

# LEM

Life Energy Motion

**Celebrating  
ingenuity and  
inspiration**



**Annual Review  
21 | 22**

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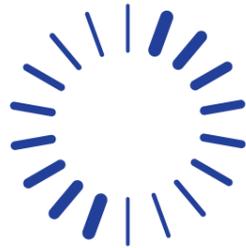


**Financial Report**  
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# Welcome

We are delighted to report record annual results as we celebrate 50 years since LEM was founded in 1972. Both our revenues and profitability demonstrated the fundamental demand for our products and the strengths of the company operationally, despite the challenging economic environment. Our dedicated employees have worked tirelessly with our suppliers and customers to mitigate the supply chain constraints and adapt to the fluctuating impediments of the pandemic.



Looking beyond this year's exceptional performance, LEM's long-term prospects are driven by megatrends such as energy efficiency, CO<sub>2</sub> neutrality, mobility, and automation. Recent geopolitical events also highlight the need to accelerate the world's efforts to decarbonize energy supplies, and power electronics is a key enabler of this process.

#### 50 years of ingenuity and inspiration

This year's Annual Review is an opportunity to reflect on the company's progress over the past 50 years. And to draw inspiration for the future. We are proud to illustrate our key milestones of technological and product achievements, together with our early expansion into different parts of the world. It was a particular pleasure for us to both learn from the founder Jean-Pierre Etter about the company's responses to customer needs and the management philosophy he used to build the organization. We encourage you to read our conversation with him – there are many insights that still guide us today!

Ingenuity is a quality that describes much of what LEM does – clever, original and inventive. Ingenuity can also be seen as a mindset, accepting a way of thinking differently and working on practical solutions that are needed. Above all, accepting that an individual does not have the complete answer, but that in working together and with the customer, we will arrive at the right solution.

#### A new headquarters and organization for our talent

It is also appropriate that we mark this anniversary by moving into our new global headquarters in Geneva. This building – “The Hive” – reflects the sustainability principles of our businesses and enables our teams to continue devising ingenious solutions for our customers. It is a symbol of how we are investing in the next generation of technologies and talent to drive LEM's progress.

Buildings can also foster creativity and innovation and help to change a company culture. We continue to embed our “LEM Blue Behaviors” across all our teams as we strive for a high-performance culture. Key qualities we look for include entrepreneurship, agility, openness, and a desire to learn. Our people enjoy intellectual challenges, diverse pathways, and global career opportunities. We are relentlessly recruiting and developing the best global talent with both leadership and technical competencies to deliver the growth potential of the company.

Our industry is changing fast and being shaped by several technology breakthroughs and market opportunities. So is LEM: as of April 1, 2022, a new regional and functional matrix organization has been fully implemented. It is designed to move decision-making closer to the customer in different parts of the world and empower local management. Global functional teams will support regional markets across all customer applications and the entire LEM product portfolio, thereby providing synergies of expertise and development.

#### CO<sub>2</sub> strategy and ESG indicators

LEM is very conscious of its responsibility to society, as our products help to optimize and reduce energy consumption in many sectors of the economy. This year, we have initiated a wide-ranging review of how LEM may reduce its own carbon footprint, identifying a range of measures to become CO<sub>2</sub> neutral in scope 1 and scope 2 emissions by 2025 and to be CO<sub>2</sub> neutral in all three scopes by 2040. A special interview with two members of the Executive Committee describes our new strategy. We are also pleased to report that our broader ESG efforts are being enhanced, as shown by the new set of key performance indicators (KPIs) compliant with the globally recognized and standardized NASDAQ ESG Reporting Guide 2.0.

#### R&D investments deliver new products

Significant investments in R&D over recent years continue to bear fruit, and in 2021/22 we launched seven products.

We are investing in next-generation technologies to support the growing market penetration of intelligent sensors for energy measurement. These investments reflect increased needs, such as those for semiconductors, metering, electromobility, and smart-grid applications.

We continue to build centers for specific competencies across our sites in Geneva, Lyon, Beijing, and Sofia. Our R&D teams provide a diversified skill set, ingenuity, and a particular cleverness in design to deliver the best product. Developing products for customers across multiple sectors allows us to leverage synergies to produce larger systems, modules, and semiconductors. This gives us the scope to master the value chain from the design function at an integrated-circuit level all the way up to the full sensor and customer application.

#### Record results

Our record financial results should be seen in the context of the global economy rebounding from the worst effects of the pandemic. They also reflect our agility to respond to customer demands, the economies of scale we are building, and the new technologies we are leveraging. Sales in the financial year 2021/22 increased by 24.1% to CHF 373.4 million. EBIT increased by 45.1% to CHF 88.4 million, yielding an improved EBIT margin of 23.7%. We posted a net profit of CHF 72.4 million, up from CHF 55.6 million last year.

Our balance sheet is strong and we continue to generate healthy cash flow. Based on these excellent results for the year 2021/22 and the long-term fundamentals for the business, the Board of Directors proposes a special dividend to mark the 50th anniversary of CHF 50 per share, up from CHF 42 per share.

**Strategic focus and outlook**

Megatrends drive demand for sensors, providing multiple opportunities to leverage LEM expertise and ensure a sustainable long-term business. Decarbonization and electrification provide underlying structural growth across all our businesses. On top of this, we are investing in next-generation applications and partnerships with customers as we move into adjacent fields that are still closely connected to current measurement, either through technology or by adding functionality. Power electronics is being seen as a strategic asset, and there is an increasing trend toward “onshoring” and localization of manufacturing investment, which will further support our business. The investment in our new production plant in Malaysia will bring us new skill sets and flexibility in our supply chain. As the world increasingly shifts to renewable energies, we see new markets opening up and will ensure that we stay close to our customers and are well positioned to meet their demands.

However, the world is dealing with a series of shocks, which will inevitably restrict economic growth. In the short term, we see continued headwinds from supply chain constraints. Our business in China is also heavily impacted by lockdowns, with implications for other markets as well. We will remain agile and adapt as best we can, but the coming financial year will not continue the same growth trajectory we have delivered this year.

**Thank you**

On behalf of the Board of Directors and the Executive Management, we thank shareholders for the confidence they have placed in us. Our talented teams worldwide have demonstrated yet again their commitment, ingenuity, and resilience in the face of multiple challenges. Our performance is also due to the trusted relationships we have developed with customers, suppliers, and business partners. We relish the opportunities to work together and bring to market new innovative products. Ultimately, all of us at LEM are inspired by a common purpose – helping our customers and society accelerate the transition to a sustainable future. We hope you enjoy this Annual Review, learn something new about how far we have come since 1972 and are as enthusiastic as we are about LEM’s prospects for the next 50 years!



**Andreas Hürlimann**  
Chairman of the Board of Directors



**Frank Rehfeld**  
Chief Executive Officer

**life**

For the past year, LEM has proven to be especially vital. The pandemic and disrupted supply chains impacted us all, but our teams adapted valiantly with creativity and new digital forms of collaboration. The record annual results reflect this exceptional commitment from everybody, and we are proud to celebrate our 50th year as a company. At special events throughout 2022, we will take time out to connect across cultures, locations, and disciplines, and to celebrate LEM moments together, using this opportunity to learn from our history and go forward with renewed conviction.

**energy**

Energy abounds in a company that is 50 years young. This dynamism enables LEM to continually recognize trends and opportunities and to design new and leading products to meet market demands. Our anniversary is the perfect occasion to celebrate LEM’s ingenuity – our particularly clever way of thinking and engineering the best solutions for our customers’ systems.

**motion**

LEM sells literally millions of electrical sensors. What will the next half century bring? Progress set into motion by megatrends, such as efficient renewable energy, mobility, and automation. Success driven by our mindset of continuous learning and improvement. A future inspired by a common purpose of helping our customers and society accelerate the transition to a sustainable future.



# Leading the world in electrical measurement



**LEM headquarters**  
Geneva, Switzerland

A leading company in electrical measurement, LEM engineers the best solutions for energy and mobility, ensuring that our customers' systems are optimized, reliable, and safe.

Our 1,500 people in over 15 countries transform technology potential into powerful answers. We develop and recruit the best global talent, working at the forefront of megatrends, such as renewable energy, mobility, automation and digitization.

**With innovative electrical solutions, we are helping our customers and society accelerate the transition to a sustainable future.**

Sales  
R&D  
Production  
Customization

	Sales	R&D	Production	Customization
<b>Europe</b>				
Geneva, Switzerland	●	●	●	
Frankfurt, Germany	●			●
Vienna, Austria	●			
Brussels, Belgium	●			
Randers, Denmark	●			
Paris, France	●			
Padova, Italy	●			
Skelmersdale, UK	●			
Lyon, France		●		
Sofia, Bulgaria	●	●	●	
<b>China</b>				
Beijing	●	●	●	
Shanghai	●			
Shenzhen	●			
Xian	●			
Hefei	●			
Taipei, Taiwan	●			
<b>North America</b>				
Milwaukee, Wisconsin	●			●
Columbus, Ohio	●			
Amherst, Massachusetts	●			
Los Angeles, California	●			
<b>Rest of world</b>				
Pune, India	●			
Seoul, South Korea	●			
Tokyo, Japan	●		●	
Tver, Russia	●		●	●
<b>Agents/distributors</b>				
	○			

# Financial results

## Record financial performance

Sales in the financial year 2021/22 totaled CHF 373.4 million, up by 24.1% from CHF 301.0 million; at constant exchange rates, sales increased by 22.5%. Both the Industry and Automotive segments delivered record sales, although both were hampered by supply chain constraints and could have delivered more products to customers. Operational efficiency is improving profitability while also enabling us to execute significant R&D programs.

LEM's diversity of applications across multiple sectors of the global economy provides a steady flow of orders and a prudent spread of risk. We also benefit from a good geographic spread of business and, in terms of relative share, the regions remained stable, with China at 38% of sales, Europe at 31%, North America at 9%, and the rest of the world accounting for 22%. All our regions delivered strong double-digit growth, with Europe and China leading the way, mainly due to demand for drives, renewable energy and electric vehicles.

During the financial year 2021/22, orders were up by 59.2% at a new record of CHF 576.4 million compared with CHF 362.0 million. The Industry segment customers continue to commit to orders over longer time horizons. During the second half of the year, Automotive bookings reverted to normal levels, with customers ordering for delivery one quarter at a time. The full-year book-to-bill ratio reached 1.54, up from 1.20.

**Top-line growth of 24.1% and an EBIT margin of 23.7% are impressive, but should be seen in the context of post-COVID-19 global economic recovery and the acceleration toward decarbonization and electrification.**

Gross profit was up significantly by 26.1% at CHF 177.3 million (CHF 140.6 million), while the gross margin improved again to 47.5%. This is 80 basis points better than in the prior year, with increased supply chain costs offset by improved efficiencies from economies of scale.

We remain vigilant with overheads, so while SG&A costs were up by 13.4% to CHF 59.7 million (CHF 52.6 million) to support the extra market demand compared with last year, they declined to 16.0% of sales (17.5%). The absolute increase reflects our investments in talent to strengthen the organization, higher compensation rates, and external consulting support for several key initiatives.

We continue with our long-term investment in future applications, with R&D up in absolute terms by 4.0% to CHF 29.4 million (CHF 28.2 million), although this decreased to 7.9% of sales (9.4%). We are significantly increasing the resources in the integrated current sensor (ICS) team both in Geneva and Lyon. We have doubled the size of the ICS and R&D teams with experts from the semiconductor industry. This will enable us to reduce outsourcing of R&D and grow in-house competency in design, test development, and applications support.

Our R&D investment continues to bear fruit with another seven new products launched successfully this year. Due to a change in accounting policy, there was also a tax credit of CHF 1.2 million reflected in R&D expenses, which would previously have been recorded in the income tax line of the P&L.

EBIT for the year 2021/22 rose notably by 45.1% to CHF 88.4 million from CHF 60.9 million, mainly due to the leverage effect of the improved revenues across our established cost base. Our reported EBIT margin was up at 23.7% compared with 20.2%, above guidance.

Net financial income was CHF -3.1 million, mainly due to foreign currency losses following the euro depreciation over the last 12 months. The Group tax expenses of CHF 12.9 million represent a tax rate of 15.1%, reflecting a favorable geographic profit mix.

