



Schmidlin™



Sustainability Report 2023

individually swiss made.

Preface

Fair and transparent



As a Swiss family business in its third generation of family ownership, we have tradition of thinking long-term. We feel a sense of obligation to preserve our production site in Switzerland for future generations and to live up to our environmental and social responsibility.

Developments at both a national and global level reinforce our conviction and give us valuable criteria for where and how we can strengthen our commitment to sustainability. Specifically, the UN's Sustainable Development Goals (SDGs) and the Swiss Federal Council's Sustainable Development Strategy (SNE 2030) highlight our responsibility as a manufacturer of construction products. We view the SDGs as a source of inspiration for the sustainable development of our business, and for long-term innovation and progress.

In the last few years, we have taken a range of steps to improve energy efficiency, reduce gray energy, conserve resources and promote the circular economy, and we want to continue making these efforts over the long term. As owners and managers of the business, alongside the supervisory board, we are committed to sustainable development so that our economic performance is in harmony with our environmental and social responsibility. To do this, we have incorporated key objectives into our business strategy.

We are delighted to publish this first Sustainability Report, which explains which areas we are focusing on for sustainable development, what we have achieved so far, and how we view our future strategy.

Beat Wullschleger

Urs Wullschleger



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Our family business

Durability and high quality

Our owner-managed family business has been in existence for over 75 years. We will continue to produce our durable, high-quality, glazed titanium steel products in Switzerland.

Wilhelm Schmidlin laid the foundations for our family business in 1947 when he opened Switzerland's first, and to this day only, steel bathtub factory in Oberarth, in the canton of Schwyz. Over time he, and later his daughter Margrit Wullschleger-Schmidlin and son-in-law Eduard Wullschleger, steadily modernized and expanded production. Since 2007 the business has been run by Beat and Urs Wullschleger, Wilhelm's grandsons. To maintain our long tradition of innovation, high quality and variety, we continuously invest

in our Swiss production site, which we believe has a long-term future.

Long-lasting and reusable

We are just as confident in the material we have used to manufacture our high-quality products for over 75 years: glazed titanium steel. This robust, long-lasting and reusable material has proven its worth in bathtubs and shower bases, so we have expanded our product range over the decades. Today we also use glazed titanium steel to manufacture shower areas, washbasins, multi-washbasins and urinals, along with kitchen splashbacks, whiteboards and panels for facade cladding.



The bathtub blanks were previously welded together from three parts (1948)



Today, the blanks are drawn and shaped from a single piece using our deep drawing press

Our core brand values

Our three core values encapsulate how we act, communicate, manufacture products and treat each other.

reliable

As a Swiss company, all that we do is based on a solid foundation. At our production facility in Oberarth we manufacture high-quality products featuring the very best in engineering technology. And you can rely on us for punctual delivery – we guarantee short delivery times even for made-to-measure products, and the results speak for themselves.

flexible

Lean processes mean our work is fast and free of complications. We accommodate your needs and create the perfect products for you and your bathroom. And we are constantly striving to improve, part of a process we call SchmidLEAN.

high quality

Using the experience of three generations, the tried-and-tested expertise of our highly qualified staff and optimised manufacturing processes, we supply long-lasting bathroom solutions – including made-to-measure options – featuring robust technology, stylish design and superior quality.



Our production site in Oberarth (Switzerland)

