BELIMO Holding AG Annual Report 2020





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Due to rounding, amounts presented throughout this report may not add up precisely to the totals provided. All ratios and variances are calculated using the underlying amount rather than the presented rounded amount.

Key Figures

Net Sales in CHF million



Dividends per share in CHI

150



EBIT in CHF million

108.1

in % of net sales

16.3

FTEs worldwide

1826

Research and Development in % of net sales

8.1

Operating Cash Flow in % of net sales



Total CO₂ Savings of Belimo Devices in million tons CO₂e

7.3

CO2 Savings Achieved per Device



Letter to the Shareholders



Dear Shareholders,

We are looking back at a financial year of unprecedented challenges and volatility due to the COVID-19 pandemic. Despite the adverse circumstances, Belimo was able to maintain steady net sales in local currencies (+/- 0.0 percent). In Swiss francs, net sales decreased by 4.5 percent to CHF 661.2 million. The Group succeeded in achieving an operating income (EBIT) of CHF 108.1 million, which equals to an EBIT margin of 16.3 percent. Net income decreased by 28.5 percent to CHF 86.6 million, whereas in the comparison period, the Swiss tax reform's transitional provisions we applied had a positive nonrecurring effect of CHF 22.1 million. Free cash flow amounted to CHF 93.3 million and was 11.2 percent higher than in the previous year. Following its growth strategy, Belimo once again increased its investment in research and development from 7.3 percent of net sales in 2019 to 8.1 percent in 2020.

The last decade of sustained investments into Operational Excellence have paid off. The Group was able to maintain superior service levels and high product availability throughout the pandemic. More importantly, Belimo managed to keep its employees safe and is proud of having abstained from introducing mandatory reduced working hours. Instead, we seized the opportunity to further strengthen our employees' training by introducing new e-learning formats (see story on page 34). We also continued implementing our four long-term strategic initiatives (see page 16) and completed a bolt-on acquisition of Opera Electronics Inc., a specialist in air quality and gas sensors. As a result, our customers will benefit from an even wider sensor offering in the future.

We are firmly convinced that our entrepreneurial activity should make a meaningful contribution to society. We support the UN 2030 Agenda for Sustainable Development through our operations, focusing on seven of the 17 goals (see page 7). Alongside our contribution to the area "Climate Action" (SDG #13), the goal of "Good Health and Well-Being" (SDG #3) has been especially important in 2020. Belimo provides solutions that ensure indoor air quality for occupants' safety and comfort and enable critical applications such as required in isolation or operating rooms in hospitals.

Belimo has been a member of the United Nations Global Compact (UNGC) since 2013. UNGC is a strategic policy initiative for businesses committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labor, environment, and anti-corruption. Belimo is specifically engaged in encouraging the development and diffusion of environmentally friendly technologies (principle #9). The Communication on Progress for the financial year 2020 is laid out in this report.

To further provide transparent information on sustainability performance, Belimo reports in accordance with the GRI Standards' "Core" reporting option as defined by the non-governmental organization Global Reporting Initiative (GRI).

The Board of Directors proposes a dividend of CHF 150.00 per share at the 2021 Annual General Meeting. Based on the closing price of CHF 7680.00 on December 31, 2020, which equates to a return of 2.0 percent per share.

On behalf of the Board of Directors and the Group Executive Committee of BELIMO Holding AG, we thank all our stakeholders for their loyalty and trust during this extraordinary year. In particular, we thank our employees who have been working in this challenging environment under strict safety conditions.

We would also like to thank you, our esteemed shareholders, for the great trust you place in us and your loyalty to BELIMO Holding AG. We wish you good health and send our best regards.

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Patrick Burkhalter Chairman of the Board of Directors

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Lars van der Haegen CEO

Introduction

Defining Materiality

How Belimo Creates Value

Our Value Creation Model serves as a guideline for how we think about the most relevant topics for us and our stakeholders. Our focus is on our customers' success. The three pillars that ensure their success are our Operational Excellence, Solution Leadership, and Customer Value. Consistent implementation of these pillars enables success for not only our customers, but also prosperity for Belimo, success for our partners, and success for society.

Commitment, credibility, and reliability characterize our behavior. This is why Belimo sees its Credibility Culture as being at the heart of its value creation model that enables us to deliver more value to our customers than they expect and more than others can offer.

Success Through Operational Excellence

Operational Excellence ensures that the products we deliver are top-quality, extremely reliable, and come with short lead times. Quality, timeliness, and costs are



Belimo Value Creation Model

our priorities. We continually enhance our processes by regularly examining how we work. We learn from our mistakes by reviewing their causes in detail and taking systematic steps for improvement.

We focus on improving our skills in the areas that allow us to deliver more customer value. We source other areas of expertise from reliable suppliers and aim to work in close partnership with them. The criteria that apply to suppliers are similar to those that apply to us. We invest in our employees to enhance their skill levels.

Success Through Solution Leadership

Research and market-relevant innovation, as well as timely and customized execution, are vital for us.

Belimo delivers more than just products. We support our customers with innovative, efficient, and energyoptimizing solutions and bring success to both them and to ourselves. We are close to our customers throughout the world; we speak their language and understand them. We continuously invest in innovation to develop superior solutions.

Success Through Customer Value (CESIM®)

We differentiate ourselves from our competitors through the high level of customer benefits from our products and services. Added value for our customers is the measure of our success. The customer-centric method for innovating building technology with our actuators, valves, and sensors is CESIM[®]. It ensures that our "small" Belimo devices have a big impact on **C**omfort, **E**nergy Efficiency, **S**afety, **I**nstallation, and **M**aintenance.

With CESIM[®], Belimo focuses on improving personal comfort in buildings, and ensures not only optimum indoor air quality, particularly important during the COVID-19 pandemic, but also higher energy efficiency. In addition to that, the customer-centric method guarantees safety for people and animals as well as protection of property, while at the same time providing easy installation and commissioning of its products with low maintenance requirements. Sales, product management, and research and development are continuously applying the method in customer interactions and innovation workshops.

Our Customer-Centric Method CESIM®: The Benefits of Belimo Solutions



Comfort: People spend more than 90 percent of their time in buildings. Belimo helps people feel more comfortable, thus ensuring that they can live and work in a healthy environment: <u>bit.ly/349FTG0</u>



Energy Efficiency: Buildings account for more than 40 percent of the world's energy consumption. With our energy-saving devices, we help reduce greenhouse gas emissions: <u>bit.ly/3jjw3bQ</u>



Safety: Belimo fire and safety actuators save lives and help minimize damage to buildings and tangible assets. Furthermore, our devices safely control critical environments such as in hospitals and laboratories: <u>bit.ly/2Gb25bz</u>



► Installation: We make the day-to-day work of engineers and contractors easier. Our devices simplify design and installation processes and make commissioning even faster: <u>bit.ly/3kZ2pZB</u>



Maintenance: Our high-quality actuators, control valves and sensors have a longer lifetime and consume less energy during operation. Reduced maintenance provides peace of mind for building owners and operators: <u>bit.ly/310m9fG</u>



About us: Belimo is the global market leader in the development, production and sales of field devices for controlling heating, ventilation and air-conditioning systems. The focus of our core business is on actuators, control valves and sensors.

Assessing Materiality (GRI 102-46)

Determining the topics that are most relevant for the role of Belimo in supporting sustainable development, responding to stakeholder interests, and ensuring long-term success in the marketplace are essential steps in establishing the foundation for corporate strategic management and sustainability reporting.

To achieve this, Belimo has identified relevant topics through a materiality assessment according to three dimensions: strategic relevance for the business, impact on sustainable development, and relevance for key stakeholder groups of Belimo. By identifying these topics and implementing the following steps to address them, Belimo aims to strengthen stakeholder relationships, monitor high-level opportunities, safeguard against risks, and maintain successful midand long-term growth performance. An overview of the topics identified in the process, which started with an industry and peer evaluation and was developed in dialog with group management across the Company, is provided in the resulting materiality map (see graph below).

The materiality map provides an overview of topics determined to be most material or relevant for the impact on sustainable development (horizontal axis) and for the interests of stakeholders (vertical axis).

This report focuses on the dark gray "Interact," "Impact," and "Focus"-topics. Topics most relevant for business are considered in particular in the further development of the Company's strategic priorities.

Our Answer to Megatrends

Structural growth drivers in the core markets of Belimo consist of the four following long-term megatrends:

Belimo Materiality Map (GRI 102-47)



Urbanization: Promoting Well-Being and Indoor Air Quality

As populations shift across the globe from rural to urban areas, more and more people are leading modern, urban lifestyles and spending 90 percent of their day indoors. State-of-the-art building automation and reliable heating, ventilation, and air conditioning (HVAC) components are indispensable for satisfying increasing demands on room climates and healthy environments.

Energy Efficiency: Increased Energy Efficiency

As buildings currently consume 40 percent of the world's energy, smart control of HVAC systems has a significant impact on global energy efficiency. In most regions of the world, regulations increasingly support raising energy efficiency standards for HVAC equipment and encourage energy-efficiency-driven building renovations. Belimo products are making a difference.

Safety in Buildings: Delivering Pressure Control

In hospitals, isolation rooms are operated with a negative or positive room pressure ratio with respect to their surroundings. Their purpose is to protect people from patients with infectious diseases or immunocompromised patients from infectious pathogens. The Belimo VAV-Universal controller product range makes it easy to create the ideal combination of controller and damper motorization for any variable air volume control (VAV), duct pressure, and room pressure application.

Digitization: Welcoming the Age of Transparency

Digitization in the building automation industry offers new powerful toolsets for analyzing and optimizing HVAC systems. The applications for smart performance devices are seemingly endless, whether it be in the form of data analytics, monitoring, predictive maintenance, or digital support of the commissioning phase.

External Initiatives/Association Memberships

Belimo has been a member of the UN Global Compact since 2013 and is committed to environmental protection, responsible working practices, human rights, and protection against corruption. The United Nations Global Compact is the largest international initiative for responsible company management. As a trusted partner around the world, Belimo and its employees are committed to the HVAC industry. We are actively involved in associations that sponsor research and formulate codes and standards. This involvement keeps us close to our customer needs and directs our investment in innovative, efficient, and energy-optimizing solutions.



UN Sustainable Development Goals Index

Belimo directly contributes to the Sustainable Development Goals (SDG). By incorporating the UN Global Compact principles into strategies, policies, and procedures, Belimo upholds its primary responsibilities to humanity and to the planet itself, and sets the stage for the long-term success of our industry.



Good Health and Well-Being: Belimo provides indoor air quality for occupants' comfort and enables critical applications (page 69).



Affordable and Clean Energy: With smart HVAC controls, Belimo contributes to the doubling of the global rate of improvement in energy efficiency (page 61).



Decent Work and Economic Growth: With its sustained

economic growth, Belimo continuously creates excellent new workplaces (page 9).



Industry, Innovation, and Infrastructure: Belimo field devices drive the energy efficiency of buildings and contribute to their resilience (page 71).



Sustainable Cities and Communities: Belimo helps make cities more sustainable and safer (page 75).

12	RESPONSIBLE Consumption And production
	20

Responsible Consumption and Production: Belimo upholds sustainable procurement practices and environmental management standards (page 82).



Climate Action: Through their application, Belimo products save energy and reduce CO₂ emissions (page 61).



Performance

Economic Performance: Management Report

Maintaining Focus in Challenging 2020

Belimo performed well in a highly uncertain environment and a contracting HVAC market. The Group managed to maintain steady sales and grow in its largest market region Europe in local currencies, thereby expanding market shares across regions and accelerating its presence in key markets.

A year without historical precedent. The COVID-19 pandemic required to master challenges at all levels. An overall shrinking and volatile market, globally stressed supply chains and the implementation of strict hygiene measures called for everyone's utmost effort at Belimo. Given these challenges, Belimo performed well. The Company maintained steady sales in local currencies (+/- 0.0 percent) despite a contracting Heating-, Ventilation and Air Conditioning (HVAC) market due to shut construction sites and restricted access to buildings. In Swiss francs, net sales declined by 4.5 percent, to CHF 661.2 million. However, Belimo was able to win market shares irrespective of these difficulties. The confirmation of Belimo as an essential manufacturing sector supplier helped support continuous operations. All Belimo locations have introduced strict measures to protect their employees' health beyond governmental requirements. Despite the aggravating circumstances, all employees delivered top performance every day with great motivation and tireless dedication, enabling to master a challenging year together.

This dedication has been confirmed by the positive results of this year's employee survey, in which employees expressed a great commitment with an engagement score of 8.9 (see page 30 for more information). Belimo was also awarded the title of LEADING EMPLOYER in 2020. Leading Employers is one of the most comprehensive studies on employer qualities in Europe based on the evaluation of a variety of data sources. The award is given to employers in the top 1 percent of the study.

Market Overview

The second quarter was severely impacted by heavy lockdown measures leading to closed construction sites and restricted building access in many regions. These lockdown measures affected business performance and lead to volatile markets and significant uncertainties across the industry. Customer confidence noticeably improved during the second half-year, result-

Continued on page 10

Net Sales by Market Regions

	2020	%	Growth in local currencies in %	2019	%
in CHF 1 000					
Europe	322 285	49	1.8	328 777	48
Americas	253 875	38	- 1.8	272 849	39
Asia Pacific	85 067	13	- 1.1	91 054	13
Group	661 226	100	0.0	692 680	100

How We Manage Our Economic Performance

How We Achieve Economic Performance

Belimo was founded on the enduring belief that successful customers are the basis for healthy and sustainable economic performance.

By creating more value for our customers than the competition, we work to generate a virtuous cycle, with greater demand for our products leading to more shipments of actuators, valves and sensors, in turn boosting productivity and profitability.

In short, Belimo views profit not as the objective, but as the result of enabling its customers' success.

How We Manage Economic Performance

Sustaining economic performance crucially involves optimal use of available resources and a balancing of growth and profitability. On the principle that "The greater the concentration, the stronger the force", Belimo attaches great importance to keeping a lasersharp focus on its niche and maintaining market leadership. This not only safeguards against competitors but also allows Belimo to retain innovation and quality leadership.

The business philosophy of Belimo also means focusing on organic growth, outsourcing production and services to others with greater expertise or economies of scale and being committed to solving customer problems, no matter what their cause may be.

How We Measure Economic Performance

The three top-level financial metrics tracked to evaluate economic performance at Belimo are sustained growth, high profitability (EBIT margin, net income), and the optimal use of capital.

Sustained growth is measured by the annual growth rate and cost ratios – a balance between investments and results – of the four strategic initiatives of Belimo (see page 16). Division Heads manage their areas of responsibility based on the performance of cost ratios, which express operating costs as a percentage of market or group sales. The optimal use of capital entails the effective management of core processes and is reflected in an accurate net working capital level and capital investment. The percentage of inhouse value add (see page 77) serves as a proxy for measuring the optimal use of capital.

Further leading indicators for gauging the effectiveness of our method of doing business include market share and profitability in total and in comparison with (new) products and regions; as well as research and development, both in total and in comparison with the closest competitors.



UN Sustainable Development Goals Approach With its sustained economic growth story

and the continuous creation of new and attractive workplaces, Belimo contributes to SDG 8 "Decent Work and Economic Growth." Other contributions are the empowerment of employees, the fostering of their skills, and offering equal opportunity employment.

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ing in new project inquiries and many construction sites returning to regular operation.

COVID-19 affected regions and segments very differently, and regional sales performance was equally heterogeneous. In Europe, the largest market region of Belimo, the Group increased sales by 1.8 percent in local currencies in the period under review. In the Americas, sales developed ahead of a dwindling overall HVAC market but still followed a negative trend 1.8 percent below previous year levels. In the Asia Pacific market region, net sales in local currencies only slightly declined by 1.1 percent, impacted by severe lockdown measures in countries outside of China. China was an exception, as output returned quickly to pre-COVID-19 levels after the strict lockdown measures, then experienced double-digit sales performance from April to October in local currencies compared to 2019.

Overall, indoor air quality has become a significant topic across segments and is gaining importance in discussions about new projects. The market for hospitals and data centers performed best, while offices underperformed due to closed buildings and working from home schemes.

Europe

In the market region Europe, the Group registered net sales of CHF 322.3 million, corresponding to an increase in local currencies of 1.8 percent in comparison with the previous year (-2.0 percent in Swiss Francs). The economic situation in Europe has gained notice-

able momentum in the second half-year. In its largest market region, Belimo grew faster than the contracting HVAC market.

The main contributing factor to growth was construction activity – namely new construction and major refurbishment – returning to pre-COVID-19 levels after the summer. Governments mostly granted access to construction sites and major projects generally proceeded. With an increasing focus on indoor air quality, the trend to upgrade insufficient HVAC systems in buildings was starting to support demand.

In Germany, the government introduced subsidizes geared to support the upgrading of existing HVAC systems to improve indoor air quality in buildings. The largest market of Belimo in Europe performed solidly with growth in local currencies. Belimo benefited from a relatively stable construction activity, winning numerous large projects.

Sales in Southern European countries improved during the second half of the year despite being impacted by strict lockdowns. Original Equipment Manufacturer (OEM) activity, especially fire damper manufacturers in Central Eastern Europe grew positively. Other regional highlights included the Nordics. Sales in the Middle East experienced a slowdown due to sluggish construction output on the backdrop of low oil prices.

While the business with air applications remained flat, water applications sales grew thanks to numerous innovative valve products, especially the Belimo Energy Valve[™]. The sensor business for both air and water applications developed very well.



Americas

In the Americas market region, the Group registered net sales of CHF 253.9 million, which corresponds to a decline of 1.8 percent in local currencies (-7.0 percent in Swiss francs). The pandemic has led to a contraction of most economies. Similarly, the HVAC market has been negatively impacted throughout the region, as most countries experienced disruptions.

Despite adverse economic conditions, Belimo Americas' sales in all countries developed better than the HVAC market. One significant factor was the ability of Belimo to reliably ship products throughout the pandemic – with sites and distribution centers continuing to perform. Many projects underway in 2020 were, however, delayed due to lockdowns or economic uncertainty. Construction activity began to recover late in the year as government-mandated restrictions on outdoor construction were lifted. Yet, overall non-residential new construction declined in 2020.

The pandemic strongly impacted the retrofit market. Access to many buildings was restricted for contractors, and the demand for maintenance was generally low given economic uncertainties. Nonetheless, numerous segments are showing a growing demand for upgrading HVAC systems to increase indoor air quality. This can be mainly observed in education, healthcare, and public spaces such as airports and train stations.

The OEM business has experienced healthy development given the challenges caused by the pandemic, with the data center market being the largest contributor to growth. Another positive factor has been OEM orders to equip fan coil units with differential pressure sensors for filter monitoring. With a trend toward advanced and improved filtration control in their offerings due to COVID-19, Belimo products are a perfect match for OEMs' requirements. The contracting channel, however, did not grow as the effects of the pandemic continued to negatively impact new construction and retrofit market activity throughout the final three quarters of the year.

In the US, the largest market of Belimo in the Americas, sales contracted due to overall HVAC market headwinds driven by the pandemic, as non-residential new construction firmly declined in 2020. Canada's results were ahead of the previous year – supported by a strong OEM channel benefiting from data center demand for air handling units containing Belimo actuators, valves, and sensors. Belimo Brazil was the best performing sales group within Belimo Americas in comparison to 2019 with sales growth in the upper single digits in local currencies.

The pandemic has had a similar impact on both air and water applications sales. The sensor product range developed pleasantly in 2020 on the back of an accelerated bundling approach in sales and a successful introduction of room sensors.

Asia Pacific

In the Asia Pacific market region, Belimo recorded CHF 85.1 million in sales, corresponding to a decrease of 1.1 percent in local currencies (-6.6 percent in Swiss francs). The region experienced a severe economic downturn caused by the pandemic. Likewise, HVAC markets were heavily affected. Overall, Belimo maintained or even improved its market position.

China was the first country to enter lockdowns early in the year. After an initial period of strict government measures, the country managed a swift recovery and finished the year with positive GDP growth, the only major economy to do so. Belimo China sales likewise profited from the quick containment of the virus, leading to a double-digit sales growth from April to October in local currencies compared to the previous year. Government efforts to upgrade hospitals benefited the OEM business, with design institutes increasing their standards. These could be met with smart sensor and actuator solutions for pressurized rooms. In addition, sales of damper actuators for subway tunnels benefited from increased investment in government infrastructure projects.

Sales in most other countries in the Asia Pacific market region suffered under the pandemic's impact, with India being one of the most heavily affected countries. Lengthy lockdowns halted most construction projects in the countries for several months. Sales declined considerably in the second and third quarter but have started to recover again in the fourth quarter.

Across the Asia Pacific market region, retrofit projects have been negatively impacted due to building access restrictions or budget cuts. Also, new construction in segments such as hotel, office, retail, and entertainment/leisure were impacted, while data centers and healthcare-related projects noticeably gained ground.

OEM business performed well, primarily through air applications such as fire and smoke actuators, spring

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Resilient Strategy

Steady sales in local currencies, strong crisis management for the workforce and supply chain, as well as disciplined cost management resulted in a solid EBIT of CHF 108.1 million, despite adverse conditions caused by the COVID-19 pandemic and unfavorable foreign exchange rate movements mainly of the US-Dollar and the Euro. The strong operating result with an EBIT margin of 16.3 percent confirms the resilience of the Belimo strategy.

Nonrecurring Tax Effects in Previous Year

Under challenging conditions, Belimo achieved a net income of CHF 86.6 million, which is comparable to 2018. The decline of CHF 34.5 million compared to 2019 is mainly attributable to transitional provisions of the Swiss tax reform applied in the previous year, which had a nonrecurring positive effect of CHF 22.1 million in 2019. Furthermore, net income was negatively impacted by foreign exchange losses of CHF 5.6 million in the year under review (previous year loss of CHF 2.4 million).

Earnings per share amounted to CHF 141.02 (previous year CHF 197.00).

Pursuing Strategic Initiatives

In the year under review, Belimo mitigated the financial impact of economic disruptions through selective cost saving measures, mainly in travel and marketing expenses. Long-term prosperity was ensured by pursuing strategic growth initiatives and a targeted hiring policy. Consequently, total expenses for research and development amounted to 8.1 percent of sales or 6.1 percent higher compared to the previous year.



Excellent Cash Flow

from Operating Activities

In 2020, Belimo was able to preserve a sound net working capital balance. Focused collection activities maintained healthy aging of trade receivables. Inventory only slightly increased despite elevated safety stock of critical parts and components. Our strong supply chain and strategic inventory management ensured high product availability and short lead times throughout the pandemic. It resulted in a strong cash flow from operating activities of CHF 125.7 million (previous year CHF 125.4 million). Cash flow used in investing activities amounted to CHF 32.4 million. Besides CHF 29.0 million capital expenditures in property, plant and equipment and intangible assets, this included CHF 2.7 million for the acquisition of all shares of Opera Electronics Inc., a specialist for air quality and gas sensors located in Canada.

Free cash flow amounted to CHF 93.3 million and was 11.2 percent higher than in the previous year.

Cash flow used in financing activities was CHF 98.6 million. It contained the dividend payment of CHF 92.2 million to the shareholders of BELIMO Holding AG, in addition to leasing payments and the purchase of treasury shares.

Strong Balance Sheet

Belimo once again successfully maintained a healthy and strong balance sheet in 2020. Total shareholders' equity amounted to CHF 489.3 million or 83.9 percent of total assets.

The strong free cash flow compensated for the higher dividend distribution to the shareholders of BELIMO Holding AG, leading to a cash and cash equivalents balance of CHF 164.9 million at year end, 28.3 percent of total assets respectively.

In order to further reduce its substantial cash reserves, the Board of Directors of BELIMO Holding AG will propose a dividend of CHF 150.00 at the Annual General Meeting.

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return actuators, and sensors for the healthcare and pharmaceutical market segments. The contracting business, on the other hand, was heavily affected, as government-induced measures hindered access to construction sites or enforced full closures.

While sales with air applications grew significantly, water applications growth declined. The sensor business for both air and water applications grew at a double-digit rate. Moreover, sales of the Belimo Energy Valve[™] developed very positively in China.