## Key figures 2017/18 to 2021/22

in CHF millions

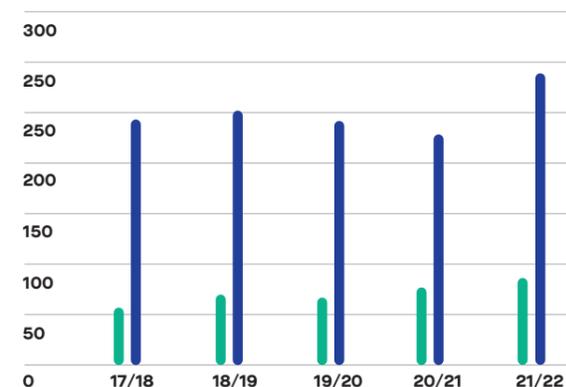
	2017/18 <sup>1</sup>	2018/19	2019/20	2020/21	2021/22
Orders received	319.7	320.5	322.4	362.0	576.4
Book-to-bill ratio	1.06	1.00	1.05	1.20	1.54
Sales	301.2	321.6	307.9	301.0	373.4
Gross margin	138.9	146.5	142.7	140.6	177.3
in % of sales	46.1%	45.6%	46.4%	46.7%	47.5%
EBIT	63.1	64.8	58.3	60.9	88.4
in % of sales	21.0%	20.1%	18.9%	20.2%	23.7%
Net profit for the year	54.4	52.4	60.7	55.6	72.4
EPS basic (CHF)	47.76	45.97	53.27	48.79	63.48
Dividend per share (CHF)	40.00	42.00	40.00	42.00	50.00 <sup>2</sup>
Operating cash flow	54.1	53.5	73.6	50.9	50.4
Investing cash flow	-15.1	-14.8	-14.7	-13.5	-21.0
	<b>31.3.2018<sup>1</sup></b>	<b>31.3.2019</b>	<b>31.3.2020</b>	<b>31.3.2021</b>	<b>31.3.2022</b>
Net financial cash/(debt)	12.6	4.5	10.2	-1.6	-23.5
Shareholders' equity	111.6	113.1	117.4	131.9	161.2
Equity ratio (in % of assets)	60.0%	60.5%	51.0%	49.9%	53.5%
Market capitalization	1'812.6	1'459.2	1'210.7	2'082	2'554
Employees (in FTEs)	1'527	1'477	1'497	1'448	1'572

<sup>1</sup> Restated financial statements.

<sup>2</sup> Proposal of the Board of Directors to the Annual General Meeting of Shareholders on June 30, 2022.

## Sales per segment

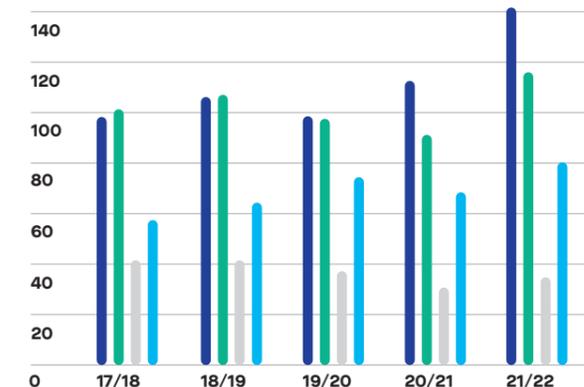
in CHF millions



● Automotive segment ● Industry segment

## Regional sales breakdown

in CHF millions



● China ● Europe ● North America ● Rest of world

We posted a record net profit for the year of CHF 72.4 million, up from CHF 55.6 million last year. This year's net profit margin thereby increased to 19.4% compared with 18.5%.

**Strong cash flow and balance sheet**

Cash flow from operating activities was CHF 50.4 million. Excluding nonrecurring tax payments related to the sale of intellectual property, it would have been CHF 77.0 million compared with CHF 50.9 million last year. Free cash flow was CHF 29.4 million (CHF 37.4 million). This decrease is mainly due to higher investments related to the new global headquarters in Geneva.

Our balance sheet remains strong, with limited net debt of CHF 23.5 million. As of March 31, 2022, total assets increased to CHF 301.4 million. Shareholders' equity reached CHF 161.2 million, representing an equity ratio of 53.5% (49.9% as of March 31, 2022).

**Special 50th anniversary dividend**

Based on the excellent results for 2021/22, the long-term fundamentals for the business and to mark the 50th anniversary of the founding of the company in 1972, the Board of Directors proposes a special dividend of CHF 50 per share (CHF 42 for 2020/21), payable on July 7, 2022. The proposal follows LEM's dividend policy of distributing significantly more than 50% of its consolidated net profit to shareholders and corresponds to a payout ratio of 78.8%, down from 86.1% last year.

**Changes in financial reporting 2022/23**

With effect from April 1, 2022, the company is now organized on a regional and functional matrix. Geographically, we will now report sales according to the following regions:

- China
- Rest of Asia (Japan, South Korea, India, Southeast Asia)
- Europe, Middle East, and Africa (EMEA)
- Americas (NAFTA and Latin America)

It also means the previous two segments of Industry and Automotive are no longer applicable. Rather, we will now report sales along the following five businesses:

- Automation
- Automotive
- Renewable Energy
- Track
- Energy Distribution and High Precision

The company will report a single company-wide P&L every quarter and cash flow and balance sheets twice a year. Further details of these changes in financial reporting are available from the slides on our website, which were presented at the annual results conference in Zurich on May 24, 2022.

**Prudent outlook**

In its latest biannual World Economic Outlook in April 2022, the IMF reduced its estimates and now forecasts global growth to slow from an estimated 6.1% in 2021 to 3.6% in 2022 and 2023. War-induced commodity price increases and broadening price pressures have led to 2022 inflation projections of 5.7% in advanced economies and 8.7% in emerging-market and developing economies. The IMF highlights the essential need for multilateral efforts to respond to the humanitarian crisis, prevent further economic fragmentation, maintain global liquidity, manage debt distress, tackle climate change, and end the pandemic.

Against this backdrop, it is clear that many factors impacting economic demand over the coming year remain out of LEM's control. Despite last year's record performance, we remain cautious about our prospects for the first six months of 2022/23. This is due to ongoing headwinds from supply chain constraints, particularly for semiconductors, while the pandemic lockdowns in China will impact supply chain, production, and sales. The current geopolitical tensions may also undermine investment confidence in certain sectors. Therefore, we expect our sales in the first six months of 2022/23 to be lower than those we achieved in the first six months of 2021/22.

LEM's business does benefit from geographic and sector diversity. There is an increasing trend toward "onshoring" and localization of manufacturing investment, which will further support our business. Our fundamental long-term prospects remain strong, driven by megatrends, such as renewable energy, mobility, and automation. We see this particularly in the demand for our new products in solar power, electric vehicles and e-mobility. The strong demand for EV solutions continues, but the sector's ongoing supply chain challenges may take several more quarters to be resolved.

We are maintaining our key project of investing in a new production plant in Malaysia and plan to start production by early 2024. We continue to invest in R&D at between 8% - 10% of sales, ensuring LEM has the right new technologies and applications for customers as their businesses grow.

**This 50<sup>th</sup> anniversary year provides us with a great opportunity to learn from our history and to also move forward with renewed energy and conviction.**

The new organizational matrix of regions and functions will move decision-making closer to the customer in different parts of the world, empower local management and increase speed of execution. Global functional teams will support regional markets across all customer applications and the entire LEM product portfolio, thereby providing synergies of expertise and development.

We have been positively surprised this year by the demand for our products and are impressed by how the organization has responded so well to multiple challenges. This 50th anniversary year provides us with a great opportunity to learn from our history and to also move forward with renewed energy and conviction. The sectors in which we serve our customers are being transformed by decarbonization and electrification, so while certain elements remain out of our own hands, we can look forward with optimism to continued long-term growth.

24.1%

Sales growth

23.7%

EBIT margin % of sales

72.4 m

Record net profit



# 50 years of ingenuity

## Key milestones

**1972**  
Liaisons électroniques-mécaniques (LEM) founded in Geneva

**1975**  
First current sensors delivered for the new metro in Santiago de Chile

**1986**  
LEM Holding introduced on the Geneva Stock Exchange. 120 employees worldwide. First sensors for trains in China

**1973**  
Swiss trams in Geneva moving smoother with first current sensors

**1979**  
First sensors for wind turbines in Germany

**1994**  
1 million sensors produced per year

**1992**  
First sales of sensors for solar photovoltaic applications

**1996**  
Strategic division into two distinct business units: test systems and high-current systems

**1997**  
CHF 100 million in total sales

**1999**  
Revolutionary product with integrated chip drives first fully automated production lines

**2003**  
First sales of sensors for hybrid electric cars

**1999**  
2 million sensors produced per year. 700 employees worldwide

**1998**  
Strategic decision to enter the automotive market

**2004**  
Strategic decision to focus on components and divest instruments business

**2008**  
First accurate compact digital voltage sensor. Still market leader with this product today

**2016**  
First fully integrated digital sensors on the market

**2015**  
37 million sensors produced per year

**2012**  
First ASIC current sensor. Programmable by customers

**2007**  
First miniature integrated circuit sensor opens up market for low currents

**2019**  
Novel electric DC meter for electric vehicle fast-charging stations

**2018**  
Sales reach a record of over CHF 300 million. R&D investment at 9.4% of sales

**2021**  
66 million sensors produced per year

**2022**  
LEM moves to new HQ in Geneva. 1,500 employees worldwide

## International expansion

With expert sense of the markets and customer demand, LEM grew rapidly around the world.

<b>1972</b>	<b>1982</b>	<b>1987</b>	<b>1989</b>	<b>1990</b>	<b>2000</b>	<b>2013</b>	<b>2017</b>
LEM SA founded in Geneva	France	US Germany Sweden	China	Russia	Japan	Bulgaria	R&D France

# 50 years of inspiration

## Conversation with the Founder, Chairman, and CEO

**Jean-Pierre Etter** LEM's Founder and CEO of LEM, 1972 – 1989, Board Member until 1998  
**Andreas Hürlimann** Chairman of the Board of Directors, 2013 – present, Board Member since 2011  
**Frank Rehfeld** CEO, 2018 – present, Senior Vice President Industry, 2016 – 2018



Jean-Pierre Etter

### What would you like to tell us about the spark that inspired the creation of LEM?

**JPE** The dream of the entire industry was to develop power electronics with variable current. My brother and I started an engineering research company, and we succeeded in developing reliable sensors. While my brother remained focused on research, in 1972, I decided to start a company to bring a few sensors to the market, as I saw growing demand across industries.

### How did you come up with the company name?

**JPE** Big industrial players had separate divisions for electronics and mechanics, which worked in silos. I envisioned linking the two and offering a combined solution, which is reflected in the name *Liaisons électroniques-mécaniques* or LEM.

### What does the name signify today?

**FR** The bridge is still the same between electronics and mechanics. To give LEM even more momentum to grow, we need to get our message beyond the population that focuses on power electronics. Therefore, we attributed to the name LEM a second dimension with our slogan Life Energy Motion, which points to our purpose: helping customers and society accelerate the transition to a sustainable future.

### Was there a key strategic choice that you made to ensure LEM's growth?

**JPE** Some members of the management and Board wanted to focus on the testing and control market. However, I made the decision to stay in current measurement for major applications because we recognized a market need and the potential to become number one. We moved rapidly into automation and high-volume sales to meet customer demand.

**AH** Project "Regain" in 2004 was key. Our focus on sensors required continuously lowering production costs, building a position in the automotive sector and later in renewable energy, but also divesting instrumentation and other loss-making businesses.

**FR** If we limited our activities to our standard heritage sensors, it would mean the end of our growth opportunities because prices fall substantially faster than you can increase volume. Therefore, we decided to move into adjacent fields that are still closely connected to current measurement either through technology or by adding functionality. Examples are the ICS business, the DC meter, and smart-grid activities.

### How would you describe your relationship with major customers?

**JPE** Right from the start, we were working very closely with customers, such as SNCF and Siemens. Working on an equal basis was key. There was mutual respect, technical exchange and learning, as well as cocreation with an open mindset and trust in the relationship. This reduced both technology risk and market risk.

**FR** Your approach from that time is still valid today. We continue to profit from the closeness of customer relationships. The special thing about LEM is that we are focused on current sensing and providing the widest application range in this area. Although we are not a huge company, we have application know-how to provide customers with volumes they cannot bundle themselves.

**AH** Our technically highly competent sales force provides expert application know-how and advice during the customer's design phase. Also, they have the flexibility to adapt components to specific customer requirements or develop new ones through customer-driven R&D or cocreation.

### How did you grow the product portfolio?

**JPE** Customers wanted customized products, so we developed products together with them. Afterwards, they viewed these sensors as their own. There was always significant investment in R&D, but to grow and to produce high volumes at lower prices, we had to invest even more in production. We needed automated production, which required machine engineering and production engineers as well.

**FR** I could not agree more. We decided to grow the investment in R&D even further to 8% to 10% of sales to move into the adjacent areas mentioned before. We managed to show results from our R&D investment in a relatively short time frame of three to four years. LEM has built up a software team and developed one of the most complex products ever developed in the components business – the DC meter for EV charging stations. I am also convinced that the ICS is becoming a great success story.

### And how have shareholders reacted to your investment in R&D?

**AH** The mindset has evolved over the years. Shareholders who were hesitant about the high level of R&D investment now see how this translates into profitable growth, and they accept that the long-term benefits are worth the investment.

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**Right from the start, we were working very closely with customers, such as SNCF and Siemens. Working on an equal basis was key. There was mutual respect, technical exchange and learning as well as cocreation and trust in the relationship.**

**Ingenuity is a good word to describe LEM. It is a response that comes from a demand. Ingenuity is a mindset, accepting a way of thinking differently, listening to one's instincts and working on practical solutions that are needed.**

**Could you tell us about LEM's early overseas expansion?**

**JPE** We proved it was best to work together with competent local experts who knew their customers. Finding the right people in each location was key. I also visited our competitors because I knew that we could learn from each other and even work together in various ways. In the 1980s, China wanted to develop semiconductors, and we received a request to deliver testers to a university. I was approached about setting up a plant to manufacture testers and was open to the idea but told the authorities that I required a responsible director. This was the start of our joint venture in China. They were responsible for management, administration, customers, and so forth, and we were responsible for technical competence, the know-how.

