Sustainability comes naturally to us.
How we are already taking care of tomorrow as a leading fittings manufacturer.

Sustainability – the most natural thing in the world for SCHELL.

Get to know our green side.

At SCHELL, sustainability is part of our company DNA. And has been for more than 90 years. It wasn't by accident that Hubert Schell founded his company in Olpe in the heart of the Sauerland region – surrounded by fields, forests and natural waterways. An environment that has made us what we are today. For SCHELL, economic success and a responsible approach to nature have always been equal aspects of our corporate philosophy, long before people even started to talk about sustainability. And it is a challenge that we intend to meet even in the era of globalisation.

The SCHELL management team: Andrea Bußmann (left) and Andreas Ueberschär (right)

All day, every day:
Sustainable business from SCHELL.

The economic sector needs to lead on the environment. This is why SCHELL carefully examines all of its energy and material flows. From eco-friendly transport and energy-saving lighting to reducing resource consumption in the office – SCHELL adopts a wide variety of measures.

Sustainability in the round

Sustainability at SCHELL is based on a comprehensive, multi-dimensional approach that anchors it in the company while exporting it as part of our products. And sustainability has always been a core part of our organisational DNA. SCHELL on the outside means sustainability on the inside. That's a promise.

An eco-friendly workplace

Sustainability means much more than just resource-friendly production. So we've embedded it into day-to-day business at SCHELL: from our own charging stations for EVs to smart water management throughout our premises and the exclusive use of 100 % green electricity, we continue to apply and improve our sustainable principles in practical terms.

Our vision: cradle-to-cradle

We are committed to applying the cradle-to-cradle approach across the entire lifecycle of our products. From the design to product development, product usage and recycling, SCHELL therefore makes every effort to pursue the goal of a potentially infinite closed-loop economy. Raw materials and products are recycled and reused – which also helps others to become more sustainable. Anyone installing SCHELL products can depend on the no-compromise quality they offer, that lets users enjoy long-term planning, avoid costly conversion work and save key resources – especially water. At its production facility in Olpe, which features a compact site layout and low logistics costs, SCHELL is also extremely well-placed for keeping its CO_2 footprint as small as possible.

Quality in black and white

Our products and processes are tested continuously, and are certified to all of the relevant quality and safety standards. As one example, our SCHELL Quality Management System has been certified to DIN EN ISO 9001:2015 by TÜV Rheinland.

TÜVRheinland ZERTIFIZIERT
Management System ISO 9001:2015
www.tuv.com ID 9108624972

ecocockpit

ZERTIFIKAT
STANDORTBILANZ

www.ecocockpit.de

Unternehmen

SCHELL GMBH & CO KG

Bilanzierungsgegenstand

CO2 FUSSABDRUCK UNTERNEHMEN SCHELL

BILANZIERUNGSZEITRAUM: 01.01.2020 - 31.12.2020

BESCHREIBUNG BILANZRAUM: Beschrieben sind hier alle CO2 Ausstöße am Standort nach dem Gate to Gate Ansatz.

Emissionen & Beschreibung des Bilanzraumes

BILANZIERUNGSSTANDARD CCF: Die Standortbilanz (CCF) stellt die Summe aller direkten und indirekten Treibhausgasemissionen eines Unternehmens, ausgedrückt in CO2-Äquivalenten (CO2e) und basierend auf einer Lebenszyklusanalyse der Emissionsverursacher, dar. Die Bilanzierung erfolgt gemäß der Anforderungen an die quantitative Bestimmung sowie an die Berichtserstattung von Treibhausgasemissionen und deren Entzug auf Unternehmensebene nach ISO 14064-1:2012. Die Ergebnisse sind nicht als Vergleichsgrundlage für Unternehmen zu verstehen. Auch für ähnliche Unternehmen können Unterschiede bei den Berechnungseinheiten, der Lebenszyklusbetrachtung und der Datenqualität zu nicht vergleichbaren Ergebnissen führen.

28.4.2021

Ort und Datum

Unterschrift

Dieses Zertifikat wurde erstellt mit ecocockpit.de, einem Tool der Effizienz-Agentur NRW. Version: 2.2.0

Independent audits have also confirmed SCHELL's frugal resource utilisation and low carbon impact.

Renewable plus sustainable e-mobility.
Charging points, LED lighting and green electricity on site.

