

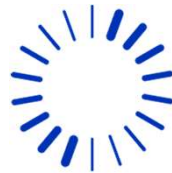


Leading the World in Electrical Measurement



Content

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- **Our markets and applications**
 - LEM solutions in the electricity value chain
 - Our key businesses
 - Our applications
 - Some use cases
- **Investing in a sustainable future**
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 - Our production capacities
 - Our people and values
 - Our responsibility





**“At LEM we help
our customers and society
accelerate the transition
to a sustainable future.”**

Frank Rehfeld, CEO

LEM at a glance



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.



LEM at a glance



1,700 people in 17 countries

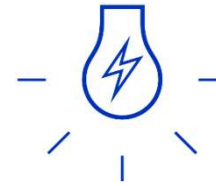
We transform technology
potential into powerful
answers



Best global talent

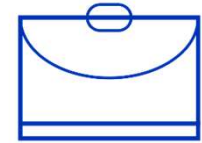
We develop and recruit
talent at the forefront of
mega trends such as

- renewable energy
- mobility
- automation
- digitization



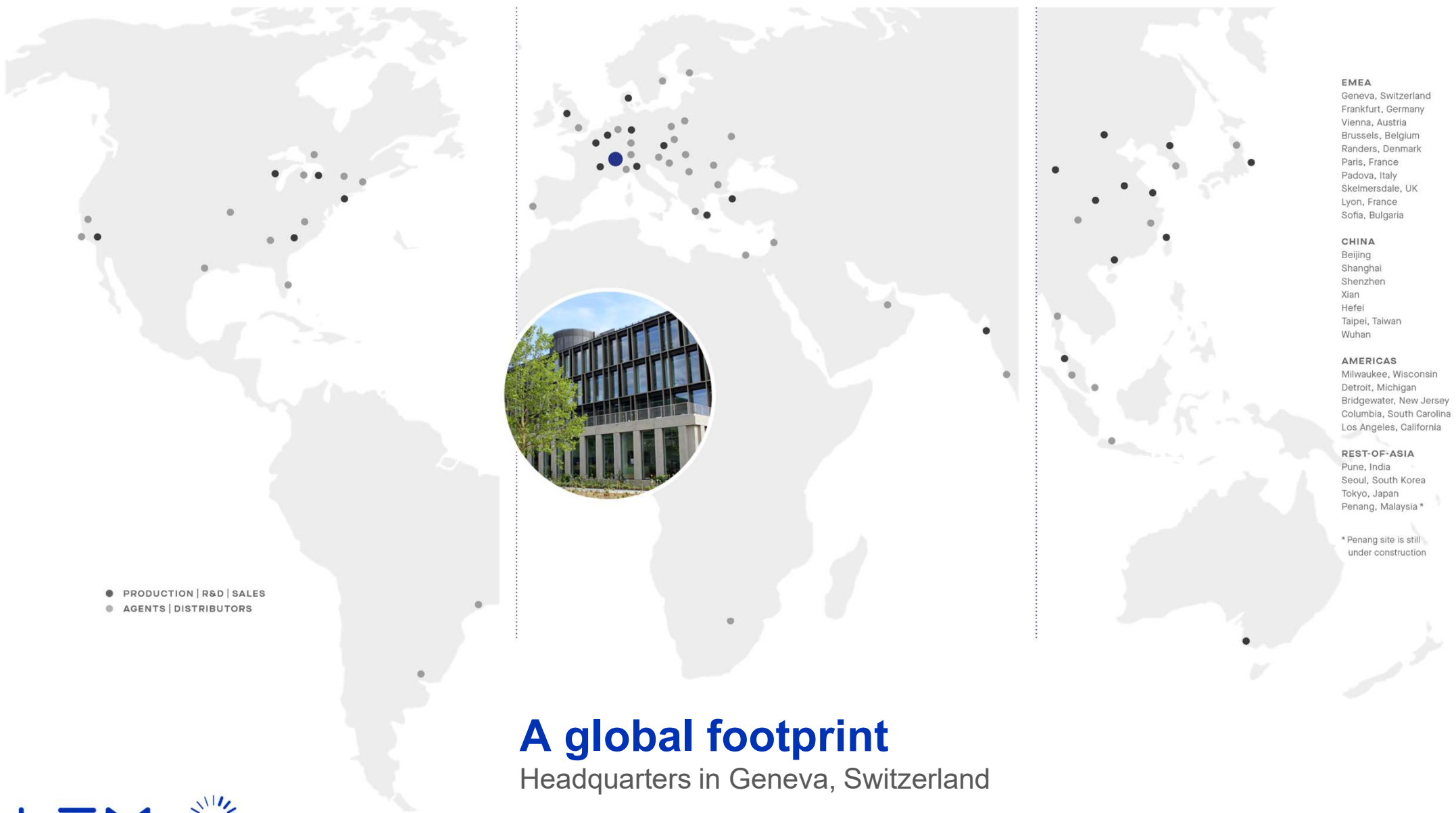
Innovative electrical solutions

We help our customers
and society accelerate
the transition to a
sustainable future



The broadest product portfolio in the industry

- From Integrated
Current Sensors to fully
instrumented modules
- Single/multi-phase
- Core based/coreless
- Busbar/PCB/cable mounting



A global footprint

Headquarters in Geneva, Switzerland

50 years of ingenuity

Key milestones

1972