**And what is the approach today?**

**FR** Very similar. You certainly need a team that you can rely on. People who have the right skill set, the right mindset, the right competencies. As we grow, we need to establish the right structures and governance to make it scalable. The fearlessness and foresight of JP Etter was amazing! We need to recapture some of that spirit today. The market focus for sustainable energy has been on Asia, thus our 50% in turnover there. But the world is waking up; sustainability will only fly when costs go down and volumes go up. We are positioning ourselves to achieve our ambition of quadrupling volume and doubling sales in the next five years. We need to get even closer to our customers, so we have reorganized ourselves into a regional and functional matrix from April 2022.

**What is your approach to talent management and building a company culture?**

**JPE** In the beginning, it was a start-up culture that worked well. Once we grew to more than 15 people, we needed a new kind of management. Our philosophy remained, with a focus on people who love their work, who have a sense of purpose. I found people I trusted who were experts in finance, marketing, and production, and gave them the freedom to operate.

**FR** Your approach still resonates today. Qualities we need are entrepreneurship, ambition, and openness. We want to attract and develop people who have fun shaping an organization and who see the agility we have due to our size. You can do things faster here than at large global companies.

**AH** Managers at LEM have the opportunity to speak directly to a Board with the majority shareholders present, like in a start-up. This access to entrepreneurial decision-making and our speed of execution are real assets. There is a healthy appetite for taking risks to move ahead. If things go wrong, we take corrective measures and move on.

**The word "ingenuity" captures a lot of LEM's essence over these 50 years.**

**How do you relate to this?**

**JPE** Ingenuity is a good word to describe LEM. It is a response that comes from a demand. Ingenuity is a mindset, accepting a way of thinking differently, listening to one's instincts, and working on practical solutions that are needed. Above all, accepting that an individual does not have the complete answer, but that in working together and with the customer, we will arrive at the right solution.

**FR** We still apply principles discovered 150 years ago by the Danish physicist Hans Christian Ørsted and ask: How do we consider customer demands to further develop something, to make it cheaper and faster? If we view ingenuity as freedom of individual thought, we have the examples of ICS and the DC meter, which were perfect moments to understand market opportunities and build competence. This closes the circle back to our culture. Driven by our success and a stable 20% EBIT margin, perhaps we developed an attitude that we already know it all.

However, future developments require us to be curious and fast, have the courage to make mistakes, and take responsibility for our actions.

**AH** Ingenuity is the quality of being clever, original, and inventive. Many engineers call current sensors "LEMs" – quite a way to call out the original. We are still putting things together in new ways, just as you, Mr. Etter, did at the start by connecting *électriques* and *mécaniques*. We have plenty of ingenuity in the production environment as well, such as by working with cobots, being more effective, more robust, higher quality, lower cost.

**"Innovation" is a much-used buzzword. How do you regard this at LEM in 2022?**

**AH** Innovation has multiple dimensions, including the classical understanding leading to new products, but also new applications for existing products, new technologies to solve existing problems more efficiently and effectively, and producing new processes, tools, and machinery. There is also innovation at LEM in supply chain management, logistics, and sales.

**FR** I would probably phrase it this way that I see ingenuity more as the mindset and innovation as the result.

**What do you see as LEM's biggest challenges to maintaining its success as market leader?**

**AH** Increasing size drives transformation toward local and regional empowerment and talent development. Yet we want to remain one company with a coherent strategy and well-coordinated decision-making. Competition is more forceful, and technologies are shifting quickly. A higher level of alertness and hunger to achieve are required.

**FR** Our limit is not the market. Our limit is the speed with which LEM can transform itself and grow in this market. Organizations, structures, processes, but also a passion to achieve – all this must come together in an already successful environment. Ultimately, it comes down to people. Rejuvenating teams and attracting the right people. This is why we work on our employer branding.

**What inspires you when you think about LEM's future and the next 50 years?**

**AH** We are at the core of the major technical efforts to decarbonize the world. We are a key enabler in this. This drives our structural growth and provides plenty of emerging opportunities. I am inspired as a shareholder, as a Board member, and as a human being. We can make a major contribution to the challenges that are ahead.

**FR** Our purpose says it all: we are helping customers and society accelerate the transition to a sustainable future.

**Can you sum up LEM in a few words?**

**JPE** First, to be useful and of service. Second, to serve a common purpose. Third, to need one another and work together. Finally, to share, give, and receive in equal measure.

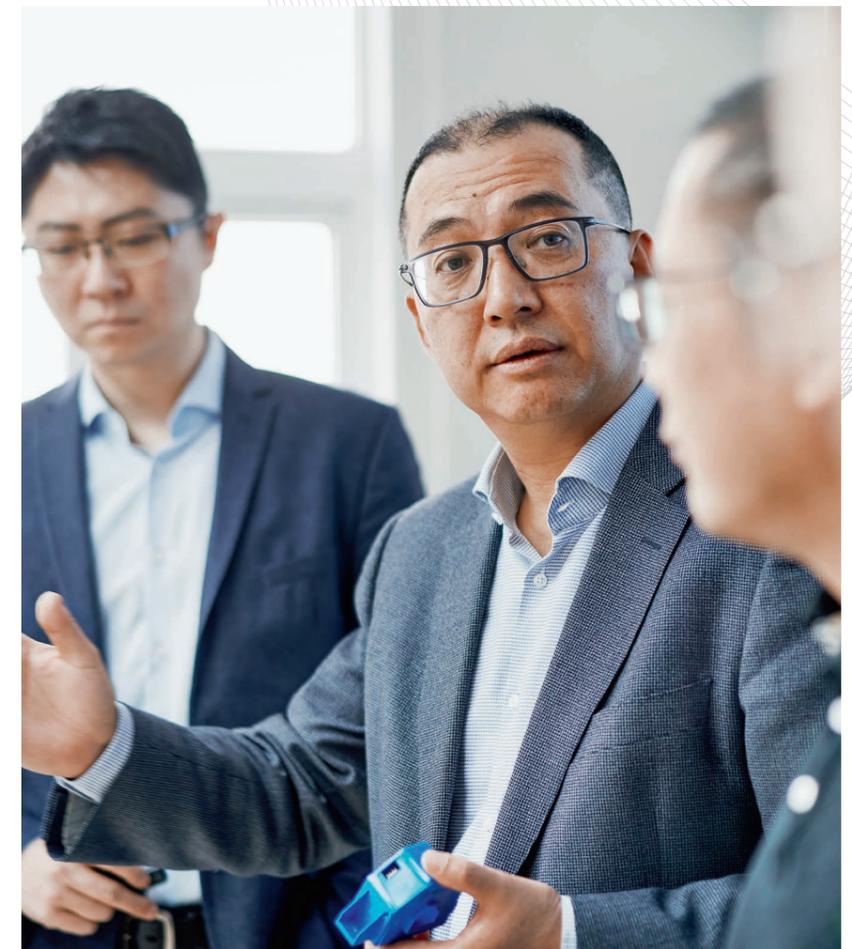
**AH** LEM employees and customers are key enablers of a carbon-free energy system for the future.

**FR** LEM is one of the places in the world where you can do what you want to do, show what you are capable of and, at the same time, contribute so that the world becomes a better place.



# Industry segment performance

«For 50 years, our customers' applications have inspired us to develop new sensors and to constantly improve ourselves, making us experts in electrical measurement.»



## LF1010s

A compact, closed-loop current sensor family based on the latest LEM ASIC technology. LF1010s serves high-performance industrial applications. A magnetic core with partial air gap for 5x better immunity against external fields and LEM Hall effect ASIC for the lowest temperature drift.



**Global industry market – challenging environment**

Global manufacturing remained strong in June 2021, while in September supply chain disruptions and material shortages subdued the upturn. By the end of 2021, output, new orders, and employment all accelerated, but lost a little traction at the end of the first quarter 2022, with March seeing rates of expansion in output and new orders ease and new export business contract (source: IHS Market).

The global economy enters 2022 in a weaker position than previously expected. As the new omicron COVID-19 variant spreads, countries have reimposed mobility restrictions. With rising energy prices and supply chain disruptions, inflation was higher than anticipated (source: IMF World Economic Outlook, January 2022).

Against this challenging global economic backdrop, the Industry segment performance produced strong growth, thanks to our broad portfolio of applications and new launches. We thus continue to maintain significant market share in our business segments. Although COVID-19 interrupted global supply chains, we were proud to have increased our output significantly.

The well-reported shortages of semiconductors and other components affected all our businesses, but with geopolitical tension leading to divestments from oil and gas, we remain encouraged by the fundamental transition towards green energy solutions. Long-term demand for our products is supported by increasing decarbonization and electrification across the world.

We are adapting to important and accelerating changes across markets, such as higher power densities, the electrification of mobility, digital disruption, smart grids, and distributed energy resources. We won new designs and accelerated the production of new sensors, such as the DC meter and ICS models.

**LEM delivers strong performance**

Full-year sales in the Industry segment totaled CHF 287.6 million, up 27.7%. At constant exchange rates, sales improved by 26.4%. All our businesses and regions continue to benefit from the return of invest-

ment confidence and customer demand. Our sales were held back principally by supply chain constraints. However, there is an increasing trend toward “onshoring” and localization of manufacturing investment, which will further support our business.

Europe (+30.4%), China (+22.8%), and the rest of the world (+34.6%) benefited from the demand across Drives, Renewables, and High Precision. Europe continues to be our largest market. North America (+22.1%) benefited from the demand for Drives, but less so for Renewables. Global orders increased by 56.2% for the full year, averaging around CHF 100 million per quarter, as customers continue to commit to orders over longer time horizons.

**Drives and Welding**

Sales in the Drives and Welding businesses increased considerably by 32.8% to CHF 130.2 million. The Drives business is largely supported by the manufacturing investment cycle and benefited from demand for small- and medium-power applications, including tooling machines and heating, ventilation and air-conditioning (HVAC) as well as end-consumer products, such as heat pumps, principally due to the strong recovery from China, Japan, and Korea. Automation and energy-saving applications are the main growth drivers for our sales. We continue to receive very positive feedback on the introduction of our new product family of ICSs for small drives and robotics.

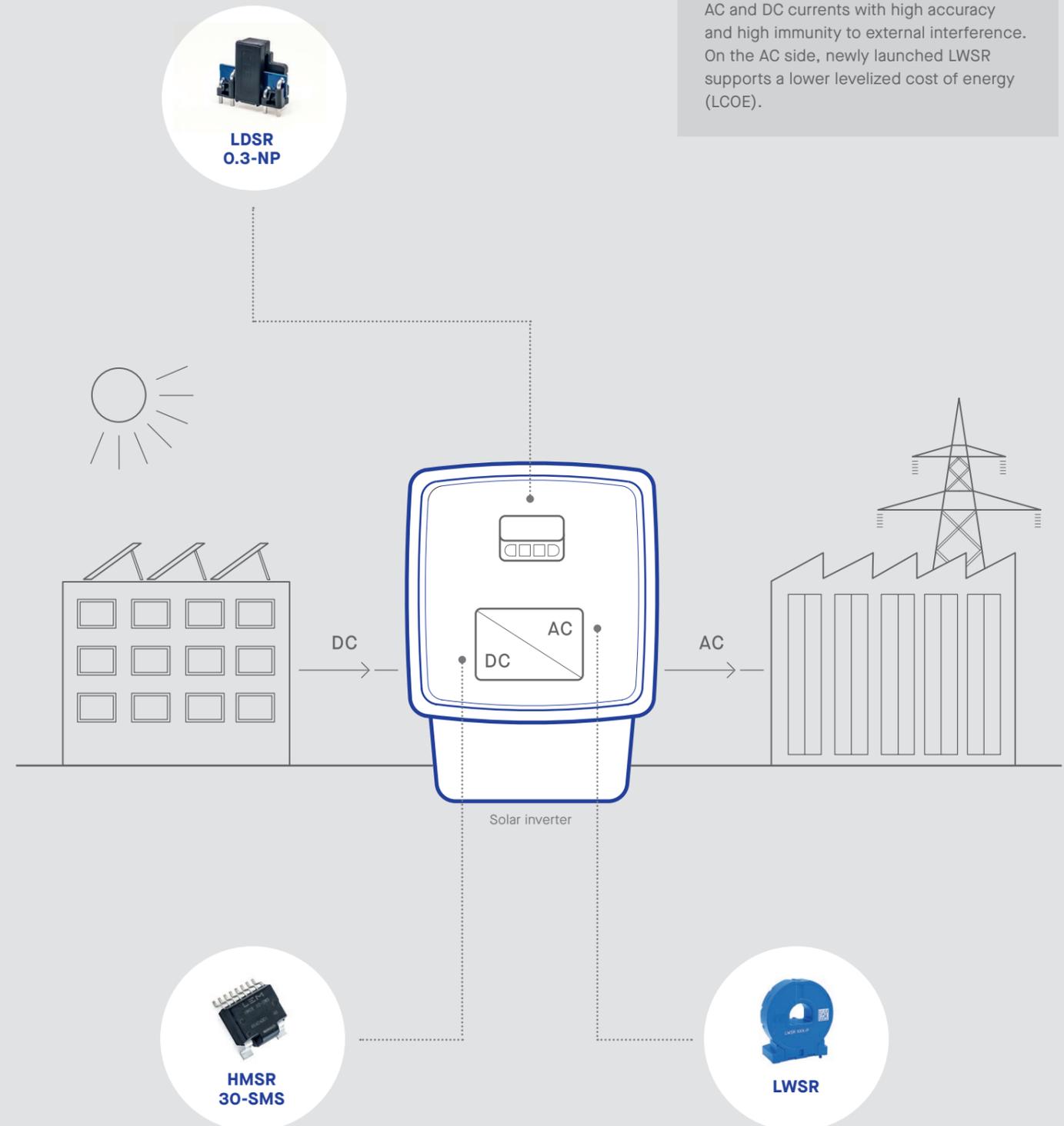
**Renewables**

Sales in the Renewables business grew by 28.7% to CHF 105.0 million due to government policies and commercial investment, with increasing concerns about dependency on fossil fuels and customers from the Chinese and European solar industry producing for the world market. We continue to grow strongly in China due to the country’s heavy investment in solar applications. Sales in Europe and the US remained steady, mainly due to our products for grid monitoring and the certified DC meters for the German market. The infrastructure investment for e-mobility is driving the successful rollout of our new DC meter, and we are encouraged by growing customer interest.