Everyday sustainability cannot be achieved without accounting for the relevant energy flows. SCHELL uses energy-saving measures and runs on clean, green power. This is why 100 % green electricity from renewable energy sources is used throughout our company – including both of our factories and our office buildings. Green power is also supplied by our EV charging stations.

Charging points on company premises

A total of five EV charging stations, each with two charging sockets, are provided on company premises near our offices: these can be used to charge the company's own electric vehicles as well as visitor and customer EVs. This not only cuts down on petrol consumption but promotes the transition to low-emission transport needed in the future. Nor is SCHELL focusing exclusively on e-mobility: bicycle shelters have also been installed on the premises to accommodate the large number of employees who commute to work by bike every day.

LED lighting with a smart control system

SCHELL's manufacturing units use high-efficiency LED luminaires for eco-friendly lighting. Instead of the old installation, with around 700 neon tubes, modern LED modules now provide sustainable lighting on the production line. Complementing these energy-saving, long-lived LEDs, which are also virtually maintenance-free, a daylight-sensitive lighting control system has also been integrated, which further helps to reduce power consumption. Overall, this adds up to about a 65 percent saving on the lighting energy budget. Energy-related refurbishments have also been made to SCHELL's facade and outdoor logo lighting.

Convenient charging

The EV charging stations have all been equipped with 'Plug & Charge' functionality: this provides a simple way to get power into the vehicle without a special charging card or app — ideal for everyday use and especially useful for guests.


MENNEKES

Limiting material flows.
Reducing paper and water consumption, and cutting logistics costs.

Waste, water and paper – what might seem like rather 'boring' substances actually play a key role in sustainability. And SCHELL of all companies obviously has to ensure the economical, centralised and hygienic management of its drinking water system.

Sparing use of paper

The careful use – and reuse – of resources is also important outside of our production facilities. This is why SCHELL practises waste separation assiduously throughout the company and ensures that paper is used sparingly – as part of administrative duties, for example. All company-internal printers and copiers also use paper made from 100 % recycled paper stock.

Managing water consumption

The SCHELL SWS Water Management System is used in all of SCHELL's buildings. SWS utilises optimised hygiene flushes and synergistic effects to keep water consumption as low as possible while still maintaining a high level of drinking water quality. The centralised control system used for the networked fittings also enables facility management processes that save time and resources.

Olpe: an ideal location

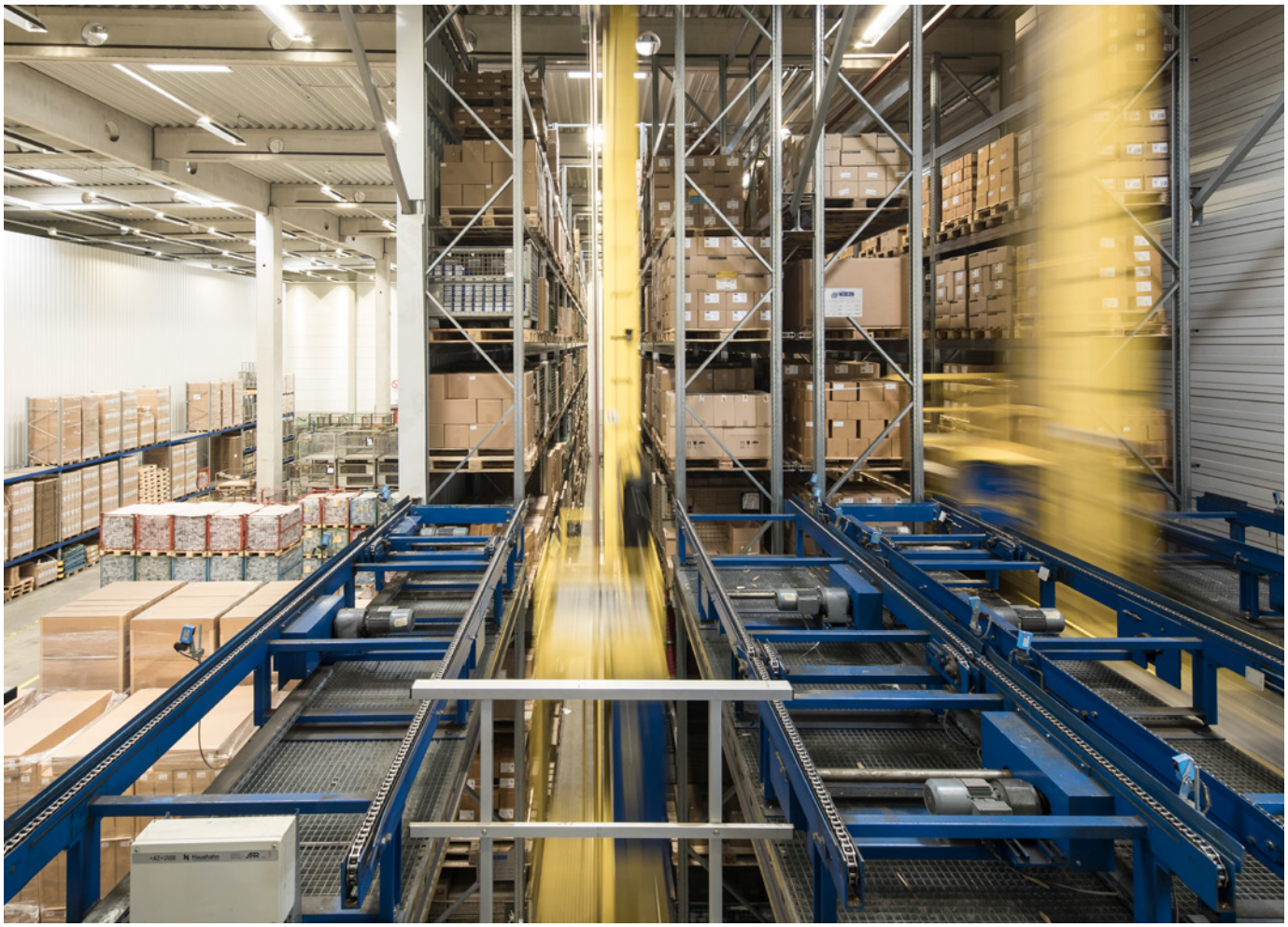
Basing the company in Olpe offers the major benefit of minimising the need for logistics and hence an avoidable environmental impact. Since both production and administration are both located onsite, this keeps everything very compact and so ensures CO_2 emissions are also reduced as far as possible. In fact, all of SCHELL's production is handled by the two SCHELL factories that are just a short distance from one another. This greatly reduces the costs of transporting both materials and finished products.