LEM (Liaisons électroniques-mécaniques) 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

1992
First sales of sensors for solar photovoltaic applications

1994
1 million sensors produced per year

1996
Strategic division into two distinct business units: test systems + high current systems

1998
Strategic decision to enter the automotive market

1999
2 million sensors produced per year. 700 employees worldwide

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

1997
CHF 100 million in total sales

2004
Strategic decision to focus on components and divest instruments business

2003
First sales of sensors for hybrid electric cars

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

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

2012
First ASIC current sensor. Programmable by customers

2015
37 million sensors produced per year

2016
First fully integrated digital sensors on the market

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

2019
Novel electric DC meter for electric vehicle fast charging stations

2021
66 million sensors produced per year

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

International expansion

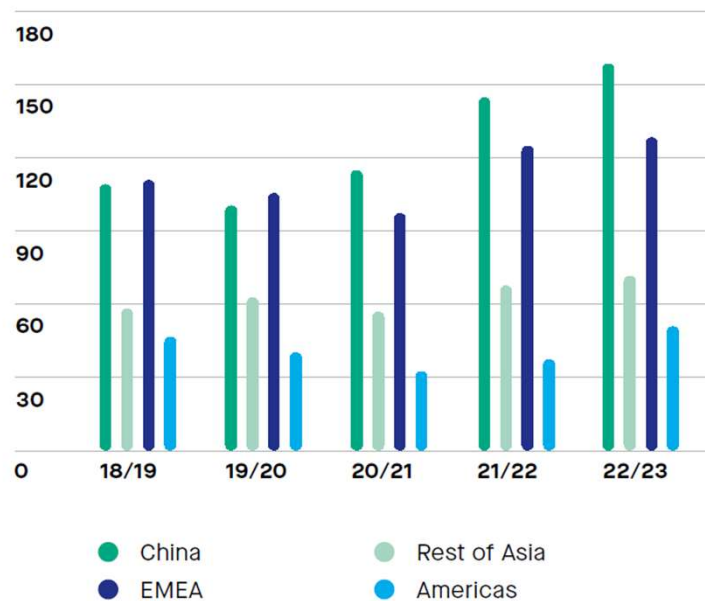
With expert sense of the markets and customer demand, LEM grew rapidly around the world.

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

Broad global sales

- Balanced geopolitical and economic exposure
- Close to customers
- Strong focus on direct sales