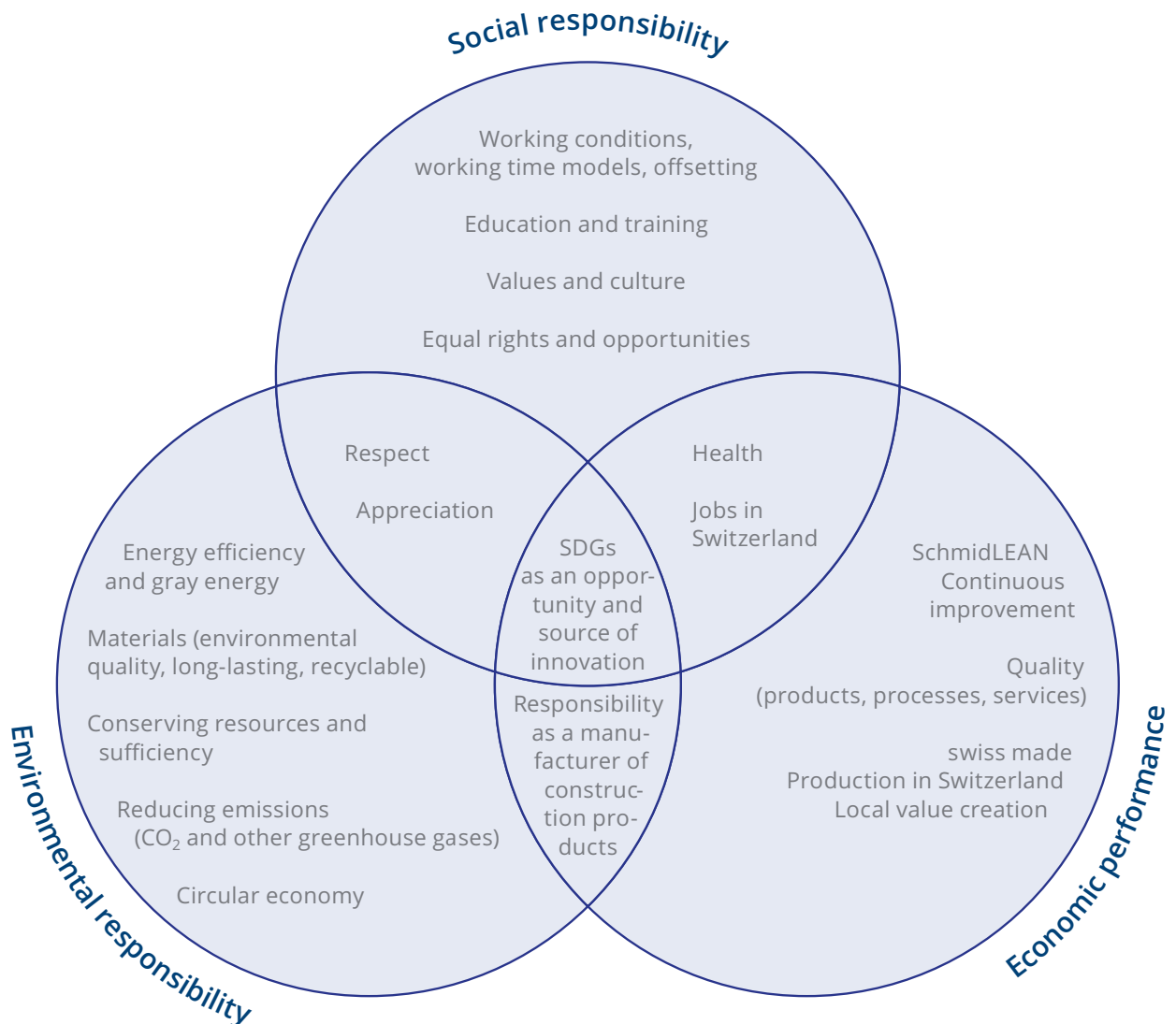
Looking ahead to tomorrow and beyond

We have identified key objectives and indicators for sustainable development as part of our business strategy.

As a family business, we operate in a way that minimizes our impact on the environment and we are aware of our responsibility towards our staff and our fellow human beings. When we make decisions, we consider the generations yet to come, and we set

great store by fair and transparent relationships with our business partners.

The management team and the supervisory board have incorporated key objectives and indicators into the business strategy. They are represented in the following three-circle model.