Business Outlook 2021

The effects of the pandemic and an increased consciousness for indoor air quality are projected to affect all construction projects in the long run. Many HVAC systems in existing buildings should be retrofitted for healthy indoor air.

Furthermore, new building codes and governmentfunded programs such as the EU Climate Target Plan 2030 aim to reduce buildings "greenhouse gas emissions by 60 percent and energy consumption for heating and cooling by 18 percent".¹ As countries around the world push for more green building initiatives, the necessary investments are expected to follow.

As COVID-19 lockdown measures impacted non-residential building use, the construction sectors for healthcare, education, public safety, warehousing/logistics, data centers and public transportation are likely to experience a sustained positive development. In contrast, construction sectors for retail, hotel, office, amusement/recreation, and airport buildings are likely to experience a delayed recovery or a longer lasting negative impact.

The output for non-residential construction is forecasted to return to growth in Europe. The primary growth drivers are expected in the healthcare, education, data centers, and warehousing/logistics sectors. Despite some uncertainties as to the effects of Brexit, Belimo expects no significant negative consequences.

The pandemic is likely to continue to hurt economic activity throughout the Americas market region during the first half of 2021. New construction activity is forecasted to improve slightly but might not reach preCOVID-19 levels in the short term. Retrofit activity is anticipated to rebound in late 2021, driven by a backlog of retrofit projects combined with upgrade demand driven by pandemic-inspired upgrades to improve indoor air quality.

In most countries in the Asia Pacific market region, the commercial building market is expected to remain sluggish throughout 2021. In China, the market outlook for the sectors healthcare, warehousing/logistics, data centers and public transportation is strong. The Indian market is bound to recover in 2021.

On balance, Belimo expects sales revenue growth in local currencies to pick up over the course of the year, completing with an annual growth rate slightly below its five-year average. This is due to the continued negative impact by the pandemic in the first half year and a strong comparative baseline in the first quarter.

Persisting unfavorable exchange rates are likely to weigh negatively on profitability in 2021. Despite the hampered sales revenue growth outlook, Belimo pursues its long-term growth strategy, allocating significant resources for research, development and sales network expansion.

¹ Communication from the European Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: "A Renovation Wave for Europe – Greening our buildings, creating jobs, improving lives", SWD(2020) 550 final, October 2020.

Key Figures

	2020	2019	Change
in CHF million			
Net sales	661.2	692.7	-4.5%
Operating income before interest, taxes, depreciation, amortization (EBITDA) in percent of net sales	139.3 21.1 %	154.2 22.3%	-9.7%
Operating income before interest and taxes (EBIT) in percent of net sales	108.1 16.3 <i>%</i>	123.9 17.9%	-12.8%
Net income in percent of net sales	86.6 13.1 %	121.1 17.5%	-28.5%
Cash-effective investments in property, plant and equipment and intangible assets	29.0	40.7	-28.8%
Cash flow from operating activities in percent of net sales	125.7 19.0%	125.4 18.1%	+0.2%
Free cash flow in percent of net sales	93.3 14.1%	83.9 12.1 %	+11.2%
in percent			
Return on equity (ROE)	17.4%	25.6%	
Return on invested capital (ROIC)	24.7%	27.8%	
in CHF			
Earnings per share	141.02	197.00	-28.4%
Dividend per share	150.00	150.00	0.0%
Number of employees (FTEs) as at December 31	1 826	1 789	+2.1%
Actuators shipped (in million items)	6.9	7.2	-3.2%
Total CO2 impact of Belimo devices (in tons of CO2e)	-7 312 825	-7 558 620	-3.3%

Alternative performance measures that are not defined or specified in IFRS, are described under the following link: www.belimo.com/financial-summary

Value added and its distribution

Significant GRI disclosures for the creation and distribution of value in accordance with GRI Standards can be found in the Financial Report.

Direct economic value added

- Sales and operating profit: see Consolidated Financial Statement Belimo Group, Consolidated Income Statement

- Personnel expenses: see Notes to the Consolidated Financial Statements Belimo Group, Note 4 Personnel Expenses

- Income Taxes: see Notes to the Consolidated Financial Statements Belimo Group, Note 7 Income Taxes

- Payments to the providers of capital: see Consolidated Financial Statement Belimo Group, Consolidated Statements of Cash Flows

Economic value retained

Investments in and divestments of tangible and intangible assets: see Consolidated Financial Statement Belimo Group, Consolidated Statements of Cash Flows

Balanced Investment Portfolio

Growth Strategy and Innovation

Belimo focused on pursuing its strategic initiatives, strengthened its global market leadership, and expanded its sensor offering by completing a bolt-on acquisition.

Grow Existing Business

In its first growth initiative, Belimo successfully expanded its market shares across regions, accelerated its presence in key markets, and further strengthened its global market leadership. In the reporting year, the Company introduced the sensor-actuator solution VRU Universal VAV controller for variable air volume control (VAV). The new product supersedes three existing products with one solution for critical applications such as laboratories or hospitals. In hospitals, for example, the VRU Universal controls negative room pressure in isolation rooms or positive room pressure in operating theaters. The product seamlessly integrates into any



building automation system and can be configured wirelessly with the Belimo Assistant App.

Meanwhile, the new service and logistics center located in Großröhrsdorf (Germany) began serving individual customer needs through the so-called Design-to-Order process (DTO). The highly flexible offering provides unique mechanical, electrical, and software configurations or bundles (see page 89 for more information). This expands retrofit services and processes to respond to increased demand for energy efficiency upgrades in buildings. In addition to these retrofit services, Belimo expanded its expertise in Indoor Air Quality (IAQ) along with the "Seven Essentials of Healthy Indoor Air" (see illustration on page 17) to respond to the demand for healthy indoor spaces. For that purpose, Belimo is leading an international team of internal and external industry experts including medical doctors. Furthermore, Belimo has made substantial investments in the advancement of its actuator, valve and sensor platforms for further modularization and streamlining that will create a seamless customer experience while improving operational excellence.

Finally, Belimo completed the development of its smallest damper actuator, the CM-Mini. The CM-Mini was designed for small residential and light commercial air handling units that are mostly required to fulfill green building standards or codes. Thanks to its small size, the CM-Mini can also be applied to move louvres in air-outlets. Ensuring adequate airflows in rooms and preventing viral cross-contamination of people through aerosols has become a key topic during the COVID-19 pandemic. The new actuator will be launched in spring 2021.

Enter Sensor Business

The sensor business is the second strategic initiative of Belimo. On the back of continued strong marketing and sales efforts, the Company won market shares in all

Continued on page 18

How We Balance Our Investment Portfolio

Keeping the Balance

Belimo needs to maintain a balanced investment portfolio to ensure its long-term success. Managing the portfolio involves striking the right balance between investments in existing and in new business areas.

In its existing business, Belimo focuses on maintaining a broad and competitive product range and on renewing selected sub-ranges at the end of their lifecycle by replacing them with a new generation with more innovative features. In its new business areas, Belimo aims to gain ground and generate growth by developing unique and innovative products to be offered to existing Belimo customer groups.

Investments in product innovation, training, and marketing must be balanced as well. This guarantees a pull for innovative offerings and ensures that the Belimo sales force and its partners are well-trained and motivated to penetrate the market. Credibility in new business areas will then in turn accelerate the introduction of new offerings.

Markets & Innovation Committee

Balancing investments between existing and new business is the responsibility of the Markets & Innovation Committee (M&I), a formal team of senior Belimo executives from the three sales regions, product management, and the Group Divisions Innovation and Strategy.

The M&I carefully assesses and prioritizes projects that are to be released for development. Balancing investments between innovation, marketing, and training is part of the Group Executive Committee's annual strategy process that is reviewed by the Board of Directors. The assignment of an executive business owner and a strategy coach to each of the four Belimo Growth Initiatives (see page 16), an implementation strategy, and a quarterly progress review ensure that operations and existing business activities are given sufficient consideration by management.

Strategic Controlling of Costs

Tracking the following operative figures is crucial for balancing allocations between investments in the different areas of the Company: planning (five-year), budgeting (annual), and controlling innovation costs per strategic growth initiative. Other critical factors include planning, budgeting, and monitoring of overall costs for innovation, marketing, and training. The growth initiatives and the abovementioned operative figures are discussed and adjusted in the annual strategy process by the Executive Committee and confirmed by the Board of Directors. Once approved, they become part of the "Belimo Strategy Map." Each initiative's KPIs are tracked and discussed every quarter by the Executive Committee and the individual initiative manager.



The Seven Essentials of Healthy Indoor Air

Continued from page 16

three regions. In 2020, a newly developed range of room sensors was launched: An innovative range of IAQ sensors that can be wirelessly configured with the Belimo Assistant App for quick commissioning. The top sensor of the range, which measures all essential indoor health parameters, temperature, relative humidity and CO₂, has a plain, timeless design and is the thinnest of its kind in the market. Precision and reliability have been a key design requirement and one of the main features is that these sensors measure the room instead of the wall temperature, unlike many products in the market. This was achieved through a meticulous housing and component design by Belimo experts from various engineering disciplines. Belimo continued to expand its portfolio of pipe and duct sensors by adding hygrostats, duct thermostats, frost monitors, and a double differential air pressure sensor, designed to dynamically monitor filter contamination. Moreover, Belimo introduced the SAP variant configurator also for sensors at its Großröhrsdorf (Germany) location, allowing customized products such as sensors with a customer logo.

Belimo completed a bolt-on acquisition of the Montreal-based air quality and gas sensors specialist Opera Electronics Inc. Belimo had been planning a range of specialty air quality and gas sensors as part of its growth strategy. By acquiring Opera, Belimo was able to implement this product range expansion. Opera develops and manufactures a solid range of air quality and gas sensors for buildings. Core applications of Opera include vehicle emissions monitoring in car parks, refrigeration gas leak detection and combustible gas monitoring in HVAC plant rooms. While Opera has mainly been focused on the Canadian market, the acquisition allows Belimo to leverage its global marketing, sales, and logistics network. Consequently, Belimo customers can benefit from an even wider range of field-devices.

Offer Selected Performance Devices

A decade ago, Belimo launched the development of the Belimo Energy Valve[™] in collaboration with MIT (Massachusetts Institute of Technology) in Boston (Massachusetts, USA) and the University of Colorado in Boulder (USA). The product is a combination of sensors, an actuator, a valve and embedded logic, forming a new product category that was named: Performance Devices. Since its introduction in 2012, the Belimo Energy Valve[™] has won more than 20 innovation awards and is optimizing energy efficiency in thousands of buildings worldwide. This product brings additional transparency to facility management by measuring thermal energy,

controlling the heating or cooling load and optimizing its performance, i.e. solving the so-called "Delta T Syndrome" in HVAC systems. This Internet of Things (IoT) product has been enhanced over the years and versions 2 and 3 have been introduced. In the reporting period, significant development resources have been allocated to further advance the product range with innovative energy metering technology in order to continue innovating this flagship product with new product launches planned for summer 2021. Customers who utilize the Belimo Energy Valve™ understand the significant advantages of this technology compared to traditional, pressure-dependent valves. To further penetrate this technology in the market, it is important that key measures to thoroughly train the Belimo sales forces and customers are continued. Therefore, major internal and external training efforts on the Belimo Energy Valve™ were undertaken in 2020 (see story on page 36). Another representative of the Performance Devices product category is the Belimo ZoneEase™ VAV, a device that accurately controls the flow of conditioned air in zone applications. A new version with a Power over Ethernet (PoE) interface has been introduced. This technology combines power supply and communications in one cable for simplified installation and increased operating safety.

Grow Asia Pacific

Belimo continued to gain market shares and momentum with its growth strategy of the Asia Pacific market region through sustained sales, marketing and operations. In China, Belimo expanded its sales network by opening four new sales and customer service hubs in the major metropolitan areas Chengdu, Hangzhou, Changsha and Qingdao with Belimo operating now a total of ten hubs. Besides product sales and support, training and consulting customers is a major task of these city-cluster hubs. With most trade shows canceled due to the virus, webinars and online meetings were also the primary tool to stay in touch with customers in China. One highlight was the joint webinar of Belimo China with the China Journal of HVAC on the Belimo Energy Valve[™] with 13 900 participants. COVID-19 lockdowns strongly impacted growth initiatives in India and some of the planned additional marketing and sales expansion efforts had to be postponed to 2021. However, Belimo started the design and construction of its new facility in Navi Mumbai (India) with customization, sales, and a customer experience center and looks forward to opening this new site that will achieve the platinum level of the Indian Green Building Council standard (IGBC) in fall 2021.

100 Million Actuators



BELING

Belimo is continuing its success story by celebrating 100 million actuators delivered worldwide. A moment to thank our customers for their loyalty.

BELIMO

At the beginning of 2020, Belimo delivered its 100 millionth actuator, and in doing so, reached another milestone in the Company's history. Belimo confirms its growth course and continues to stand for innovative products that sustainably increase comfort, energy efficiency and safety in buildings. The 100 millionth actuator was handed over to Darryl Boyce, President of ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers, a leading professional association seeking to advance HVAC systems' design and construction) by James Furlong, Head of Americas and Lars van der Haegen, CEO of Belimo, for installation in ASHRAE's new corporate facility in Atlanta (Georgia, USA).

Energy Savings and Comfort

"We are proud to look back on our 100 million actuators," says Lars van der Haegen. "It's about technical innovations and their impact on sustainability." Buildings are responsible for 40 percent of global CO₂ emissions. With proper building controls systems, energy savings of up to 50 percent can be achieved in comparison with buildings which lack such features. The ambition of Belimo is always to increase both energy efficiency and comfort. "Our 100 millionth actuator – a PR actuator, which

was made as our anniversary product - offers the same sustainable added value for our customers." The PR actuator is part of a motorized butterfly valve that is used in water applications and, thanks to a power consumption of only 20 Watts, reduces energy consumption by over 80 percent in comparison with competitor products. "We believe that not only the best products and world-class logistics have been indispensable for achieving our 100 million milestone: also essential are our employees, who continuously aim to exceed customer expectations when it comes to value. Our partnerships and our customers' great trust in us have made this possible. We want to thank them for this joint success."

Find out more and visit www.belimo.com/100million

Remuneration Report

Competitive Pay and Shared Participation

Fair pay, orientation to strategic benchmarks, and shared participation are the cornerstones of the Belimo remuneration system.

Since its early days, the Belimo founding members have prioritized fair pay as a guiding principle in their remuneration system. All employees should feel valued for their work and benefit from the Company's success. Fair pay and the culture of employee participation is viewed as a form of recognition and job enrichment.

These principles are reflected in today's value creation model with the Credibility Culture at its core (see page 4). Belimo is committed to labor market positioning, internal wage justice, and equal pay for men and women.

Ensuring Equal Pay and Wage Justice

In order to guarantee the principles of wage justice and competitive pay, Belimo continually monitors its remu-

neration system throughout the Company. Salaries and bonus payments are benchmarked against the market and adjusted as required. The internal remuneration system is screened for potential gender pay gaps. Belimo voluntarily evaluated its Swiss entities' equal pay practices with the official tool "Logib" of the Swiss Confederation. The unaudited self-assessment identified no gender pay gap.

Additionally, the managing directors and Human Resource (HR) representatives of all subsidiaries are instructed to identify pay-gaps during the annual salary adjustment process.

Employee Share Purchase Plan (ESPP)

To foster and strengthen a sense of ownership among all employees, Belimo introduced the Employee Share Purchase Plan (ESPP) in 2020. It allows the eligible employees to purchase shares at preferential conditions – generally with a 30 percent discount.

The acquired shares under the ESPP are subject to a three-year restriction period from the purchase date.



Remuneration Approval Process for the Board of Directors and the Group Executive Committee

Remuneration Committee

Consists of at least two Members of the Board of Directors, develops proposals on remuneration and submits these to the Board of Directors and the Annual General Meeting (AGM).



Annual General Meeting (AGM) Approves the remuneration proposals. This restriction period continues to apply, irrespective of continued employment, i.e., shares cannot be sold until the end of the restriction period. The program's scope is initially limited to the five Belimo subsidiaries in Switzerland, the US and Hong Kong (China). It is planned to be expanded to additional locations in 2021.

Members of the Board of Directors and Members of the Group Executive Committee

Governance Approach

The Remuneration Committee is responsible for defining overall remuneration for Members of the Group Executive Committee, performance targets, and assessment criteria. The Committee also determines total compensation for the Members of the Board of Directors. Each year, the Annual General Meeting votes on the remuneration of the Board of Directors and the Group Executive Committee for the respective current financial year. The requested amounts represent maximum amounts that are capped at a certain limit based on the annual budget. In the following year, a vote will also be held on the effective previous year's remunerations.

The Committee's constitution is set within the framework of the statutory provisions and articles of incorporation and is subject to election by the Annual General Meeting. The Remuneration Committee also monitors compliance with the principles for remuneration in accordance with corresponding legislation and the Swiss Ordinance on Excessive Compensation.

Elements of Remuneration/Compensation Principles

The Members of the Board of Directors receive a fixed cash remuneration only, as stipulated in the Articles of Incorporation, article 25quinquies (see <u>bit.ly/344Enpj</u>). The Members of the Group Executive Committee receive a fixed base salary, a cash bonus, and ESPP shares (see figure below).

The variable components of remuneration for the CEO may amount to a maximum of 120 percent of the equivalent base salary in accordance with the articles of incorporation. For the other Members of the Group Executive Committee the variable components of remuneration may amount to a maximum of 100 percent of the base salary.

The amount of the variable remuneration components received when all set targets have been reached is approximately 45 percent of the CEO's total compensation and up to 42 percent for the other Members of the Group Executive Committee. If targets are partially reached, the variable remuneration components are lower. If they are exceeded, they can be increased by a maximum factor of 1.33.

Payment of up to 60 percent of the variable components of remuneration is based on operating income (EBIT) and sales growth achievement. The payment of the remaining portion of the variable components of remuneration is based on personal performance targets. Such targets include the total cost of a Member's division, inventory turnover, or specific projects. All targets are in line with the Company's core values, long-term goals and the interests of shareholders as well as other stakeholders.

Compensation Framework for Members of the Group Executive Committee

CEO					
	47 - 55 %		19-29%	16-	- 34 %
Group Exe	ecutive Committee				
	49 - 64	%	16-27	% 13	8-32%
- %0	20% —	40% —	 %09	80% –	100%

■ Base Salary ■ Cash Bonus ■ Employee Share Purchase Plan (ESPP)

Pay mix corridor at target achievement/respectively at maximum target bonus (133 percent) - actual figures.

Group Remuneration Governance Structure



The ESPP requires the CEO to invest a defined mandatory percentage – generally 16 percent of total compensation at target achievement – in shares at preferential conditions. Other Members of the Executive Committee are required to invest up to 15 percent of total compensation in shares (at target achievement). The ESPP allows the CEO to voluntarily purchase additional shares worth up to 34 percent of the total compensation, while other Members of the Executive Committee are allowed to invest up to 32 percent of total compensation in shares.

All Other Employees

Governance Approach

Global HR defines the minimum standards of employee remuneration throughout the Group. Together with local HR representatives, managing directors are responsible for ensuring these requirements are met (see figure above). Regional HR positions support subsidiaries in implementing appropriate policies in accordance with local laws, regulations, cultures, and market conditions, and are responsible for monitoring compliance with them.

Elements of Remuneration/Compensation Principles

The compensation principles for employees are based on the Hay Chart Profile method of job evaluation, which Belimo introduced in Switzerland and the US in 2000. It defines twelve different salary bands in conjunction with the three dimensions "Know-How," "Problem Solving," and "Accountability." All employees receive a fixed component (base salary) and a variable component of remuneration, consisting of a cash bonus and non-mandatory participation in the ESPP (see table page 23).

Elements of Remuneration

Remuneration for all employees, including Members of the Group Executive Committee, is structured as fol-

lows: fixed and variable remuneration components, and benefits (pension plans and other benefits):

Remuneration element	Туре	Delivery	Entitlement
Fixed components	Base salary	Cash	For all employees.
Variable components ¹⁾	Short-term incentive: Cash bonus	Cash	 For the CEO: ranging from 19 to 29 percent of total compensation. For all other Members of the Group Execu- tive Committee: ranging from 16 to 27 per- cent of total compensation. For all other employees: part of total com- pensation.
	Long-term incentive: Employee Share Purchase Plan (ESPP)	Discounted shares (with a 30 percent discount and a three-year restriction period)	 For the CEO: mandatory 16 percent of total compensation, voluntarily up to 34 percent of total compensation. For all other Members of the Group Executive Committee: between 13 to 15 percent of total compensation mandatory, voluntarily between 28 to 32 percent of total compensation. For all other employees: non-mandatory.
Benefits ²⁾	Pension plans	Pension contributions	For all employees, in line with local market practices.
	Other benefits	Various forms	For all employees, in line with local market practices.

¹⁾ Pay mix corridor at target achievement or at maximum target bonus, respectively (133 percent) – actual figures.
²⁾ Excluding expense allowance.

Belimo Annual Report 2020

Remuneration 2020

Board of Directors

The 2020 Annual General Meeting approved a projected maximum total compensation for the Board of Directors of CHF 0.95 million for the 2020 financial year (see table below). It consisted of fixed compensation, paid in cash, and included social security. The Board of Directors was expanded at the Annual General Meeting 2020 to include one additional member as full replacement for all Members who departed the Company in 2019. The fixed compensation per board member and term of office of one year remained unchanged from 2019.

In 2020, none of the Members of the Board of Directors received any compensation or loans from the Group other than those disclosed in this report. No allowance or loans were paid to related parties of the Members of the Board of Directors, and no payments were made to former members or related parties.

As of December 31, 2020, no credits or loans were outstanding.

Remuneration of the Board of Directors

2020 2019	Fixed cash compensation	Social security	Total fixed	Expense allowance
in CHF 1 000				
Patrick Burkhalter, Chairman	<mark>254</mark> 211	<mark>19</mark> 15	<mark>273</mark> 226	<mark>6</mark> 6
Dr. Martin Zwyssig, Deputy Chairman	124 124	9 9	<mark>133</mark> 133	6 6
Prof. Adrian Altenburger, Member	<mark>124</mark> 124	9	<mark>133</mark> 133	<mark>6</mark> 6
Sandra Emme, Member	<mark>124</mark> 124	9 9	<mark>133</mark> 133	<mark>6</mark> 6
Urban Linsi, Member (from April 2019)	124 83	9	133 89	6 4
Stefan Ranstrand, Member (from April 2020)	83	6	89	4
Martin Hess, Member (until April 2019)	- 4		4	
Prof. em. Dr. Hans Peter Wehrli Chairman and Member (until April 2019)	85	- 5	90	- 2
Total	<mark>833</mark> 755	63 53	895 808	<mark>34</mark> 30
Approved Remuneration by the Annual General Meeting			<mark>950</mark> 900	

Group Executive Committee

The 2020 Annual General Meeting approved a projected total maximum compensation of CHF 5.8 million for the Members of the Group Executive Committee (see table below). It is split between a maximum fixed compensation of CHF 3.1 million and a maximum variable compensation of CHF 2.7 million. In 2020, the highest remuneration paid to a Member of the Group Executive Committee was to Lars van der Haegen, CEO.

None of the Group Executive Committee Members received any compensation or loans from the Group other than those disclosed in this report. No allowance or loans were paid to related parties of the Members of the Group Executive Committee. Remuneration in the amount of CHF 460 thousand was assigned to a former Member of the Group Executive Committee and none to related parties.

As of December 31, 2020, no credits or loans were outstanding.