**Solar inverter**

Every house with a photovoltaic system needs an inverter to convert the solar DC electricity into AC electricity.

LDSR measures AC and DC leakage currents in transformerless photovoltaic systems to ensure the safety of people and installations. Primarily used on the DC side of the inverter, HMSR SMS measures AC and DC currents with high accuracy and high immunity to external interference. On the AC side, newly launched LWSR supports a lower levelized cost of energy (LCOE).



## Industry segment performance

### Traction

Sales increased by 12.8% to CHF 42.8 million. Our Traction business, with its project-based long investment horizons, has returned to growth mainly in Europe and India after COVID-19 reduced the global demand for rail traffic.

### High Precision

In the project-driven High-Precision business, sales grew by 24.6% to CHF 9.5 million. Demand in the test and measurement sector for batteries and EVs as well as medical equipment increased sales of our high-precision sensors. Our most recent product line, the IN family, continues to be well received by customers thanks to its superior performance.

### Moving into new markets

As we are moving towards a fully integrated energy market, we are accelerating our efforts for ICSs by preparing the launch of a large portfolio of smaller current sensors in addition to the existing HMSR, a miniature current sensor manufactured on semiconductor processes, and GO series of chip-based sensors. The new family of ICSs stands out with a high agility of application, such as robots in logistics, EV chargers and heat pumps, and allows us to penetrate new low-power, high-volume applications, such as air conditioners, drones, and e-bikes.

Our DC meter for charging green cars was launched in 2020/21 and continued to perform strongly in this financial year. The DCBM offers a high level of integrated functions, with a reliable and certified solution for billing electricity for fast charger users. With the official DC meter qualification and certification granted by the German Physical Technical Federal Institution PTB, LEM is one of the first to introduce integrated functions and a certified software solution for billing electricity for fast charger users. We will continue to invest in DC metering with the aim of offering our solutions in other European markets.

In the Drives business, we are moving from current sensors with analogue output to digital outputs. For our smart-grid projects, bookings and sales for the various Rogowski products continue to increase. Both products have seen large orders and are leading our growth in the low-voltage market. We continue to develop other sensors based on the Rogowski technology to enter the highly promising medium-voltage switchgear business. We offer a broad variety of secondary cables and connectors.

### LEM – 50 years of leadership

LEM brings 50 years of global leadership in electrical measurement – underpinned by our qualities of ingenuity and inspiration. The drive to constantly improve ourselves is an inherent characteristic of LEM. It's with a heritage of close resourceful collaboration and a knowledge of partnership that we work. Our customers' applications inspire us to develop new sensors, and we understand their products very well. While our customers provide the market pull, we offer the technical push. By projecting ourselves into the situations of our customers, our design teams produce solutions with creativity and ingenuity. Our teams then know how to translate an application-specific project into cost-efficient production to meet our customers' requirements for volume, price, and quality.

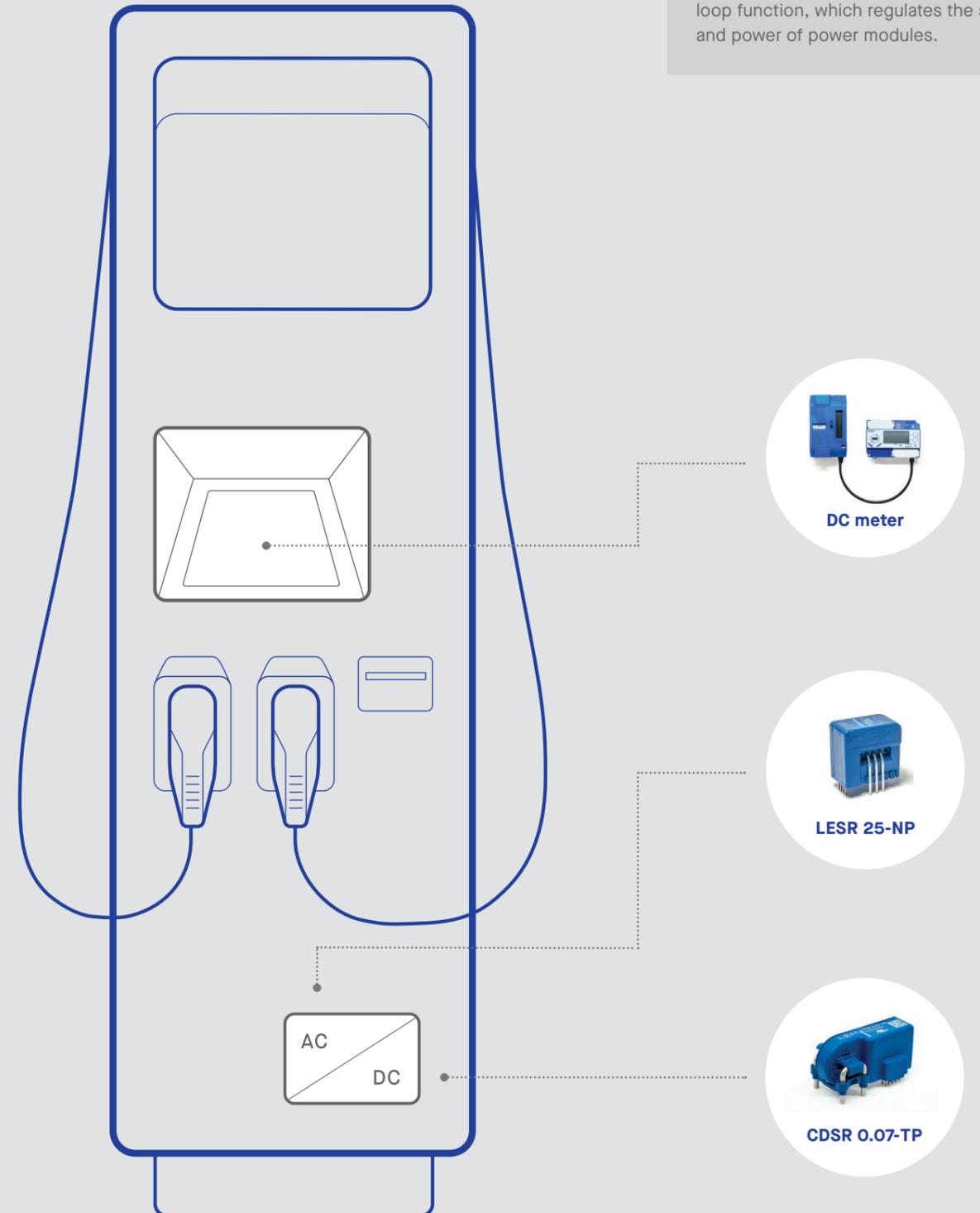
### Outlook

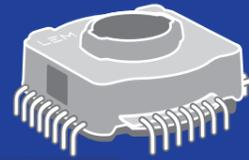
The latest IMF World Economic Outlook (January 2022) predicts the global growth of 5.9% in 2021 to moderate to 4.4% in 2022. The Industry segment continues to be impacted by the pandemic in the first quarter of 2022. As markets continue to pick up, supply chain resilience remains the biggest challenge. In the short term, we are anticipating that new lockdown measures in China will impact our suppliers, production at our factories and, ultimately, sales in the first half of the coming financial year. In the medium- to long-term view, however, LEM will benefit from our portfolio, which is well balanced geographically and across applications. We expect our order book on heritage and new products to stay in very good shape as we continue to expand into new applications. We expect new opportunities in grid monitoring and EV charging systems in the US, thanks to the new US government administration's support for green energy solutions.

## Industry sales 2021/22



● Drives and Welding	<b>130.2 m</b>
● Renewables	<b>105.0 m</b>
● Traction	<b>42.8 m</b>
● High Precision	<b>9.5 m</b>





#### HC16

A unique open-loop, Hall-based sensor with measurement up to 1,600 amp, HC16 suits all architectures up to 1,000 V. Compatible with surface-mounted and through-hole assembly processes and a highly versatile solution for motor control applications.



# Automotive segment performance

«When LEM decided to address the automotive market about 20 years ago, we were already anticipating the technical challenges linked to the electrification of the sector. Our ingenious approach has led LEM to be a partner of choice for key EV market players.»

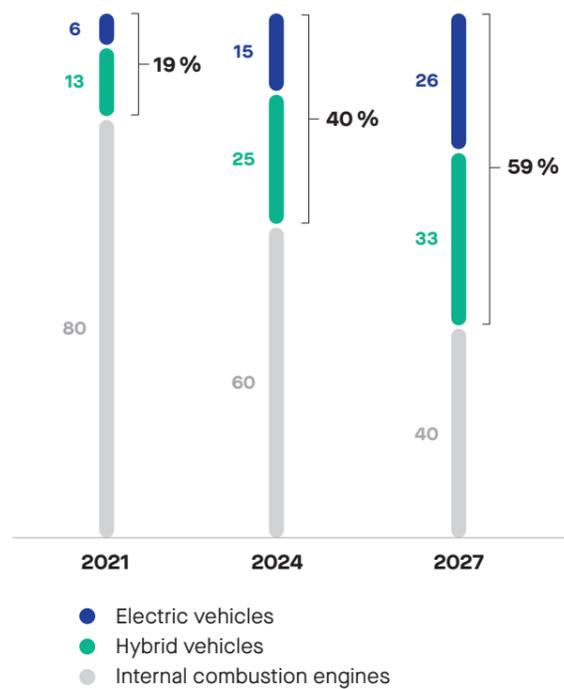


## Automotive segment performance

### Market dynamics strongly influenced by supply chain constraints and acceleration of electrification

After a difficult year in 2020 due to the pandemic, the global production output for passenger cars slightly increased in 2021 by 1.2% to 75.5 million units. The expected rebound driven by demand for electric vehicles (EVs) has been curtailed by the unavailability of components, particularly driven by the shortage of automotive-grade semiconductors. The situation highlighted the structural vulnerability of the automotive supply chain, which has been built on a lean inventory and just-in-time delivery. The unprecedented shortages forced major automotive original equipment manufacturers (OEMs) to cut production and revise their volume ambitions downward. Conversely, Chinese OEMs and “newcomers” seemed to be less affected by this situation thanks to the greater flexibility of their supply chain setup.

### New car production – propulsion share



Source: IHS Markit 2022

<sup>1</sup> Electric vehicles (EVs), defined as plug-in hybrids and battery electric vehicles but excluding traditional hybrids.

