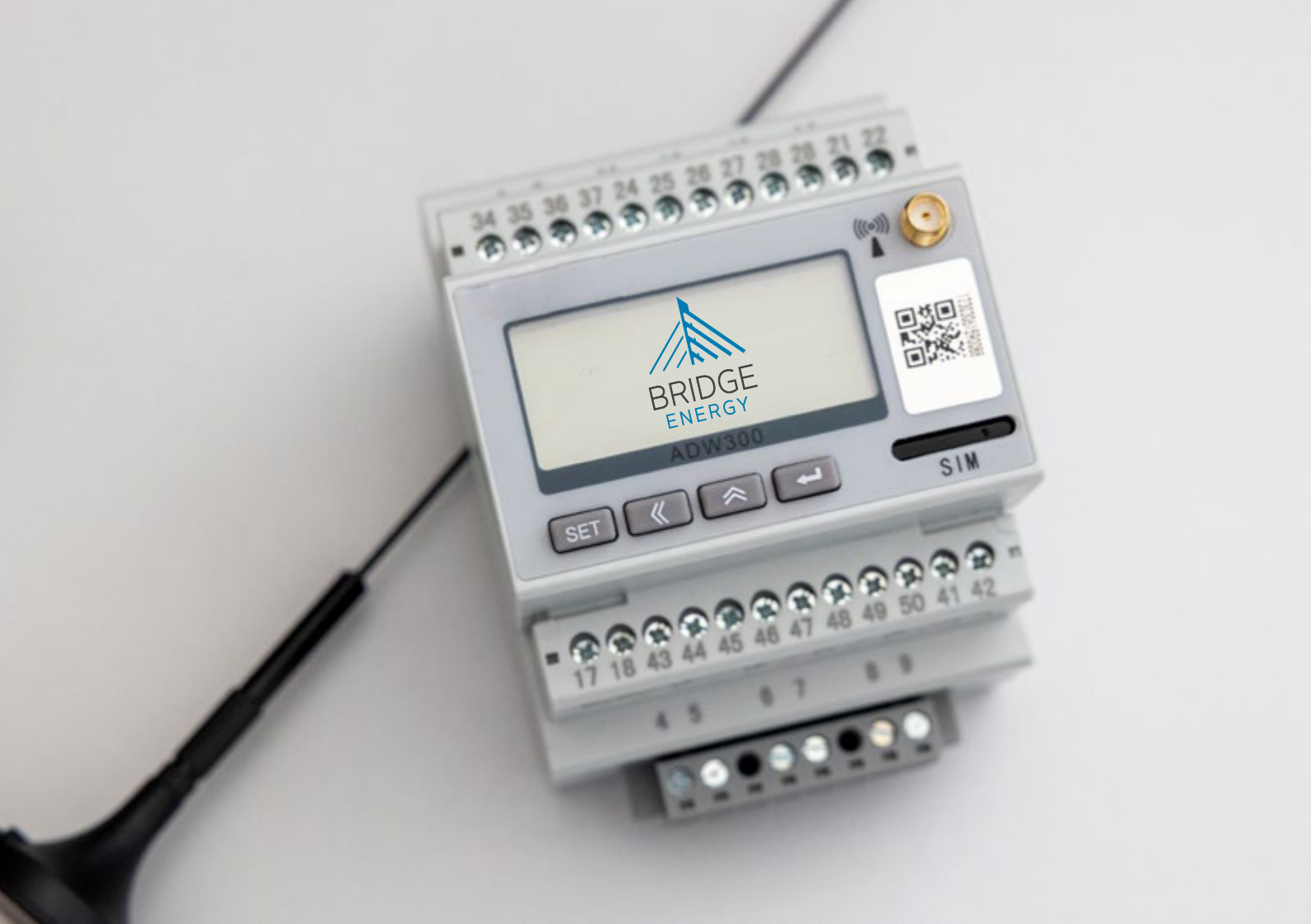
SIMPLE.
UNIVERSAL.
ADAPTABLE.

BEPIPE automatically adapts to the respective AC frequency. Without additional settings or maintenance during operation.

The size of the appropriate BEPIPE system depends on the connected load, with 5 kW to 2 megawatts available as standard sizes.

In principle, several BEPIPE systems can be installed one after the other. The only requirement is a distance of 30 cm. Individual unique designs are also possible.