Remuneration of the Members of the Group Executive Committee

2020 2019	Lars van der Haegen, CEO	Other Members, Group Executive Committee	Total	Approved Remuneration by the Annual General Meeting
in CHF 1 000				
Fixed compensation	<mark>500</mark> 490	<mark>1 512</mark> 1 683	<mark>2 012</mark> 2 173	
Social security and pension	118 111	276 334	<mark>394</mark> 445	
Other compensation	12 7	92 109	104 116	
Total fixed compensation	630 608	1 880 2 126	<mark>2 511</mark> 2 734	<mark>3 100</mark> 3 000
Variable compensation	242 446	798 1 237	1 040 1 683	
ESPP Discount	44	173	217	
Social security and pension	65 87	154 205	219 292	
Total variable compensation	351 533	1 125 1 442	<mark>1 476</mark> 1 975	<mark>2 700</mark> 2 400
Total compensation	982 1 141	<mark>3 005</mark> 3 568	<mark>3 987</mark> 4 709	<mark>5 800</mark> 5 400
Expense allowance	18 18	<mark>57</mark> 69	75 87	



Report of the Statutory Auditor

To the General Meeting of BELIMO Holding AG, Hinwil

We have audited the accompanying remuneration report of BELIMO Holding AG for the year ended 31 December 2020. The audit was limited to the information according to articles 14– 16 of the Ordinance against Excessive compensation in Stock Exchange Listed Companies contained in the sections "Remunerations" on pages 24 to 25 of the Annual Report.

Responsibility of the Board of Directors

The Board of Directors is responsible for the preparation and overall fair presentation of the remuneration report in accordance with Swiss law and the Ordinance against Excessive compensation in Stock Exchange Listed Companies (Ordinance). The Board of Directors is also responsible for designing the remuneration system and defining individual remuneration packages.

Auditor's Responsibility

Our responsibility is to express an opinion on the accompanying remuneration report. We conducted our audit in accordance with Swiss Auditing Standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the remuneration report complies with Swiss law and articles 14 – 16 of the Ordinance.

An audit involves performing procedures to obtain audit evidence on the disclosures made in the remuneration report with regard to compensation, loans and credits in accordance with articles 14 – 16 of the Ordinance. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatements in the remuneration report, whether due to fraud or error. This audit also includes evaluating the reasonableness of the methods applied to value components of remuneration, as well as assessing the overall presentation of the remuneration report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion

In our opinion, the remuneration report for the year ended 31 December 2020 of BELIMO Holding AG complies with Swiss law and articles 14-16 of the Ordinance.

KPMG AG



Reto Benz Licensed Audit Expert Auditor in Charge

Zurich, 5 March 2021

Reto Kaufmann Licensed Audit Expert

KPMG AG, Räffelstrasse 28, PO Box, CH-8045 Zurich

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Credibility Culture

Company Values and Culture

Creating and Living a Unique Culture

Our success is the result of offering customers more value. This is why we are driven to deliver top performance in everything we do.

Customer loyalty generally starts with an organization's well-defined purpose and substantial investment. For Belimo, that purpose is to create impact through the development, production, and sales of field devices for the energy-efficient control of HVAC systems. We express this with our customer-centric method for innovating building technology with actuators, control valves and sensors CESIM® (see page 5).

The Company's internal service quality is absolutely crucial for maintaining a competitive advantage. It unites seamless processes with training and a "Quality First" attitude. Belimo believes that this forms the foundation upon which employee loyalty can thrive. A more advanced professional experience leads to better overall employee performance. The better the professional expertise of its employees, the better the Company's external service quality becomes. This includes excellent outside/inside sales and technical support, fast and reliable logistics and efficient handling of quality issues. The resulting outstanding customer service leads to higher customer satisfaction, positioning the brand ahead of its competitors. The goal of Belimo, however, is not only to have satisfied customers. Its ambition is to provide superior value by exceeding customer expectations. When this becomes the norm, true customer loyalty is sure to follow.

The culture of Belimo is built on trust, integrity, competence, and responsibility. We support personal commitment, teamwork, cultural diversity, and the courage to take risks to inspire customers. The premium that customers pay for a flawless experience leads to higher demand and efficiency through operational excellence on the supply side, resulting in above-average profitability.

Culture Does not Stop at the Company's Borders

The principles for interacting with internal and external stakeholders are outlined in our vision, mission statement, values/code of conduct, and CESIM[®]. In this order and in accordance with the Belimo management model, it is crucial that they be followed and practiced.

Leadership training, ongoing communication of vision, mission, and values are vital to the continuous improvement of Company culture. New employees learn about the values and quality standards during their introduction to the Company (New Employee Training events, see page 29). Because any company also depends on its external stakeholders, the cultural aspects do not stop at the organization's borders. It is in the interest of Belimo to also promote an outstanding company culture with its customers, suppliers, and other interfaces.

Employee Loyalty and Identification

We assess the success of our company values and culture through employee surveys (see page 30) and feedback from new employees. Each department evaluates the results of the survey process. Its employees then create an improvement plan that is monitored by Human Resources.

Each employee's ability to put those values into practice is assessed within the scope of the annual employee performance appraisal interview. Moreover, average employee tenure is measured and benchmarked against industry standards.

Information Regarding Employees as at December 31

		Danbury (Connecticut, USA)	Hinwil (Switzerland)	All Other Belimo Subsidiaries	Belimo Group 2020	In % of FTEs	Belimo Group 2019
Total employees							
Headcount		418	854	630	1 902		1 866
Full-time equivalents (FTEs)		416	791	620	1 826		1 789
Employees by employment contra	act (FTEs)						
Permanent/indefinite	Female	174	282	137	593	32.5%	624
	Male	242	489	354	1 085	59.4%	1 118
Temporary/fixed	Female	0	13	49	62	3.4%	29
	Male	0	7	79	86	4.7%	18
Employees by employment type (FTEs)						
Full-time	Female	172	184	166	522	28.6%	519
	Male	238	424	427	1 089	59.6%	1 061
Part-time	Female	2	111	19	132	7.2%	133
	Male	4	72	7	83	4.6%	76
Employees covered by collective agreements (GRI 102-41)	bargaining						
As % of the total workforce		0 %1)	0 % 1)	21.2% ²⁾	7.0%		6.2%

 $^{\rm D}$ In Switzerland and the US, employees are not covered by a collective bargaining agreement. $^{\rm 2)}$ Average of all other Belimo subsidiaries in percent on a headcount-basis.



"There worked with Belime for mean constant cons

Story: Employee Excellence Training

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The First Impression Counts

Four times a year, Belimo Americas holds Employee Excellence Training events to introduce new employees to the Company. They are a memorable introduction to the Belimo family – thanks to hands-on and teambuilding activities.

Employee Excellence Training is the first impression of the "Together to the Top"-culture for new employees in Belimo Americas. Concepts such as CESIM[®] and Credibility Culture are introduced to participants in a two-day interactive training event with guests from various departments joining in.

The training goes beyond general new employee information and helps inspire commitment to the mission and values of Belimo.

Diversity as a Key Factor

All new employees from our Canada, Latin America, and US locations are invited to the Employee Excellence Training at the Danbury headquarters in Connecticut. The diversity of cultures and positions of participants help build strong working relationships and engagement through inclusion. Employee Excellence Training is the inauguration into the diverse family of Belimo.

Near the end of two days of training, participants learn the inner workings of a Belimo product through the hands-on construction of an actuator. This exercise encourages teambuilding as employees help each other complete the assembly. Building the actuator promotes the importance of all jobs at Belimo. It gives participants a keepsake to remember their experience of becoming part of the Belimo family. "The Employee Excellence Training was a great introduction to Belimo and truly shows what Belimo products and culture are all about."

Dan Holland Product Specialist (far left, top row)

"The best part was the opportunity to meet the leadership and amazing members of the team in Danbury. The training session was interactive, fun, professional, and efficiently organized. The discussions and activities helped me understand the mission, values, and the Credibility Culture of Belimo." **Syed Anjum Abbas** Technical Support Representative (second from the right, top row)

"There was a nice balance of product training and activities that brought the participants together. It was a wonderful and valuable introduction to Belimo." Jennifer Merriam Customer Service (third from the right, bottom row)

Employee Empowerment and Engagement

Taking Engagement to the Next Level

Employee engagement is critical for the success of Belimo. In 2020, employees reaffirmed their high level of identification, motivation, and commitment to the Company.

Belimo believes that satisfied employees directly lead to satisfied customers. An empowered and engaged workforce is therefore essential to success in the market by maintaining a high level of customer support and innovation leadership. Belimo refers to the continuous engagement of its employees as a competitive advantage and as beneficial to all other stakeholders.

Training and Role Models

For Belimo, employee empowerment and engagement begin with transparent communication and a culture of trust. Creating a trusting work environment where employees can thrive and unlock their full potential is a primary aspiration. Direct and open dialogue about mistakes is therefore essential.

To ensure that employees remain empowered and engaged, Belimo regularly holds management training on its Corporate mission and values. It is an essential responsibility of managers across all levels to act as role models, represent the values of Belimo and lead by example. Belimo also regularly supports social and team-building events.

Higher Employee Engagement Score

To assess employee engagement, Belimo conducts a group-wide employee survey every three years. Within the context of this survey, employees are asked questions anonymously on central workplace subjects. These comprise job content, structures, processes, collaboration, the Executive Committee, dealing with changes, line managers, employee promotion, and remuneration. Detailed results are analyzed by the individual teams around the world and used to implement corresponding measures. The so-called engagement-score is the pivotal value of the survey, as it allows us to gauge employee commitment. On a scale from 1 (lowest rating) to 10 (highest rating), it describes the extent to which the topics of identification, motivation, and commitment are present among employees.

The 2020 employee survey met with a response rate of 89 percent, which is slightly lower than in 2017 (92 percent) but still an exceptional value, considering the survey was conducted in the middle of the COVID-19lockdown, as well as being statistically significant. The engagement score increased slightly to an outstanding value of 8.9 (see chart below). It was particularly gratifying to see that departments with below-average

Employee Engagement

Scale from 1 (lowest rating) to 10 (highest rating)



results in the last survey performed much better in the current poll. This improvement suggests that the measures taken were effective and had a high impact on employees' engagement and satisfaction. One of the most significant improvements throughout the Group was that employees rated their development opportunities significantly higher. Even given the top values, Belimo still aims to improve engagement scores by using the feedback gained from the survey to pinpoint room for improvement. Most importantly, we will work on keeping the strengths that make employees define Belimo as their employer of choice.

Another factor in assessing its success in Human Resources Management is employee turnover. Among other topics, managers are trained to foster participation as well as a trial-and-error culture and align their decision-making process with the mission and values of Belimo.

Health and Safety at the Workplace

Ergonomic workstations, relaxation exercises, workplace exchanges organized by teams to prevent monotony in work routines and regular training courses ensure a pleasant and organized work environment. This enables employees to deliver extraordinary performance.

Continuous investments are made in occupational safety and ergonomics, which are reviewed on-site with external consultants. The program to promote occupational health includes targeted relaxation and strengthening exercises, training in workplace ergonomics, and other topic-specific activities and lectures. Furthermore, surveys are held regularly to query employees about their working comfort.

The first-aid teams in Hinwil and Danbury receive frequent training on the handling of various medical emergencies. The safety concept is commonly reviewed by implementing evacuation exercises without notice.

The restaurants BELGUSTO in Hinwil and Belimo Bistro in Danbury offer employees the opportunity to eat healthy food at affordable prices while meeting colleagues from other departments and supporting cross functional collaboration.

Skill Development and Knowledge Management

Fostering Skills in the Organization

Knowledgeable employees are critical for operational excellence and solution leadership. Belimo supports its employees in developing their specialist knowledge.

Acquiring the necessary knowledge ensures that employees are fully proficient in their tasks, responsibilities, and corporate culture. Belimo views properly trained employees as essential to providing value to customers. Moreover, effectively managing skills development and knowledge is vital for successful employer branding: It helps in attracting talent and retaining employees by facilitating their continued engagement. Likewise, it also prepares employees for future changes (new technologies, products, and services).

Tracking Days of Training

The deliberate management of skill development ensures employees receive the training necessary to succeed in their roles. To streamline its training functions for customers and employees, Belimo has established a global training organization with local teams and has implemented a Learning Management System (LMS). It provides e-learning content to employees and allows tracking of training and certifications. See how we have accelerated our e-learning offerings in times of COVID-19 on page 34.

Belimo tracks expenses for internal and external courses, days of training per employee and monitors the core competencies' average degree of fulfillment. Feedback forms are usually collected after each session, and the topics of skills development and knowledge management are addressed in the periodical employee survey. The LMS further enables Belimo to document employee training. Identifying and training skills which will be needed in the future is crucial.

Performance and Appraisal System

Belimo works at all levels with performance and behavioral appraisal systems. This includes regular status reports on the achievement of individual goals, employee performance appraisals, and appropriate remedial measures. Personal development planning is outlined and discussed at regular employee reviews. Appraisal reviews, including the assessment of core competencies, a competency matrix for assemblers, career paths, and career development plans, all serve as a basis for deciding which employees should receive training.

Comprehensive introduction programs ensure that new employees are efficiently introduced into their field of work and the corporate culture (see story Employee Excellence Training on page 29). An internal training program enables knowledge and skills to be continuously adapted to the tasks at hand. Employees' personal development is also supported. Belimo managers regularly complete training courses on leadership skills. Notably, all Belimo managers complete a threeday leadership course focusing on company values and strategies and enhancing leadership skills. Belimo offers career path planning for managers as well as for professional specialists and supports further individual education financially.

Supporting the Talent of Tomorrow

Together with local schools, Belimo helps students in Hinwil (Switzerland) to choose a profession and provides insight into everyday working life. This offer attracts great interest in the region and has therefore been expanded further. Meanwhile, the STEM initiative in Danbury (Connecticut, USA) aims to stimulate children's curiosity and interest in Science, Technology, Engineering, and Mathematics. In workshops, representatives of local Belimo management use practical examples to show children how these disciplines are applied in product development and, ultimately, how energy-efficient HVAC systems contribute to protecting the environment.

Training and Education Overview

	Danbury (Connecticut, USA)	Hinwil (Switzerland)	All Other Belimo Subsidiaries	Belimo Group 2020	Belimo Group 2019
Average hours of training per employee					
Total number of training hours divided by average full time equivalents (FTEs)	26 hours/year	24 hours/year	27 hours/year	26 hours/year	24 hours/year

Programs for Improving Employee Skills and Transition Assistance Programs

Type and scope of programs implemented and assistance provided to increase employee skills.

Methodical Experience

Methodical experience includes general knowledge that is important across disciplines. It comprises the ability to apply specific learning and working methods necessary for the acquisition and development of expertise. Belimo offers a wide range of courses for developing such abilities, e.g. presentation skills, project management, leading and moderating of workshops, introduction to HVAC and building technology, etc.

Social Competency

Social competencies are key to our current working environment, as social skills form the basis to working together smoothly. They include among others fostering a certain level of empathy, teamwork and communication readiness. Courses offered to our employees include, for example, effective communication, negotiation and conflict management, intercultural competences, as well as language courses.

Leadership Skills

Belimo understands leadership skills as the abilities of individuals to help oversee processes, guide initiatives and projects and steer their employees towards the achievement of goals and customer expectations. Besides a Global Leadership Course, which takes place on regular basis, additional offerings include, for example, the essence of leadership, succeeding as a supervisor, change management, health promotion, "The 7 Habits of Highly Effective People", etc.

Transition assistance programs provided to facilitate continued employability and manage the end of careers resulting from retirement or termination of employment. In Hinwil (Switzerland), courses are offered as preparation for retirement. Also, Belimo occasionally offers outplacement services in cases where the employer terminates the working relationship.

	Danbury (Connecticut, USA)	Hinwil (Switzerland)	All Other Belimo Subsidiaries	Belimo Group 2020	Belimo Group 2019
Employees receiving regular performance and career development reviews					
As a percentage of the total workforce	100%	100%	100%	100%	100%
As a percentage of the workforce with management functions	100%	100%	100%	100%	100%
As a percentage of the workforce without management functions	100%	100%	100%	100%	100%

Story: Credibility Culture

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Maintaining Our Training Competence
Customer and employee training are a top priority at Belimo. This is why we have continued to train our key users and staff throughout the COVID-19 pandemic.

Whether in the Americas, Europe or Asia Pacific, Belimo provides internal and external training in all regions. These range from simple online training courses and small training events at customers' sites to entire training days at the Belimo Experience Centers. All programs aim to expand the Heating, Ventilation, and Air Conditioning (HVAC) knowledge and skills of our employees and customers.

The outbreak of COVID-19 has impacted people's lives around the world and, due to global restrictions, also our training platforms. Despite the difficult circumstances, Belimo intends to continue to make the best possible contribution to foster training without putting the health and safety of customers and employees at risk. For this reason, our internal and external education program has taken the next step towards digitization.

Offering Knowledge to Customers

As the pandemic broke out, we began internal training on the Belimo Energy Valve™ (see the spotlight on page 36). We were able to offer this fundamental knowledge to our customers and the HVAC market through various online measures such as videos, animations, landing pages, and customer suggestions. Even during the pandemic, we never abandoned our goal of ensuring that all employees are familiar with the basics of the relationship between the Belimo flagship product and energy savings and that other groups acquire more in-depth knowledge of the subject. By taking another step towards online training, we maintained our training competence.

Accelerated E-Learning

Many of our field sales representatives have been unable to visit customers or welcome local customers during the pandemic. We have, however, strived to use this time intensively to emerge from the pandemic with more advanced knowledge.

In keeping with the spirit of "Together to the Top," "Home Office Training Sessions" (HOTS) were created by a broad array of specialists at Belimo. The 43 webinars, 13 screencasts, 12 webbased trainings, and six documents enabled us to train employees at regular intervals on product and application knowledge and topics such as social media or new EU directives. Between March and May 2020, approximately 8000 attendees/subsequent recording requests were registered, resulting in more than 100 participants per HOTS on average.

After four months of intensive training and much positive feedback, Belimo would like to thank all the speakers for their exciting webinars and in-depth Q&A sessions, which are still available to everyone. In the future, we also want to continue actively providing and preparing company knowledge. These two examples show that we were able to use the crisis to expand our online training expertise further, both externally and internally. By doing so, Belimo and its employees always stay one step ahead.

Just like Sandra Stöckli, a Swiss hand cyclist and paracycling athlete whom we support. Like us, she used the crisis to prepare for the period after it.

See what Sandra Stöckli did during the lockdown time to stay motivated: <u>bit.ly/33gsvAg</u>

Deep Dive: Energy Valve[™] Training Initiative



Maintaining Training Momentum

The Global Belimo Energy Valve[™] Training Initiative is an excellent example that genuinely reflects the broad diversity of the Belimo training landscape.

In 2019, an international team of experienced Belimo sales staff and product managers was given the task of determining the main measures required to further accelerate sales of the Belimo Energy Valve[™]. As their primary measure, the team proposed systematic investment in the training of all key employees and customers in the significant advantages of the Belimo Energy Valve[™]. During the following nine months, the team developed a comprehensive training plan divided into three training steps.

The first module includes the Belimo Energy Valve™ Basic Training, which is implemented as an e-learning session for all employees working directly with customers. The goal of this training is to teach a few easy-to-understand, notable features and essential benefits of the Belimo Energy Valve[™] in an exciting and thoughtful manner. More than 560 participants have completed this first module.

The second module is called Belimo Energy Valve[™] Advanced Training and is offered in person in all regions to train Sales Special-





ists, Regional Application Consultants as well as Technical Supporters. Furthermore, this session includes hands-on exercises, real-life experiences in the field, and a great deal of practical training, focusing on best sales practices and high customer value.

The third module, the Customer Energy Valve[™] Training, is aimed at all our customers worldwide. The primary purpose is to familiarize different customer groups with the most critical applications of the Belimo Energy Valve[™] and to show the resulting benefits. This training also contains numerous practical exercises.

A highlight of this process was implementing the first Belimo Ener-

gy Valve[™] Advanced Training in India, which took place in March 2020. A group of 20 employees had the opportunity to attend this session, and the feedback given by the participants was highly gratifying. The start of the COVID-19 pandemic, however, tempered the delight of this first success. The rollout plan for on-site training sessions in all countries had to be postponed from 2020 to 2021. To keep the momentum of this initiative, online training sessions for the Energy Valve[™] for both Belimo sales staff and customers were introduced

A central part was the online webinar "Managing the Delta T Syndrome" in May 2020, which was jointly hosted by the China Journal of HVAC and Belimo China and was attended by 13 900 customers.

The Belimo Energy Valve[™] Training will continue throughout 2021 and we are excited to see the impact of this investment in the training and education of employees and customers.

Find more information about the Belimo Energy Valve[™]: www.belimo.com/energyvalve

Equal Opportunity Employment

Offering Equal Opportunities

The success of Belimo is only possible thanks to the shared commitment of its employees. Our workforce encompasses a vast range of different cultures and nationalities.

To be a reliable partner that always bases its actions on the highest level of integrity, Belimo sees cultural diversity, equality of treatment and the prevention of discrimination as crucial. Belimo believes that the workforce should reflect the diversity of the population, as a variety of perspectives strengthens the Company's knowledge base. This, in turn, offers a competitive advantage. All stakeholders benefit from equal opportunity employment, particularly suppliers (compliance requirements), customers (best solutions), and existing employees, for whom equal opportunity employment is a central pillar in a culture of trust.

Cases of Violation and Discrimination

Belimo is committed to a work environment in which all individuals are treated with respect and dignity, free from all forms of discrimination, harassment, and retaliation. The Belimo mission statement has been supplemented by a Code of Conduct, which applies to all employees. In 2020, all employees had to take a webbased training on the Code of Conduct and those with customer and supplier interactions in addition also on the anti-bribery and anti-corruption policy. Employees are encouraged to report cases of breach through a globally accessible incident/breach notification channel. By the end of 2020, a total of eight reports were submitted - seven of them referring to managers' inappropriate behavior and one to bribery. The cases referring to managers' inadequate behavior led in some cases to corrective actions. The case of bribery was investigated by a third party and found to be baseless.

A policy prohibiting workplace harassment and discrimination (e.g., on grounds of race, color, sex, religion, political opinion, national extraction, or social origin as defined by the International Labour Organization) is implemented. There were two cases of discrimination revealed in 2020. The first case concerned a former employee who brought a complaint of discrimination to a state agency. The matter was resolved through mediation and was concluded without any admission of liability. The second case concerned an applicant who has also brought a complaint of discrimination to a state agency. The matter is in the preliminary phase.

Belimo: Equal Opportunity Employer

Belimo attaches great importance to ensuring that women and men receive equal pay for work of equal value. Special attention is also paid to gender equality in salary adjustments. Moreover, the Company is particularly proud of its integration of people with physical or mental disabilities. Ability Beyond in the US, Sonnhalde in the Zurich Oberland region (Switzerland) and Foundation Brändi in Willisau (Switzerland) as well as the residential and employment center for people with restricted mobility (IWAZ) in Switzerland are examples for programs Belimo is involved with to find gainful employment for individuals with disabilities. Our many years of cooperation with these organizations are an established part of the corporate culture at Belimo. To improve its performance as an equal opportunity employer, Belimo tracks the following KPIs: Percentage of genders employed, age structure, diversity of nationalities/languages, results of the employee survey, the proportion of women in a management position, as well as gender pay gap. Belimo voluntarily evaluated its Swiss entities' equal pay practices with the official tool "Logib" of the Swiss Confederation. The unaudited self-assessment identified no gender pay gap. Employees and the Company equally value the part-time working models offered. In Hinwil, 23 percent of employees have chosen this model.