interseroh
zero waste solutions

Certificate resources SAVED
2020

Partnerships with companies like Interseroh also generate further savings in primary raw materials and greenhouse gases.


SCHELL
SCHELL



The circle of life.
Reuse and recycling at SCHELL.

SCHELL considers itself duty-bound to apply the cradle-to-cradle principle for a systematic, end-to-end circular economy. From product design and development to production, product usage, service or recycling, the most sustainable approach possible is analysed and taken at all stages within the product lifecycle.


SCHEL

Cradle-to-cradle.
The concept of a waste-free, closed-loop economy.

The ultimate aim of applying the cradle-to-cradle principle is to make all substances and materials infinitely reusable within a business ecosystem – so that no waste is ever created. At SCHELL, we interpret this to mean reuse – in the same or a different way – and recycling.

An endless usage loop

Developed in the 1990s, the cradle-to-cradle (C2C) principle pursues the vision of establishing an economic system that follows the path of a never-ending loop, with all materials being separated back into their constituent parts after use without any loss of quality, and ready to be reused once again. In this idealised economic system, no waste is generated and everything is governed by natural cycles. Since waste substances are very harmful to the environment, C2C offers a key route to sustainability. Accordingly, SCHELL is pursuing efforts to realise this vision with its own products.

The product lifecycle at SCHELL

Even at the product development stage, SCHELL ensures that materials are carefully selected and their later reuse is already being considered. The product lifecycle is then comprehensively analysed, from installation to operations and then on to removal and recycling, and optimised to close the loop and ensure no material losses. This is possible only with outstanding product quality and an appropriate level of service. All materials are tested to ensure they can be reused – as originally used or otherwise. If they cannot be reused in their current form, then they are reused in other applications, which may also include partial or complete recycling.

Cradle-to-cradle and renewables

Alongside environmentally friendly production, the cradle-to-cradle principle also incorporates the use of renewables. SCHELL is well-placed here, thanks to its decision to use 100 % green electricity.

Made with care.
Prudent use of raw materials.

At every stage in product development and manufacturing, SCHELL takes care to ensure the optimal use of raw materials and to identify a further purpose for supposedly ‘waste’ materials. Just as is required by the cradle-to-cradle principle.