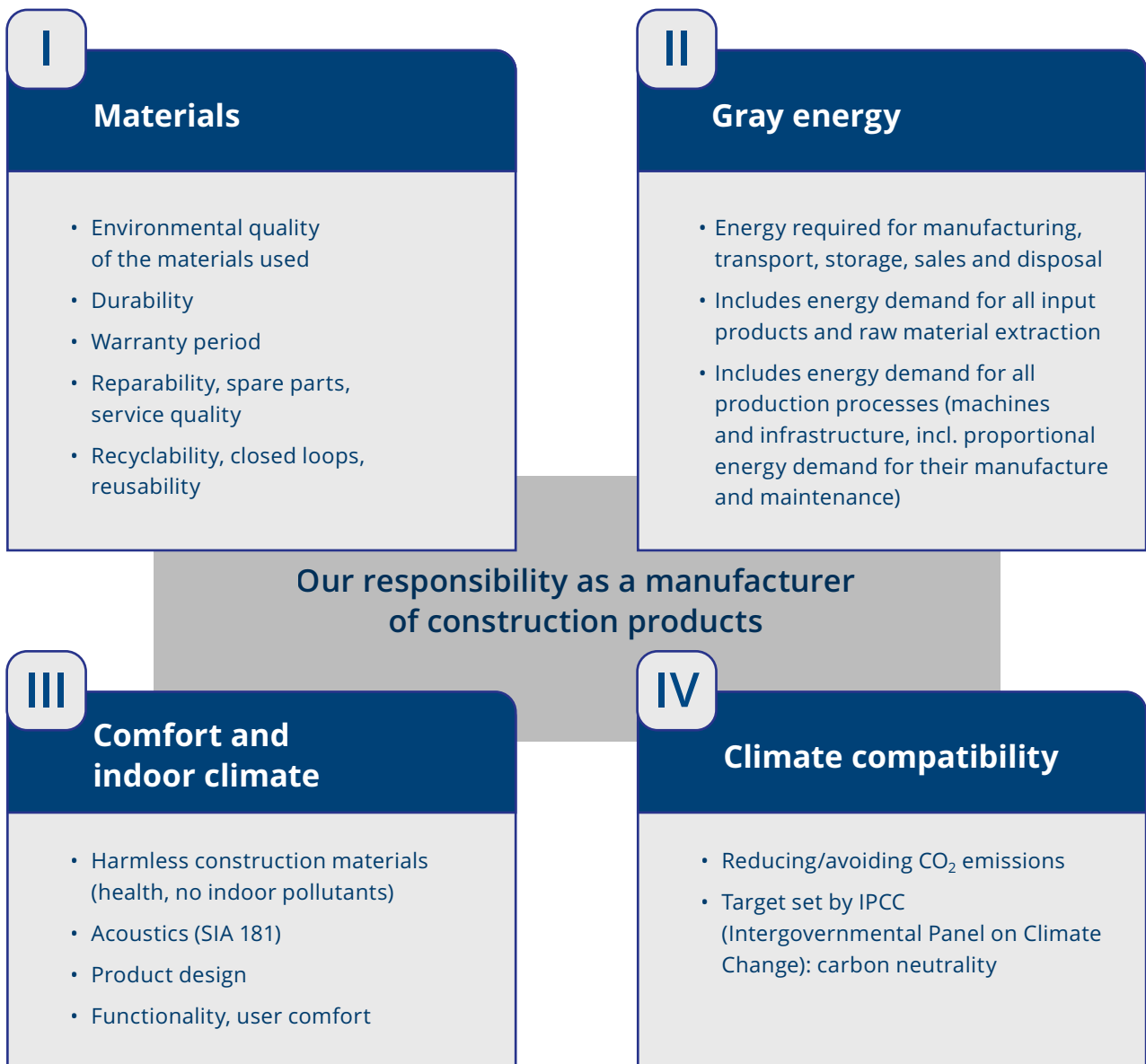


Our responsibility

Products everyone can rely on

As an industrial business and manufacturer of construction products, we feel a particular sense of responsibility when it comes to sustainability in materials, gray energy, climate compatibility, comfort and the indoor climate.

This is in accordance with the “Standards and Labels Map” published by the Sustainable Construction Network Switzerland.





**Materials:
long-lasting and recyclable**

We use steel and enamel, two natural raw materials that complement each other, to manufacture our products. Enamel is a form of melted glass consisting of borax, feldspar, quartz and sodium carbonate. All the raw materials needed to produce enamel are naturally occurring minerals. We melt steel and enamel together to produce a high-quality, robust and long-lasting whole: glazed titanium steel. The materials we use are natural and 100 % recyclable and they retain their value in the raw material extraction, production and disposal cycle. Our products stand out with their outstanding stability, extremely long-lasting surfaces and timeless designs, making them highly durable: We offer a 30-year warranty for our glazed titanium steel products.



**Comfort and indoor climate:
ergonomic and emission-free**

Comfort and functionality matter to us when designing our products, so we believe easy-to-use products and supportive ergonomics are very important. Glazed titanium steel is a good material for indoor climates, as it does not release any harmful substances, it is lightfast, and it is very robust. Our bathtubs, shower bases and shower areas, along with the specific assembly systems, comply with the increased acoustic requirements of the SIA 181:2020 "Sound insulation in buildings" standard.