	Danbury (Connecticut, USA)	Hinwil	All Other Belimo Subsidiaries	Belimo Group 2020	In % of Headcount	In % of Headcount 2019
Employees without Management Functions						
Female	163	311	126	600	50.4%	48.5%
Male	198	203	189	590	49.6%	51.5%
<30 years	43	88	45	176	14.8%	16.3%
30 – 50 years	160	297	193	650	54.6%	55.6%
>50 years	158	129	77	364	30.6%	28.1%
Employees with Management Functions						
Female	12	28	67	107	15.2%	16.1%
Male	44	308	247	599	84.8%	83.9%
<30 years	0	4	11	15	2.1%	1.8%
<u>30 - 50 years</u>	28	221	227	476	67.4%	68.2%
>50 years	28	111	76	215	30.5%	30.0%
Group Executive Committee ¹⁾						
Female	0	0	0	0	0.0%	0.0%
Male	1	4	1	6	100.0%	100.0%
<30 years	0	0	0	0	0.0%	0.0%
<u>30 - 50 years</u>	0	1	1	2	33.3%	28.6%
>50 years	1	3	0	4	66.7%	71.4%
Board of Directors ²⁾						
Female	0	1	0	1	16.6%	20.0%
Male	0	5	0	5	83.4%	80.0%
<30 years	0	0	0	0	0.0%	0.0%
30 - 50 years	0	2	0	2	33.3%	40.0%
>50 years	0	4	0	4	66.7%	60.0%
Disability-Employment-Schemes	Danbury	Hinwil	Off-Site	Belimo Group 2020		Belimo Group 2019
Number of individuals with disabili- ties working for Belimo in the context of		0	64	70 ⁴⁾		110
disability-employment-schemes ³⁾	6	0	04	70 %		119

Diversity of Governance Bodies and Employees as at December 31 (Headcount Figures)

¹⁾ The percentage of women on level Group Executive Committee at Belimo deviates by – 7 percentage points from the manufacturing industry average in Switzerland of 7 percent.

²⁾ The percentage of women on level Board of Directors deviates by +2.6 percentage points from the industry average in Switzerland of 14 percent. (Source: Schillingreport 2019).
 ³⁾ Individuals are employed by the respective organizations, not by Belimo directly.

⁴⁾ All Sonnhalde associates (42 individuals) and all associates of Brändi Foundation (22 individuals) perform their work on the premises of the respective institutions. The placement of associates from the residential and employment center for people with restricted mobility (IWAZ) had to be put on hold due to COVID-19.

Story: Top-Class Sports and Business

On the Path to the 2021 Paralympic Summer Games Top-class sport has many similarities with the economy. Both experience ups and downs. Belimo supports Swiss top athlete, hand cyclist and paracycling athlete Sandra Stöckli and supports her in optimally preparing for the worldwide competition. After the 2016 Rio de Janeiro Paralympic Summer Games – where Sandra Stöckli came home with an Olympic Diploma – she set her sights on the 2020 Tokyo Paralympic Summer Games, which at the time of writing are planned to be held in Japan in 2021. The Tokyo Paralympics had to be postponed due to the global COVID-19 pandemic. There, too, Stöckli not only wants to take part, she wants to be right up front.

On her path to the Paralympic Games in Tokyo, Sandra Stöckli stopped at Belimo and invited employees to take a bike ride together. Whether on a racing bike or a mountain bike, amateur or semi-professional, all employees were invited to ride with the Swiss champion on her handcycle around Lake Pfäffikon (Switzerland). Many employees took the opportunity to support Sandra Stöckli in training for the Tokyo Paralympic Summer Games.

Watch the movie of Sandra Stöckli visiting Belimo to go for a ride with the employees: <u>bit.ly/33briKj</u>





Corporate Governance

Principles of Governance

BELIMO Holding AG discloses this corporate governance report at the highest corporate level of the Belimo Group in accordance with the principles and regulations of the Swiss stock exchange SIX Swiss Exchange, in particular the Corporate Governance Directive and the Swiss Code of Best Practice published by economiesuisse.

The required disclosure of remuneration for the Members of the Board of Directors of BELIMO Holding AG and the Group Executive Committee, as well as other disclosures, are reported in the Remuneration Report on pages 20 to 25 based on the Ordinance Against Excessive Compensation in Listed Companies and the articles of incorporation of BELIMO Holding AG. The information contained in this corporate governance report is based on the corporate organization, regulations and articles of incorporation effective as of December 31, 2020.

Group Structure and Shareholders

Group Structure

The Belimo Group is organized into markets (Europe, Americas, Asia Pacific), Innovation, Production, Logistics/Customization, Finance & Business Services, Global Quality as well as Strategy & Brand Management. The operational Group structure is shown in the organization chart below.

BELIMO Holding AG (the holding company of the Belimo Group) is the only Group company that is listed. The registered office of the Company is in Hinwil (Switzerland). Belimo shares (ISIN CH0001503199) are listed on the Swiss stock exchange SIX Swiss Exchange.

The market capitalization as of December 31, 2020, amounted to CHF 4 723 million. With the exception of BELIMO Holding AG, no Group companies hold Belimo shares. The Belimo shares held by BELIMO Holding AG

Group Structure



are disclosed on page 147. Further details on Belimo shares are provided on pages 152 to 153. Information regarding the unlisted companies is given on page 138.

Significant Shareholders

As of December 31, 2020, the following shareholders owned more than three percent of the share capital of BELIMO Holding AG:

Shareholder	Number of Belimo shares	Share	Of which voting shares	Share
BlackRock, Inc.	18 542	3.01%	18 542	3.01%
Ameriprise Financial, Inc.	26 071	4.24%	26 071	4.24%
The Capital Group Companies, Inc.	30 687	4.99%	30 687	4.99%
1832 Asset Management L.P.	31 501	5.12%	31 501	5.12%
Group Linsi	120 121	19.53%	120 121	19.53%

Disclosure notices relating to persons or groups with significant shareholdings (more than three percent of voting rights) can be found at:

www.six-exchange-regulation.com

As of December 31, 2020, BELIMO Holding AG held 0.005 percent of the share capital.

Cross-Shareholdings

There are no cross-shareholdings with other companies.

Capital Structure

Information on the capital structure is contained to a large extent in the articles of incorporation of BELIMO Holding AG and in the financial statements of BELIMO Holding AG (pages 144 to 149). The articles of incorporation are available at:

www.belimo.com/corporate-governance

Capital

The ordinary share capital of BELIMO Holding AG amounts to CHF 615 000.

Approved and Conditional Capital in Particular

The Company has no approved or conditional share capital.

Changes in Equity

The shareholders' equity of BELIMO Holding AG has changed during the last three years as follows:

	2020	2019	2018
in CHF 1 000			
Shareholders' equity as of December 31	302 927	309 095	287 174

Shares

The share capital is divided into 615 000 registered shares, each with a nominal value of CHF 1.00. All registered shares are fully paid up and entitle the holder to dividends.

The Company maintains a share register, in which the names and addresses of owners and beneficial owners of shares are entered. Each share entered in the share register at the date determined in advance by the Board of Directors entitles the holder to one vote at the Annual General Meeting. In the event of a share capital increase, shareholders have a right of first refusal to subscribe to new shares in proportion to their existing shareholding and legal requirements.

Participation and Dividend-Rights Certificates

BELIMO Holding AG has issued neither participation nor dividend-rights certificates.

Limitation of Transferability and Nominee Registrations

In terms of the relationship with the Company, only those persons who are entered in the share register shall be considered registered shareholders or beneficial owners. Buyers of shares or the beneficial owners must apply in writing to be entered in the share register. The Company may refuse to make an entry in the share register if the applicant fails to declare expressly that he/she has acquired and will hold the shares on his/her own behalf and for his/her own account.

A shareholder or beneficial owner shall be entered in the share register as a voting shareholder or beneficial owner for a maximum of five percent of the total number of shares as shown in the commercial register. Legal entities and private partnerships related to each other through ownership or voting rights, by shared management, or in any similar manner, and individuals, legal entities and private partnerships acting jointly or in a coordinated manner shall be deemed one person. Shareholders holding more than five percent of the total number of shares at the time this provision was introduced shall continue to be registered in the share register with the number of shares actually held.

By application of regulations, the Board of Directors may define exceptions to the five-percent registration limit. No such exceptions were made during the year under review.



Convertible Bonds and Share Options

BELIMO Holding AG has no outstanding convertible bonds or share options. No options were issued to employees.

Board of Directors

Members of the Board of Directors

The Board of Directors of BELIMO Holding AG comprised a total of six members as of December 31, 2020.

Further Activities and Relationships

Personal details and further activities and relationships of the individual Members of the Board of Directors are shown on pages 46 to 47.

Independence of Non-Executive Members

The Board of Directors consists of non-executive members. This means that no member exercised an operational function for the Belimo Group during the three financial years preceding the reporting period.

The other Members of the Board of Directors and the companies they represent have no material business relationships with the Belimo Group.

Mandates

No Member of the Board of Directors may hold more than four additional mandates in the ultimate strategic management bodies or on the ultimate boards of listed companies which do not belong to the Belimo Group. The Board of Directors may allow a maximum of two exceptions per member in specific cases.

The acceptance of a maximum of four mandates in the ultimate strategic management bodies or on the ultimate boards of non-listed companies which do not belong to the Belimo Group is permissible for a Member of the Board of Directors as long as the Member of the Board of Directors is not impaired in exercising their obligations to BELIMO Holding AG.

Election and Term of Office

According to the articles of incorporation, the Board of Directors is made up of at least three and no more than seven members, who are elected individually by the Annual General Meeting (AGM) for a term of office of one year, which ends with the next ordinary Annual General Meeting. Upon reaching 70 years of age, Members of the Board of Directors may be elected for a term of office one final time.

Details of the first election to the Board of Directors are provided in the following table:

Member	AGM
Patrick Burkhalter (Chairman)	2014
Dr. Martin Zwyssig (Deputy Chairman)	2011
Prof. Adrian Altenburger	2015
Sandra Emme	2018
Urban Linsi	2019
Stefan Ranstrand	2020

Internal Organization

The Board of Directors is the supreme management body in the Belimo Group. It is empowered to make decisions with respect to all matters that are not reserved for the Annual General Meeting by law or in accordance with the articles of incorporation, or that the board has not delegated to another body by regulation or resolution. The Board of Directors constitutes itself, subject to legal and statutory provisions. The Chairman and the Deputy Chairman of the Board of Directors as well as the Members of the Remuneration Committee are elected individually by the Annual General Meeting for a term of office of one year, which ends with the next ordinary Annual General Meeting. The Board of Directors designates a secretary, who does not have to be a Member of the Board of Directors.

By law, the Board of Directors has the following non-transferable and non-assignable tasks:

- Directing the Company and issuing the necessary instructions
- Approving corporate policy and strategy
- Defining the organizational structure
- Determining the design of the accounting system, financial control and financial planning
- Appointing and removing the persons entrusted with the management and representation of the Company
- Supervision of the persons in charge of the management
- Drawing up the Annual Report and the Remuneration Report, preparing for the Annual General Meeting and carrying out its resolutions
- Notifying the judge in the event of insolvency

The Board of Directors may entrust the preparation and execution of its resolutions or the supervision of business to committees. The Board of Directors has established three permanent committees during the year under review: the Audit, the Remuneration and the Strategy Committee. The Nomination Committee shall be convened when necessary.

Details of the memberships for each of the committees are given in the following table:



Member	Audit Com- mittee	Remu- neration Com- mittee	Nomi- nation Com- mittee	Strategy Com- mittee	Meeting Atten- dance in %
Number of Meetings Held	2	2	6	3	_
Patrick Burkhalter	Member			Lead	100
Dr. Martin Zwyssig	Lead		Member		100
Prof. Adrian Altenburger		Lead		Member	100
Sandra Emme		Member	Lead		100
Urban Linsi			Member		100
Stefan Ranstrand				Member	100

The Board of Directors has delegated the operational management to the Group Executive Committee, headed by the CEO, in accordance with the articles of incorporation of BELIMO Holding AG and organizational regulations that have been issued (with the corporate schedule of responsibilities). The CEO is not a Member of the Board of Directors.

The Chairman of the Board of Directors, or, in his absence, the Deputy Chairman of the Board or a duly appointed member, calls the meetings and chairs the discussions.

Functioning of the Board of Directors

The Board of Directors holds at least five ordinary meetings per year. A as a rule, the dates of its ordinary meetings and committee meetings are set early so that all members can attend in person. Extraordinary meetings may be convened as and when required. Any board member may submit a request for additional meetings to the Chairman, stating the reasons.

The agenda for meetings is drawn up by the Chairman in cooperation with the CEO. Any board member may request additional items to be included in the agenda. Meetings are announced in writing by the Chairman. The invitation, together with the detailed agenda and attachments, is normally distributed to all participants one week prior to the date of the meeting. Provided that no member objects, the board may then also discuss other urgent matters that were not included in the agenda. The Members of the Group Executive Committee may be invited to attend board meetings. Other employees or third parties may also be invited to attend meetings, in order for the Board of Directors to receive adequate information for its decisions. The Board of Directors makes decisions and conducts elections by a majority of the members present at the meeting. A majority of members must be present for the board to pass a resolution. Resolutions may also be passed by videoconferences, conference calls or by means of circulation, provided that no member requests a verbal discussion at a meeting. The individual members are required to step out of the meeting if matters are discussed that affect them or persons or legal entities related to them. The board members receive a complete copy of the minutes, with the other participants receiving an excerpt detailing the agenda items/resolutions of relevance to them.

Attendance of Ordinary Board Meetings in 2020

Total number of ordinary board meetings held	10
Number of members who missed no meetings	6
Number of members who missed one meeting	0
Number of members who missed two or more meetings	0
Meeting attendance, in %	100

In addition to board meetings, the Board of Directors holds regular meetings with the Group Executive Committee. Furthermore, the Board of Directors and the Group Executive Committee met for one workshop in 2020, which is included in the 11 ordinary board meetings.

On March 23, 2020, the Members of the Board of Directors, including the CEO and CFO, carried out a self-evaluation by compiling and discussing insights gained from a questionnaire completed in advance. Improvement suggestions have been recognized and implemented. The Board of Directors will repeat this self-evaluation annually in the future.

Composition/Functioning of the Committees of the Board of Directors

The duties of the Audit, Remuneration, Nomination and Strategy Committee primarily comprise evaluation, advisory and supervisory functions for the Board of Directors. The committees have no decision-making powers. They meet periodically or when required. The same conditions regarding meeting rules and stepping out also apply as for the Board of Directors meetings. The Board of Directors elects the Members of the Audit, Nomination and Strategy Committee annually. The Members of the Remuneration Committee are elected individually by the Annual General Meeting for a term of office of one year.

Board of Directors



Patrick Burkhalter, Chairman

Patrick Burkhalter (1962, Swiss citizen) was elected to the Board of Directors at the 2014 Annual General Meeting and as Chairman of the Board at the 2019 Annual General Meeting. He is a Member of the Strategy Committee (Lead) as well as a Member of the Audit Committee.

From 1988 to 2018, Patrick Burkhalter held several positions at Ergon Informatik AG, Zurich (Switzerland). After starting his career as a software developer, he was appointed Chief Executive Officer and Member of the Board of Directors of the company in 1992. From 2016 to 2018 he led the company as its Chairman. He holds a degree in business administration and computer science (lic. oec. publ.) and acts as a guest speaker at ETH Zurich (Switzerland). Throughout his career, Patrick Burkhalter has gathered relevant knowledge and expertise with IT, entrepreneurship, strategic development and corporate governance.



Dr. Martin Zwyssig, Deputy Chairman

Dr. Martin Zwyssig (1965, Swiss citizen) was first elected to the Board of Directors at the 2011 Annual General Meeting. He is Deputy Chairman of the Board, a Member of the Nomination Committee and a Member of the Audit Committee (Lead).

Dr. Martin Zwyssig was Divisional Controller at Sarna Kunststoff Holding AG, Sarnen (Switzerland) before becoming Senior Vice President Finance & Controlling of the EMS-EFTEC Group in Romanshorn (Switzerland) in 2001. From 2003 to 2008, he was Group CFO of Schaffner Holding AG, Luterbach (Switzerland) and subsequently Group CFO of Ascom Holding AG, Baar (Switzerland). In 2014, Dr. Martin Zwyssig became Group CFO and Member of the Executive Board of Autoneum Holding AG, Winterthur (Switzerland). Since April 2020, he is Chief Financial Officer of the REHAU Group with headquarters in Muri b. Bern (Switzerland). Martin Zwyssig holds a master's degree in Accounting & Finance and a doctorate in business administration from the University of St. Gallen (Switzerland). Dr. Martin Zwyssig's areas of expertise are financial management, accounting, tax and corporate governance.



Prof. Adrian Altenburger, Member

Prof. Adrian Altenburger (1963, Swiss citizen) was first elected to the Board of Directors at the 2015 Annual General Meeting. He is a Member of the Remuneration Committee (Lead) as well as of the Strategy Committee.

From 1999 to 2015 Prof. Adrian Altenburger was Partner, a Member of the Group Executive Committee and a Member of the Board of Directors of the engineering company Amstein + Walthert AG, Zurich (Switzerland). In 2015 he was appointed Professor at the Lucerne University of Applied Sciences, School of Engineering & Architecture, and Head of the Institute of Building Technology and Energy, Lucerne (Switzerland). Prof. Adrian Altenburger is Vice President of the Zurich-based SIA Swiss Society of Engineers and Architects and Deputy Chairman of the Winterthur-based SNV Swiss Association for Standardization (both Switzerland). He is a Member of the Board of Directors at the following Swiss companies: Jobst Willers Engineering AG (Rheinfelden), Energie Wasser Bern (ewb, Bern), BS2 AG (Schlieren) as well as Pasquale Baurealisation AG (Zurich). He graduated as an HVAC engineer HTL and holds a master's degree in architecture from ETH Zurich (MAS Arch. ETH). Prof. Adrian Altenburger's field of expertise lies in energy and building technology engineering.





Sandra Emme, Member

Sandra Emme (1972, Swiss and German citizen) was elected to the Board of Directors for the first time at the 2018 Annual General Meeting. She is a Member of the Remuneration Committee as well as the Nomination Committee (Lead).

Sandra Emme was co-founder of a start-up company in the IT sector, which she successfully sold in 2011. Since then she has been working in various positions for Google Switzerland GmbH, Zurich (Switzerland): From 2014 to June 2019 as Industry Head for Luxury and Finance in Global Business Development and since July 2019 as Industry Leader for Cloud Enterprise in Global Business Development. Sandra Emme is a lecturer for Leading Digital Business Transformation at the IMD Business School in Lausanne (Switzerland) and since May 2019 a Member of the Board of Directors of Metall Zug AG, Zug (Switzerland). She holds a Master of Arts in business and international management from the University of Applied Sciences Bremen (Germany). She completed part of her studies at the Ecole Supérieure de Commerce in Marseilles (France) and later completed an advanced degree in Leading Digital Business Transformation at the IMD Business School, Lausanne (Switzerland) / Singapore. Sandra Emme's fields of expertise are her know-how in digital transformation strategy, international business development as well as entrepreneurship.



Urban Linsi, Member

Urban Linsi (1974, Swiss citizen) was elected to the Board of Directors at the 2019 Annual General Meeting. He is a Member of the Nomination Committee.

Between 2009 and 2014 Urban Linsi worked for the architecture firm Linsi Delco, Uetikon am See (Switzerland) before joining Braune Roth AG, Ingenieurbüro für Akustik, Bauphysik und Lärmbekämpfung, Rorschacherberg (Switzerland), as a project manager. Urban Linsi completed an apprenticeship as a bricklayer and subsequently as a carpenter. Furthermore, he is a Technician TS-Holzbau and has completed various training programs in the field of energy and sustainable construction. He is also a Member of the Sustainable Construction Network Switzerland (NNBS). Urban Linsi is a Member of the Board of the U.W. Linsi Foundation as well as a Member of the anchor shareholder Group Linsi. As such, he acts as the representative of the Linsi family. His field of expertise lies in energy and building technology engineering.



Stefan Ranstrand, Member

Stefan Ranstrand (1960, Swiss and Swedish citizen) was elected to the Board of Directors at the 2020 Annual General Meeting. He is a Member of the Strategy Committee.

Stefan Ranstrand is President and CEO of Tomra Systems ASA, Asker (Norway), which specializes in recycling solutions. Prior to that, he worked in various executive positions for ABB Ltd. in China, Japan, Malaysia, Switzerland and the Czech Republic. He holds a Master of Science degree in Industrial and Management Engineering from the University of Technology Darmstadt (Germany) and Linköping University (Sweden). His field of expertise lies in leading a globally active and listed industrial company as well as his expertise in Asia Pacific.

Changes in the Board of Directors during the Reporting Period

At the Annual General Meeting in Hinwil (Switzerland) on March 30, 2020, the shareholders elected Stefan Ranstrand as a new Member of the Board of Directors (find out more at www.belimo.com/agm).



Minutes of the meetings are prepared and distributed to those who attended the meeting and to all Members of the Board of Directors. The members of the committees also report verbally to the next meeting of the Board of Directors regarding the matters discussed and submit, where necessary, the respective motions to the Board of Directors.

Audit Committee

The Audit Committee comprises at least two independent Members of the Board of Directors. Based on their education or their professional experience, all members of the committee have sufficient knowledge of finance and accounting.

The members for the 2020/2021 period of office are: Dr. Martin Zwyssig (Lead) and Patrick Burkhalter.

Duties:

- Evaluating the Annual Report, the annual and interim financial statements, the comprehensive audit report and the audit reports for the Belimo Group and BELIMO Holding AG, submitting motions to the Board of Directors
- Evaluating adherence to financial reporting standards within the Group
- Selecting the audit firm to be proposed to the Annual General Meeting as statutory auditors, submitting motions to the Board of Directors
- Approving the audit plans of the statutory auditors
- Evaluating the performance, independence and remuneration of the statutory auditors

- Periodically reviewing the guidelines issued regarding ad hoc announcements and the avoidance of insider offences
- Reviewing the internal control system
- Reviewing reports and updates from internal audit
- Periodically reviewing the structure of the risk management system
- Evaluating key tax issues

The Audit Committee held two meetings in 2020 with the CEO, CFO and internal and external auditors.

Remuneration Committee

The Remuneration Committee comprises at least two non-executive, independent Members of the Board of Directors. A member is considered independent if he or she has never, or at least not for the past three years, been a Member of the Group Executive Committee and has no, or only minimal, business relationship with the Company. The Members of the Remuneration Committee are elected individually by the Annual General Meeting for a term of office of one year until the next ordinary Annual General Meeting. The following members have been elected for the 2020/2021 period of office: Prof. Adrian Altenburger (Lead) and Sandra Emme.

Information on the duties of the Remuneration Committee are disclosed in the Remuneration Report on pages 20 to 25.

The Remuneration Committee held two meetings in 2020.

	Patrick Burkhalter, Chairman	Dr. Martin Zwyssig, Deputy Chairman	Prof. Adrian Altenburger	Sandra Emme	Urban Linsi	Stefan Ranstrand
Executive Experience	•	•	•	•		•
Finance, Audit, and Risk Management	•	•				
Compliance, Regulatory, and Legal	•	•				•
Capital Markets, M&A		•				•
Core Industry Experience (HVAC)			•		•	
Transferable Expertise in Related Industries	•	•		•		•
Functional Experience		•		•		•
International Business Experience		•	•	•		•
Digitization, Technology	•		•	•		
Strategy, Business Transformation	•	•		•		•
Human Resources, Compensation			•	•		
Board Governance	•	•		•		
Environmental, Social and Governance	•		•		•	•
Anchor Shareholder Representative				_	•	

Competence Matrix – Board of Directors

Nomination Committee

The Nomination Committee comprises at least two Members of the Board of Directors.

The members for the 2020/2021 period of office are: Sandra Emme (Lead), Dr. Martin Zwyssig and Urban Linsi.

Duties:

- Selecting suitable candidates for membership in the Board of Directors, submitting motions to the Board of Directors for proposal to the Annual General Meeting
- Selecting suitable candidates to fill positions on the Group Executive Committee

The Nomination Committee held six meetings in 2020.

Strategy Committee

The Strategy Committee comprises at least two Members of the Board of Directors.

The members for the 2020/2021 period of office are: Patrick Burkhalter (Lead), Prof. Adrian Altenburger and Stefan Ranstrand.

Duties:

- Assist the Board of Directors and the Executive Committee in providing insights and guidance relating to strategy matters.
- Facilitate the Board's review, discussion, and understanding of the Company's strategies and plans as developed by management.
- Advise on key questions of corporate strategy and support the strategic development of the Company.
- Assist the Executive Committee in developing and implementing the Company's strategies (e.g., Growth Strategy, Strategy Map, Strategic Initiatives, Functional Strategies, and Sales & Marketing Strategies).

The Strategy Committee held three meetings in 2020.