Brass recycling

The further use of raw materials in the SCHELL production process is especially effective in the case of brass. All of the brass turnings and swarf generated during production are collected and returned to the brass manufacturer.

It’s all based on brass

Brass is the primary material used to manufacture SCHELL’s angle valves and fittings. Over the course of a year, the company’s production units use about 5,000 tonnes of brass. And not without reason: more than 10 million angle valves have to leave the production line in just 12 months. Every second, two standard angle valves – our original best-selling product – are installed somewhere in the world.

A quality installation that lasts and lasts.
SCHELL products are both durable and recyclable.

Our uncompromising SCHELL quality forms the basis for all sustainable processes – from installation to operations and subsequent recycling. Less (often) is more: products that need replacing after a short space of time are bad for the environment. This is why SCHELL products are especially long-lasting and vandal-resistant.

Longevity pays its way

For all of its products, SCHELL insists on using top-quality materials, and a design that guarantees a long service life and optimum protection against the possibility of vandalism. From constant use to carelessness on the part of users or contact with many different cleaning agents, products such as wash basin taps face plenty of challenges – and especially in public sanitary facilities. And if this means repairs are needed, SCHELL can offer the right spare part for a very wide range of products. In most cases, this avoids replacing the entire product, which saves time and materials. SCHELL also designs its products to be simple to maintain and straightforward to repair.

Ready for recycling

SCHELL's product longevity is not only a result of engineering excellence and superior robustness, however, but also stems from SCHELL's typical approach to product design, which combines award-winning form with function. As we know from experience: a more attractive design is less likely to be targeted by vandalism. And if renovation or conversion work does become necessary, SCHELL products can be returned to the raw material recycling loop via the company responsible for plumbing or fit-out. So their value as a resource is not lost.

BELGAQUA DIN DVGW CERT DVGW CERT Choose the Original Choose Success!

SCHELL fittings have national and international certification

Making the most of a scarce resource.
Saving water without compromising on hygiene or convenience.

Although 70 percent of the Earth's surface is covered with water, only 3.5 percent of this water is freshwater and just 0.3 percent is actually usable. Water is therefore a very valuable resource indeed. Reason enough, then, for SCHELL to develop water-saving technologies that are most effective where people are typically least likely to prioritise economical water consumption: in public, semi-public and commercial sanitary facilities.

Less water but the same user experience

From showers in sports venues to toilets in service stations or laundry rooms at daycare facilities – our taps and fittings know what's best and effectively save water all on their own. And all while ensuring drinking water quality is never compromised. End users enjoy the same high-quality experience: our technological solutions are so sophisticated that they never limit functionality or convenience.

A small part with a big effect

Even our simplest components are also pretty 'smart'. When SCHELL angle valves are combined with SCHELL flow restrictors, for example, this rather unassuming accessory part regulates the flow of water and therefore stabilises the flow rate. This can significantly reduce water consumption – and especially if mains pressure is high. Saving water without inconveniencing users.

SCHELL also offers special products for developers who need to obtain building certification like BREEAM or LEED. These products include specialised flow regulators that cut water consumption to just 1.3 l/min. Fittings such as the MODUS E, which offers greatly reduced water consumption with maximum user comfort, are also very useful for these kinds of certification.

Saving hot water means saving emissions

Saving cold water is good, saving hot water is better. The energy needed to provide users with 1 m^3 of hot water is no less than 35 kWh – some 87 times higher than for 1 m^3 of cold water. Accordingly, it's even more important that hot water is really only used when it is actually required. Intelligent fittings from SCHELL can be used to cut water consumption and, in turn, achieve long-term reductions in the CO_2 emissions caused indirectly by the heating of cold water.

SCHELL awarded maximum ratings internationally for saving water

People living in Germany use an average of

129 litres

of drinking water every day.

Since 1990, water consumption per person has declined by

↘17%

In water, the human body weighs just

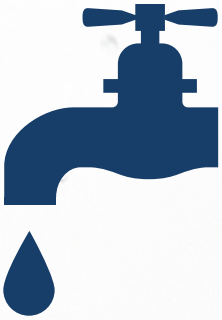
10%

of its normal weight.

Around **4%** of our drinking water is used as part of meals and beverages.

91%

of people in Germany drink tap water.



We use about

36%

of our drinking water for hygiene (baths, showers and personal care).

Roughly **12%** of daily drinking water consumption is used for home cleaning, washing dishes and garden upkeep.

Some **12%** of our drinking water is used for washing clothes.