**Gray energy:
acting consciously**

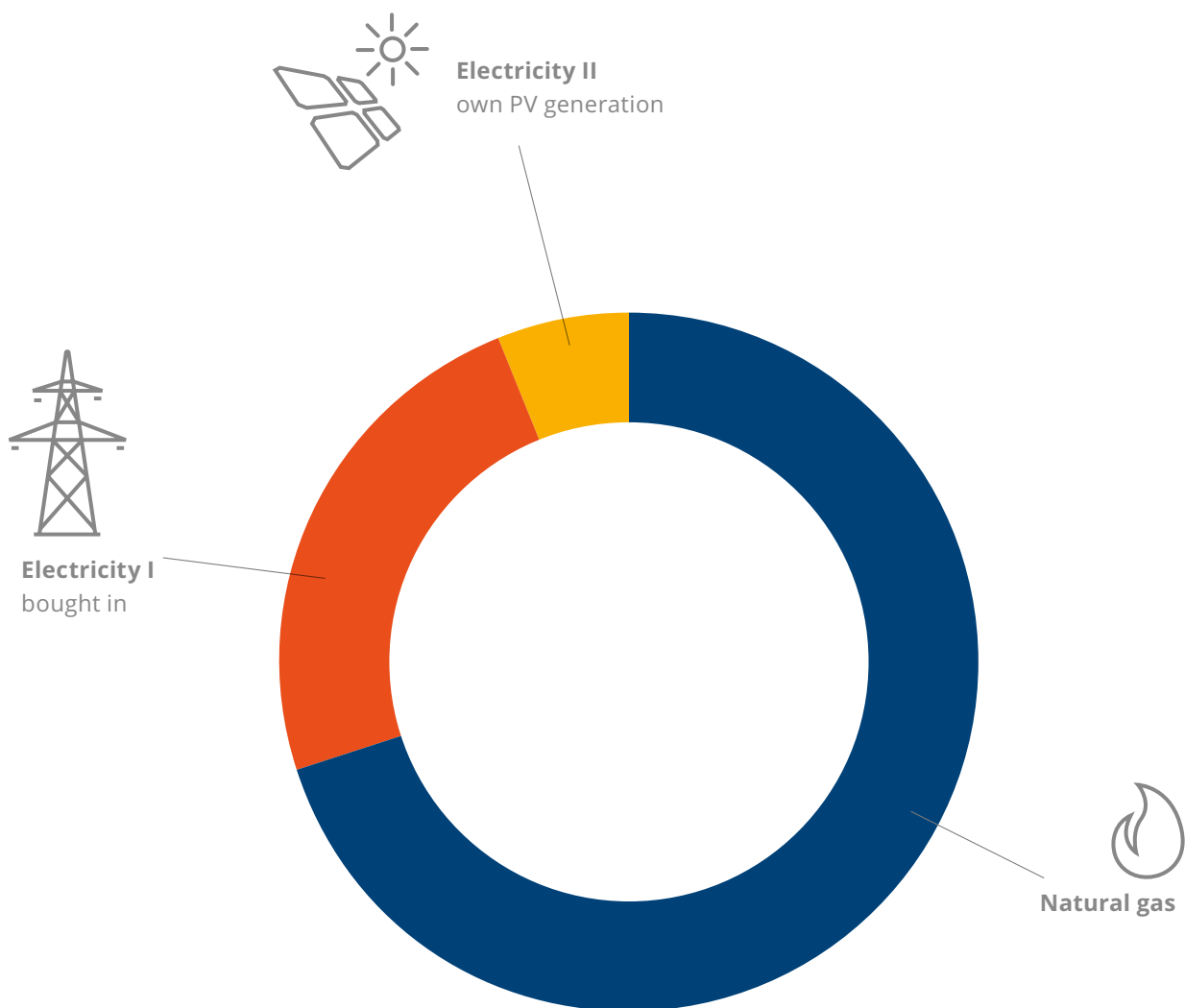
Gray energy is the total energy used to manufacture a product across its life cycle, which includes the energy required for upstream processes, operating equipment and disposal. Clearly, industrial production is impossible without energy. But we do our best to save energy and obtain it from renewable sources as far as possible. We have already taken a wide range of steps to make our operations more energy efficient and reduce our consumption, including reusing heat given off by furnaces and dryers, modernizing energy systems in buildings, optimizing packaging, and introducing various measures to reduce electricity and gas consumption. See pages 13 and 14 for a detailed list.



**Climate compatibility:
reducing emissions**

We have installed PV panels, which allow us to produce one fifth of the energy we consume ourselves, and we obtain electricity solely from hydroelectric power (naturemade basic certification). By agreement with the authorities, we are committed to steadily reducing our CO₂ emissions. In recent years we have taken various steps to achieve this, including reusing heat given off by furnaces and dryers, buying low-CO₂ steel, recycling sheet metal within our sites, installing an enameling furnace powered by electricity, modernizing energy systems in buildings, optimizing packaging, and introducing various measures to reduce electricity and gas consumption. See pages 13 and 14 for a detailed list.





Our energy consumption in 2022 (production and offices in Oberarth)

Natural gas bought in	5 079 461 kWh	70 %
Electricity I bought in, 100 % from hydroelectric power (naturemade basic)	1 702 897 kWh	24 %
Electricity II own PV panels	432 454 kWh	6 %
Total energy consumption	6 214 812 kWh	100 %

What we have achieved so far

In terms of sustainability

Environment	Economy	Society
Energy efficiency and gray energy	Production site and value creation in Switzerland	Working conditions
Conserving resources and circular economy	Quality (products, processes)	Education and training
		Social responsibility

In recent years, we have established priorities for several aspects of sustainability which we are looking to optimize.

Environment

Energy efficiency and gray energy

Our goal for many years has been to reduce the energy we use for each product we manufacture in order to reduce the gray energy it contains. So since 2013 we have worked alongside energy consultants Energie-Agentur der Wirtschaft (EnAW) and the Swiss Federal Office for the Environment (BAFU) to agree targets for continuous reduction of our energy consumption and CO₂ emissions. Compared to 2013, by the end of 2022 we saved 654,751 kWh energy and 770 tons of CO₂ – and we are committed to reducing our CO₂ emissions by 1245 tons in total by the end of 2024.