Regulation of Authority

The regulation of authority between the Board of Directors and the Group Executive Committee, which is headed by the CEO, is laid down in the organizational regulations (corporate schedule of responsibilities) of BELIMO Holding AG, in accordance with the articles of incorporation of BELIMO Holding AG. These describe the general duties and define who holds the decision-making authority for which transactions.

In addition to decisions regarding the tasks that are defined under article 716a of the Swiss Code of Obligations as being irrevocable and non-assignable, the Board of Directors also reserves the right to approve significant transactions relating to the implementation of strategy and important organizational, financial and staffing matters in the operational area.

Information and Control Instruments in Relation to the Group Executive Committee

The Board of Directors is integrated in the management information system of the Belimo Group at the appropriate level. At the end of each quarter, in addition to the monthly reporting, the Board of Directors receives commented, unaudited financial statements and key figures of the Group. Furthermore, forecast figures are distributed quarterly and at the end of the third quarter, the board receives the detailed projection for the current year as well as the budget of the following year.

During a strategy workshop with the Group Executive Committee in the first half-year, the board discusses the results of medium-term planning covering a period of five years as well as qualitative strategic targets.

The written reports are supplemented by verbal information from the CEO or CFO at every meeting of the Board of Directors. In special cases, the CEO informs the Board of Directors without delay regarding the matter in question. The Chairman of the Board of Directors maintains regular contact and discussions with the CEO and is kept up to date by him on all transactions and issues that are of fundamental importance or that have wider implications.

The Board of Directors is responsible for risk management, the Group Executive Committee for its operational implementation. A company-wide risk assessment is carried out annually, using a systematic risk management methodology. The assessment is based on group workshops and individual interviews and contains the phases risk identification and evaluation, causes and action analysis and implementation of the actions defined. The result of the risk assessment is discussed with and approved by the Board of Directors.

Group Executive Committee

Together with the other Members of the Group Executive Committee, the CEO manages the operations of the Group. He is responsible for drawing up, implementing and achieving the Group's corporate targets. The Group Executive Committee handles all transactions that are of significant importance to the Belimo Group.

The Group Executive Committee has the following main duties:

 Developing and implementing the overall strategy and the overall budget



Group Executive Committee



Lars van der Haegen, Chief Executive Officer

Lars van der Haegen (1968, Swiss citizen) was appointed CEO of the Belimo Group and Head of the Group Executive Committee in July 2015. Prior to that, he held various management positions at Belimo: Head of Product Management Air Volume Control Europe from 2000 to 2002, Head of Product Management and Marketing at Belimo Americas in Danbury (Connecticut, USA) from 2003 to 2006, Managing Director of Belimo Italy from 2007 to 2010 and Head of Americas and Member of the Group Executive Committee from 2011 to June 2015. In April 2020 he was elected to the Board of Directors of Schweiter Technologies, Steinhausen (Switzerland). Lars van der Haegen is a Building Technology Designer who holds master's degrees from both Columbia Business School in New York (USA) and London Business School (Great Britain).



Gary Economides, Head of Group Division Asia Pacific

Gary Economides (1970, Australian citizen) was appointed Head of Group Division Asia Pacific and Member of the Group Executive Committee in November 2012. Prior to that, he was a product manager at Staefa Control System in Sydney (Australia) from 1994 to 1997, served in various management roles at Siemens Building Technologies in Hong Kong (China) from 1998 to 2005, and was Managing Director of Carel Asia in Hong Kong (China) from 2005 to 2009, and CEO of Carel Electronic in Suzhou (China) from 2009 to 2012. He holds a bachelor's degree in mechanical engineering from the University of Technology Sydney (Australia) and an MBA from the University of New South Wales, Australian Graduate School of Management in Hong Kong (China).



Lukas Eigenmann, Head of Group Division Europe

Lukas Eigenmann (1961, Swiss citizen) was appointed Head of Group Division Europe and Member of the Group Executive Committee in July 2010. He joined the Company in 1984. From 1990 on, he held various management positions at Belimo Americas in Danbury (Connecticut, USA) until 1991 and in Vienna (Austria) from 1994 to 1996. From 2002 to 2010 he was Managing Director in Stuttgart (Germany). Lukas Eigenmann is an Electronics Technician TS.



James W. Furlong, Head of Group Division Americas

James W. Furlong (1960, American citizen) was appointed Head of Group Division Americas and Member of the Group Executive Committee in March 2016. Prior to that, he held managing positions with the building equipment provider York International from 1991 to 1999 and with Baltimore Aircoil Company from 1999 to 2008. From 2008 to 2016, he was Vice President of Industrial Refrigeration at Johnson Controls. He holds a bachelor's degree in chemical engineering from Manhattan College (New York, USA), an MBA from Loyola University (Maryland, USA) and is a licensed Professional Engineer in the State of Connecticut (USA).





Louis Scheidegger, Head of Group Division Production

Louis Scheidegger (1966, Swiss citizen) has been Head of the Group Division Production since 2008 and was appointed Member of the Group Executive Committee in March 2019. He joined Belimo in 1991 and studied electrical engineering at the Zurich University of Applied Sciences (ZHAW) in Winterthur (Switzerland). From 2001 to 2002 he attended the International Senior Management Program at the St. Gallen Business School (Switzerland) and from 2015 to 2016 the Asia Executive Certificate Program at the University of St. Gallen (Switzerland).



Dr. Markus Schürch, Chief Financial Officer

Dr. Markus Schürch (1971, Swiss citizen) was appointed Member of the Group Executive Committee in September 2018 and Head of Group Division Finance and Business Services as well as Chief Financial Officer in January 2019. Prior to that, he worked at Landis+Gyr in Zug (Switzerland) in various positions from 2004 to 2018. Most recently, he served as Senior Vice President & CFO for the EMEA (Europe, Middle East & Africa) region of the company from 2012 to 2018. Before joining Landis+Gyr, he was engaged as a consultant and project manager at McKinsey in Zurich (Switzerland) from 1999 to 2004. Dr. Markus Schürch holds a doctorate and a degree in chemical engineering from ETH Zurich (Switzerland), Dr. sc. tech. ETH.

Changes in the Group Executive Committee during the Reporting Period

Peter Schmidlin left the Group Executive Committee in March 2020 and took on the functional responsibility of an important long-term platform project within the Group Division Innovation as a new challenge.

Dr. Elena Cortona (1970, Swiss and Italian citizen) was appointed Chief Technology Officer (CTO), Member of the Group Executive Committee and Head of Group Division Innovation in October 2020, effective June 2021. She has been working for the Schindler Group, Ebikon (Switzerland), in various positions since 2001; currently as Senior Vice President, Head of Digital Transformation in the CTO Division. Since 2019, she has been serving on the Board of Interroll, Sant' Antonino (Switzerland). Dr. Elena Cortona graduated in Mechanical Engineering at the Polytechnic University of Turin (Italy) and the RWTH Aachen (Germany). From 1996 to 2000, she completed her PhD at the Institute of Energy Technology (IET) at the ETH Zurich (Switzerland) in Mechanical Engineering on the subject of engine thermomanagement for fuel consumption reduction.

More information on former Members of the Group Executive Committee can be found in our Annual Report 2019 available under the following link:

https://www.belimo.com/mam/corporate-communications/investor-relations/financial-reports/2020/ Annual_Report_2019.pdf

- Drawing up and implementing the structures and systems necessary for the management of the Group
- Making optimal use of Group resources
- Utilizing potential synergies present within the Group
- Promoting cooperation and communication within the Group
- Preparing motions that fall within the authority of the Board of Directors

Members of the Group Executive Committee

The Group Executive Committee comprised a total of six members as of December 31, 2020.

Further Activities and Relationships

Personal details and further activities and relationships of the individual Members of the Group Executive Committee are shown on pages 50 to 51.

Mandates

No Member of the Group Executive Committee may hold more than two additional mandates in the ultimate strategic management bodies or on the ultimate boards of listed companies which do not belong to the Belimo Group. The Board of Directors may allow a maximum of two exceptions per member in specific cases.

The acceptance of a maximum of four mandates in the ultimate strategic management bodies or on the ultimate boards of non-listed companies which do not belong to the Belimo Group is permissible for a Member of the Group Executive Committee as long as the Member of the Group Executive Committee is not impaired in exercising their obligations to the Belimo Group.

Management Contracts

There are no management contracts with companies or individuals outside the Belimo Group.

Remuneration, Participations and Loans

Details on the principles of the remuneration system, the granted remuneration, participations and loans to current and former Members of the Board of Directors and the Group Executive Committee are provided on pages 20 to 25 in the Remuneration Report and in the notes to the financial statements of BELIMO Holding AG on page 148 of this Annual Report.

Shareholders' Rights of Influence

Limitation of Voting Rights and Proxies

Each share entered in the share register at the date determined in advance by the Board of Directors entitles the holder to one vote at the Annual General Meeting.

Every shareholder may have his/her shares represented at the Annual General Meeting by a proxy appointed in writing or by the independent voter representative provided for by law. The proxy need not to be a shareholder. The independent voter representative is elected by the Annual General Meeting for the term of office of one year, including the subsequent Annual General Meeting. The Board of Directors may issue procedural rules for participation, representation and give instructions. Shareholders can issue their proxy and instructions to the independent voter representative electronically. The independent voter representative is obliged to exercise the voting rights that he/she represents as per the instructions. The general instruction to vote in accordance with the Board of Directors is deemed to be a valid instruction for exercising the right to vote.

See the provisions under the note regarding limitations on the transferability of shares and nominee registrations in this Corporate Governance section on page 43.

Quorum as per Articles of Incorporation

The Annual General Meeting resolves and elects with the absolute majority of votes cast, insofar as the law does not compulsorily specify otherwise. In the event of a tie, the Chairman of the meeting shall cast the deciding vote. If an absolute majority is not reached in a first election round, a relative majority shall be decisive in the second round. Resolutions based on article 704 of the Swiss Code of Obligations require at least two thirds of the votes represented and the absolute majority of the nominal values of the shares represented.

Convening the Annual General Meeting

The Annual General Meeting is convened in accordance with the Swiss Code of Obligations by being announced once in the Swiss Official Gazette of Commerce, and, for information purposes, by written invitation to the registered shareholders. The provisions do not contain any rules that are in violation of statute.

Including Items in the Agenda for the Annual General Meeting

Voting shareholders representing shares with a nominal value of at least CHF 10 000 may request the inclusion of an additional item in the agenda of the Annual General Meeting. Such requests shall be submitted in writing to the Chairman of the Board of Directors at latest 45 days prior to the Annual General Meeting.

Entry in the Share Register

For administrative reasons, the share register is closed for about ten days before an Annual General Meeting. The exact date will be determined by the Board of



Directors of BELIMO Holding AG and is published in the invitation to the Annual General Meeting.

Change in Control and Defensive Measures

Obligation to Make an Offer to Buy Shares

The articles of incorporation do not contain any provisions with respect to opting out or opting up.

Change of Control Clauses

Information on change of control clauses for Members of the Board of Directors and Group Executive Committee is on pages 20 to 25 of the Remuneration Report.

Statutory Auditors

Period of Appointment and Period of Office of the Auditor in Charge

KPMG AG, Räffelstrasse 28, Zurich (Switzerland) has been the Group auditor of the Belimo Group and the statutory auditor of BELIMO Holding AG since 2004. The statutory auditors are elected by the Annual General Meeting for one financial year. The auditor in charge since 2019 is Reto Benz. In compliance with the term of office regulations stipulated by the Swiss Code of Obligations, a new lead auditor will be in charge for the 2026 financial year at the latest.

Audit Fee

KPMG invoiced a total of CHF 0.4 million to the Belimo Group in 2020 for services related to the audit of the financial statements of BELIMO Holding AG, the Group and the Group companies audited by it.

Additional Fees

No additional fees were paid to KPMG for other services such as consulting and tax advice.

Sources of Information for the External Audit

Each year, at least one Audit Committee meeting takes place at which the annual financial statements are discussed in addition to other matters. The comprehen-

Agenda and Events

sive audit report from the statutory auditors forms the basis for the discussion of the audit proceedings and the annual financial statements. Two meetings took place in the year under review. In each case, the statutory auditors supplied the participants with written points for discussion beforehand.

Information Policy

Principles

BELIMO Holding AG and the Belimo Group pursue an open, active, and transparent information policy. The priority is that all stakeholders – shareholders and analysts, customers, employees, suppliers, municipalities, and authorities – have an equal information basis and, therefore, an identical decision-making basis to interact with the Company.

Contacts

The Group CFO and the Investor Relations Officer (IRO) are the designated contact persons for the capital market (shareholders, portfolio managers and analysts). They regularly attend investor meetings, calls, conferences, and roadshows.

BELIMO Holding AG

Dr. Markus Schürch, CFO / Gérard Moinat, IRO Brunnenbachstrasse 1, 8340 Hinwil (Switzerland) Phone +41 43 843 63 80 E-mail ir@belimo.ch

Publications / Reporting Cycle

Each year, a Summary Annual Report, an Annual Report including a Remuneration Report, and a Semiannual Report are published and available at:

www.belimo.com/financial-reports

Subscriptions

Interested parties are invited to add their names to a mailing list to receive the latest news and ad hoc announcements of Belimo at:

www.belimo.com/press-releases



Additional information regarding the Company calendar is available at:

 www.belimo.com/financial-calendar

Customer Value

Customer Engagement and Support

Engaging with Our Customers

Superior customer support is essential for any company seeking to achieve and sustain a leading position in the HVAC industry.

With its mission to be the global leader in actuators, valves, and sensors, Belimo has customer support ingrained in its corporate culture. Excellent support has become a competitive advantage of Belimo as it improves the ease of doing business and establishes long-lasting customer relations and loyalty.

High-class customer support at Belimo is also a way of demonstrating that this is "the way we feel people should be treated." As Belimo regularly introduces new technologies, the Company offers to assist clients in overcoming initial reservations and helping to accelerate market acceptance of new solutions.

Crucial Consistency

All departments at Belimo that work directly with customers are responsible for managing Customer Engagement and Support. Among others, these include sales, customer service, technical support, field support, product management, credit, and collections. The three region Heads (Members of the Executive Committee) with direct regional access to customers are ultimately responsible for customer satisfaction. By maintaining a highly qualified sales force of more than 300 sales engineers, Belimo ensures every customer receives expert advice in her or his local language.

The consistency of customer engagement activities is crucial for the brand. Belimo, therefore, relies on well-documented internal policies and procedures to ensure employees are aware of their responsibilities as well as upstream and downstream value creation processes. A state-of-the-art CRM solution (Customer Relationship Management) was evaluated in the interest of continuously improving our sales efficiency and enabling best practice exchange and will be implemented for three pilot countries in 2021. The rollout will be completed globally in 2022, thus making our customer interactions become even more focused on individual needs.

A global Belimo customer journey serves as a reference for the worldwide web, e-commerce, and social media presence of Belimo. In 2020, all country specific Belimo websites have been upgraded and harmonized to this new standard. Belimo customers are encouraged to use locally available support channels, be it via phone, website or new media.

Customer Issue Tracking System

Belimo reviews its management of Customer Engagement and Support by conducting surveys and tracking material returns. To further advance such topics, Belimo has implemented a customer issue tracking system, allowing the Company to assess its effectiveness in resolving customer issues.

In the event of a product complaint, Belimo applies a structured process to resolve the issue quickly. Once the product complaint is closed, a systematic phone survey is conducted. A Belimo quality manager calls each customer to gather feedback, to measure our performance, and to ensure that the case has been entirely resolved. In 2020, 100 percent (previous year 100 percent) of customers have been fairly/very satisfied with the frequency of the communication, as well as with the attitude of Belimo managers in the course of the process.

Also in 2020, 96 percent (previous year 97 percent) are happy with overall complaint handling, which Belimo sees as a reliable indicator of the effectiveness of its approach.



Belimo Stands for Consulting

Unlike other awards in the HVAC industry, the Confidence Award of the German trade magazine CCI not only focuses on technology, but above all on the quality of consulting, service and ultimately the trust that customers place in "their" manufacturers. Various manufacturers and suppliers of products and systems in the ventilation, air-conditioning, and refrigeration industry were evaluated. After Belimo was awarded first place in the category of measurement, control and regulation components in 2017, it is a further confirmation of our work that we are also the winner in 2020. "We are more than happy and of course also a little proud to receive such positive feedback again in the form of the CCI trust award," says **Jürgen Metzler, General Manager of BELIMO Stellantriebe Vertriebs GmbH** (see photo). "We would like to thank all of our customers for their trust. We see this award as further inspiration to innovate and to develop energy-efficient products and continue to offer our customers the best service."

Our exceptional support and service performance was also recognized in the United States. Belimo was named "Best Technical Support Company for the Large Manufacturer" by ControlTrends. This award reaffirms our commitment to helping our customers choose the right products and providing advice on how to get the most out of their system. These two awards confirm that Belimo remains true to itself and that the first two letters of our name are still very much alive, which have stood for "Beraten" (consulting) for 45 years.



High-Performance Solutions for Energy Efficiency and Indoor Air Quality

Quantifying Our Impact

"Small Devices, Big Impact" is our promise. But how much impact do Belimo products really have on energy saving in the field?

The HVAC control system, in which Belimo field devices are integrated, is designed to control comfort parameters (temperature, humidity, CO₂ level) of the indoor environment. To achieve comfort in buildings and rooms, these systems consume energy. This is why Belimo products are designed to operate the HVAC processes in the most energy-efficient manner possible. To quantify the positive energy leverage, Belimo has established a model that assesses the impact of its field devices over their lifecycle in a typical HVAC system (for more information, please refer to our website on <u>bit.ly/2HDFyEJ</u>). The energy-impact model is structured along with six lifecycle steps:

1. Resources

The model takes account of "gray" energy-content included in materials used to build a typical field device (steel, copper, aluminum, plastics, electronics, and cardboard).

3.65 kg CO2e per air-side actuator / 6.04 kg CO2e per water valve and actuator (in one lifecycle): To keep utilized resources at the lowest possible level, environmental responsibility begins with product design. Local sourcing, weight, and material reduction, etc. lower this factor.

2. Manufacturing

Also taken into account in our model is the energy needed to manufacture the field devices, to assemble and to test them.

1.05 kg CO₂e per air-side actuator / 2.46 kg CO₂e per water valve and actuator (in one lifecycle): Ongoing

optimization of current products leads to considerable material and energy savings during manufacturing.

3. Distribution

The model also considers the average amount of transportation energy needed to deliver a Belimo field device to the customer. Assumptions are made on the transportation paths commonly used.

0.11 kg CO₂e per air-side actuator / 0.23 kg CO₂e per water valve and actuator (in one lifecycle): Optimal shipping coordination results in low carbon emissions, as only a minority of field devices is shipped by air freight.

4. Operation

Subsequently, the energy of a Belimo field device used during operation is calculated, taking into account the energy used in standby mode and when actuating.

46.99 kg CO₂e per air-side actuator / 26.86 kg CO₂e per water valve and actuator (in one lifecycle): In our model, a conservative service life of 15 years is assumed, while actual lifetimes are often 20 years and more (find out more about how Belimo reduced operation energy up to 70 percent compared to competitors on page 58).

5. Energy Saving

The European standard EN 15232-2017 "Energy performance of buildings – Impact of Building Automation, Control, and Building Management" (BACS) is used to calculate energy savings realized in applications. This standard provides average savings when using BACS and controls devices of different efficiency classes, ranging from A (55 percent energy savings) to D (no energy savings). We assume our devices are used in different percentages in each class, totaling weighted savings of 44 percent.

Even though typical HVAC systems operate much the same across the world, significant variations arise due to differences in climate zones and power generation.



CO2 Impact of a Belimo Field Device

Weighted average impact of an air-side and water-side actuator in kg of CO2e



With 5.0 million new air-side actuators and 1.9 million valves and actuators shipped in 2020, Belimo helps prevent 7.3 million tons of CO₂e over the entire lifecycle of its products.

Annual energy savings are therefore calculated based on the consumption of a typical HVAC system that operates with a global average heating and cooling load profile and a typical electrical power consumption.

-1103.25 kg CO₂e per air-side actuator as well as water valve and actuator combination (in one lifecycle): This significant saving is possible thanks to the smart control of heating, cooling, and ventilation loads to which Belimo devices have a major contribution.

6. Recycling

Belimo strives to minimize waste generated at the end of life of its products. This often coincides with the end of life of a HVAC-system and is difficult to manage and track.

-0.27 kg CO₂e per air-side actuator / -0.62 kg CO₂e per water valve and actuator (in one lifecycle): Energy can be recovered by adequately recycling the units. The energy-saving impact (step 5) of a Belimo valve and actuator is 21 (air-side) to 32 (water-side) times higher than the effect from all input factors, with a weighted average of 24. This results in a net CO_2 prevention impact of 1 068.28 kg CO_2e per valve and actuator over a 15-year lifecycle. For air-side actuators, this value is 1 051.71 kg CO_2e per device. With 5.0 million new airside actuators and 1.9 million valves and actuators shipped in 2020, these devices will help prevent 7.3 million tons of CO_2e over their coming lifecycle. This corresponds to the negative emission of a medium-class car touring 560 000 times around the world.

Click here to view the documentation and a review of the model or go to bit.ly/2HDFyEJ

Deep Dive: Operations

If All Zone Valves Were Belimo ZoneTight[™] Valves

While a zone valve actuator of poor quality (right) must be heated to 41.5 °C (107 °F) to keep the valve open, the Belimo CQ actuator (left) operates with minimal power and therefore remains near ambient temperature (22.6 °C / 73 °F).

To achieve minimum power consumption during operation (step 4 of our impact model, see previous pages), Belimo has developed a method for controlling the hydronic circuit in a zone.

For decades, hydronic heating and cooling applications in rooms of commercial buildings were controlled manually. Later, when thermostatic valves or electronic controllers were introduced, low-cost short-stroke valves and wax-type actuators became the dominant technology.

With a relatively small investment, a decent level of comfort could be

achieved with these actuators. The downside of wax-type actuators, however, is the relatively high electrical power consumption needed to open the valve. An electrical resistor must heat up the wax to make it expand and, in order to hold the valve open, the wax must be heated all the time. A major disadvantage of the shortstroke valve is that it is prone to clogging with debris, making the control of water flow impossible and causing poor room comfort and wasted energy. For manually "regulated" valves, this is even worse.

Once a valve is clogged, it no longer adjusts to changing room temperatures. As a result, rooms are heated or cooled even when empty or there is no heating or cooling demand. Moreover, once the temperature is set, it stays as is, and people often adjust the temperature by opening a window. This wastes tremendous amounts of energy.

22.6C

Especially in Asia and the Americas, another valve technology using so-called paddle valves has been very popular in zone applications. The valves function using a rubber paddle attached to a mechanical spring that is operated by a motor, working against the water flow in the valve. Depending on the pressure applied against the paddle, the valve is more or less tight. Also, to keep the valve in an open position, the electric motor must continuously work against the spring load and the water pressure. This results in a considerably





higher power consumption during operation compared to the best-performing zone valves.

"Ghost Energy" – A Widespread Phenomenon

Short-stroke valves and paddle valves suffer from another wellknown weakness: They supply zones with so-called "ghost energy." As both technologies are unable to close the valve tightly, small amounts of hot or chilled water escape to the heat exchanger and correspondingly heat or cool the room even when there is no demand. In spring, for example, on days with no heating demand, the "ghost energy" phenomenon can be observed by touching radiators or the heat exchanger of a fan coil. They are warm and waste space heating energy for no reason.

Belimo Valve Technology in the Zone

To control a heat exchanger with a designated flow, Belimo decided in 1999 to enhance proven ball valve technology and improve control by adding a characterized disc to the valve. The newly developed Characterized Control Valve[™] (CCV) offered significant advantages. The flow characteristics of the CCV made it easy for system integrators to control the heat exchanger's power output and to do so at a much higher control resolution than short-stroke valves.