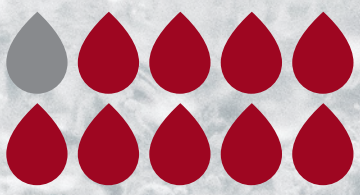
Water makes up

50–70%

of the human body .

90%

of our blood consists of water.



Around **27%** of our drinking water is used for flushing the toilet.

Every day, our bodies lose about 2.5 litres of water (through sweating, respiration and bodily excretions).

2.5l

Electronic is more economical.
Achieving sustainability goals with SCHELL fittings.

From regulating flushing to limiting flow time, electronic fittings from SCHELL can be easily adjusted to suit local circumstances in order to achieve maximum savings while still maintaining a high level of drinking water hygiene.

Contact-free and electronic instead of conventional

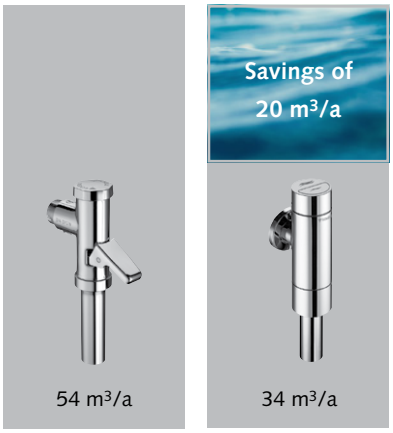
Electronic SCHELL fittings are especially good at limiting water consumption. Like electronic wash basin taps, for example: which start automatically, interrupt the flow of water during prolonged 'soaping-up phases' and stop automatically when no longer needed. Electronic urinal fittings also adjust automatically to usage patterns. When compared to conventional fittings, water consumption can be reduced by 37 percent for WC usage and by up to 62 percent for hand washing. This is due to the smart adjustment of flow times and detection ranges, which allows contact-free, electronic taps to achieve water savings of up to 62 percent compared with standard single-lever mixers. Another benefit is the fact that these taps are significantly more hygienic for users. Anyone making the switch to electronic taps and fittings can also keep operations especially cost-effective while avoiding any loss of drinking water hygiene. This is because important stagnation flushes are easy to program with electronic taps and fittings.