Heat recovery

For many years, each time we have had replacements in our production systems, we have invested in more efficient systems in order to reduce our electricity and gas consumption. And we have also introduced several heat recovery processes to further minimize how much energy we consume. For example, 100 % of the energy needed for our drying system comes from the heat given off by our enameling furnace.

The numbers: 522,500 kWh/year ≈ 219.45 tons CO₂/year

We also use the residual heat from our bathtubs after baking the enamel. Via a heat exchanger, we use this energy to dry the bathtubs in our degreasing plant, which reduces the plant's energy requirements by a quarter. **The numbers: 112,860 kWh/year ≈ 47.4 tons CO₂/year**

In addition, we use the heat given off by our compressors to raise the temperature of the intake air in the burners, which reduces the energy requirements of each burner by almost 2 %. **The numbers: 101,589 kWh/year ≈ 42.7 tons CO₂/year**

We also use the heat given off by our furnaces to heat the factory buildings.

Generating our own electricity

In fall 2021 we installed PV panels on our roof with a rated output of 480 kW. Every year the panels produce approximately 430,000 kWh, which covers around 20 % of our electricity consumption.

Electric enameling furnace

Installing an electrically powered enameling furnace has allowed us to use more renewable energy and reduce our CO₂ emissions as a result.

Gray energy in steel

We obtain low-CO₂ steel from our suppliers. Our overarching goal is to reduce CO₂ emissions from steel production and to continue reducing the gray energy in this source product.

No standby operation

We use blanking to reduce standby energy consumption in our control systems. **The numbers: 1013 kWh/year ≈ 425 kg CO₂/year**

Modernizing energy systems in buildings

We have installed state-of-the-art thermal insulation in the envelope of our older office and production buildings.

Conserving resources and circular economy

We are committed to closed loops, so we have taken a number of steps across various areas of our business, and we are investigating further steps to take. We meet or exceed all legal requirements for emissions limits, occupational safety and residual materials.

Recycling enamel

When we spray the enamel onto our products, some of the enamel does not adhere to the product. We use filter systems to extract almost all of this overspray. 90 % of the overspray remains in the cycle: We process 40 % of it for enameling the rear of products and applying intermediate layers, and we send 50 % of the extracted enamel back to the enamel producer to be fused and turned into new enamel frits. The remaining 10 % of the enamel collected is highly contaminated or discolored, so it has to be disposed of.

Recycling steel

We keep 100 % of our scrap sheet metal in the materials cycle and reuse 20 % of it ourselves. We use metal strips to make our products wider when custom-made designs are required, and we reuse the pieces of sheet metal to produce lugs and mountings for hanging up products during the enameling process. The remaining 80 % of our scrap sheet metal is sent to the Swiss Steel plant in Emmenbrücke, where it is melted and turned into new steel.

Recycling packaging materials

We recover product packaging and transportation materials for reuse ourselves or for recycling. To increase the amount we recover, we have introduced a reward system for bathtub supports, and we are working on adding more packaging materials to this system.

Recycling products

At our plant, we can re-enamel used products made from glazed steel – whether they are our own products or were made by other manufacturers. Enameled bathroom products already have a long service life, and this allows us to extend it by several decades.

Economy

Production site and value creation in Switzerland

As a family business with a proud pedigree, we are committed to our production site and to securing jobs in central Switzerland. We constantly invest in our plants and in our staff to ensure that we continue to be highly productive and competitive in future. Process optimization is a key aspect of what we do, and our SchmidLEAN philosophy of continuous improvement of processes has proved its worth over many years. 10 % of our working time is dedicated to in-house training (Skills matrix, workplace rotations) and another 10 % focuses on process improvements (TPS days). An important element of this philosophy is incorporating all staff into the continuous improvement process: A sophisticated suggestion and implementation system ensures that staff can play a direct role in turning ideas for improvement into reality. This way, everyone can contribute to making how we work more advanced and more sustainable.

Quality (products, processes)

As a manufacturer of construction products, we are aware of our corporate responsibility (see page 8). Robust materials, a timeless design and a long-term service and spare parts warranty ensure that our products last for a long time. Our set concept – product plus specific installation system – has steadily been developed over time and plays a major part in sustainable construction. Our products meet the requirements of the Swiss Sustainable Construction Standard (SNBS) and other sustainable construction standards (DGNB, SGNI, LEED, BREEAM). See the Annex (page 20) for an overview of how we correspond to the SNBS indicators.

Society

Working conditions

Our employees are our most valuable resource. So we set great store by operational safety, and we create working conditions which offer a positive social environment and protect employee health. We have optimized our working areas to provide a pleasant and healthy working environment, with a strong focus on ergonomics and hygienic workspaces, and we seek to use eco-friendly components and materials.

Education and training

Part of our SchmidLEAN philosophy is that in-house training is crucial. We regularly rotate workplaces and use the Skills matrix with the associated in-house workplace training to help our employees with their continuous professional development. And we also offer external training opportunities with courses and seminars. As a business offering training for apprentices – we currently have eight of them – we know that we have a responsibility when it comes to training up future generations.