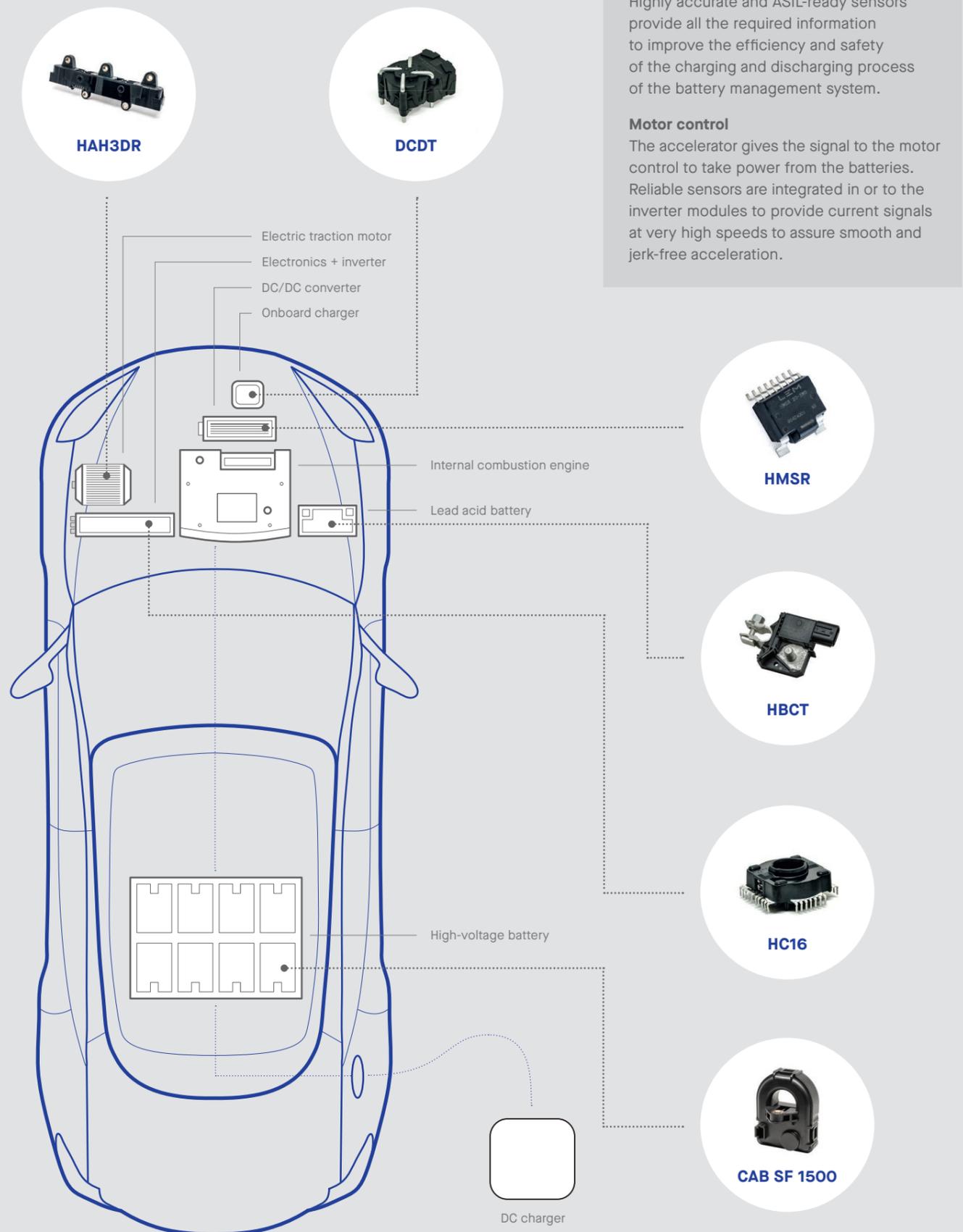
In parallel, the adoption of EVs by consumers continued to thrive, driven by a combination of factors: government subsidies to support post-pandemic industry recovery, CO<sub>2</sub> emissions reduction targets, and rising oil prices. Consequently, carmakers did prioritize the production of premium electrified models, leading to a global share of EVs<sup>1</sup> increasing to 8% of the total vehicle production in 2021. Since EVs require a lot of semiconductors, the increasing demand for EVs will lead in the short term to extended tensions in the supply chain. However, the ramp-up of EV production will accelerate the transition towards electrification in the medium term.

### Strong recovery driven by EV demand

Full-year sales in the Automotive segment totaled CHF 85.8 million, an increase of 13.3%. At constant exchange rates, sales improved by 10.8% compared to full-year last year. Q4 performance reflects the higher baseline of last year when global production had recovered from previous shutdowns.

Our output is still constrained by supply chain issues for semiconductors and other components. These continue to impact the entire sector, and some manufacturers are still revising production plans downward. Bookings in the first half were exceptionally boosted by customers committing firm orders in advance for several quarters. While second half bookings remain strong, they have now reverted to normal levels, with customers ordering for delivery one quarter at a time. The strong fundamental demand for EV solutions continues, but the industry’s ongoing challenges may take several more quarters to be resolved.

With the acceleration of the deployment of EV platforms by carmakers, our products have been designed for several vehicles that entered production in 2020. Our largest market, China, grew by 31.7%, driven by consumer appetite for EVs, the launch of several new vehicles, and the ability of new sector players to better manage supply chain challenges. We benefit from a leading market position, and LEM is well positioned to capture growth opportunities unleashed by the government’s ambition to achieve 25% electrified cars by 2025.



### Hybrid electric vehicles/ electric vehicles

#### Battery management

Highly accurate and ASIL-ready sensors provide all the required information to improve the efficiency and safety of the charging and discharging process of the battery management system.

#### Motor control

The accelerator gives the signal to the motor control to take power from the batteries. Reliable sensors are integrated in or to the inverter modules to provide current signals at very high speeds to assure smooth and jerk-free acceleration.

## Automotive segment performance

The traditional OEMs are not adapting as quickly to these supply chain challenges, and this is reflected in our sales in other regions, such as Europe (+4.8%) and North America (-4.8%). Moreover, the rest of the world decreased by 2.7%, reflecting a higher sales base, as these markets had been less impacted by the pandemic last year.

### Well positioned to capture growth on green cars

The green car sector now represents more than 80% of the Automotive revenues, reflecting LEM's strategic focus on electric and hybrid powertrains. Analyzing our sales performance by the different businesses underlines this dramatic shift.

### Battery management

We offer intelligent battery sensors for start/stop architectures combining a unique know-how on current sensing technologies together with our expertise acquired on lead acid battery technologies. For the full-year 2021/22, sales grew by 6.7% to CHF 48.7 million, reflecting the US reduction in traditional combustion engine sales and the semiconductor shortages, offset by the increase in demand for high-voltage products.

### Motor control

Our sensors for power inverter applications provide flexibility to Tier 1 and OEMs in their design, with solutions that can be implemented on various subsystems, such as gate driver boards, power modules, integrated busbar, and standard busbar mounting. For the full-year 2021/22, sales grew by 27.7% to CHF 34.1 million, with strong demand spurred by EVs.

### Charging system

This new product range offers dedicated technologies to support transfer energy subsystems from AC to DC and DC to DC with high- and low-voltage applications. For the full-year 2021/22, sales decreased by 11.9% to CHF 3.0 million due to product allocation impacted by semiconductor shortages.

### Continuously progressing in all aspects of the business in a constrained market

Technical innovation and strong product development road maps have always been key pillars of LEM's strategy, making us a preferred partner for customers adapting to the technological disruption of automotive electrification.

But over the last couple of years, due to the global constraints that the automotive market experienced, we have also witnessed a shift of our customer priorities from long-term productivity improvements to safeguarding short-term production continuity. LEM has risen to these new challenges by quickly adapting our processes in terms of supply chain management agility and making extra efforts to optimize production outputs.

The recognition by our customers of our efforts demonstrates that we are the right partners for them to prepare their future. This allows LEM to maintain a strong link with our customers' R&D teams, so that we can continue to ensure long-term success founded on our technical expertise.

### LEM ingenuity and inspiration

When LEM decided to address the automotive market about 20 years ago, we focused on current measurement devices for 12-V battery management in conventional combustion engine vehicles. But the market potential of automotive electrification had already been perceived as a strong opportunity. Over

## Sensor integration levels



Source: Strategy Engineers; AVL

the years, our persistence in addressing and solving the technical challenges of our customers helped them to fully engage on this path of electrification.

This ingenious approach led LEM to be a partner of choice for all key automotive trendsetters, be it either newcomers disrupting the established OEM brands or traditional carmakers transitioning from conventional combustion engines to electrified powertrains, leveraging their high-volume production capabilities.

Our successful early move into the EV market provides us with inspiration to build on this experience and tackle even larger opportunities, such as those in energy metering.

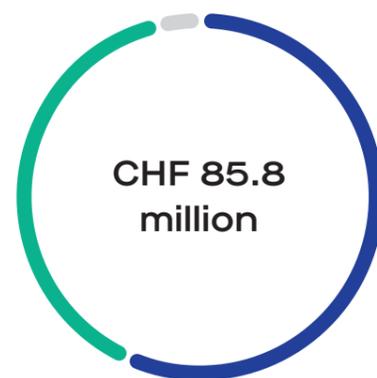
### Outlook

The pandemic, together with structural changes linked to electrification, continues to disrupt the global supply chain. Although these challenges expose us to matters out of our control, we remain flexible and agile as an organization. In the short term, we expect our business to be impacted by factory closures in China and continued supply bottlenecks, particularly due to the global shortage of semiconductors affecting the whole automotive industry. However, in the medium and long term, we are confident the green energy transition will continue to drive LEM's future. In 2022/23, our growth will be supported by new product launches in motor control (HC16 and HAH6) and battery management (HSBBV).

**Production of EVs per year are forecast to double from 2025 to 2030 as products move beyond the performance and luxury segments. The next five years are critical, particularly in building a robust supply chain and support infrastructure, and in convincing consumers that EVs are real. Because for the industry, they are.**

IHS Markit "Making the BEV commitment," June 2021

## Automotive sales 2021/22

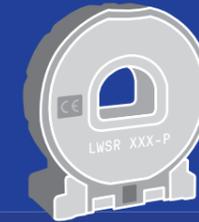


- Battery management 48.7 m
- Motor control 34.1 m
- Charging systems 3.0 m



# Trends, technology, R&D

«We continued to invest in new technologies and in the ingenuity of our highly skilled R&D teams. This resulted in the launch of seven new products in the past year.»



## LWSR

Completing LEM's offer for solar string inverters, LWSR is a closed-loop, Hall-based sensor designed to fit inverters rated between 250 and 500 kW. This sensor supports solar inverter manufacturers with a lower LCOE for photovoltaic power plants.



#### Megatrends drive long-term growth

Our growth is driven by megatrends, such as renewable energy, energy efficiency, reliable energy, distributed energy, mobility, automation, and digitization. They drive demand for sensors, give multiple opportunities to leverage LEM expertise, and ensure a sustainable long-term business for all our stakeholders.

Based on IHS data and our analysis, the current sensor market is expected to grow from about CHF 2.8 billion in 2021 to CHF 4.1 billion in 2026. Our strong heritage is industry applications, where we are market leader and have significant growth potential, while our fastest growing sector in the long term is automotive applications. Far from being a mature market, current sensing products are undergoing significant mutations, driven by new applications and technologies. These fast-changing markets will lead to pricing pressure, shorter product lifetimes, quicker return on investments and will require companies to be more agile.

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**Our R&D team provides a diversified skill set and ingenuity as well as a particular cleverness in design to deliver the best product. We master the value chain, from the design function at an IC level all the way up to the full sensor and customer application.**

LEM has opportunities thanks to the switch to electric powertrains, the miniaturization of components, and the adoption of integrated current sensors. Across both industry and automotive applications, we see demand for additional functionalities towards current transmission and digital information.

#### Technology trends

##### Ever-higher power densities drive new current sensing technologies

The power density is the amount of power generated per unit volume of the motor and the power electronics. The more powerful the motor in a smaller envelope, the higher the power density. Increasing power density is therefore a critical factor to increase performance, as space constraints are present in virtually all industry and automotive applications.

Two technologies are enabling a step change in levels of power density: silicon carbide (SiC) and gallium nitride (GaN). These allow higher switching frequencies and thus are very well suited for automotive applications where performance is key. We are spending significant time and energy on evaluating, gaining access to and mastering future sensor technologies.

The increased demand for small sensors capable of handling high levels of power density led to the emergence of integrated current sensors over the last decade. ICSs measure the primary current line directly through surface-mounted integrated circuits (ICs) and have become a technology of choice for industrial and automotive applications thanks to their ability to sense relatively high currents while using a very compact footprint.



#### Digital is disrupting energy and mobility usages

Smart grid and autonomous driving are two major disruptions led by digital revolutions to bring about smarter, greener, and more efficient ecosystems. This is creating a lot of data, communication, and the need for artificial intelligence. At LEM, we are developing smarter sensors with data processing, functional safety, including self-diagnostics, and added value with embedded software to achieve real-time computation, which accelerates information transmission and decision-making in the system.

#### The electrification of vehicles opens new applications to current sensors

By 2028, 50% of annual car production will be using hybrid and electric powertrains. In addition, electric and hybrid vehicles require a higher number of current sensors than combustion powertrains, spurring exponential growth for the demand of sensors. From about 125 m of current phases measured in 2020, LEM estimates that the market will grow more than four times, to reach about 450 m in 2028.

LEM believes onboard chargers (OBCs), DC meters, and DC/DC converters will play a key role in energy distribution and management of hybrid and electric powertrains. OBCs provide the means to recharge the battery using an AC socket at home or from a charging station. DC/DC converters translate high voltage coming from the battery to a lower voltage, which is then used for various onboard applications (A/C, electric power steering, etc.).

DC metering is becoming mandatory in EU and US markets, as regulators want customers to pay only for the power load of the battery of the vehicle, net of power line losses. Electrical safety is also becoming increasingly important, as the detection of current leakage brings protection for customers in case of malfunction of the charging station. Ever-higher voltage levels (up to 800 V) place the battery system at the heart of the hybrid and electric powertrains. Accurate battery management systems that can measure the state of charge (SoC) and state of health (SoH) have become increasingly important to ensure the driver has access to reliable information on the remaining driving range and that the battery cells are well maintained to protect the battery life.