Regional sales breakdown
in CHF millions



406.4

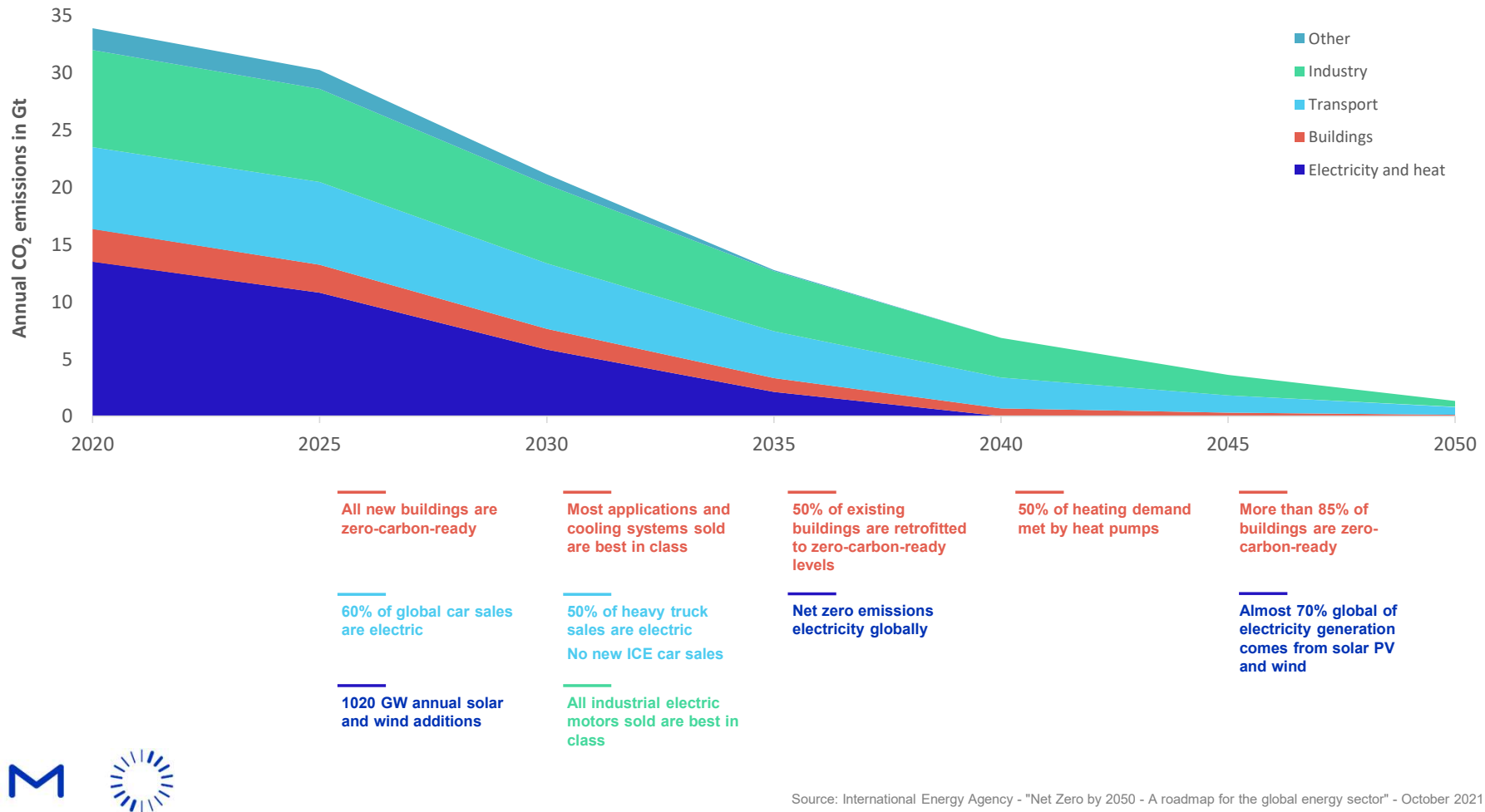
Annual sales in CHF millions

+ 8.8%

Sales growth

A long-term vision

Considering the key milestones in the pathway to global net zero emissions by 2050...