The CCV demonstrated zero leakage when closed and thanks to its self-cleaning function, clogging was eliminated. Due to the obvious advantages of CCV technology compared to current valve technologies, Belimo introduced a dedicated new product range of CCVs for zones in 2015 – the Belimo Zone-Tight[™] product range. This product

Small Devices – Big Impact

An energy simulation comparing the Belimo ZoneTight™ valves to short-stroke / paddle valves calculated energy savings from a) lower operation energy from Belimo motor technology and b) lower thermal energy and pumping energy use from tighter valves (see table below). The simulation shows annual savings of 4.12 / 13.94 kg CO2e. An estimated 55 million zone valves are currently installed around the world. If all of these valves were Belimo ZoneTight™ valves, 440 000 tons of CO₂ emissions could be prevented every year, corresponding to negative emissions of a medium-class car touring almost 35 000 times around the world. Small devices, big impact.

range became an instant success in the market and has seen rapid growth in sales in recent years.

Energy-Saving Actuator

The new actuator series (CQ) of Belimo ZoneTight[™] set new standards in zone applications with regard to control performance and energy savings. Instead of relying on a thermal, wax-type actuator that keeps the valve open or closed

Comparison of the Energy Savings of a Belimo ZoneTight™ Valve-Actuator Combination

Compared valve type	Annual savings thanks to optimized Belimo motor technology (lower operation energy)	Annual savings thanks to tighter valve (lower thermal and pumping energy)	Total annual savings per Belimo ZoneTight™ control valve
Short-stroke valve	2.77 kg CO₂e	1.35 kg CO₂e	4.12 kg CO₂e
Paddle-type valve	13.28 kg CO₂e	0.66 kg CO ₂ e	13.94 kg CO ₂ e





valve-actuator combination

by heating up the actuator to temperatures of more than 40 °C (104 °F), the extremely compact CQ actuator from Belimo uses more than five times less electrical energy than a comparable thermal short-stroke actuator. Actuation of the motor actuator from Belimo is also much faster and the valve can be adjusted to any position in just 75 seconds.

Being independent of ambient temperature, the Belimo control valve assembly offers a further advantage compared to wax-type actuators. When a wax-type thermal actuator is exposed to direct sunlight or a high ambient temperature, the valve can no longer be reliably closed, resulting in continuous leakage and thus unwanted energy waste.

The photo on pages 58 and 59 depicts a wax-type actuator opening a short-stroke valve with an approx. temperature of 41.5 °C (107 °F). As the valve permanently works against the force of the spring, this actuator requires around 2.5 Watts of electrical power. In contrast, the Belimo Zone-Tight[™] actuator (see photo above)

only requires 0.4 Watts in actuation mode and just 0.3 Watts in the holding state. This results in overall savings of approximately 70 percent in operation energy compared to wax-type actuators. Bearing in mind that a typical commercial building often has 1000 zone valves installed, this represents a substantial impact.

Driving with a Foot on the Brake

The actuator's much lower power consumption in the holding state is the result of an invention from Belimo. To maintain its holding force in a de-energized state, preventing the actuator from opening or closing when counter pressure is applied, previous actuator designs required an inhibitor spring in the gear. This made the gear stiffer through friction. A major disadvantage of this principle, however, was the modulating friction it created, resulting in detrimental, cumulative energy consumption. In other words, the actuator was operating with a foot on the brake.

Our answer was a simple but clever solution: A patented detent torque

plate that extends the brushless electric motor. Thanks to the unique geometry of the additional plate between the motor coils and rotating magnets, an induction field is generated when the actuator stops, thus blocking the motor.

Belimo went a step further with its Belimo ZoneTight[™] product range and added a mechanical pressure-compensation function to its zone valves. A significant advantage of the pressure-independent valves is that the flow going out of the valves is stable even as the water pressure varies. This ensures maximum occupant comfort as the power output of the coil remains stable. Using an electronic pressure-independent valve such as the Belimo EPIV or Belimo Energy Valve[™] offers even more energy savings in the building's HVAC system. The building management system can identify the exact position of the actuator controlling the valve as well as the effective flow going through the valve.

With this information, an algorithm can ensure that the valves are opened as much as possible while the pump speed is reduced to a minimum. The result: Improved room comfort while ensuring substantial savings in electrical pumping energy.

Click here to view the documentation of the model or go to: bit.ly/2HDFyEJ

How We Maintain Leadership with Our Solutions

Energy Efficiency and Indoor Air Quality

Optimizing the energy use of buildings offers enormous energy savings potential, as buildings are responsible for some 40 percent of worldwide energy consumption and climate-damaging CO2 emissions. HVAC systems account for 40 percent of all energy used in buildings. As the European Norm, EN15232 states, smart building automation and controls systems have a significant impact on the energy efficiency of HVAC-systems. They save between 30 and 55 percent of energy in comparison with systems without controls.

Belimo also makes an essential contribution to better comfort and indoor air quality (IAQ) in buildings. Its sensors reliably measure the temperature, relative humidity, and CO₂ content of the air in rooms and its actuators control the flow of fresh air into a room. Perfectly synchronizing sensors and actuators in ventilation systems is a specialty of Belimo, which creates an ideal balance between sufficient fresh air and high energy-efficiency.

Focusing on the Right Products

Belimo employees show fantastic creativity when it comes to new ideas for higher energy efficiency or better IAQ. Through a regional idea collection process, dozens of new product ideas are brought to the Markets & Innovation (M&I) Committee every year. This body, consisting of members of the three sales regions, product management, and the Group Divisions Innovation and Strategy, carefully evaluates and prioritizes the ideas. The degree of additional CESIM®-value generated for customers is a critical factor in their selection process.

Ultimately, the M&I Committee defines as well as updates the roadmap and decides which project will be released for development next. During product development, the customer-centric method CESIM® assures the project team never loses sight of the primary purpose and customer benefit of a product.

Tracking of Strategic Products

A fundamental approach of Belimo to maintain leadership is by training customers as well as building owners/operators. The Company also conducts internal training, as employees need to understand the superior energy efficiency and IAQ Belimo products provide.

Belimo maintains a fully transparent, SAP-based controlling system that tracks the sales and margin development of existing products. Also, "strategic products" reporting has been established, which tracks sales development of selected strategic, high-performance products on a monthly basis. A special report is made available to all managers at headquarters and in the sales regions that represents a frequently used instrument in management reviews.

- Watch the video to learn about the product features and benefits of the Belimo ZoneTight[™] zone valve. <u>bit.ly/37ulcpB</u>
- Watch the video that compares different types of control valves and their reaction behavior when opening and closing, leakage as well as power consumption. <u>bit.ly/37vtBKo</u>



UN Sustainable Development Goals Approach Buildings and their HVAC

Buildings and their HVAC systems play a critical

role in the doubling of the global rate of improvement in energy efficiency stipulated by SDG target 7.3. An estimated 30 percent of all energy used in buildings is lost due to insufficiently controlled systems. By providing smart HVAC-controls, Belimo makes an active contribution to SDG 7 "Ensure access to affordable, reliable, sustainable, and modern energy for all."



UN Sustainable Development Goals Approach

Buildings are responsible for 40 percent of worldwide energy consumption and climate change, causing CO₂ emissions.

Through their application, Belimo products save energy in HVAC systems in buildings, thereby creating measurable sustainability benefits and significantly contributing to SDG 13 "Climate Action."

Customer Story: Ludmillenstift Hospital



Years of expansion at the Ludmillenstift Hospital resulted in an HVAC system that just could not cope. The introduction of Belimo Energy Valves[™] significantly reduced the water flow rate of the heating network, resulting in smart, transparent, and energy-efficient load-dependent heating and cooling systems while improving comfort and keeping energy consumption stable.

The Ludmillenstift Hospital is located in the city of Meppen in Lower Saxony (Germany). This large multi-discipline hospital forms the main pillar of a comprehensive health network and can boast more than 160 years of providing healthcare to the Emsland region. It prides itself on exceptional levels of care for its patients, backed by modern infrastructure and stateof-the-art medical technology, including advanced diagnostic and therapeutic expertise and other specialized services.

Cold Rooms and Bold Attempts

Technology also plays a crucial role in ensuring the functionality, comfort, safety and efficiency of the buildings that make up the hospital's infrastructure. However, patient demand and specialist facilities have grown beyond capacity over the years, and repeated expansion and renovation programs have resulted in major challenges related to controlling and maintaining the hydronic distribution system.

Maintaining a well-balanced HVAC system can be challenging in multiple-building complexes like hospitals. This was certainly the case when the situation came to a head, with many complaints from staff about cold rooms and zones in the winter months. The facilities management team at the Ludmillenstift was aware that certain parts of the site were regularly undersupplied with adequate hot water and recognized that the heating system's hydronics was struggling to manage and monitor comfort levels.

The team made bold attempts to improve the situation by dramati-



Facts and Figures about Ludmillenstift Hospital



Opened: 1851

Location: Meppen (Germany)





cally raising the boiler temperature, with all pumps set to full load. However, this met with very limited success; the complaints continued and the excessive pumping and generation of additional steam energy led to a huge increase in cost, which heavily stretched the hospital's budget. At this point, the Ludmillenstift decided to call in experts – in the form of the company G.U.T. August Brötje KG – to find out the root cause of the issue and decide on an adequate solution.

Oscillating Heat Supply

The engineers from August Brötje KG looked over pre-existing system drawings of the heating supply and decided that only a central balancing of the sub-manifolds would solve the hydronics problems. They then carried out an extensive survey of the building's HVAC system, which disclosed various weaknesses and bottlenecks. For example, the temperatures measured at the hydronic switch

About the Belimo Energy Valve™



The Belimo Energy Valve[™] is an IoT cloud-connected, pressure-independent valve that monitors coil performance and energy consumption while maintaining high delta T. It also has an exclusive glycol monitoring feature, providing accurate, repeatable flow measurement, and ensuring that the glycol concentration meets design requirements.

The patented Power Control and Delta T Manager™ built-in logic software enables power monitoring and control and optimizes the energy supplied to the coil by maintaining the designated delta T. In addition to the analog control and feedback signal, the Energy Valve[™] communicates data to Building Management Systems (BMS) via BACnet MS/TP or BACnet IP, as well as Modbus RTU and Modbus TCP/IP.

The integral webserver enables clear visualization of the valves' operation in real time. Performance data is stored remotely on the Belimo Energy Valve™ for 13 months and cloud data provides lifetime data access.

The functionality of the Belimo Energy Valve[™] precisely matched what Peter Meier was looking for to address both the current and future challenges of controlling the hospital's hydronics system. He particularly liked the performance reporting of current and historical data – such as flow rates and energy usage – as well as BACnet IP communication between each Belimo Energy Valve[™], the August Brötje KG on-site control and regulation technology, and the hospital's building management system. were 90/86 °C (194/187 °F), and the heat supply of the individual sub stations was oscillating, which made the heat supply come and go randomly. The lack of hot water reaching the heating coils also repeatedly triggered the frost protection system to shut down the ventilation system in winter, which was especially problematic in the operating theatres. Overall, the heating supply simply had not been modernized at the same rate as the rest of the hospital.

To address the enormously high boiler flow and system return temperatures throughout the year, Peter Meier, the controls expert from August Brötje KG, had to define the long-term scope of the improvement project, which included the following specifications:

- All heating manifolds should be adjusted to their nominal flow volume to ensure that only the exact amount of water needed for hydronic balancing is supplied;
- The currently required thermal energy should be recorded and quantified at the respective distribution feeds;
- The system's return temperature should be reduced to improve the energy conversion efficiency of heat recovery towards the boiler (and prepare for the later planned use of a combined heat and power unit);
- The flow volume through the entire facility should be loaddependent to make sure that the



Illustration of the Situation at Ludmillenstift Hospital



Belimo Annual Report 2020



system can be operated efficiently, and that the maximum amount of water is not permanently pumped through the buildings.

Innovation to the Rescue

Belimo had already introduced Peter Meier to its latest innovation - the Belimo Energy Valve[™] and this seemed the ideal solution for the Ludmillenstift Hospital site.

This electronic, characterized control valve combines pressureindependent control, flow and energy measurement, automatic hydronics balancing and data monitoring, all in one device. By continuously measuring water flow and temperature of the supply and return (delta T), the Belimo Energy Valve[™] determines the thermal energy being consumed. The automatic flow control function then makes sure that only the required amount of energy is supplied, regardless of any differential pressure fluctuations.

Cautious Start – Instant Results

The first installation was chosen at manifold 1, which supplied a ward block, a residential building for staff, and a hotel for patients' families. A total of eight Belimo Energy Valves[™] were installed in several zones and linked to the hospital's existing Building Management System (BMS) via the BACnet/IP interface. A test phase was first carried out in a transparent manner to identify and mitigate any potential risks before they became problems, which led to a win-win situation for all parties. "It was astonishing to see how the true flow rates of the heating supply became visible in the BMS for the first time. Together with the facilities management team at the Ludmillenstift, we were able to identify the weak points in the hydronics system and take appropriate countermeasures."

Peter Meier, controls expert from August Brötje KG

The Belimo Energy Valves[™] were put to the test from February to March and proved a complete success in the prevailing weather conditions of temperatures as low as – 12 °C (10 °F). They dynamically controlled and monitored all hydronic manifold circuits by continuously measuring the flow and water temperatures, from the very first moment they were commissioned – problems with the heating supply had finally been localized and solved. From then on, all rooms and zones connected

66



History of Belimo Energy Valves™at Ludmillenstift





to manifold circuit 1 were supplied with precisely the right volume and correct flow of water actually needed for heating purposes, which considerably reduced the amount of water the hospital had to supply. The data the Belimo Energy Valves™ measured and recorded also provided an in-depth view of what was really happening in the system, leading to recommendations for further potential improvements for energy efficiency.

Next Steps for More Savings

The energy reports automatically generated from the Belimo Energy Valves[™] are much appreciated by the Ludmillenstift because they provide a transparent view of the flow, temperature and overall coil performance. As an additional benefit, the hospital now uses the data from the hot water preparation for regulatory reporting to the health authority. "Now the heat and cold generated is distributed sensibly and according to demand. In the heating circuit, for example, we have now been able to reduce the supply temperature to below 70 °C (158 °F), which saves a lot of money."

Matthias Jungedeitering, facility manager at Ludmillenstift

The Belimo Energy Valves[™] provided performance data that led to additional measures, including the following improvements:

- The feeder pump of ward block B (Bettenhaus B) became obsolete and was removed;
- The two feeder lines of the medical center had already become obsolete and were removed;
- The hot water preparation in section E was reduced from 2 200 liters (581 gallons) to supply 700 liters (185 gallons);
- The hot water preparation for the Konvikt compound was reduced from 1 100 liters (291 gallons) to supply 350 liters (92 gallons).



The Ludmillenstift Hospital maintained comfort and energy consumption in 2020 at 2013/2014-levels despite having expanded floor space by 40 percent in the meantime.



The successful completion, informative results and data transparency of the test phase showed that the Belimo Energy Valves™ would be a perfect fit for the complete HVAC system in the hospital, including other application areas where thermal energy and volumetric flow had to be monitored and recorded.

Keeping Warm

On the heating side, the Ludmillenstift implemented further modernization projects, renovating manifolds 2 and 3 in the same way as manifold 1. The system operates at a seasonally dependent flow temperature of between 72 and 75 °C (162 and 167 °F), to supply the main heating and ventilation system, as well as 17 other hot water heating systems. The return temperature of the heating systems is set to 48 °C (118 °F) in winter and 60°C (140°F) in summer; the higher temperature in summer is due to the hot water preparation. As a result, all hydronic adjustments of the heating system were made in preparation to initiate the planning and integration of the cogeneration unit (BHKW) with 8 551 operating hours per annum into the network.

Staying Cool

The renewal of the HVAC system continued with the cooling system. All chillers are now connected to form a common system, enabling load-dependent cooling and making optimal use of available capacity by transporting excess cooling energy to other buildings. The Belimo Energy Valves[™] use the monitored flow and temperature data to reliably control the flow volumes and cooling demand of the entire network. For example, when external temperatures are below 12 °C (54 °F) and the cooling circuit used for ventilation does not require any cooling capacity, the Belimo Energy Valves[™] stay closed and the water is pumped to another area that has a cooling demand. The Belimo Energy Valves[™] are also used in the cooling systems of large medical equipment such as MRI and CT systems, where they monitor and record the flow volume for reporting purposes.

Partnership for Energy Efficiency

Today, the HVAC system at the Ludmillenstift Hospital reliably supplies the entire site with the right amount of cooling and heating all year round, in an energyefficient way. Between February 2013 to February 2014, the hospital used approximately one million kWh (1 GWh) less input energy in the form of natural gas than in previous years - equivalent to 202 tons of CO2. The technological advances of the Belimo Energy Valve[™] have allowed the Ludmillenstift to maintain comfort and energy consumption at the same levels in 2020 as it achieved between February 2013 and February 2014, despite the site expanding by 40 percent. At the same time, the data from the Belimo Energy Valves™ gives the facilities management team total transparency, allowing them to analyze potential problems far more easily and solve glitches independently, keep running costs low, and make easier, sound decisions on further investment into the system.

"Our work is easier now. If a problem occurs somewhere in a building, we can see straightaway on the BMS what is going on and react accordingly, even if we are on call and working from home. And now, when any expansions or new buildings are planned, we can provide concrete information as to whether, for example, additional cold or heat generators are required, or whether our existing resources are sufficient."

Matthias Jungedeitering, facility manager at Ludmillenstift

Expertise, partnership and smart valve control has once again proven to be a winning combination for reaching new heights of energy efficiency and savings.

"We have collaborated many times with August Brötje KG and recently our work with them at the Ludmillenstift was recognized as best practice. It is now being used as a blueprint for how to deliver similar projects in the future."

Matthias Jungedeitering, facility manager at Ludmillenstift



UN Sustainable Development Goals Approach

Belimo contributes to SDG 3 "Good Health and

Well-Being" by ensuring optimum indoor air quality and well-being in rooms, which is especially important during the ongoing COVID-19 pandemic. Its intelligent HVAC components control the major factors affecting room climate: temperature, humidity, air flow, and indoor air quality (the concentration of CO2 and Volatile Organic Compounds - VOCs). Dry air plays an important role in the spread of microbes, including viruses. High-performance HVAC systems and proper humidification strategies are required to maintain stable and healthy indoor air quality. Tight control of each and everyone of these factors also enables critical processes such as required in surgery rooms in hospitals, data centers, etc.



Leading by Example

In 2020, the Belimo Americas headquarters in Danbury installed a 876 kWp photovoltaic rooftop system, one of the largest such installations in the state of Connecticut (USA). This system is a natural renewable energy source that powers part of our Danbury facility and lowers our impact on the environment.

Belimo strives to be environmentally friendly, from the products we offer to the way we operate our facilities. Overall, Belimo has installed solar power capacities of almost 1 MWp or more than 520 Watts per employee.
Solution Leadership

Solution Leadership

Delivering the Best Solutions

We strive for market and technological leadership and invest in innovation, so we can surprise the market with unique solutions.

Belimo is continuously working on delivering highly engineered solutions with added value. Our full attention is focused on heating, ventilation and air-conditioning applications. We largely refrain from investing in material assets and instead concentrate on developing our employees, products, markets and quality standards. We diversify in depth, rather than breadth. We see innovation as one of the most important factors for longterm success. Challenges of our customers and new technology trends inspire us to develop groundbreaking solutions. As part of our customer-centric method CESIM[®], the various customer segments and partners become involved in the development process at an early stage. This allows us, together with our stakeholders, to find and verify innovative approaches and ideas.



Research & Development Costs

Balancing Customer Needs / Standardization

Farsighted investment into research and development (R&D) to maintain innovation leadership is one of the main success factors of solution leadership (see graph on the left bottom). The Group division Innovation is responsible for and ultimately drives the development of better solutions, while the regional Group divisions operate the training facilities. All major Belimo sites with innovation capabilities are certified according to ISO 9001 and ISO 14001 (Danbury, Hinwil, and Shanghai). However, balancing customer needs and the standardization of the product range constitutes a constant trade-off for the Company. Modularization of the product range is an ongoing effort that allows for more flexibility to expand it while reducing complexity at the same time.

Gauging R&D Success

The main KPI for gauging the success of solution leadership is the investment in R&D as a percentage of net sales. This percentage has been maintained constantly seven percent and above over the last five years. Belimo also tracks the success of managing its better solution design by comparing R&D investments in different segments to changes in sales or market share of the corresponding segments. Other measures are the overall strategic development of the product range as well as the number of quality cases and associated costs. Belimo also runs several experience centers in Hinwil (Switzerland), Danbury (Connecticut, USA), Shanghai and Hong Kong (China), which allow to present new products to our customers and train them in their use. They are being upgraded step by step and further experience centers are planned.



UN Sustainable Development Goals Approach

Concerning SDG 9 "Industry, Innovation and Infrastructure," Belimo sets standards in HVAC actuator, control valve, and sensor technology.

While the majority of control devices of Belimo drive energy efficiency of buildings, its fire and smoke actuators contribute to their resilience.

Story: Indoor Air Quality and Health

Sensing a Building's Health

Most people spend 90 percent of their time indoors and breathe 12 000 liters (3170 gallons) of air per day. With its sensors and actuators, Belimo contributes to better and healthier indoor air and addresses some of the challenges in the wake of COVID-19. While the effects of volatile organic compounds (VOC) on humans have been discussed within the context of "sick building syndrome," the role that dry air plays in spreading microbes, including viruses, is often neglected. Viruses can spread through small droplets of water. The lower the air humidity, the quicker small droplets may evaporate and turn into aerosols, which enables them to travel great distances. Viruses in small droplets and aerosols can travel through large open indoor spaces such as offices and survive for several hours, thereby infecting more people.

The "Sweet Spot" in Humidity

Furthermore, many bacteria and viruses become much more infectious when exposed to dry air. In temperate climate zones, air humidity indoors often drops to a relative humidity of less than



40 percent during colder months. However, the "sweet spot" for indoor air humidity is 40 to 60 percent, as this dramatically reduces the risk of disease transmission and enables the body to better repair and protect itself. Therefore, proper humidification strategies and the permanent measurement of the relative humidity level in the different zones are essential for maintaining stable and healthy indoor air quality in buildings. VOCs are organic chemicals, such as Formaldehyde and Benzene, which originate from many different sources like perfumes, paint, carpets, building materials, and smoke. They are a significant contributor to "sick building syndrome" – a condition caused by staying in a building – and impact the wellbeing of users.

Even low VOC concentrations can irritate mucous membranes (eyes, nose, and respiratory tract) as well as cause headaches, fatigue, and nausea. High concentrations of certain VOCs can also lead to other health issues. For most chemical compounds, authorities have set maximum levels for VOC concentrations in workplaces. This can be measured directly and controlled by appropriate ventilation and air purification.

Controlled Ventilation

Central air handling units (AHUs) and air distribution systems are required to provide fresh, filtered, and conditioned air to building zones instead of recirculating stale air inside a room. The advantage of this approach: the supply air's quality can be centrally controlled in an AHU at any time. Temperature and humidity sensors continuously measure the thermal conditions of the supply air. Deviations are immediately detected and corrected. Pressure sensors above the filters detect early on when a filter is dirty and needs to be replaced. This ensures a consistent air flow. All zones in the building benefit from a higher level of comfort and safety.

In addition to centrally controlling air quality, the conditioned air in each room can be measured and controlled individually. Room sensors that continuously measure all environmental parameters, including temperature, humidity, CO₂ content, and the presence of VOCs, are essential for our health and well-being. An increase in CO₂ or VOC concentrations in a room, for example, through the presence of many people or a copy machine creating additional emissions, is immediately detected, and the air damper of the duct can be opened to provide more fresh air to the corresponding room and extract contaminated air. This instantly restores comfort to a healthy level.

However, adequate control is only possible if the right values are appropriately measured. This is especially true for the air quality of the room. Many sensors on the market are known to drift over time. Humidity sensors from Belimo with a capacitive polymer sensor element are not affected by high humidity and contamination. By default, they offer up to two percent accuracy and long-term deviation of less than +/-0.25 percent. High accuracy and long-term stability are essential for ensuring optimum indoor air quality. On average, sensors account for only 0.08 percent of the total HVAC investment in a building. Therefore, selecting a quality device that ensures reliable measurement is quickly amortized through the improved health and productivity of the building's occupants.