#### More stringent safety standards pave the way for autonomous driving

Automated driving functions are realized with interconnected systems using automated driving assistance systems (ADAS). Those systems are replacing part of a driver's usual decisions keeping them and others safe from hazards. To maintain this level of safety, ADAS are implementing functional safety defined by the ISO 26262 standard. We are introducing this standard to offer the strongest safety functions to our customers using LEM sensors in electrical vehicle powertrain systems, such as battery, motor, and power converters.

#### Smart grid, a new market for current sensing solutions

Our energy system is undergoing a radical transformation as millions of EVs hit the road and terawatts of renewable energy capacity are installed. These changes are essential to decarbonize our energy system but are creating significant challenges. First, wind and solar energy's intermittent nature forces grid operators to provide flexibility to the system. Second, the rapid growth of distributed energy resources (DER) is decentralizing the distribution network, increasing the complexity of its operation. A smarter grid is thus needed to reliably integrate intermittent renewable energies and DERs.

LEM provides sensors that measure electrical parameters along the network, allowing grid operators to monitor, control, and automate grid operation. LEM offers best-in-class solutions for the ever-increasing demands of utilities and equipment manufacturers.

**Ongoing R&D investments**

We continue to invest to assure long-term growth, with R&D investments in 2021/22 of CHF 29.4 million, up from CHF 28.2 million last year. We are on track in executing our mid-term and long-term plans. Four main trends prevail in driving our investments: increasing global demand for electromobility; measurement of energy flows in smart grids; requests from automotive customers for functional safety through third-party assessments; and demand for tailored solutions in high-volume applications.

Our investments are split into near-, mid-, and long-term projects, such as developing building blocks for the next decade. At our R&D sites in Geneva and Lyon, our engineers and specialists are conducting long-term research and thinking about new applications in clever ways. In Sofia and Beijing as well, new products are being developed in cooperation with our customers for specific applications.

This is leading us from a traditional, electromagnetic sensors company into a broadened business of various integration levels. Examples are the HMSR and the DC meter for charging stations. The HMSR is an ICS that includes a high-performance ASIC, a micro ferrite, and the benefits from a specific over-molding method ensuring high isolation in a very small package. The DC meter has an intelligent Ethernet interface and a high level of integration in the customer product. Both products, launched in 2020, have seen a fast ramp-up and are a success story of our collaborative work approach.

Our R&D team provides a diversified skill set and ingenuity as well as a particular cleverness in design to deliver the best product. Developing products for customers in the industry and automotive segments allows us to leverage synergies to produce larger systems, modules, and semiconductors. This gives us the agility to master the value chain from the design function at an IC level all the way up to the full sensor and customer application.

An example is the development of the DC meter, where we involved alpha customers early on and quickly provided prototypes for customer feedback. The shift from hybrids to full EVs is the future, and we are positioned exactly right for this transformation. The demand for DC metering in EV charging infrastructure is increasing and even stronger than we expected. Our broad skill set also led us to produce functionally safe sensors to protect customer products and users from higher system and vehicle malfunction. The demand for residual current detection associated with charging solutions is also taking off.

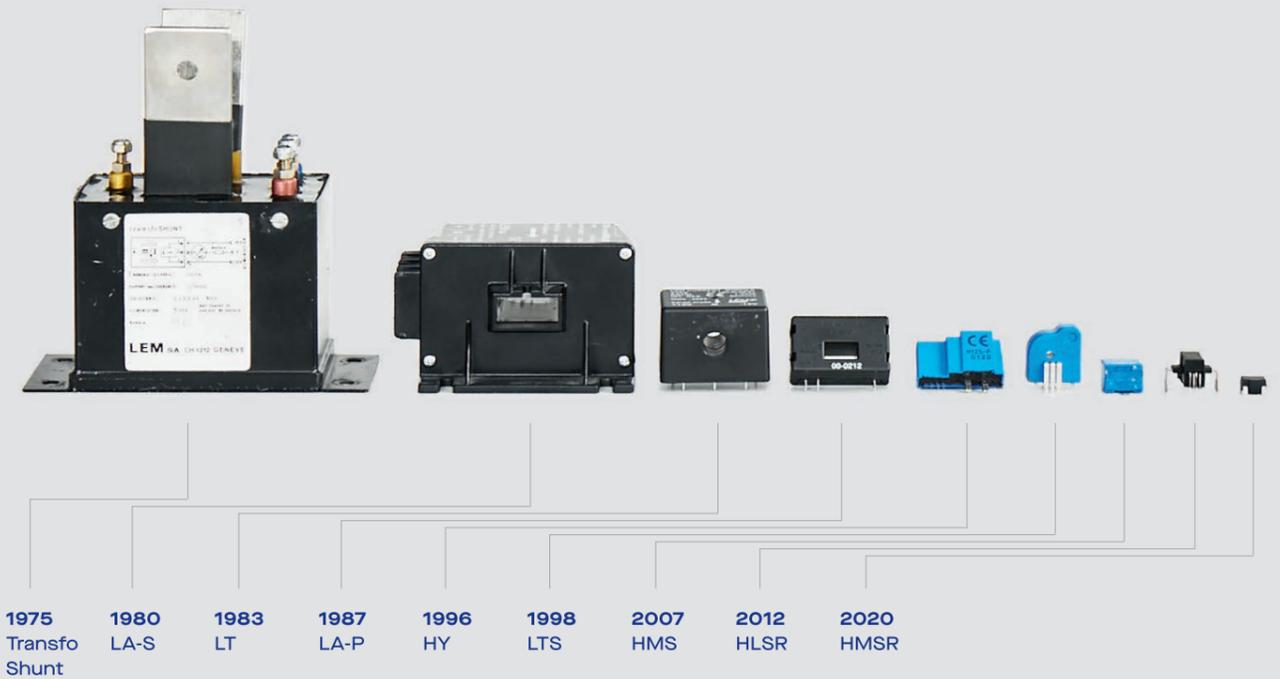
**Development across sites, teams, and segments**

The Geneva team is becoming our leading hub for innovation and advanced engineering for products going into drives, residual current detection, high precision, and semiconductors. In Lyon, we develop products for traction, DC metering for EV fast-charging stations, and automotive battery management systems.

R&D teams in both Geneva and Lyon focus on new and advanced technologies, such as embedded software development and validation, predevelopment of technologies and innovative applications of our products, including algorithms for intelligent battery management. Dedicated innovation teams at both sites work with universities and technical institutions.

We are significantly increasing the resources in the ICS team both in Geneva and Lyon. We have doubled the size of the ICS R&D team with experts from the semiconductor industry. This will enable us to reduce outsourcing R&D and grow in-house competency in design, test development and applications support.

**New technologies drive miniaturization**  
Precision DC and AC current sensors are getting smaller and smarter.



Due to continued stress in the supply chain, the whole semiconductor industry is very constrained by material availability. We have been successfully establishing very important strategic partnerships – with foundries, outsourced assembly and testing – in order to get the materials we require. These partnerships will guarantee and secure component delivery for our key customers.

In Bulgaria, we are executing major projects, such as development of Rogowski coils in Sofia. China is developing custom projects, such as open-loop sensors in Beijing and launched a trackside sensor last year.

#### Protecting our customers from cyberthreats

Cybersecurity is a concern for our customers. We have been working on hardware/software product-related cybersecurity specifically for Automotive. With increasing digitalization, more and more products could be exposed to external communication. One example is an automotive sensor. Whenever a firmware download is done, there exists the threat of potential hacking, so cybersecurity needs to be considered. Another example is the DC meter. The interface at the charging station could potentially be exposed. We are working on ways cybersecurity can protect these products. We understand the complexity of the situation and are actively planning to increase our competency in this area. We are expanding our know-how and investing in system engineers who can translate customer needs into product requirements and architecture.

#### Technical focus and product launches

We are running product projects in the areas of automotive battery management, integrated current sensors for renewable energy applications, drives, and traction. New market needs are emerging to protect people's safety. Residual current detection is becoming more and more apparent as a trend, driven by regulations as well. For example, detection and monitoring of current overload, where we see very strong demand in DC charging but also in photovoltaic and data centers.

We completed a process assessment and certification last year with the DC meter 600 amp, MID module D. This allows LEM to deliver DC meters at fast-charging EV stations directly to our German customers and forego an additional and expensive interim certification step. Our teams continue to work on the lower-cost, high-volume 100 amp DC meter.

Rogowski sensors are in very strong demand in smart grid. In our traction business, we updated existing products via testing and validation to be compatible with new standards, and in China, we engineered new sensors for trackside monitoring.

Our efforts were recognized by the granting of nine patents. Significant investments in R&D over recent years continue to bear fruit. In 2021/22, we launched seven products.

#### Outlook

In 2022/23, our investment in R&D will increase, with growth in three main areas across our main R&D sites. For ICS, additional resources will allow us to widen our portfolio. More system engineering capacity is needed to support new product requirements, including functional safety and cybersecurity. Embedded software is increasingly integrated into LEM products, including DC metering, battery monitoring and residual current detection, and this will require growth in both development and testing teams.

We will also increase efficiency by developing new product architectures shared across multiple applications. The innovation team in Geneva has been extended and continues to work on long-term technology projects and innovative new applications.

## Product launches 2021/22

Product	Segment	Application
<b>EM4T II+/TEMA4G</b>	Industry	Onboard traction, metering
<b>ARH</b>	Industry	Smart grid
<b>HOB-P</b>	Industry	Drives, power conversion
<b>LWSR</b>	Industry	Renewables
<b>IN 200</b>	Industry	High precision
<b>HTRS</b>	Industry	Trackside
<b>HSBBV</b>	Automotive	Battery management



#### EM4T II+/TEMA4G

TEMA4G, an energy measurement solution (EMS), contains the new EM4T II+ and a 4G/LTE modem. The EM4T II+ is a highly versatile multinet network energy meter able to measure both AC and DC currents and can therefore be used for cross-border traffic. The EM4T II+ is fully compliant with metering standards for onboard use and is available for new designs and maintenance projects.



#### HOB-P

A high-bandwidth (1 MHz), open-loop sensor developed specifically for fast-switching silicon carbide (SiC) MOSFETs in high-voltage, pulsed-power circuits. Thanks to a pick-up coil on LEM's application-specific integrated circuit (ASIC), the sensor provides best-in-class response time and frequency bandwidth. The HOB-P is well suited for handheld plasma cutters, welders, and DC-DC converters.



#### LWSR

Completing LEM's offer for solar string inverters, LWSR is a closed-loop, Hall-based sensor designed to fit inverters rated between 250 and 500 kW. This sensor is aimed at providing solar inverter manufacturers with sensing measurement solutions to support a lower LCOE for photovoltaic power plants.



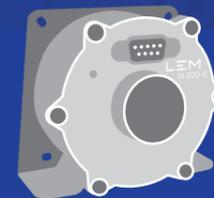
#### IN 200

To enable test benches to achieve the increasingly high levels of accuracy that the EV market is demanding, LEM has developed the world's first current measurement sensor capable of achieving record-high levels of accuracy (0.0018%) and performance. Effectively three products capable of matching nominal currents of 100A, 200A, and 400A, the IN 200 sensor offers significant performance improvements over previous devices, especially in terms of linearity, electrical offset, and noise immunity.

# Culture, talent & values



«LEM's founder Jean-Pierre Etter emphasized the quality of ingenuity as a mindset, a way of thinking differently, questioning the usual way of doing things. This same quality remains today with our Blue Behavior of a learner mindset.»



## IN 200

For high-precision applications, such as MRI, and to enable test benches to achieve ever higher levels of accuracy for the EV market, LEM has developed the IN 200. This is the world's first current measurement sensor to achieve record-high levels of accuracy (0.0018%). It significantly improves performance over previous devices, especially in terms of linearity, electrical offset, and noise immunity.

# Culture and talent for growth

## Organization adapted to customer needs and growth opportunities

Our industry is changing fast and being shaped by several technology breakthroughs and market opportunities. And so is LEM. As of April 1, 2022, a new regional and functional matrix organization has been fully implemented. This new structure aims at accelerating the speed of decisions closer to our current and future customers while building our growth on solid foundations. Our new headquarters in Geneva is the symbol of our ambition and our way of working: agility, transparency, and collaboration. We believe this location, known as "The Hive," will inspire current and future LEM employees to fulfill their potential.

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**The way we work together with all our stakeholders is what makes us different from the competition and will enable us to achieve our ambitious business objectives and deliver on our purpose.**

## Human resources function drives talent development

At LEM, Human Resources is a strategic business partner, committed to maximizing sustainable global growth by building organizational capability and a work environment where diverse talent can thrive. Last year, we continued to shape the HR function by adding two centers of excellence: Total Rewards and Talent Management, which will ensure that we continue to attract, engage, develop, and retain the talent LEM needs today and tomorrow.

During 2021/22, we conducted a fundamental review of LEM's long-term incentive plan with the goal of further strengthening:

- the link between pay and performance by adding an external perspective to the current internally focused view on company value creation;
- the loyalty of key employees to LEM by giving them the opportunity to directly participate in LEM's sustainable success via an equity-based plan;
- the alignment of interests with shareholders.