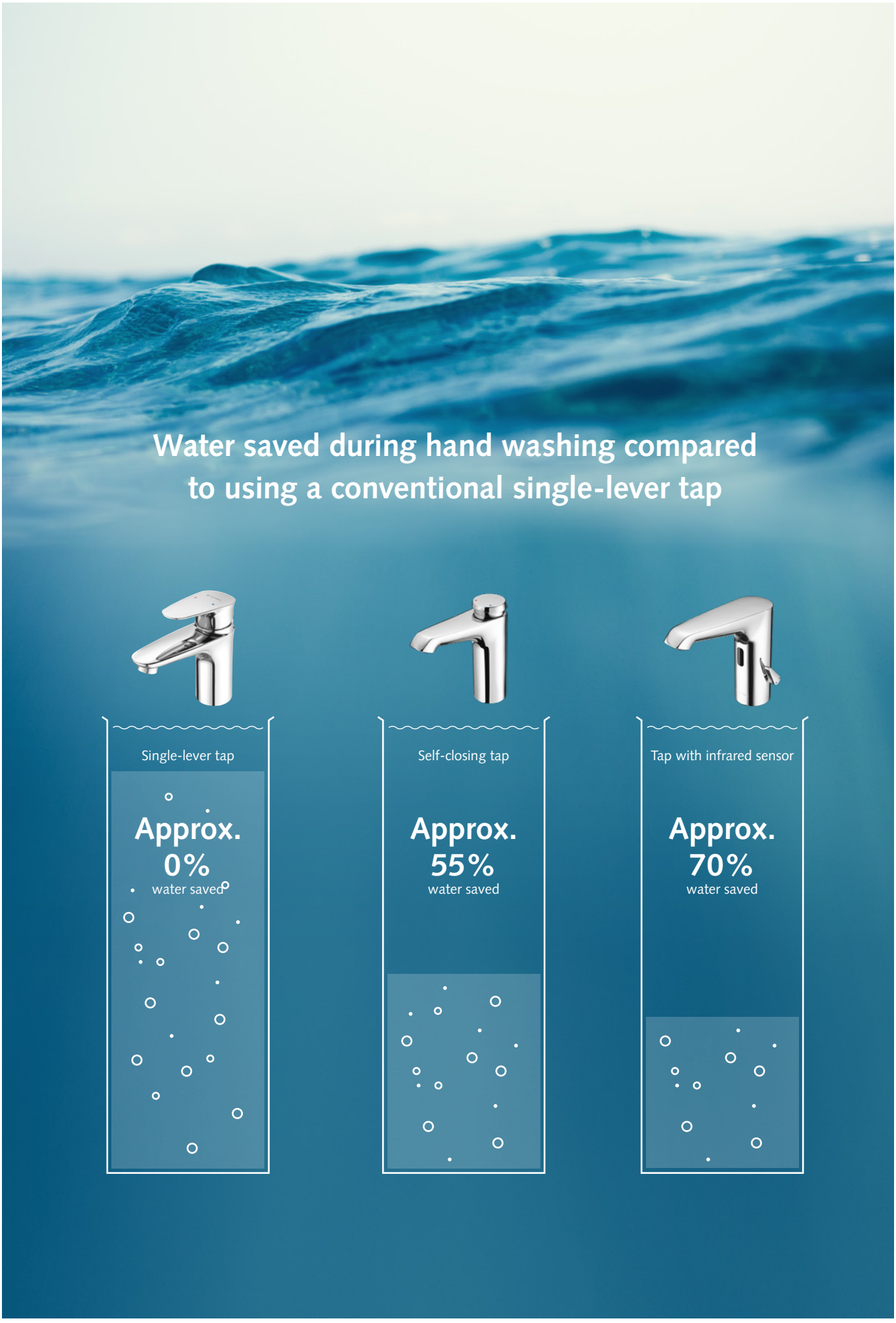
Using economy programs

Electronic urinal fittings can also cut consumption. Apart from adjusting normal flush volumes to an appropriately economical level, periods of heavier use – during the half-time break in a football stadium, for example – can be accommodated with special programs that work to regulate flush volumes.

Saving water with the WC economy button

Even conventional toilets can save water with SCHELL: compared with a traditional flush valve, a SCHELL WC flush valve with an economy button can cut water consumption by up to 37 %.




Water saved during hand washing compared to using a conventional single-lever tap
Single-lever tap
Approx. 0% water saved
Self-closing tap
Approx. 55% water saved
Tap with infrared sensor
Approx. 70% water saved

Intelligent controls for more sustainable buildings.
Optimising consumption with SCHELL SWS and SMART.SWS.

SCHELL's SWS Water Management System is used to network and control all of the electronic taps and fittings present in a building. During periods of non-use, SCHELL SWS limits the flow of water to the minimum required to maintain water hygiene. This not only supports a demand-based water usage model but does so from anywhere in the world – with the SMART.SWS online service. And so saves even more resources.

Optimised Facility Management

Having a central control system for fittings makes it easier to perform stagnation flushes, for example, since these can be programmed as required and then executed automatically. This avoids having to open all of the tapping points in a building manually. SWS also offers the option of grouping multiple fittings together: these groups allow even large sections of pipework to be flushed efficiently and automatically.

Operation and reporting with just a phone

No complicated technology is required: SCHELL SWS can be operated with a PC, tablet or smartphone and offers quick, plug-and-play installation. Nor do facility managers need to even be physically present in the building itself: SMART.SWS can be used to run hygiene flushes from any mobile, internet-capable device. The reports provided by the SMART.SWS online tool also give facility managers an analysis of the fittings that are most frequently and most rarely used. This kind of useful data helps facility managers to achieve continual optimisation of their drinking water installations, adjusting settings to match actual usage and avoiding time-consuming decommissioning work. Even tapping points located in less-used areas will be flushed automatically at regular intervals. This not only ensures drinking water hygiene is properly maintained but helps to achieve cost-effective handling of water as a valuable resource.

Full control with SCHELL SWS

Maintenance work can also be planned efficiently, since building operators can view all of the key parameters like battery levels at any time. If needed, settings can even be adjusted for each fitting individually. With monitoring and tamper-proof logging provided for all operating parameters (VDI 6023), the operator always has full control of the system, enabling the fine-grained management – and improvement – of both efficiency and sustainability.

Flexibility for new developments, renovations and handling

Thanks to its modular design, the SWS Water Management System is both quick and simple to install. The individual fittings can be networked using a wired or wireless setup. This is especially useful for renovation projects. As one example, electronic fittings and other components can run on batteries and be integrated into a wireless network. This avoids having to install additional power outlets in existing buildings. This future-oriented drinking water system ensures safe drinking water quality, even for upcoming and future usage changes or renovation work – for better planning, more control and greater sustainability.