Social responsibility

One way we live up to our social responsibility is through our commitment to sponsoring and promoting young talent in both amateur and top-level sport: we support small local sports clubs and a number of sports at national level. We also embody our social responsibility in our work alongside organizations which offer a daily structure for people with disabilities, by enabling products and parts to be manufactured at these support centers. Outside Switzerland, we regularly support charitable aid and construction projects run by supplying bathtubs, shower bases and sanitary equipment.



At a glance

We have made progress – and we will keep going

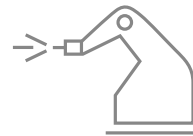


100 %

of our scrap sheet metal stays in the materials cycle.

90 %

of the enamel that does not end up in our products during spraying is recycled.

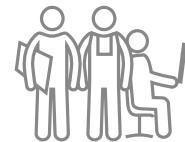


100 %

recyclable materials in our products:
Steel and enamel can be fully recycled.

80 %, 10 % and 10 %

are the core values of our SchmidLEAN philosophy.
10 % of our working time is dedicated to in-house training (Skills matrix, workplace rotations),
10 % to process improvements (TPS days),
and 80 % to standard working.



30 years

warranty on our products: Robust surfaces
and timeless designs make them extremely
durable.

20 %

of the electricity we consume is generated
from the PV panels on our roof.



654,751 kWh

less energy consumption since 2013.

770 tons of CO₂

saved since 2013.



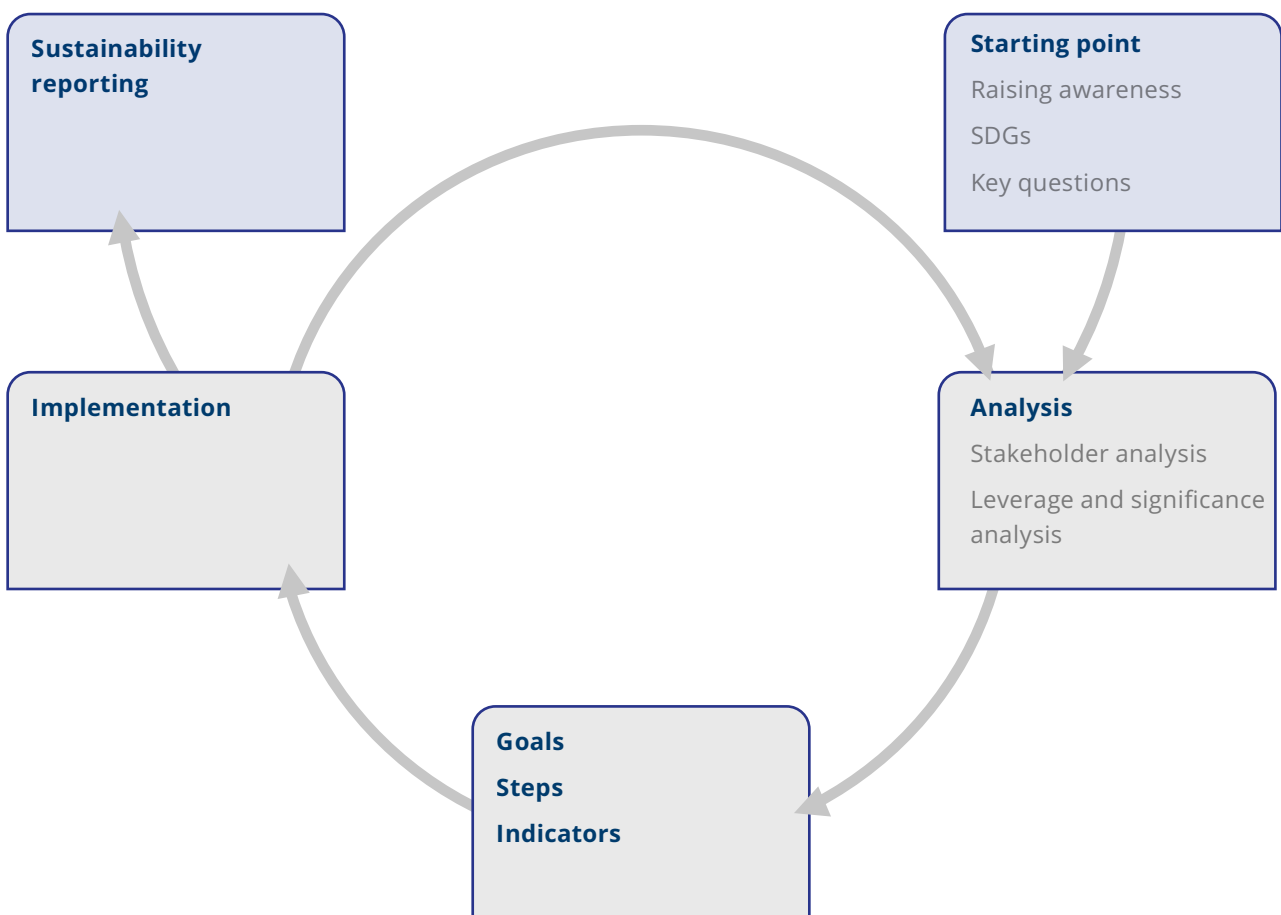
Sustainability management at Schmidlin

We are introducing systematic sustainability management to ensure that sustainability plays a part in all our processes and decisions.