Find Out More.

Watch the video with David Alliband, Manager Sensor Solutions at Belimo, explaining why sensors are the foundation of comfort: <u>bit.ly/32S2qsb</u>

Supporting the 40to60rh Petition Belimo supports the petition that calls the World Health Organization to include a relative humidity level of 40 to 60 percent in regulations: <u>40to60rh.com</u>

Story: Room Sensors

A Glimpse of the Future

The new Belimo room

ing units are an ideal

product range.

addition to the existing

With its new room sensors and

manifold advantages to users.

The product range expansion for

quick assembly for the installers,

easy commissioning for system

integrators and a comfortable

Belimo room sensors have the

slimmest design of any active

multi-temperature, humidity and CO_2 sensor has a depth of

sensor on the market - even the

room climate for users.

an esthetic design for the architect,

visible areas of the room offers

room operating units, Belimo liter-

ally sets foot in the room, providing

sensors and room operat-

just 22 millimeters (0.87 inches) and fits seamlessly into any environment.

Easy Installation

Despite its slim construction, everything is designed for easy installation. For example, the sensors are equipped with pluggable push-in spring-loaded terminal blocks.

The mounting plates are compatible with all standard wall sockets and can therefore easily be used around the world. The ease of installation reduces errors during assembly or wiring and as a result saves costs.

Using near-field communication (NFC), the Belimo Assistant App simplifies commissioning and diagnostics and enables important parameters to be set with a smartphone. The app was developed to offer device settings and operating data for all active Belimo room devices at your fingertips. Using the smartphone's NFC function, it provides wireless and efficient configuration, control and on-site operation of room sensors, even if the sensor is not connected to a power supply.

Overview Belimo Hinwil

cos

Analog Output

22RTM-1xxx

22.4 · 1.4 · 237 ·

BELIMO

Find Out More

Watch the video on the development of the new room sensors and room operating units: <u>bit.ly/3iSybgN</u>

Digitally Enabled Solutions

Innovating Digital Solutions

By launching an ever-increasing array of digital products such as Belimo Clear Edge™, Belimo helps its customers digitize their business processes and maximize the value of their installations.

Belimo sees digitization as a highly relevant trend for the HVAC industry as it enables a closer relationship between all stakeholders in the value chain. It helps Belimo assume a customer journey perspective, whether in its development, production, or customization approach. For customers, digitally enabled solutions promise to bring product enrichment thanks to value-added product features. Belimo products now meet the increasing demand expressed by customers to digitize their business processes, i.e., in planning, installation, commissioning, monitoring, optimization, and maintenance.

Digitization Leads to New Questions

Belimo aims to be fit for the future by embracing digitization. The main driver of digitally enabled solutions is the Group division Innovation, which has mandated a dedicated group of specialists to draft and test underlying business cases. Digitization, however, also leads Belimo to ask new questions of itself. The internal digitization of Belimo is an ongoing, company-wide process, in which not only the organization but also the development processes are constantly evolving.

Harvesting Value

Belimo ZoneEase^M, a smart actuator with an integrated variable air volume (VAV) and room controller, is a great representative of this new family of digital products.

Digital Belimo assistant tools, either on the mobile phone or in the Belimo cloud, make it possible to pre-

pare the configurations of all controllers in a job and assure an efficient and error-free commissioning process. Not only is the timesaving for the system integrator substantial, but the progress and final configuration of the job are automatically logged and documented. This represents a significant advantage during the controls project and later in the maintenance phase.

Moreover, digital products provide data that can be analyzed to learn more about the application and consequently improve the product or its software in future versions. We aim to know selected applications better than our customers so we can innovate beyond the product and enhance HVAC systems' overall efficiency.

In 2020, Belimo introduced Belimo Clear Edge[™], an appliance built on the SkySpark® Everywhere[™] platform. Clear Edge leverages data from BACnet-connected Belimo Energy Valves[™] in a Building Automation System to automatically monitor, manage, and optimize performance and energy consumption. Furthermore, it provides an aggregated system-level view of all Belimo Energy Valves[™] in a building. Clear Edge's goal is to help our customers and end-users maximize the value of installed Belimo Energy Valves[™].



UN Sustainable Development Goals Approach

By 2050, two-thirds of all humanity – 6.5 billion people – will live in cities. The megatrend of urbanization actively drives the number of

people living and working inside and with it, the necessity of intelligently controlled HVAC systems – ergo Belimo applications. Concerning SDG 11 "Sustainable Cities and Communities," Belimo helps make cities more sustainable and safer by providing products such as the Belimo Energy Valve™ or a wide range of safety actuators for motorized fire dampers and smoke control dampers.

Strategic IP Management

Managing Patents Successfully

Through strategic intellectual property (IP) management, Belimo protects its commercial interests and handles its growing number of patents and trademarks.

The first and foremost reason for Belimo to pursue strategic IP management is to ensure the Freedom to Operate (FTO). This means that Belimo and its customers are free to manufacture and operate Belimo products or non-patented know-how, without being restricted by other patent rights. Protecting technological advantage and subsequent innovation leadership is a second reason. A third focus is pruning: the continuous evaluation of patents with low business value.

Regular Monitoring to Ensure FTO

In search of new patents, the strategic IP management team continuously monitors ongoing development projects, mapping out and analyzing their status. In addition to that, new product or technology patents of third parties in the HVAC industry are regularly monitored to ensure FTO and to be knowledgeable of the market.

The Belimo Head of Research is ultimately responsible for IP topics, while external experts support specific tasks. This approach allows developers to focus primarily on their roles, especially since these tasks are highly labor-intensive. IP management also entails defining rules and duties between development partners before the start of a project. These are usually well-documented in framework development agreements and non-disclosure agreements (NDAs). If required, Belimo evaluates the licensing of advanced technology for its products to partners.

Maintaining a Patent Database

The effectiveness of IP management is reviewed in regular meetings with the Group division Innovation and the IP management team. This also ensures an unlimited flow of information between the two groups. IP management also maintains a patent database for tracking and sharing all relevant information. Belimo uses several KPIs to gauge the success of its strategic IP management. These are the number of fields Belimo files patents in, the percentage of patent protected products, as well as the number and areas of license, development, and frame development agreements. Currently, Belimo files approximately ten new patents each year. Overall, Belimo owns around 90 patent families with about 280 pending patent applications or granted patents. In the reporting period, approximately 70 percent of sales was patent-protected. Belimo continuously monitors whether the IP strategy is on track and adapts the IP management infrastructure to strengthen its IP related activities.

IP Management in the Age of Digitization

Strategic IP management is especially relevant in the age of digitization – a field Belimo focuses its research on and has filed several patent applications. Digitization and IoT are also fields where Belimo is increasingly competing with IT companies that are submitting a vast number of patents. Belimo puts significant efforts into monitoring activities in this field and prioritizes patenting efforts. Last but not least, FTO in the IoT range is a vital IP area as well.

Operational Excellence

Partnerships with Suppliers

Creating Win-Win Relationships

Belimo views its suppliers as key partners and as a critical element for the Company's asset-light model.

As 86 percent of product manufacturing costs are incurred in a network of almost 400 suppliers, a good partnership with its suppliers is essential for the Company to deliver with high speed, quality, and flexibility to its clients. This network is also absolutely critical to maintaining comparatively high net sales per employee. Depending on their turnover, the Company differentiates between A, B, and C-type suppliers – next to strategic component specialists and special part suppliers.

A guiding principle in terms of supplier partnership is to involve suppliers when the exact part specifications for Belimo products or services are being developed. Optimizing downstream impacts also includes finding preferable solutions that fulfill the needs of the end-users as well as meeting and exceeding mandates cost-effectively. The ultimate ambition of the sourcing strategy of Belimo is to engage suppliers that match its company culture.

Strong Supplier Relationships

Belimo suppliers significantly contribute to quality, innovative capacity, and sustainability and are involved in the environmental and Quality First policy of Belimo. When it comes to social and ecological standards, Belimo makes the same demands on its suppliers as it does on its internal service providers. These requirements are set out in the Code of Conduct for suppliers and reflect internal guidelines. All suppliers are expected to pass these requirements down along their supply chain.

Among other things, these requirements are based on the principles of the UN Global Compact. Belimo is convinced of its moral obligation to thoroughly evaluate its supplier's adherence to occupational safety standards and additional aspects. This can only be monitored through a certain level of personal presence on-site – i.e., through supplier audits (child labor, protective gear, etc.). Therefore, suppliers must be willing to grant full transparency to enable Belimo to reasonably estimate possible risks, be it of financial nature, ability (knowhow), and availability (capacities) to work on projects or possible image-risks to the Belimo brand.

Focus on Final Assembly, Testing, and Customizing





The main instruments to establish new and evaluate existing supplier relationships are audits, risk management, and category management. An SRM tool (Supplier Relationship Management) allows Belimo to effectively and reliably follow up on action plans resulting from each audit. For Belimo, being an active partner in the skill development of its suppliers' workforce regarding manufacturing processes is crucial for longterm partnerships, as it ensures competitiveness and quality. The final goal of Belimo is to establish relationships with its suppliers that are characterized by trust and honesty.

Seeking a Cultural Fit

Next to ensuring a cultural fit with its suppliers, Belimo evaluates the effectiveness of its approach based on the number of suppliers audited each year, the years of cooperation, and their turnover. Of its supplier base, about 10 percent are audited every year. These audits are mainly conducted at A, B, and special part suppliers. Besides being ISO 9001/quality management certified, Belimo requires its A-suppliers to establish a certified environmental management system that complies with ISO or has at least implemented the following elements from the standard: environmental goals, program, legal compliance, waste management.

Regarding supplier turnover, between one to five new ones are added each year – while non-compliant suppliers are gradually weeded out. On average, Belimo maintains a relationship for over 15 years with approximately one-third of its suppliers. Especially in challenging years such as 2020, Belimo views such long-term partnerships as absolutely critical for maintaining high product availability.

Environmental Footprint of the Supply Chain

Mitigating Our Footprint

Belimo does everything it can to minimize the environmental impact of its supply chain.

Being attentive helps mitigate risks from corrupt supplier practices such as pollution etc. that might negatively affect the environment and therefore contradict Belimo ethical standards. At the same time, resource efficiency (materials, natural resources, energy, etc.) and waste reduction directly reduce costs.

Code of Conduct as a Key Instrument

Belimo demands its suppliers to make a clear commitment to sustainability and social responsibility principles. Critical instruments ensure that suppliers adhere to these requirements, such as the Code of Conduct (incl. supplier declarations). Contract management is another instrument to hold third parties accountable. Both new and existing suppliers undergo regular process audits, where their adherence to the Code of Conduct is verified. In 2020, however, fewer audits than planned could be conducted due to COVID-19.

Approaches to optimize the environmental footprint of the supply chain involve minimizing waste and shipping by optimally coordinating the supply chain and source locally wherever possible (see "Process Efficiency and Short Lead Times," page 88). Suppliers must comply with strict packaging instructions and maximize the reuse and recycling of materials. All transport packaging conforms with international guidelines.

Looking for Healthy Profits

98 percent of our procurement volume is from Code of Conduct signatories. Our Code of Conduct prohibits gross violations of environmental laws. Once a collaboration has been established, Belimo especially looks for healthy profits as they ensure the capability to innovate and invest in state-of-the-art environmental-friendly technology. Furthermore, many suppliers are certified according to ISO 14001, in addition to ISO 9001 (see "Partnership with Suppliers," page 77). Working with a 4PL logistics provider (Fourth Party Logistics) offers enhanced analytics of the environmental footprint of the supply chain.

Structured Product Design Process

The "Quality First" initiative of Belimo has been an essential pillar for managing sustainable product development, the continuous improvement process, and the complaint handling process for many years. All product developments at Belimo follow a structured design process (certified according to ISO 9001:2015 and ISO 14001:2015), for which the "Voice of the Customer" serves as a vital input source. This input is generated through onsite interviews (different customers within different regions) that are conducted in line with CESIM[®].

Within CESIM[®], the percentage of significant products and services with health and safety impacts is assessed before being sold. In 2020, 100 percent of the products were evaluated (see page 80).

Hazardous Substances

The quality organization is responsible for supplier compliance with guidelines and regulations that govern the use of critical materials, such as Restriction of Hazardous Substances Directive (RoHS), REACH, Conflict Minerals, Prop 65, etc. The ever-increasing requirements are continuously analyzed, and the findings flow into the processes and products. Compliance is implemented based on a list of banned substances and suppliers are obliged to comply with these requirements. The careful selection of materials used is aimed at minimizing their environmental impact. Auxiliary materials such as solvents, resins, paints, or lead and chromium are not used at all, or only in minimal quantities.



During the design process, Belimo also relies on industry-wide accepted tools, such as FMEA (Failure Mode and Effect Analysis) and in-depth risk analysis. Environmental directives (WEEE, RoHS, REACH) are also taken into account. Moreover, all Belimo products undergo first-article inspection and series testing before being sold. The successful inspection and series testing have ensured that no incidents of non-compliance with regulations and/or voluntary codes have been reported during the period under review.

All legal and compliance topics concerning customer health and safety are listed in the Belimo requirement specifications. With this framework, Belimo ensures that all requirements regarding health and safety are fulfilled. No incidents of non-compliance with regulations and voluntary codes were reported during the period under review.

Assessment of the Health and Safety Impacts of Products and Service Categories (GRI 416-1)

Percentage of significant products and	
services, for which health and safety impacts	
were assessed prior to sale in 2020	100

100%

0

Incidents of Non-Compliance Concerning the Health and Safety Impacts of Products and Services (GRI 416-2)

Number of incidents in 2020

Energy Efficiency in Operations

Knowing Where the Energy Goes

The Belimo brand stands for energy-efficient HVAC control devices. So do the operations of Belimo. The Company, therefore, makes every effort to limit its own impact.

As a leader in developing energy-efficient solutions for the HVAC industry, the stakeholders of Belimo expect the Company to run its own operations energy efficiently, be it in production processes or even more so with respect to its buildings.

All Energy Flows in One Single Graph

With this in mind, Belimo focuses its efforts on reducing its footprint where it thinks it is most qualified and achieves the most significant impact: Inside its buildings.

To manage its buildings in the best manner and to maintain an overview at all times, Belimo has introduced a global building management system (BMS) in 2020 that encompasses all Belimo premises. The system allows us to display, supervise, collect data, and be notified of alarms on all Belimo properties in one software solution. It also enables all facility managers of Belimo across the world to access the BMS.

Once the system is in place, Belimo will be able to collect data on the energy usage, recycling, and waste of the buildings to introduce tailor-made saving measures. Energy can only be saved when it is 100 percent clear where it is used.

The energy and demand monitoring concept, which is currently being introduced, is comprised of three modules:

1. Global Approach: What type of energy is being measured where, how, and why. And even more importantly: In what way are the measured values processed and displayed.

2. Local Implementation: Drawing up energy flow schematics encompassing the production of energy, its transformation, storage, distribution, and consumption.

3. Measuring the Flow of Energy: Installation of additional electricity, gas, heat, cold, and water meters. Also, the Belimo Energy Valve[™] is exceptionally well suited to transparently display energy flows.

These steps are currently being piloted in Hinwil (Switzerland) before being applied to other sites. The objective is to display the energy consumption of the whole Company in a single graph. Responsible for driving this initiative forward is the Global Real Estate Manager. In addition, Belimo achieved progress in the area of energy consumption at its premises. In the reporting period, new and highly efficient chillers were installed in Hinwil (Switzerland, see story page 85). Belimo also increased its solar power production in the reporting year from 61 to 373 MWh/year. One hundred percent of the electricity produced is consumed in-house.

Energy Efficiency in Production

Next to managing its premises in the most energy-efficient way, Belimo also strives for continuous improvement of energy consumption and waste in production according to the principles of lean management. All production processes are, therefore, continuously analyzed with regard to the use and cost of energy and carried down to energy source and site.

The modular design of Belimo products offers energy efficiency advantages as it minimizes variances of parts and therefore waste as well as the number of suppliers and transports. Moreover, automated assembly of modular products leads to higher (energy and material) efficiency and a further reduction of waste.



Energy Consumption by Source (Danbury/Hinwil)



Electricity, non-renewable: 54% Electricity, renewable: 19%

- Natural gas: 15%
- District heating: 11%
- Diesel: 1 %

CO2e Emissions by Source (Scope 1 and 2, Danbury/Hinwil)

in % of total CO2e emissions, 2020



- Electricity, non-renewable: 77 %
- Natural gas: 21%
- Diesel: 2%

The Belimo sites in Hinwil (Switzerland), Danbury (Connecticut, USA), Sparks (Nevada, USA) as well as Shanghai (China) apply the international environmental management standard ISO 14001 and quality management standard ISO 9001. Also, the Stuttgart (Germany) site applies the ISO 9001 standard. For the service and logistics center in Großröhrsdorf (Germany) opened in 2019, an ISO 9001 certification is planned for 2021, followed by ISO 14001 certification for 2022. These sites also undergo regular audits by the Swiss Association for Quality and Management Systems (SQS) and the China Quality Certification Center (CQC) in China.



UN Sustainable Development Goals Approach

Belimo contributes to SDG 12 "Responsible Consumption and Production" by upholding sustainable procurement practices and localized sourcing, minimizing waste, and optimizing logistics

through modularization of its product ranges and applying environmental management standards at its main production sites.

Energy Consumption Within the Organization

Scope: Danbury and Hinwil; encompassing approx. 90 percent of total energy consumption within Belimo.

		Danbury (Connecticut,	Hinwil		
	Unit	USA)	(Switzerland)	Total 2020	Total 2019
Electricity					
Total electricity consumption (purchased)	MWh	3 822	3 198	7 020	7 472
Total cost of electricity consumption	CHF	567 453	362 249	929 702	1 029 647
		40 % renew- able content			
Total electricity consumption (own production)	MWh	275	98	373	61
On-site fuel consumption					
Heating oil	liter	0	0	0	0
Natural gas	MWh	1 552	0	1 552	1 244
Total cost of heating oil	CHF	0	0	0	0
Total cost of natural gas	CHF	42 593	0	42 593	45 699
District heating					
Total district heating consumption	MWh	0	1 096	1 096	1 281
Total cost of district heating	CHF	0	83 040	83 040	104 771
Fuel consumption of backup generators					
Diesel fuel	liter	12 644	0	12 644	13 361
Total cost of diesel fuel	CHF	6 438	0	6 438	10 220
Floor area					
Total floor area of all buildings on site	m ²	18 263	35 360	53 623	53 623

Energy Consumption and CO₂e Emissions by Source (Scope 1 and 2, Danbury and Hinwil)

	Danbury (Co	onnecticut, USA)	Hinwil (Sv	vitzerland)		Total 2020	Total 2019 restated ¹⁾
	MWh	tCO₂e	MWh	tCO2e	MWh	tCO₂e	tCO2e
Energy							
Electricity non-renewable	2 293	608	3 198	580	5 491	1 188	1 257
Electricity renewable (purchased and own production)	1 804	0	98	0	1 902	0	0
Heating oil	0	0	0	0	0	0	0
Natural gas	1 552	313	0	0	1 552	313	251
District heating	0	0	1 096	0	1 096	0	0
Diesel	126	34	0	0	126	34	36
Total	5 775	955	4 393	580	10 168	1 535	1544

¹⁾ 2019 figures have been restated due to new, more detailed emission factors (district heating) as well as omission of Scope 3 (electricity renewable). Calculation of CO₂e emissions: Danbury figures according to US EPA and Ecoinvent version 2.2, Hinwil figures according to BAFU Factsheet 2019.

Classification of Operational Boundaries Where CO2e Emissions Occurred (Danbury and Hinwil)

in tCO ₂ e	2020	2019 restated ¹⁾
Total	1 535	1 544
Scope 1 (direct emissions from owned or controlled sources)	347	287
Scope 2 (indirect emissions from the generation of purchased energy)	1 188	1 257

¹⁾ 2019 figures have been restated due to new, more detailed emission factors (district heating) as well as omission of Scope 3 (electricity renewable).

Energy and CO₂e Intensity (Scope 1 and 2, Danbury and Hinwil)

As outlined on pages 56 to 57, Belimo products reduce energy consumption and CO₂ emissions by a factor of 24 in relation to their resource input. While our model covers the whole resource consumption including supply chain, the figures below only show measured resources.

	Unit	2020	2019 restated ¹⁾
Net sales	kWh per 1 000 CHF Net Sales	15.38	14.71
Net sales	kgCO₂e per 1 000 CHF Net Sales	2.32	2.23
Per capita	kWh per employee	5 574.99	5 954.27
Per capita	kgCO ₂ e per employee	841.83	902.28
Number of actuators sold	kWh actuator sold	1.47	1.42
Number of actuators sold	kgCO2e per actuator sold	0.22	0.22

¹⁾ 2019 figures have been restated due to new, more detailed emission factors (district heating) as well as omission of Scope 3 (electricity renewable). Net sales, total employees, total number of actuators sold represent Group-wide figures, while the underlying energy consumption and greenhouse gas emissions comprise only data from the two locations Hinwil and Danbury.

Recycling and Disposal (Danbury and Hinwil)

	Unit	Danbury	Hinwil	Total 2020	Total 2019
For recycling	metric tons	290	357	648	756
For incineration	metric tons	73	249	321	350
Remaining waste	metric tons	0	0	0	0
Hazardous waste (electron- ics, separated materials)	metric tons	0	3	3	3
Wastewater	m ³	250	6 478	6 728	6 240

Business Travel (Danbury and Hinwil)

	2020	2019
Emissions caused by air travel of employees in tCO2e	523.9	2 243.6

Largely reduced business travel activity in 2020 due to COVID-19. All emission factors and emissions are based on the myclimate Flight Emission Calculator.

Story: Future-Proof Chilled Water System

A Showpiece of Energy Transparency and Efficiency

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To optimize the HVAC system at its headquarters, Belimo went the extra mile with an innovatively designed and controlled cooling plant. It not only showcases energy-efficient HVAC field devices but also energy transparency.

In 2018, Belimo kicked off the planning of a new chilled water supply plant. Its goal was to address demanding and persistent comfort issues in the main production building in Hinwil (Switzerland) and to replace the 18-year-old plant. Simultaneously, the switch to a new building automation solution had been initiated.

Two chillers, each with a cooling capacity of 350 kW (100 cooling tons), were designed to be the heart of the new system – with the option to add a third chiller in the future. After a thorough planning phase, installation started in March 2019 as the two 3.2 ton machines were lifted onto the roof.

Providing Full Transparency

In the following phase, six Belimo Energy Valves[™] were installed in the two chillers and in the four sector sub stations, where they provide transparency on two levels: where cooling energy is being generated (at the chiller level) and in which sector it is being consumed.

Two electrical meters measure the power consumption of the two chillers and compare this data to their thermal output. The resulting COP measurement (Coefficient of Performance, see box on page 87) is the leading key performance indicator for gauging energy efficiency of the cooling system. "If it was not for the Belimo Energy Valves™, we probably would never have found out at such an early stage that the two identical chillers were not performing equally," says Marco Manfredi, Global Real Estate Manager at Belimo (see photo above). By directly comparing their COP, Manfredi could work together with the contractor to single out and consequently fix a parameter that differed in the two chillers' factory settings.

The Belimo Energy Valves™ also provided the necessary transparency and dynamic hydronic balancing at the sector level to efficiently address the comfort issues in the building. Allowing Manfredi to read out significant real-time values was essential for the system's efficient operation and optimization. "By independently regulating the flow based on the required volumetric flow, the Belimo Energy Valve™ not only increases energy efficiency, it also creates transparency as power and energy consumption can be read and compared in each sector," explains Manfredi.

If substantial differences in performance between the sectors occur, the cause can be singled out and, if necessary, a system malfunction can be corrected. And in the event that something does not work as planned, historical data can be used for evaluation.

The hydronic system is designed as a variable primary flow (VPF) system, adapting the primary flow according to the cooling demand of the building sectors. The two Turbocor chillers control the supply temperature in a modulating manner. "Thanks to the Belimo Energy Valves™, the flows of the two chillers and the four sub stations are balanced and adapted at all times to the load situations," says Manfredi.