		CABLE DIMENSIONS		DEVICES DIMENSIONS	
TYPE	**POWER (kW)**	Length m	Ø mm²	(Ø, Height) mm	WEIGHT kg
SINGLE-PHASE L1/N Set of two BEPIPES	5	1	6	70 x 90	1,0
	10	1	10	70 x 120	1,6
	20	1	10	70 x 140	1,6
SINGLE-PHASE L1/L2/L3/N Set of four BEPIPES	10	1	10	70 x 90	3,2
	20	1	16	70 x 140	5,6
	30	3	16	70 x 170	8,0
	50	3	16	130 x 110	10,0
	75	3	16	130 x 120	12,0
	100	3	25	130 x 130	15,0
	200	3	25	130 x 150	18,0
	300	3	35	180 x 180	24,0
	400	3	35	180 x 190	30,0
	500	3	35	180 x 210	37,0
	750	3	35	260 x 270	55,0
	1000	3	50	260 x 300	74,0
	1500	3	50	260 x 340	106,0
	2000	3	50	260 x 370	140,0


BRIDGE
ENERGY
ADW300
SIM
SET

TRANSPARENT. UNCOMPLICATED. *REAL TIME.*

BEPIPE
BRIDGE ENERGY SAVING SYSTEM

The smart meter pre-installed in BEPIPE enables transparent monitoring of power consumption at all times.

Thanks to the innovative technology, comparisons with earlier times are easily accessible. For example, daily updated values can be compared with the values from the previous day, previous month or previous year in order to be able to make timely adjustments to energy consumption. All current parameters can be called up in real time via the dashboard of the app.

This makes it particularly easy to identify peak times.


Hello Max Mustermann
ENERGY USAGE
TODAY
23087.51
kWh
-18
%
MONTH
170821.68
kWh
-16.2
%
YEAR
12311305.28
kWh
-17.3
%

PRACTICAL.
USER FRIENDLY.
ALWAYS READY.

A particularly user-friendly dashboard in the app shows the energy consumption. In this way, energy guzzlers and power-intensive times can be easily identified without great effort. Time periods can be easily compared with one click. Operation is intuitive.

The dashboard can be viewed at any time via mobile phone, tablet or desktop. So even in times of absence, i. e., if you are on vacation.

Thanks to the innovative technology, all of this is easily possible.

SIX STEPS TO *SAVING ELECTRICITY*

1. DATA EVALUATION

A questionnaire evaluates your current ACTUAL status and subsequent performance.

Based on the answers, the appropriate performance of the BEPIPE system for your application is determined.

2. SITE ANALYSIS

During an on-site inspection, the experts from BRIDGE Energy will look at the local conditions with you. The ideal installation location is determined, and the baseline is measured, i.e. your current electricity consumption. This reference value serves as a starting point to determine the actual savings.

3. CONTRACT

The next step is the conclusion of the contract.

It contains all the rights and obligations of the contracting parties and the parameters of the contracting model.

4. INSTALLATION

Within a few hours, your BEPIPE system will now be installed. The actual duration depends on the size of the unit and the local conditions, e.g. how easy your transformer is to access.

Ideally, the power is turned off for the duration of the installation. But this is not mandatory.

5. PRELIMINARY PHASE

After installation, it takes about three to four weeks for BEPIPE to take full effect – that is, for the concentration of free electrons to be high enough to increase conductivity and reduce resistances.

Changes are measured on an ongoing basis.

6. ELECTRICITY SAVING

From the 5th week onwards, you benefit fully from the electricity savings.

The actual consumption is evaluated at regular intervals and compared with the baseline. This way, you always have an overview of how much energy and CO_2 you save.

SUSTAINABLE.
RECYCLABLE.
ECOLOGICAL.

BEPIPE
BRIDGE ENERGY SAVING SYSTEM

Every company should take responsibility for climate protection and be mindful of resources. The team at BRIDGE Energy GmbH shares this view, which is why the Austrian company has dedicated itself to energy optimization.

During the development of the BEPIPE system, the BRIDGE Energy Team paid great attention to sustainability. Thus, all components are environmentally friendly or recyclable.

The device shell is made of recyclable steel, and the individual cylinders are made of a refillable polymer capsule.

The chemical substances inside the containers consist of minerals that gradually degrade. If they were to enter the groundwater, they would have no negative impact on the environment.

BRIDGE Energy – *Your key to a greener future..*

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