As of 2022/23, the current cash-based long-term incentive plan of LEM's Executive and Senior Management will be replaced by a share-based Performance Share Unit (PSU) plan.

## Employer of choice

We are a high-quality global employer, human-sized with a collaborative culture. As market leader in several applications of electrical measurement, our employees enjoy intellectual challenges, diverse pathways, and global career opportunities. We are relentlessly recruiting and developing the best global talent with both leadership and technical competencies to deliver on the growth potential of the company. Working for LEM enables us all to contribute to its purpose: "With innovative electrical solutions, we are helping our customers and society accelerate the transition to a sustainable future."

## Keeping connected: ingenuity and inspiration

Over the last couple of years, all of us have had to adjust to the extraordinary consequences of the COVID-19 pandemic. Everyone has gone the extra mile to compensate for the lack of in-person communication due to travel restrictions. In the meantime, we have continued to build communication and collaboration tools, such as our new intranet called My LEM. This new global platform aims at sharing information and, more importantly, creates and maintains a social link between the global LEM community. The quality of ingenuity remains a constant factor in how LEM employees develop solutions for our customers and also the best practices we develop across functions. By keeping connected and sharing such successes, we are inspired to learn from each other and seek continuous improvements.

## Our way of working is what makes the difference

The LEM team is made of human expertise, talent, and leadership and works relentlessly to bring customers the best solutions. We are conscious that the way we work together with all our stakeholders is what makes us different from the competition and will enable us to achieve our ambitious business objectives and deliver on our purpose.

LEM employees have been involved in the identification and definition of LEM Blue Behaviors, which are grouped in four categories:

- Innovation and continuous improvement mindset
- Customer orientation and growth mindset
- Team player mindset
- Player/learner mindset

Within these groups, specific behaviors have been identified and are already integrated into individual development plans, performance assessment systems, and talent acquisition processes. All employees should aspire to embrace and enact LEM Blue Behaviors, whatever their function or seniority. It is already clear that a constructive culture will help current employees achieve their full potential and enjoy their experiences, as well as attract the right caliber of new talent to ensure LEM achieves its strategic goals.

## Diversity and inclusion

As LEM adapts its organizational structure to meet the demands of its customers and seize the growth opportunities of the various megatrends, there is a need to diversify its talent base across different regions, product applications, technologies, and support functions. The company is committed to ensuring that its talent acquisition and development strategies are as broad-based as possible, recognizing that diversity and inclusion brings many benefits.

LEM provides equal opportunity to all qualified individuals. The share of female employees is 53% in the overall workforce. However, given the historically high share of engineering positions in product development, sales and marketing, and management, the share of female employees in the nonproduction-related activities is 31%, which is a 2% increase compared to the previous year. We actively seek female candidates in order to increase their share in the higher-qualification positions, and there has been significant progress in markets such as China, where many engineering graduates are women. Several global responsibilities, such as purchasing, supply chain, finance and reporting, group controlling, global talent management, and communications, are headed by female employees. LEM has several key female managers in China (Finance, Purchasing, Quality, and Supply Chain) and in Bulgaria (General Manager, Purchasing, Human Resources, and R&D). During 2021/22, the proportion of management positions held by women increased by 4%.

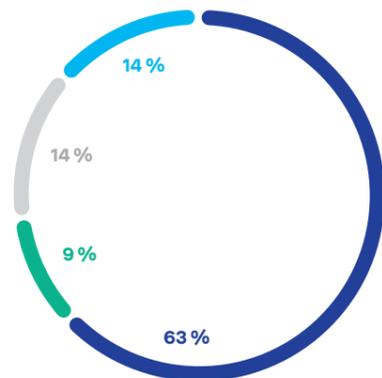
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## Employee analysis

	31.3.2022	31.3.2021
<b>FTE</b>		
Permanent employees	1'350	1'297
Temporary employees	198	135
Trainees	24	16
<b>Total</b>	<b>1'572</b>	<b>1'448</b>

### Workforce by activity

1'572 total employees



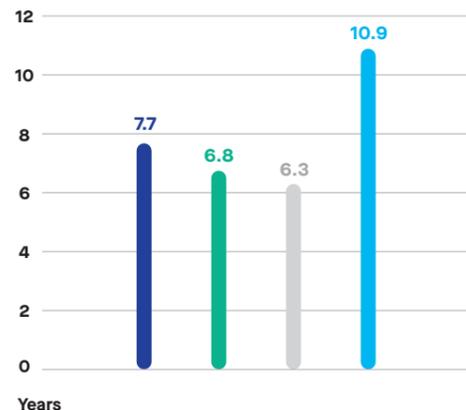
- Operations
- Admin and logistics
- R&D
- Sales and marketing

#### Ready-now talent

A committed, qualified, and engaged team is essential for LEM's lasting success. To this end, we support our employees to attend leadership and job-specific training and develop their personal skills. Our aim is to continue to invest in reskilling or upskilling, with an increased focus on web-based/remote delivery to adapt to the new normal. Access to LinkedIn Learning for all LEM employees is an illustration of our commitment to their development. In the last year, more than 40% of our open positions were filled by internal talent.

### Average length of service

1'350 permanent employees



- Operations
- Admin and logistics
- R&D
- Sales and marketing

#### New talent

We are continually looking for new talent who wish to make a difference and have genuine interest in contributing to LEM's purpose. We offer a multicultural, human-focused working environment allowing self-fulfillment in a growing and challenging context. We are focused on hiring core competencies in new markets, such as smart grid, semiconductors, and embedded software, as well as in the fastest growing area of e-mobility. In addition to technical competencies, new recruits should embrace LEM Blue Behaviors. We are committed to investing time and resources to facilitate their onboarding and integration into our organization so they can maximize their impact.

### Executive Committee



From left to right: **Frank Rehfeld** Chief Executive Officer, **Andrea Borla** Chief Financial Officer, **Rebecca Cullinan** Senior Vice President, Industry, **Rainer Bos** Senior Vice President, Automotive, **Rodolphe Boschet** Chief Human Resources Officer

# Our values and behaviors

## Our values

Our core values are the beliefs we share – and the spirit and intent of everything we do:

### We are customer-driven

All our activities are driven by the desire to provide best-quality service.

### We operate with integrity

Our relationships with coworkers, customers, suppliers, partners, and the investor community are based on openness and fairness.

### We value teamwork

Teamwork is more than just working together, it is bringing out the best of everyone's strengths.

### We commit

We set our goals high and take responsibility for all our actions.

### We strive for excellence

No matter how good our products, services, processes, and results, we are dedicated to making them better.

### We lead innovation

By thinking outside the box, we adapt to tomorrow's requirements.

## LEM Blue Behaviors

The LEM team is made of expertise, talent, and leadership and works relentlessly to bring customers the best solutions. We have identified four groups of LEM Blue Behaviors, which all employees should aspire to embrace and enact, whatever their function or seniority:

**1** Innovation and continuous improvement mindset

**3** Team player mindset

**2** Customer orientation and growth mindset

**4** Player/learner mindset

# Board of Directors



Left to right Ueli Wampfler, Werner C. Weber, Andreas Hürlimann, François Gabella, Ulrich J. Looser, Ilan Cohen

### Ueli Wampfler

Member of the Board of Directors  
Chairman of the Audit and Risk Committee

### Werner C. Weber

Member of the Board of Directors  
Member of the Strategy Committee

### Andreas Hürlimann

Chairman of the Board of Directors  
Chairman of the Strategy Committee  
Member of the Nomination and Compensation Committee

### François Gabella

Member of the Board of Directors  
Member of the Strategy Committee

### Ulrich J. Looser

Member of the Board of Directors  
Chairman of the Nomination and Compensation Committee  
Member of the Audit and Risk Committee

### Ilan Cohen

Member of the Board of Directors

«Climate change is one of the greatest challenges facing society. LEM's products help our customers reduce energy consumption and CO<sub>2</sub> emissions in many sectors of the economy. We are now implementing a strategy to reduce our own emissions and those across our supply chain to become net-zero by 2040.»

# CO<sub>2</sub> strategy



# Towards a sustainable future

Rainer Bos, Senior Vice President, Automotive, and Andrea Borla, Chief Financial Officer, share their perspectives on LEM's new CO<sub>2</sub> strategy.

## What was the catalyst behind LEM's CO<sub>2</sub> strategy? Rainer Bos (RB)

There are two key aspects behind our strategy. Above all, it is our responsibility as a company to contribute to the mitigation of climate change. Secondly, our customers are expecting their suppliers to fulfill their CO<sub>2</sub> requirements. It is also important that our employees feel that they work in a company that is doing the right thing for the future of our society.

## Andrea Borla (AB)

Absolutely. With this strategy, we want to underline LEM's willingness to contribute to reducing global warming and its effects by launching concrete initiatives. The other catalyst is our various stakeholders, including customers and employees, but also our investors, who in the last few years have made increasing inquiries about our responsibility around sustainability.

## Can you describe the way in which you are going about this project?

**AB** In 2021, we set up a global team, with individuals from our various locations and sites. It was essential for us that this was not just a head office exercise with our Swiss-based team, but that our global teams also participate, especially at the other main sites in China and Bulgaria.

After exploratory discussions, we decided to seek guidance from an external consulting firm specialized in crafting CO<sub>2</sub>-reduction plans for companies. The first phase was the assessment, during which we evaluated the sources of our CO<sub>2</sub> emissions. The second phase was to develop a company-wide CO<sub>2</sub>-reduction strategy, which consisted in defining the long-term vision, the mid- and short-term targets, and several specific initiatives on how to tackle our emissions.

## What are your findings so far?

**RB** Scope 1 and 2 account for only 2.5% of our total CO<sub>2</sub> emissions. Scope 1 emissions are direct emissions from LEM's own sources that result from the combustion of fossil fuels. Scope 2 emissions refer to indirect emissions generated by our purchases of electricity. These are areas that we can impact strongly and can make relatively quick reductions. However, scope 3 emissions are a bigger challenge, since they include a company's upstream and downstream activities. We were all aware of the fact supply chains are often a crucial element in the CO<sub>2</sub> activities of a company like ours, but the magnitude of its effect was surprising. 97.5% of our total CO<sub>2</sub> emissions are classed as scope 3; these include purchased components (90.2%), downstream transportation (4.3%), and production materials (1.5%). This is a clear indicator that we must collaborate more closely with our suppliers to share and develop similar ambitions and plans. To me, we even need to go beyond that, as it is not just the suppliers, but the components that we are buying from them that play a central role.

## Given these findings, what are your short-term targets, and how do you aim to achieve them?

**RB** Our priority is to be CO<sub>2</sub> neutral in scope 1 and scope 2 by 2025. We are convinced that we can do that by purchasing green energy from the market or by installing solar panels at our sites for our own electricity consumption. Moreover, we will start to reduce our scope 3 emissions in parallel, for example by finding reasonable, more environmentally friendly transportation means for our goods – inbound and outbound. There are several other measures that can be taken to diminish our scope 3 emissions, such as reducing single-use products, increasing the usage of recycled materials, and reducing waste in general.

## What is your long-term vision and target?

**AB** Like many of our customers, we have the ambition to be faster in becoming CO<sub>2</sub> neutral than the Paris commitments, that is, to be CO<sub>2</sub> neutral in all 3 scopes by 2040, instead of 2050. The major challenge is the way by which we can ensure that all our purchased components are also produced in ways that emit drastically less CO<sub>2</sub>.

## What are the main challenges facing LEM in reducing its scope 3 CO<sub>2</sub> footprint across its supply chain with suppliers?

**RB** A key challenge is that we should be working on the designs of the future to come up with more "CO<sub>2</sub>-compliant" product designs. In our industry, we have lots of so-called "design-for" activities, such as "designs for quality," "designs for cost" or "designs for manufacturing." I am convinced that in the future we need to introduce a "design for environment." A second challenge is to fully involve our suppliers in developing their own action plans in terms of ambitions for CO<sub>2</sub> reduction and neutrality. We need to develop a strategy together in the scope of the general partnership agreements and contracts that we have with them, especially when it comes to electronic components. A third challenge is to ensure that we carefully select the right locations when we make capacity increases. To optimize our CO<sub>2</sub> footprint, we need to look at where our customers and our suppliers are when making choices about expansion. Finally, we must closely monitor country-specific policy developments. For example, in the Western part of the world, we have the freedom to select electricity suppliers based on carbon neutrality. In other regions, this selection proves to be more challenging.

## LEM has significant operations and sales in China. How do you view the potential to reduce your CO<sub>2</sub> footprint in that country?

**RB** Our major short-term focus is moving transportation to train and boat. This is something that we have already achieved in the last years, but due to the current conflict between Russia and Ukraine, logistical constraints have been forcing us to get partially back to air freight. Most of our suppliers are in China, so we will be having various negotiations to have them develop their own action plans. In China, selecting the source of the electrical energy we use is

not fully in our hands, as there are certain restrictions. I am expecting that this will progressively change, but it is a process that might take slightly more time.