Sensors Maximize Efficiency

In addition to the Belimo Energy Valves™, Belimo sensors were installed in many of the system's components. They continuously monitor system values and report them to the control system. The sensors for continuous temperature measurement at the evaporator input and output were designed to offer precise and robust measurement as well as easy mounting. All data can be visualized and monitored through the Belimo Building Management System in real time. The system also allows full remote access and control of the HVAC systems and triggers alarms if it detects any incorrect situations.

A great deal of thought went into designing the installation and control, ensuring to be as energy efficient as possible. The cooling energy produced is distributed to the four sub stations with heat exchangers (one per sector) via a 140 meter (460 foot) long pipeline equipped with a twin pump installation and Belimo butterfly valves.

The primary and secondary circuit is separated by plate heat exchangers. 3000 liters (793 gallons) of water storage are connected to the system, temporarily storing cooling energy. "The storage allows the chillers to operate more efficiently as longer and continuous operating times are possible, instead of operating on a short-term and intermittent basis," says Manfredi.

The cooling energy is used in every sector for ventilation and air-conditioning systems, as well as for the thermally-activated building systems (TABS). TABS are an energy-efficient, innovative solution for cooling and heating buildings. They use the building mass, in particular the concrete, as energy storage, cooling the zone as chilled





Data of the Chilled Water System at Belimo Hinwil (per Machine)

- Highly efficient, air-cooled chilled water system for outdoor installation
- Cooling capacity of chillers: 2 × 350 kW
- Dimensions: 3.2 tons;
 2.5 × 4.0 × 2.2 meters (H × W × D)/ (8 × 13 × 7 feet)
- Total power consumption of chiller and compressor: 100 kW
- Energy efficiency ratio: 100.5 kW/kW
- EUROVENT class: A
- Refrigerant: Water/glycol mixture 70/30 percent
- Operating temperature: 11/17 °C (52/63 °F)
- Delta T: 6 °K (43 °F)
- Variable primary flow (VPF): Ranging from 40 m³/h to 115 m³/h



Belimo Energy Valves™ Provide Transparent COP Monitoring

The graph above depicts the measured Coefficient of Performance (COP) – a KPI for energy efficiency of the chilled water system – in comparison with the outside temperature in degrees Celsius during twelve summer days in August 2020. This level of transparency and real-time tracking of KPIs is only possible thanks to the Belimo Energy Valves™ installed. ceilings do by radiation from the ceiling. Selecting chillers with modulating Turbocor compressors also significantly contributes to greater energy efficiency. The compressors' shafts are designed to be "supported" by a magnetic field, which makes them extremely quiet and allow variable speed.

In August 2019, work on the new system was finally completed, and the first fresh breeze of new cooling comfort provided relief amidst the heat of the summer.

Process Efficiency and Short Lead Times

Staying Ahead in Logistics

Short lead times are a main competitive advantage that Belimo offers to its customers.

Frequent last-minute changes in planning, construction, and installation are a severe challenge in the HVAC sector. Through short lead times and on-time performance, Belimo provides its customers with additional flexibility. Delivering on-time and directly to customers and construction sites also reduces handling and partially eliminates the need to stock products, which frees up our customers' capital and time. Besides, short lead times reduce risks such as exposure to order changes and updates by waiting customers. They also minimize on-site loss as well as material returns.

Short lead times also increase the flexibility of Belimo to react to changing demand. Short lead times result in lower carbon emissions and costs as urgent deliveries are usually air-shipped. Furthermore, process efficiency in logistics reduces internal lead times between order intake and shipping, production, and customization.

Change in Logistics Provider

The departments responsible for process efficiency and short lead times are procurement, planning, customization, production, and logistics. Continuous process improvements such as the optimization of customs duty processes, product lifecycle management, supply chain improvements, and managed logistics (4PL) are crucial processes for fast lead times.

To improve this, Belimo completed the change from a 3PL (Third Party Logistics) to a 4PL provider at the beginning of the reporting period. The latter also offers tailor-made supply chain management, regular freight tenders, and fully automated digital data interexchange. These measures reduced cost per kilogram by one to three percent and end-to-end lead times by two to three weeks. Weekly consolidated shipments from suppliers are a measure for keeping lead times short while saving energy. Also, the Company uses the reusable packaging five to seven times to transport goods back and forth to suppliers. The consolidation of internal transfers within the Company and direct deliveries to customers reduce lead times. Standardized reusable packages are used for deliveries between Belimo sites as they allow automatic storage or further processing without any need for repackaging.

Measuring Delivery Performance

Short lead times and reliability are cornerstones of what the Company offers its customers. If the first promised customer delivery date, the "first confirmed (date)", of a sales order cannot be fulfilled, then the corresponding order will be adjusted to reflect a newly confirmed date. This is typically the "last confirmed (date)" for the customer, since he/she has initially received an earlier delivery date on his/her order confirmation.





 First confirmed Last confirmed ••• Trend line
 ¹⁾ Weighted logistics data of all Belimo sites except Mumbai (India) and Kuala Lumpur (Malaysia), covering 98 percent of global deliveries.

The aim of Belimo is to provide "best-in-class service" to meet the needs of its customers. COVID-19 challenged the supply chain in 2020 and the historically positive curve of increasingly on-time delivery performance has flattened slightly. By measuring processes more closely and by adding further measuring points, Belimo will continue to improve its ability to contribute to the success of its customers.



Story: Service & Logistics Center Großröhrsdorf

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Custom-Made to the Highest Standards



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In 2019, the new service and logistics center located in Großröhrsdorf began serving individual customer needs. The hub addresses an everincreasing trend in the market for custom production.

In summer 2019, Belimo settled down in the State of Saxony more precisely, in Großröhrsdorf, a small town 26 kilometers (16 miles) north-east of Dresden (Germany).

Belimo implemented the setup of the new location in record time from purchasing the building to the start-up phase. It already began taking orders in its inauguration year. And despite the COVID-19 impact, the ramp-up of the new center is still well on track.

The new location offers several advantages: It adds even greater customer flexibility to the existing Belimo portfolio, adds literally plenty of room for growth, strengthens the Group's presence in an important and booming European economic region, and naturally reduces the Swiss Franc exposure of the Group.

Adding Design-to-Order

The Großröhrsdorf location namely serves three main tasks (see also box below): Develop the warehouse and logistics for the German market, act as a hub for the European sensor portfolio (standard and customization), and pursue an entirely new business model, the so-called design-to-order process (DTO). This process was initially successfully implemented at the Belimo retrofit workshop in Danbury (Connecticut, USA).

Describing the DTO-offering of "his" site, Managing Director Martin Arnold says: "Each order is a custom production with a very manageable number of pieces."

In addition to the most popular customer-specific offering, the cable solutions, Belimo Großröhrsdorf customers can expect application-specific linkages (an accessory product which is needed to connect an actuator with a globe valve or a butterfly valve), piping packages, bundles (actuators, sensors, and valves), special product configurations and OEM-specific (Original Equipment Manufacturer) application software. Individual shared-logic solutions will also be offered for OEMs, specifically for Performance Devices.

For example, a customer can order a pre-assembled 6-way valve with connection pipes for cooling and heating ceilings and a cable with a special plug - this dramatically simplifies installing the valve at the construction site. "This is something we were previously unable to offer," says Arnold.

Focus on Quality and Costs

The demand for project specific DTO solutions has been in the market for a long time. In addition to standard products, more and more

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Offerings of the Service and Logistics Center Großröhrsdorf

customers want project-related solutions.

The main reason for the continued demand for custom products is efficiency. Many installers do not want to carry out process steps, such as cabling directly at the construction site. This is because there is either a shortage of specialists on site or because it is difficult to correctly complete certain activities at a bustling construction site, such as assigning sockets.

Arnold: "More and more installers want manufacturers to take over such work steps to make system assembly as quick, inexpensive, and precise as possible – meaning, they only have to insert the connector plug." This saves contractors money, as working on the construction site is labor-intensive and hourly rates are high.

Traditional high-volume and longterm OEM-business, on the other hand, is less of a focus for Arnold. Arnold: "We can, however, help OEMs with prototyping."

Speed Is Key

Since many standard processes such as change management, testing by innovation, and sales support are not required in the DTO setup, the Großröhrsdorf location can offer these services more flexibly and quickly than would be possible in a standard setting. "We focus on testing our additional services only and otherwise rely on our quality standard products off the rack," says Arnold. "This saves us a great number of additional loops and time."

Saving time is essential, because what matters to Arnold's team during the DTO offer phase is speed. Customers usually expect a confirmation of feasibility within two days, according to Arnold. "We take the latest version of the actuator, implement solutions, test them, and then deliver the actuator. Done." How long does it take before a customer can hold "their" DTO product in their hands? This greatly depends on the customer. Arnold often observes that many do not yet know precisely what they want when they come knocking at his door. "Details such as pin assignment or other specifics must first be defined with our customers." After the agreement on the design the customer receives a quote and consequent orders are turned around quickly – custom made to the highest standards.

Find Out More

Watch the video about our new Service and Logistics Center in Großröhrsdorf (Germany): <u>bit.ly/3hPr4hv</u>





Quality First

Exceeding Expectations

Following our Quality First Standards, Belimo encourages all of its employees to assume their share of responsibility to ensure quality.

The order of our priorities is quality first, timeliness second, and cost third. To achieve our goals in terms of quality, these Quality First Standards also state that quality is everyone's responsibility. The standards are, therefore, cascaded to each employee through individual workshops within all divisions. By doing so, employees become part of the development. And by raising awareness among our employees, we emphasize our commitment to live up to the quality standards we have defined for ourselves.

How Do We Manage Quality?

To contribute to the organization's overall quality mindset, Belimo employees are empowered and encouraged to make continuous improvements to operational excellence at every step of the value chain. Besides, all employees are encouraged to open an internal quality, environmental, or safety-case if they believe something is not conforming. These inputs are then analyzed, and corresponding action is taken.

To further strengthen its Quality First approach in 2020, Global Quality pushed ahead with setting up a process engineering department for continuous process improvements. A second focus area has been the improvement of the gate review process for development projects, intending to support the project team with experts during the entire project cycle and to increase the effectiveness and efficiency during the gate reviews themselves. Thirdly, a product and operational compliance project was executed in 2020 to promptly manage all these requests against the backdrop of continuously increasing compliance obligations. With setting up a compliance organization, well-defined processes, including a material database, Belimo will become even more efficient in achieving customer expectations.

How Do We Measure Quality?

Belimo measures customer satisfaction after closing a quality case. Also, the number of customer, supplier, and internal complaints is regularly reviewed to verify our approach's success.

The number of **customer complaints** decreased from an annual average of more than 200 between 2015 to 2018 to 171 in 2019 and 146 in 2020, respectively (-14.6 percent). Customer complaints have also continued to decrease steadily relative to net sales development, which we regard as confirmation of the success of our quality strategy.

In 2020, the number of **supplier complaints** (of logistical and technical nature) remained nearly stable in comparison with the figure of 2019 (+3.3 percent), in spite of the globally stressed supply chains resulting from the COVID-19 pandemic. We consider this to be a great success and proof of the stability of our long-term partnerships with our suppliers.

In 2016, we initiated the logging of all logistical supplier complaints, regardless of severity. This initiative has helped us understand potentials for improvements while at the same time resulting in a peak in the number of logistical supplier complaints. Subsequent years have conclusively shown a stabilization in the number of supplier complaints, proof of the effectiveness of the measures that have been implemented. As a learning organization, we need to register **internal complaints** systematically. Further strengthening our Quality First approach led to a peak in internal complaints in 2019, but this number then decreased markedly in 2020, to 169 (-34.2 percent in comparison to 2019). While COVID-19 influenced the number of supplier complaints that were registered, the same circumstances must also be taken into account when examining why the number of internal complaints has dropped. The central focus throughout the COVID-19pandemic has been on maintaining superior service levels and high product availability, which has resulted in turn in a decrease in internal complaints. Or, to put it another way, our focus has been on "operational doing."



Total Number of Cases

Number of Cases per CHF 100 Million Net Sales

Appendix

Stakeholder Engagement and GRI Content Indices

About this Report

This report has been prepared in accordance with the GRI Standards: Core option. The current report refers to the year 2020 and is the second report that BELIMO Holding AG has published along the GRI-standards (GRI 102-49; 102-50). Considering newly available, more detailed emission factors for district heating, the CO₂ emissions from heat consumption (page 83 and 84) were recalculated for 2019. Furthermore, the focus is placed on Scope 1 and 2 emissions, while Scope 3 emissions from renewable electricity are considered immaterial and thus are excluded (GRI 102-48). The reporting period is January 1, 2020 – December 31, 2020 (GRI 102-50). BELIMO Holding AG has not sought external assurance of the GRI information provided but has

used the standards for internal auditing wherever practical (GRI 102-56). The content of this report focuses on the topics determined to be relevant or material to Belimo, its stakeholders and its impacts on sustainable development. For a description of the materiality assessment see page 6 and for the alignment between Belimo material topics and GRI topic-specific standards see the table below. The discussion of these topics has been developed so that it meets the information requirements of the key stakeholder groups of Belimo (see page 95). On the executive-level, these topics are managed by the CFO and the CEO. They are supported by the Head of Global Quality as well as the Head of Strategy & Brand Management as members of the Sustainability Steering Committee.

Page	Belimo Material Topics	GRI Topic
	Performance	
9	Economic Performance	201 Economic Performance
17	Balanced Investment Portfolio	_
	Credibility Culture	
27	Company Values and Cultures	102-16 Values, principles, standards and norms of behavior
30	Employee Empowerment and Engagement	
32	Skill Development and Knowledge Management	404 Training and Education
38	Equal Opportunity Employment	405 Diversity and equal opportunity 406 Non-discrimination
	Customer Value	
54	Customer Engagement and Support	_
56	High-Performance Solutions for Energy Efficiency and Indoor Air Quality	305-3 Other indirect (Scope 3, downstream) GHG emissions
	Solution Leadership	
71	Solution Leadership	_
75	Digitally Enabled Solutions	-
76	Strategic IP Management	_
	Operational Excellence	
77	Partnerships with Suppliers	102-9 Supply chain
79	Environmental Footprint of the Supply Chain	305-1 Direct (Scope 1) GHG emissions 305-2 Energy indirect (Scope 2) GHG emissions 416 Customer health and safety
81	Energy Efficiency in Operations	302 Energy
88	Process Efficiency and Short Lead Times	
92	Quality First	

Mapping Our Topics with GRI

Stakeholder Engagement (GRI 102-40; 102-42)

The stakeholders listed in the table below have been identified by the Executive Committee as important stakeholders as they fulfil the following two criteria: The stakeholder group exerts a strong influence on the economic, environmental or social performance of Belimo and the stakeholder group is strongly affected by the economic, environmental or social performance of the Company. Sustainability at Belimo is geared towards several stakeholder groups and aims to create added value for all these groups. Meeting the interests of a stakeholder group, such as customers, must not be at the expense of other stakeholders, such as employees or local interest groups. Customers appreciate the reliable and innovative application solutions and high product quality. Further strengths include consulting and service expertise throughout all customer relationship phases and partnership interactions with suppliers and consultants.

Stakeholder Type	Engagement Approach (GRI 102-43)	Key Topics of Interest to the Stakeholder Group (GRI 102-44)
Capital Market	The Group CFO and the Investor Relations Officer are the designated contact persons for the capital market (shareholders, portfolio managers and analysts). They regularly attend investor meetings, calls, conferences, and roadshows. Each year, a Summary Annual Report, an Annual Report including a Remuneration Report, and a Semiannual Report are published. Also, the Company organizes at least one Conference for Media and Financial Analysts, an Annual General Meeting and a Capital Markets Day each year.	Information about financial figures such as shareholder return, management structure, economic development in key markets, strategy, transparency of the remuneration system, new products and economic outlook.
Customers	Technical support, online training events, customer hotline, mailings, interviews, and most importantly: personal consultations through Belimo sales managers. All customer interac- tions are managed through a Customer Relationship Management tool.	For real estate investors/architects: assurance in the Company's high-quality product offering and efficient delivery. For planners and project managers: certainty about our solutions. For buyers: seamless integration into their system. For installers: solution simplicity.
Employees	New employee introductions, leadership training events, worldwide surveys every three years, annual and semiannual performance reviews.	Workplace safety, remuneration, company strategy, education, and further training events, occupational health and safety.
Suppliers	Initial contact within the scope of the assess- ment procedure and implementation of the Code of Conduct for Suppliers, close collaboration in joint development projects. Of its supplier base, approximately 10 percent are audited every year.	Order volume, risk assessment, price negotia- tions, overall strategy of Belimo.
Municipalities and Authorities	Regular exchange on topics such as taxes, working permits and developments of production sites.	Consultation on expansion plans, tax strategy, etc.



GRI Content Index

For the Materiality Disclosures Service, GRI Services reviewed that the GRI content index is clearly presented and the references for Disclosures GRI 102-40 to 102-49 align with appropriate sections in the body of the report.

Disclosure	Description	Reference
GRI 101: 2016	Foundation	
GRI 102: 2016	General Disclosures	
	Organizational Profile	
102-1	Name of the Organization	BELIMO Holding AG; Corporate Governance, p. 42
102-2	Activities, brands, products, and services	Introduction; p. 5
102-3	Location of headquarters	Hinwil (Switzerland); Corporate Governance, p. 42
102-4	Location of operations	Solution Leadership, p. 71
102-5	Ownership and legal form	Corporate Governance, pp. 42–43
102-6	Markets served	Europe, Americas, and Asia Pacific; Management Report, pp. 8–14; Segment Reporting, pp. 108–110
102-7	Scale of the organization	Key Figures, p. 15
102-8	Information on employees and other workers	Company Values and Culture, p. 28
102-9	Supply chain	Operational Excellence, pp. 77–80
102-10	Significant changes to the organization and its supply chain	Changes to the Scope of Consolidation, pp. 106–107
102-11	Precautionary Principle or approach	Environmental Footprint of the Supply Chain, pp. 79–80
102-12	External initiatives	Introduction, p. 7 and www.belimo.us/en_US/about/ belimo/affiliated-organizations
102-13	Membership of associations	Introduction, p. 7
	Strategy	
102-14	Statement from senior decision-maker	Letter to the Shareholders, pp. 2–3
	Ethics and Integrity	
102-16	Values, principles, standards, and norms of behavior	Company Values and Culture, p. 27
	Governance	
102-18	Governance structure	Corporate Governance, pp. 42–53
102-20	Executive-level responsibility for economic, environmental, and social topics	Appendix, p. 94
	Stakeholder Engagement	
102-40	List of stakeholder group	Appendix, p. 95
102-41	Collective bargaining agreements	Information Regarding Employees, p. 28
102-42	Identifying and selecting stakeholders	Appendix, p. 95
102-43	Approach to stakeholder engagement	Appendix, p. 95
102-44	Key topics and concerns raised	Appendix, p. 95
	Reporting Practice	
102-45	Entities included in the consolidated financial statements	Credits, envelope
102-46	Defining report content and topic boundaries	Introduction, p. 6
102-47	List of material topics	Introduction, p. 6
102-48	Restatements of information	Appendix, p. 94
102-49	Changes in reporting	Appendix, p. 94
102-50	Reporting period	Appendix, p. 94

102-51	Date of most recent report	March 9, 2020
102-52	Reporting cycle	Corporate Governance, p. 53
102-53	Contact point for questions regarding the report	Corporate Governance, p. 53
102-54	Claims of reporting in accordance with the GRI Standards	Appendix, p. 94
102-55	GRI content index	Appendix, p. 96
102-56	External assurance	Appendix, p. 94

Topic-Specific Disclosures

GRI Code	Торіс	Page	Reason(s) for Omission(s)
GRI 200	Economic topics		
GRI 201: 2016	Economic Performance		
GRI 103: 2016 103-1/103-2/103-3	Management Approach	Economic Performance, p. 9	
201-1	Direct economic value generated and distributed	Financial Report, p. 100	
	Customer Engagement and Support		
GRI 103: 2016 103-1/103-2/103-3	Management Approach	Customer Engagement and Support, p. 54	
	Partnership with Suppliers		
GRI 103: 2016 103-1/103-2/103-3	Management Approach	Partnership with Suppliers, pp. 77–78	
	Process Efficiency and Short Lead Times		
GRI 103: 2016 103-1/103-2/103-3	Management Approach	Process Efficiency and Short Lead Times, p. 88	
	Balanced Investment Portfolio		
GRI 103: 2016 103-1/103-2/103-3	Management Approach	Balanced Investment Portfolio, p. 17	
	Strategic IP Management		
GRI 103: 2016 103-1/103-2/103-3	Management Approach	Strategic IP Management, p. 76	
	Solution Leadership		
GRI 103: 2016 103-1/103-2/103-3	Management Approach	Solution Leadership, p. 71	
	Quality First		
GRI 103: 2016 103-1/103-2/103-3	Management Approach	Quality First, pp. 92–93	_
GRI 300	Environmental topics		
GRI 302: 2016	Energy		
GRI 103: 2016 103-1/103-2/103-3	Management Approach	Energy Efficiency in Operations, pp. 81– 84	
302-1	Energy consumption within the organization	Energy Efficiency in Operations, p. 83	
302-3	Energy intensity	Energy Efficiency in Operations, p. 84	
GRI 305: 2016	Emissions		
GRI 103: 2016 103-1/103-2/103-3	Management Approach	Energy Efficiency in Operations, p. 81	
GRI 305-1	Direct (Scope 1) GHG emissions	Energy Efficiency in Operations, pp. 83–84	

GRI 305-2	Energy indirect (Scope 2) GHG emissions	Energy Efficiency in Operations,	
GRI 305-4	GHG emissions intensity	Energy Efficiency in Operations,	
	Digitally Enabled Solutions	_ :	
GRI 103: 2016 103-1/103-2/103-3	Management Approach	Digitally Enabled Solutions, p. 75	
	High-Performance Solutions for Energy Efficiency and Indoor Air Quality		
GRI 103: 2016 103-1/103-2/103-3	Management Approach	High-Performance Solutions for Energy Efficiency and Indoor Air Quality, pp. 56 – 57	
	Environmental Footprint of the Supply Chain		
GRI 103: 2016 103-1/103-2/103-3	Management Approach	Environmental Footprint of the Supply Chain, pp. 79–80	
GRI 400	Social topics		
GRI 404: 2016	Training and Education		
GRI 103: 2016 103-1/103-2/103-3	Management Approach	Skill Development and Knowledge Management, p. 32	
404-1	Average hours of training per year and employee	Skill Development and Knowledge Management, p. 33	
404-2	Programs for upgrading employee skills and transition assistance programs	Skill Development and Knowledge Management, p. 33	
404-3	Percentage of employees receiving regular performance and career development reviews	Skill Development and Knowledge Management, p. 33	
GRI 405: 2016	Diversity and Equal Opportunity		
GRI 103: 2016 103-1/103-2/103-3	Management Approach	Equal Opportunity Employment, p. 38	
405-1	Diversity of governance bodies and employees	Equal Opportunity Employment, p. 39	
GRI 406: 2016	Non-discrimination		
GRI 103: 2016 103-1/103-2/103-3	Management Approach	Equal Opportunity Employment, p. 38	
406-1	Incidents of discrimination and corrective actions taken	Equal Opportunity Employment, p. 38	
GRI 416: 2016	Customer Health and Safety		
GRI 103: 2016 103-1/103-2/103-3	Management Approach	Environmental Footprint of the Supply Chain, pp. 79–80	
416-1	Assessments of the health and safety impacts of product and service categories	Environmental Footprint of the Supply Chain, p. 80	
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	Environmental Footprint of the Supply Chain, p. 80	
	Company Values and Culture		
GRI 103: 2016 103-1/103-2/103-3	Management Approach	Company Values and Culture, p. 27	
	Employee Empowerment and Engagement		
GRI 103: 2016 103-1/103-2/103-3	Management Approach	Employee Empowerment and Engagement, pp. 30–31	