The demand for sustainable construction is getting louder and louder in society and within the industry. We are also delighted to see that awareness of the importance of sustainable development in the Swiss construction sector is growing, with remits increasing in depth and affecting the entire value chain. To achieve the SNE 2030 targets and as a result the SDGs, everyone involved in construction projects, as well as the federal government, the cantons and Swiss society as a whole, needs to work together.

Sustainability embedded in our corporate culture

As a manufacturer, we want to use sustainability management to review and optimize all our processes across the value chain. We view sustainability management as a process, and we want all our employees to play their part in it: Step by step, sustainable development should become part of our corporate culture and corporate structures should adapt accordingly. And that also includes publishing a Sustainability Report at sensible intervals.



Our next steps

The analysis stage of our sustainability process involves defining areas of activity which are particularly relevant for our customers and other stakeholders and which have a high leverage effect when it comes to achieving the SDGs. We use them to set goals, define indicators, identify steps and then implement them.

Our next Sustainability Report will provide information about the initial goals we have set, the extent to which we have achieved them, and the impacts they have had. We will continue the sustainability process by starting the analysis process again and initiating the second cycle. These future process cycles will integrate sustainable development into our business strategy on a step-by-step basis.





Following the SNBS (Swiss Sustainable Construction Standard)




Our sustainability strategy follows the Swiss Sustainable Construction standard (SNBS). This has been developed based on the Swiss Federal Council's Sustainable Development Strategy, which in turn is based on the UN's 2030 Agenda with its 17 SDGs, to which Switzerland is a signatory.

Following the Swiss Sustainable Construction Standard represents an important contribution towards sustainable development. The following table shows which steps we have already taken in order to correspond to the SNBS indicators, and as a result to contribute to the achievement of the SDGs.


The Swiss Sustainable Construction Standard (SNBS) is equivalent to other international certification systems for sustainable construction, such as DGNB, LEED and BREEAM.

Sustainable Development Goals (SDGs)	Goal	SNBS Corresponding indicators relevant for Schmidlin as a manufacturer	Schmidlin offers									
		Society Economy Environment										
	Ensure healthy lives and promote well-being for all at all ages.	3.9	<table border="1"> <tr> <td data-bbox="726 694 826 974">106.2</td> <td data-bbox="826 694 1034 974">Sound insulation</td> <td data-bbox="1034 694 1457 974">Schmidlin products, along with the specific assembly systems, comply with the increased acoustic requirements of the SIA 181:2020 "Sound insulation in buildings" standard.</td> </tr> <tr> <td data-bbox="726 974 826 1525">107.1</td> <td data-bbox="826 974 1034 1525">Health, indoor climate</td> <td data-bbox="1034 974 1457 1525"> <p>The materials used in Schmidlin products do not release any harmful substances (toxins).</p> <p>They do not contain any halogens or PVC.</p> <p>They are compatible for people with allergies, including people with multiple chemical sensitivity (MCS).</p> <p>The glazed surface is antibacterial, which makes it very hygienic.</p> </td> </tr> <tr> <td data-bbox="726 1525 826 1765">303.3</td> <td data-bbox="826 1525 1034 1765">Components relevant for the environment, disposal and health</td> <td data-bbox="1034 1525 1457 1765">Steel and enamel are raw, natural, 100 % recyclable materials. They retain their value in the raw material extraction, production and disposal cycle.</td> </tr> </table>	106.2	Sound insulation	Schmidlin products, along with the specific assembly systems, comply with the increased acoustic requirements of the SIA 181:2020 "Sound insulation in buildings" standard.	107.1	Health, indoor climate	<p>The materials used in Schmidlin products do not release any harmful substances (toxins).</p> <p>They do not contain any halogens or PVC.</p> <p>They are compatible for people with allergies, including people with multiple chemical sensitivity (MCS).</p> <p>The glazed surface is antibacterial, which makes it very hygienic.</p>	303.3	Components relevant for the environment, disposal and health	Steel and enamel are raw, natural, 100 % recyclable materials. They retain their value in the raw material extraction, production and disposal cycle.
106.2	Sound insulation	Schmidlin products, along with the specific assembly systems, comply with the increased acoustic requirements of the SIA 181:2020 "Sound insulation in buildings" standard.										
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303.3	Components relevant for the environment, disposal and health	Steel and enamel are raw, natural, 100 % recyclable materials. They retain their value in the raw material extraction, production and disposal cycle.										
	Ensure availability and sustainable management of water and sanitation for all.	6.4	<table border="1"> <tr> <td data-bbox="726 1765 826 2002">306.2</td> <td data-bbox="826 1765 1034 2002">Retention, saving water</td> <td data-bbox="1034 1765 1457 2002">Waterless urinals (ECOPUR 100) and water-saving urinals (ECOPUR 200).</td> </tr> </table>	306.2	Retention, saving water	Waterless urinals (ECOPUR 100) and water-saving urinals (ECOPUR 200).						
306.2	Retention, saving water	Waterless urinals (ECOPUR 100) and water-saving urinals (ECOPUR 200).										