## What is your attitude towards offsetting?

**AB** In the short term, we would support resorting to offsetting, which may help achieve immediate results in respect of net CO<sub>2</sub> emissions reduction. In the long term, our ambition is to become CO<sub>2</sub> neutral for all three scopes without having to offset.

## How do LEM products contribute to society's overall challenges with climate change?

**AB** LEM's products help our customers become more energy-efficient by measuring electric current. Our products also get incorporated into electric cars or solar and wind farms for example, applications which play an important role in reducing the CO<sub>2</sub> emission levels of our society. It is fundamental to keep in mind that the way our products are used is also part of our overall contribution to tackle climate change.

**RB** Exactly. Looking at smart grids, this is a field where many governments will reshape their electrical distribution infrastructure in a more intelligent way, where our smart-grid sensors could be a valuable contribution. It is also, for instance, about making railways more efficient, where LEM solutions could play a major role. Nearly all our products are helping to optimize and reduce energy consumption in many sectors of the economy.

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**It is fundamental to keep in mind that the way our products are used is also part of our overall contribution to tackle climate change. Nearly all our products are helping to optimize and reduce energy consumption in many sectors of the economy.**

# Responsibility

We believe that sustainable and ethical practices create long-term value for all key stakeholders in society, assure longevity of businesses, lead to smart solutions, and inspire us and others to do better. Our success stems from operating and evolving within a clear value system and following best-practice principles and standards, together with the close monitoring of environmental, social, and governance (ESG) KPIs.

## LEM Code of Conduct

The LEM Code of Conduct (CoC) is the cornerstone document for matters related to our company's responsibility to society. It reflects the United Nations Global Compact (UNGC) principles, global environmental standards and our core corporate values. It is a binding document for employees and business partners, such as suppliers and consultants, whose compliance we regularly audit. Every LEM employee receives e-learning training on the CoC, including instructions and case studies, and signs it.

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**We believe that sustainable and ethical practices create long-term value for all key stakeholders in society, assure longevity of businesses, lead to smart solutions, and inspire us and others to do better.**

## United Nations Global Compact

Since 2006, we adhere to the Ten Principles of the UNGC, which are driving global action to achieve the Sustainable Development Goals by 2030. These principles, which relate to human rights, labor, environment, and anticorruption, are embedded in every aspect of LEM, from our strategy to our actions. As we do every year, we provided an update on our progress to the United Nations, which is available on LEM's and the UNGC's website. In addition, we follow the best-practice policies of the Universal Declaration of Human Rights, UK Bribery Act, EU Conflict Minerals Regulation, and Responsible Minerals Initiative.

## Environmental standards

The trends toward sustainable energy sources and electromobility are two of LEM's key growth drivers. Our accurate sensing solutions give our customers a competitive edge in energy management solutions. For example, LEM sensors' high accuracy directly impacts the battery pack size of an electric or hybrid-electric car and hence improves car weight and energy consumption. Our products are also found in other green energy applications, such as solar panels and wind turbines.

All our main production sites are ISO 14001:2015 certified, an environmental certification which we renew regularly. Our production activities are compliant with the European Regulation for Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) and the Restriction of Hazardous Substances (RoHS). We regularly publish updates to its standards and reporting on our website. All LEM manufacturing sites apply waste sorting and treatment solutions. For each new product, we develop an environmental profile before launch, which includes the recyclability rate and material saving compared to previous or equivalent models.

Out of the 17 Sustainable Development Goals (SDGs) from the United Nations Environment program (UNEP) that promotes environmental sustainability as a key enabling factor in ensuring the health of our planet, we contribute more specifically to five SDGs that are pertinent to our activity: Water and Sanitation (Goal 6); Affordable and Clean Energy (Goal 7); Industry, Innovation and Infrastructure (Goal 9); Responsible Consumption and Production (Goal 12); and Climate Action (Goal 13).

## Assessments by third-party organizations

We attach great importance to external assessments of our Corporate Social Responsibility (CSR) performance, which is why for the financial year 2021/22, we chose to be evaluated by EcoVadis and the NQC SupplierAssurance. These assessments allow us to grow and evolve, as they not only highlight strengths, but also areas for improvement.

## EcoVadis

EcoVadis assesses how well a company has integrated the principles of sustainability and CSR into its business and management system. EcoVadis gave us an overall score on our sustainability achievements based on an extensive questionnaire that was completed by our teams in the fields of Quality & Environment, Corporate Risk, Control & Audit, Legal, Purchasing, Supply Chain, and Human Resources. Our employees had to provide factual evidence when answering the EcoVadis questionnaire, which was afterwards reviewed by their teams to give an objective assessment of our sustainability performance. We have been awarded a silver medal for the year 2021-2022, underlining our efforts in the fields of environment, labor and human rights, and ethics.

## NQC SupplierAssurance

In October 2021, we completed the SAQ 4.0 questionnaire from NQC SupplierAssurance, which covers themes such as company management, working conditions, human rights, health and safety, business ethics, environment, supplier management, and responsible sourcing of raw materials. We also provided evidence to support our responses, which were reviewed by the NQC SupplierAssurance team. We achieved a final score of 74%, which compares favorably to the industry average of 67% across 832 locations in the field of electronic components and supplies.

## ESG metrics

We recognize the importance of keeping score of our ESG performance. Our ambition is to continually develop our internal capabilities and sustainability initiatives and to report transparently on our progress. In 2021, alongside our new CO<sub>2</sub> strategy, we took the strategic decision to align our ESG reporting to the globally recognized and standardized NASDAQ ESG Reporting Guide 2.0, which offers us the possibility to report more systematically on various ESG KPIs.



## In 2021, alongside our new CO<sub>2</sub> strategy, we took the strategic decision to align our ESG reporting to the globally recognized and standardized NASDAQ ESG Reporting Guide 2.0.

### Environmental

We measure our environmental footprint with several KPIs: the emissions of greenhouse gas (GhG) in CO<sub>2</sub> equivalents across all three scopes (1, 2, and 3), the total GhG emissions per output scaling factor, the total direct energy usage per output scaling factor, continuous compliance with ISO 14001, and the direct involvement of our Senior Management Team in climate-related matters.

As part of our new CO<sub>2</sub> strategy (see pages 50 and 51), we conducted a company-wide assessment of our CO<sub>2</sub> emissions, which allowed us to accurately evaluate our company emissions profile. In 2021, we emitted 245 tons of CO<sub>2</sub> in scope 1, 4'042 tons in scope 2, and 163'610 tons in scope 3. A clear plan with measures such as transitioning to fully green energy for our own electricity consumption is already in place. This will allow us to be CO<sub>2</sub> neutral in scope 1 and 2 by 2025. Scope 3 represents by far the biggest source of our emissions, with around 97.5% of the total. We are confident that by closely cooperating with all partners along our supply chains, we can become net-zero by 2040.

In 2021, the total GhG emissions per output scaling factor in CO<sub>2</sub> equivalents reached 0.25%. With regards to the total direct energy usage per output scaling factor, we have seen a significant improvement since last year, going from 15% in 2020 to 11% in 2021, which underlines efficiency gains that can be explained by increased sales volumes and decreased energy consumption due to COVID-19.

Our four main production sites adhere to the ISO 14001 standard. Every year, we audit our suppliers to make sure that they fully comply with this standard, and we ensure that they are aware of our Suppliers General Requirements Manual. Moreover, as shown by our new CO<sub>2</sub> strategy, our Senior Management Team, and especially our Senior Vice President, Automotive, and our Chief Financial Officer, directly oversee climate-related risks and take an active stance in managing this key topic, alongside a newly created team in 2021, which is in charge of CSR-related topics.

### Social

It is our goal to make sure that all our activities respect human rights. Additionally, we strive to foster a culture that encourages professional development, equal and fair treatment, and that nourishes and empowers every individual. We want to be a company where our employees can feel safe to be creative, innovative, and thrive with their personal talents.

We make sure that our employees are not subject to discrimination based on characteristics other than inherent factors required for the job. The total enterprise headcount shows that there are more women than men working for LEM globally. Our CoC – which also covers suppliers and vendors – stipulates strict policies protecting human rights as well as against sexual harassment, discrimination, and child and forced labor.

### Governance

We place ethics at the heart of our corporate practices. As such, we want our employees to act based on our CoC to make sure that our values are well understood across all sites, cultures, and positions. We ensure all employees sign the CoC upon arrival and require them to take an online training. In 2021, 98% of our employees worldwide have signed the CoC.

## ESG Key Performance Indicators \*

Environmental (E)			2017	2018	2019	2020	2021
E1.1	GhG emissions	Total amount (in tons) in CO <sub>2</sub> equivalents for Scope 1	N/A	N/A	N/A	N/A	245
E1.2	GhG emissions	Total amount (in tons) in CO <sub>2</sub> equivalents for Scope 2	N/A	N/A	N/A	N/A	4'042
E1.3	GhG emissions	Total amount (in tons) in CO <sub>2</sub> equivalents for Scope 3	N/A	N/A	N/A	N/A	163'610
E2.1	Emissions intensity	Total GhG emissions per output scaling factor	N/A	N/A	N/A	N/A	0.25%
E4.1	Energy intensity	Total direct energy usage per output scaling factor	14%	14%	16%	15%	11%
E7.1	Environmental operations	Does your company follow a formal Environmental Policy? Yes/No	Yes	Yes	Yes	Yes	Yes
E9.1	Climate oversight/management	Does your Senior Management Team oversee and/or manage climate-related risks? Yes/No	N/A	N/A	N/A	N/A	Yes
Social (S)			2017	2018	2019	2020	2021
S4.1	Gender diversity	Percentage: total enterprise headcount held by women	N/A	N/A	N/A	N/A	52.6%
S6.1	Nondiscrimination	Does your company follow a sexual harassment and/or nondiscrimination policy? Yes/No	Yes	Yes	Yes	Yes	Yes
S9.1	Child and forced labor	Does your company follow a child and/or forced labor policy? Yes/No	Yes	Yes	Yes	Yes	Yes
S9.2	Child and forced labor	Does your child and/or forced labor policy also cover suppliers and vendors? Yes/No	Yes	Yes	Yes	Yes	Yes
S10.1	Human rights	Does your company follow a human rights policy? Yes/No	Yes	Yes	Yes	Yes	Yes
S10.2	Human rights	Does your human rights policy also cover suppliers and vendors? Yes/No	Yes	Yes	Yes	Yes	Yes
Corporate governance (G)			2017	2018	2019	2020	2021
G6.1	Ethics and anticorruption	Does your company follow an ethics and/or anticorruption policy? Yes/No	Yes	Yes	Yes	Yes	Yes
G6.2	Ethics and anticorruption	If yes, what percentage of your workforce has formally certified its compliance with the policy?	93%	96%	97%	97%	98%

\* Aligned with NASDAQ ESG Reporting Guide 2.0.

# Information for investors

## Contact

Andrea Borla (CFO)  
Phone: +41 22 706 12 50  
E-mail: investor@lem.com

## Number of registered shareholders

	31.3.2022	31.3.2021
1-499	1'297	1'195
500-4'999	58	49
5'000-49'999	6	6
50'000 and more	3	2
<b>Total</b>	<b>1'364</b>	<b>1'252</b>

## Shareholders by category

in %	31.3.2022	31.3.2021
Institutional shareholders	44.6	44.3
Private individuals	25.5	25.2
LEM employees, manager, and board	6.8	6.5
Treasury shares	0.0	0.1
Nonregistered shares	23.1	23.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

## Share information

Symbol	LEHN
Listing	SIX Swiss Exchange
Nominal value	CHF 0.50
ISIN	CH0022427626
Swiss Security Number (Valor)	2 242 762

## LEM share

In number of shares, CHF	2021/22	2020/21
Number of shares	1'140'000	1'140'000
Year high <sup>1</sup>	2'690	1'998
Year low <sup>1</sup>	1'610	980
Year-end <sup>1</sup>	2'240	1'826
Average daily trading volume (shares) <sup>1</sup>	587	1'343
Earnings per share	63.48	48.79
Ordinary dividend per share <sup>2</sup>	50	42
Market capitalization as per March 31 <sup>1</sup> (in CHF millions)	2'554	2'082

<sup>1</sup> Source: SIX.

<sup>2</sup> Proposal of the Board of Directors to the Annual General Meeting of Shareholders 2022.

## Share price development LEM HOLDING SA (LEHN) compared to SPI

in CHF



Source: Bloomberg

## Financial calendar April 1, 2022 to March 31, 2023

<b>June 30, 2022</b>	Annual General Meeting for the financial year 2021/22
<b>July 5, 2022</b>	Dividend ex-date
<b>July 7, 2022</b>	Dividend payment date
<b>July 28, 2022</b>	First quarter results 2022/23
<b>November 8, 2022</b>	Half year results 2022/23
<b>February 6, 2023</b>	9 months results 2022/23
<b>May 25, 2023</b>	Full year results 2022/23
<b>June 29, 2023</b>	Annual General Meeting for the financial year 2022/23
<b>July 4, 2023</b>	Dividend ex-date
<b>July 6, 2023</b>	Dividend payment date



Leading the world in electrical measurement, LEM engineers the best solutions for energy and mobility, ensuring that our customers' systems are optimized, reliable, and safe.

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