SWS: a versatile option for existing buildings

For existing buildings, the SWS Water Management System is the perfect choice, since it is currently the only system that supports the networking of both battery-operated and mains-operated components as part of a wired or wireless network. This makes retrofits possible for older buildings with the typical kinds of problems for drinking water hygiene – avoiding extensive renovation work while offering the best-possible support for maintaining water quality. As one example, conventional single-lever mixers at rarely-used tapping points can be replaced by battery-operated, SWS-capable SCHELL wash basin taps. SWS can then be used to easily program and monitor the automated stagnation flushes required. The perfect solution – whether from a technical, environmental or cost perspective.

Selected reference projects.
Hygiene, cost-effectiveness and sustainability in practice.

SCHELL products offer best-in-class support for maintaining user and drinking water hygiene. These advantages are simultaneously combined with options for reducing running costs, which also helps to protect the environment in a number of ways. Our selected reference projects show how this philosophy works in practice.

Charité, Benjamin Franklin Campus, Berlin

Stringent requirements for drinking water quality and its documentation apply in the operating theatres on the Charité's Benjamin Franklin Campus. Contact-free electronic SCHELL fittings, networked temperature sensors and centrally controlled hygiene flushes are now helping to maintain drinking water quality here. Stagnation flushes are performed both at scheduled times and when critical temperatures are reached across all of the points of use. Water usage, stagnation flushes and water temperatures are recorded continuously, and can be analysed quickly and easily. Straightforward control, maintenance and diagnostics for all networked fittings ensures efficient facility management. And the environment benefits from the energy and water savings made – some of which have been achieved by avoiding the need for manual flushing.

3-Feld Sports Centre, Berlin (Neukölln)

In this project, outsized pipework cross-sections and a lack of concurrency in usage presented risks to drinking water hygiene. To solve these problems, sets of battery-operated electronic fittings that operate wirelessly were installed in the sports centre's sanitary facilities. Stagnation flushes have been programmed as groups of fittings to ensure that the water in the system is replaced regularly in full, as is required. This allows drinking water quality to be maintained over the long term without needing to replace any of the pipework. A full renovation of the sports centre would have used a lot of resources and energy, and produced a lot of building waste. The option of installing SCHELL products was therefore a much more sustainable approach.

Certification is certain

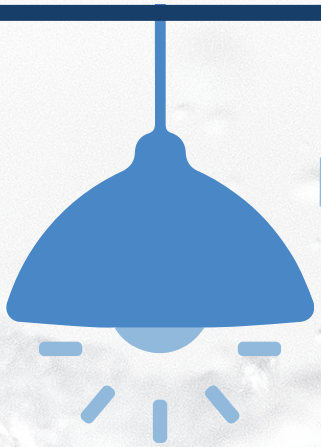
Where construction projects also require building certification to standards such as DGNB, BREEAM or LEED, SCHELL fittings offer a made-to-measure solution. Offering full compliance with water saving requirements while helping to achieve target values in the respective certification process.

Charité, Benjamin Franklin Campus, Berlin
Contact-free electronic fittings, networked temperature sensors and centrally controlled hygiene flushes are now helping to maintain drinking water quality in the hospital while also ensuring cost-effective and sustainable water management.

3-Feld Sports Centre, Berlin (Neukölln)
Battery-operated electronic SCHELL fittings that operate wirelessly have been installed in the sports centre. Ensuring the long-term maintenance of drinking water quality without an expensive and resource-/energy-intensive renovation project.

SCHELL is so sustainable.
Our environmentally-friendly features and processes at a glance.

There are many aspects to sustainability and even small-scale processes can make a big difference. All of these approaches are now implemented as part of day-to-day practice at SCHELL.