Sustainable Development Goals (SDGs)		Goal	SNBS		Schmidlin offers
			Corresponding indicators relevant for Schmidlin as a manufacturer		
	Ensure and expand access to affordable, reliable, sustainable and modern energy for all.	7.2	301.1	Generating energy demand (gray energy)	Constant reduction of energy costs per unit manufactured (EnAW certificate) (page 13)
		7.3	302.1	Generating greenhouse gas emissions	Reusing waste heat / heat recovery in production (page 13) Solar panels on company premises (page 13) Using low-CO ₂ steel (page 14)
	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all, decoupled from environmental degradation.	8.4	208.1	Regional value creation	Production in Switzerland: swiss made Jobs in Switzerland, producing a high level of regional value creation since 1947.
			303.2	Conserving resources and availability	SchmidLEAN: Short lead times and short delivery routes Made-to-measure and individual piece manufacturing We meet or exceed all legal requirements for emissions limits, occupational safety and residual materials
	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.	9.4	202.1	Design, components and structure	Durable (30-year warranty) Colorfast and lightfast Stable and robust (shock- and scratch-resistant) Built-in components can be recycled: products can be repaired or re-enameled Recyclable and reusable

Sustainable Development Goals (SDGs)	Goal	SNBS Corresponding indicators relevant for Schmidlin as a manufacturer	Schmidlin offers	
	Reduce inequality within and among countries.	10.2	103.3 Barrier-free construction	Floor-level shower areas with no sills (SIA standard 500) Non-slip surfaces available
	Make cities and human settlements inclusive, safe, resilient and sustainable and reduce their environmental impact.	11.8	202.1 Design, components and structure	Durable (30-year warranty) Colorfast and lightfast Stable and robust (shock- and scratch-resistant) Built-in components can be recycled: products can be repaired or re-enameled Recyclable and reusable
	Ensure sustainable consumption and production patterns, and promote recycling.	12.5	105.1 Flexibility and variability in use, quality of use 201.1 Life cycle costs	Compatible and can be combined with other manufacturers' products Made-to-measure and individual piece manufacturing 30-year warranty from us as the manufacturer. The renters' association calculates a service life of 50 years for bathroom products made from enameled steel. Repairability For steel tile flanges: no costs from renewal of silicone joints (maintenance joints) Material value during dismantling (100 % recyclable materials), free disposal.

Sustainable Development Goals (SDGs)		Goal	SNBS Corresponding indicators relevant for Schmidlin as a manufacturer	Schmidlin offers
		12.5	202.1 Design, components and structure	<p>Durable (30-year warranty)</p> <p>Colorfast and lightfast</p> <p>Stable and robust (shock- and scratch-resistant)</p> <p>Built-in components can be recycled: products can be repaired or re-enameled</p> <p>Recyclable and reusable</p>
			301.1 Generating energy demand (gray energy)	<p>Constant reduction of energy costs per unit manufactured (EnAW certificate) (page 13)</p> <p>Reusing waste heat / heat recovery in production (page 13)</p>
			302.1 Generating greenhouse gas emissions	<p>Solar panels on company premises (page 13)</p> <p>Using low-CO₂ steel (page 14)</p>
			303.2 Conserving resources and availability	<p>Recycling enamel (page 14)</p> <p>Recycling steel (page 14)</p> <p>Recycling packaging materials (page 14)</p> <p>Recyclability</p> <p>We meet or exceed all legal requirements for emissions limits, occupational safety and residual materials.</p>

Sustainable Development Goals (SDGs)	Goal	SNBS Corresponding indicators relevant for Schmidlin as a manufacturer	Schmidlin offers	
	Take urgent action to combat climate change and its impacts.	13	301.1 Generating energy demand (gray energy)	Constant reduction of energy costs per unit manufactured (EnAW certificate) (page 13)
			302.1 Generating greenhouse gas emissions	Reusing waste heat / heat recovery in production (page 13) Solar panels on company premises (page 13) Using low-CO ₂ steel (page 14)

Legal information

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