Long-lived **LED lighting** in all our buildings

Production of various **spare parts** for repairs

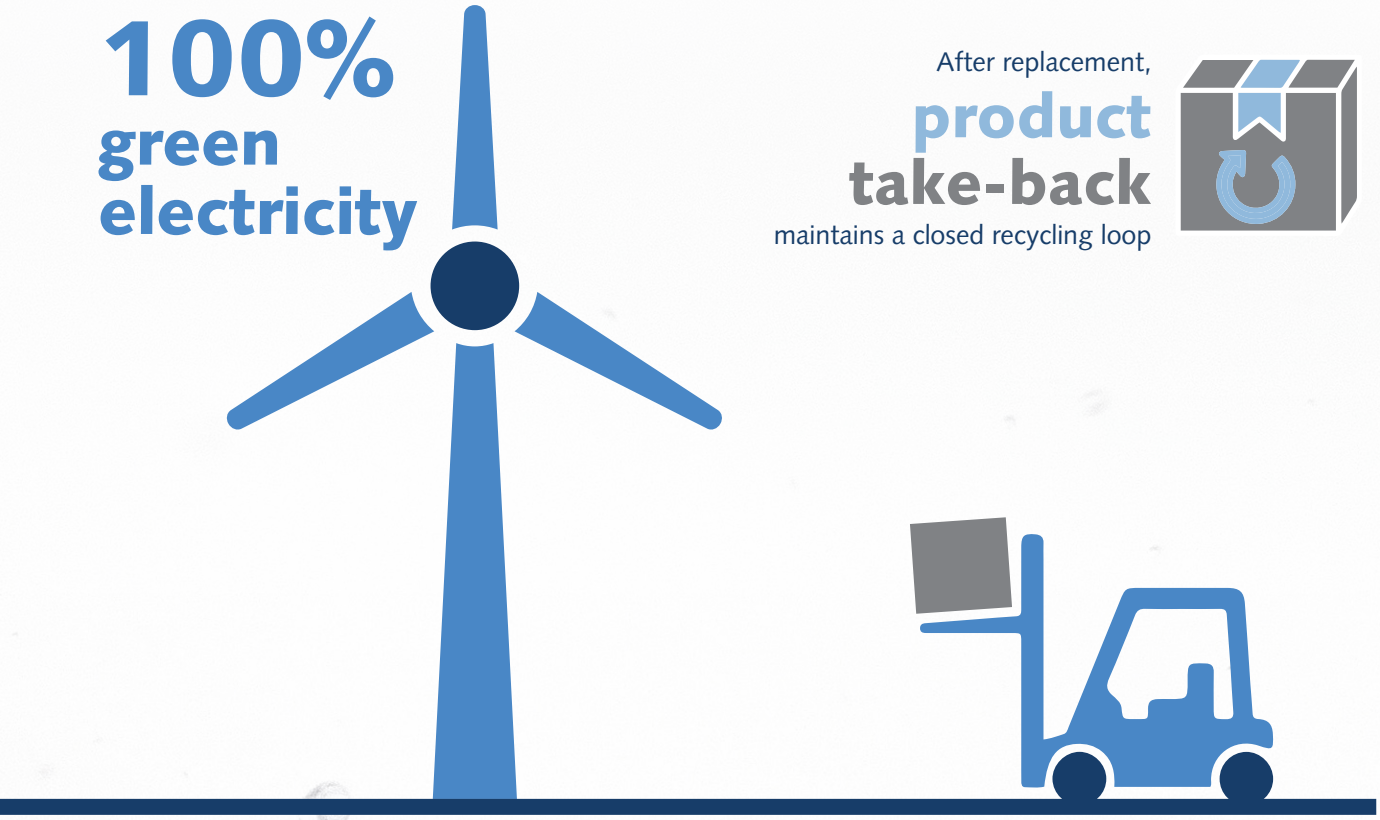
Intelligent **Water management** to maintain drinking water quality

Optimum product quality for a long service life

Use of **recycled paper** from 100% recycled stock

All power used by our company is

100% green electricity



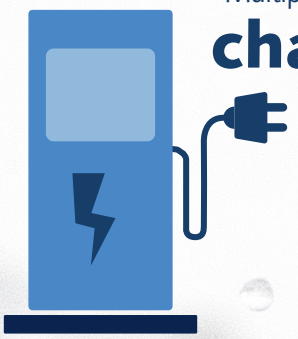
After replacement,

product take-back

maintains a closed recycling loop

Short routes for logistics thanks to our

local focus

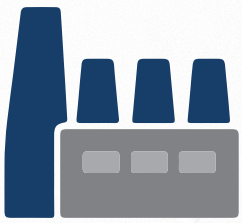


Multiple **EV charging stations**

on company premises.

Environmentally friendly production, thanks to our

cradle-to-cradle approach



Water-saving products

that significantly reduce water consumption.

Specialised products for buildings certified to

LEED and BREEAM

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