A long-term vision

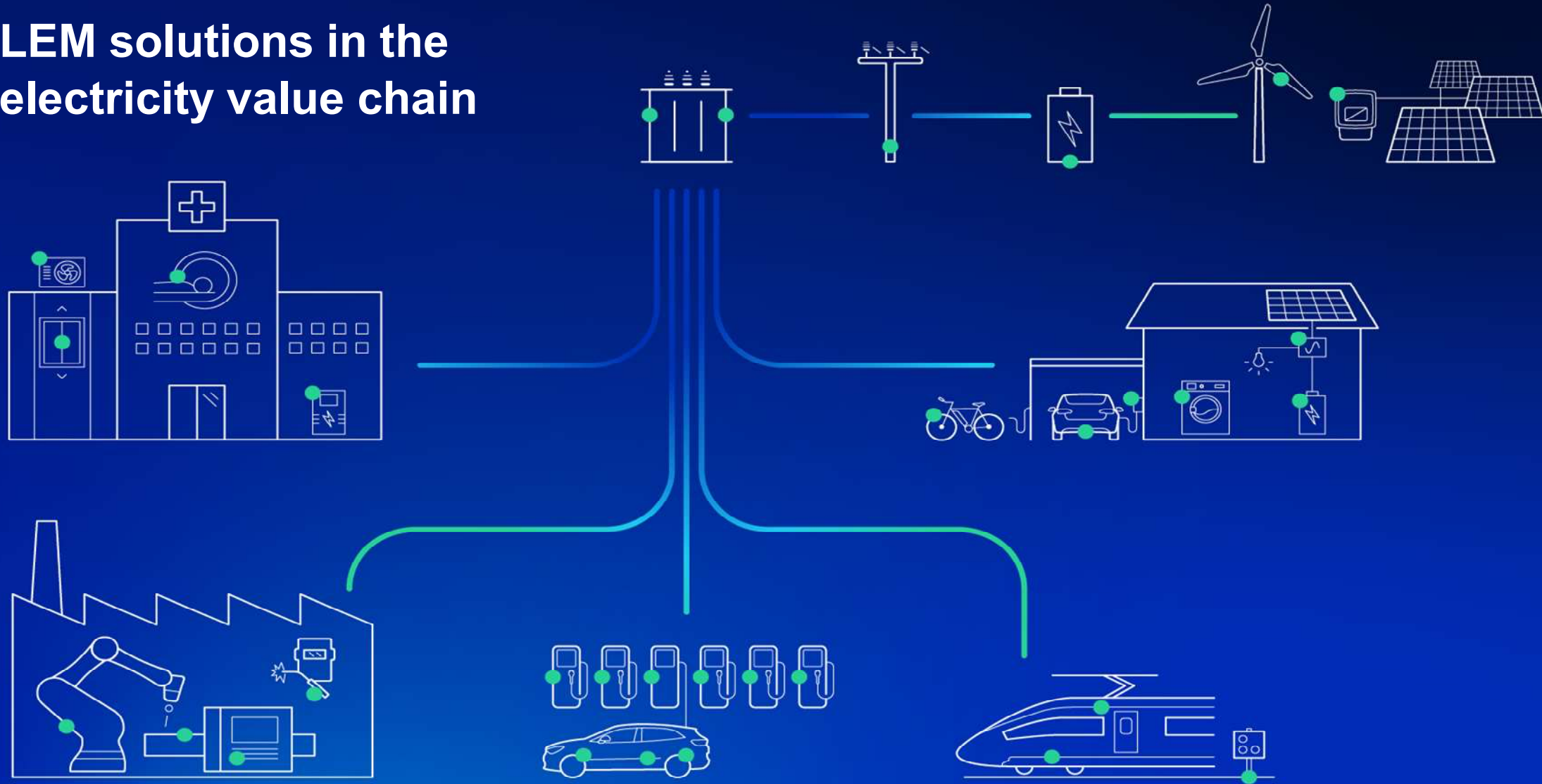
...LEM is strategically positioned and has a role to play in all the mega trends.



Our markets and applications



LEM solutions in the electricity value chain



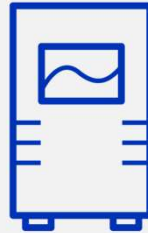
Our applications

LEM sensors and solutions play a key role in 6 areas

Drives



Power conversion



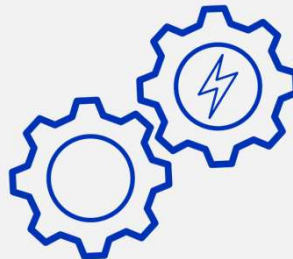
Electrical safety



Battery management



Energy monitoring



Energy metering



Our product portfolio

The widest choice in the electrical measurement industry



+2,000

products

+240

product families

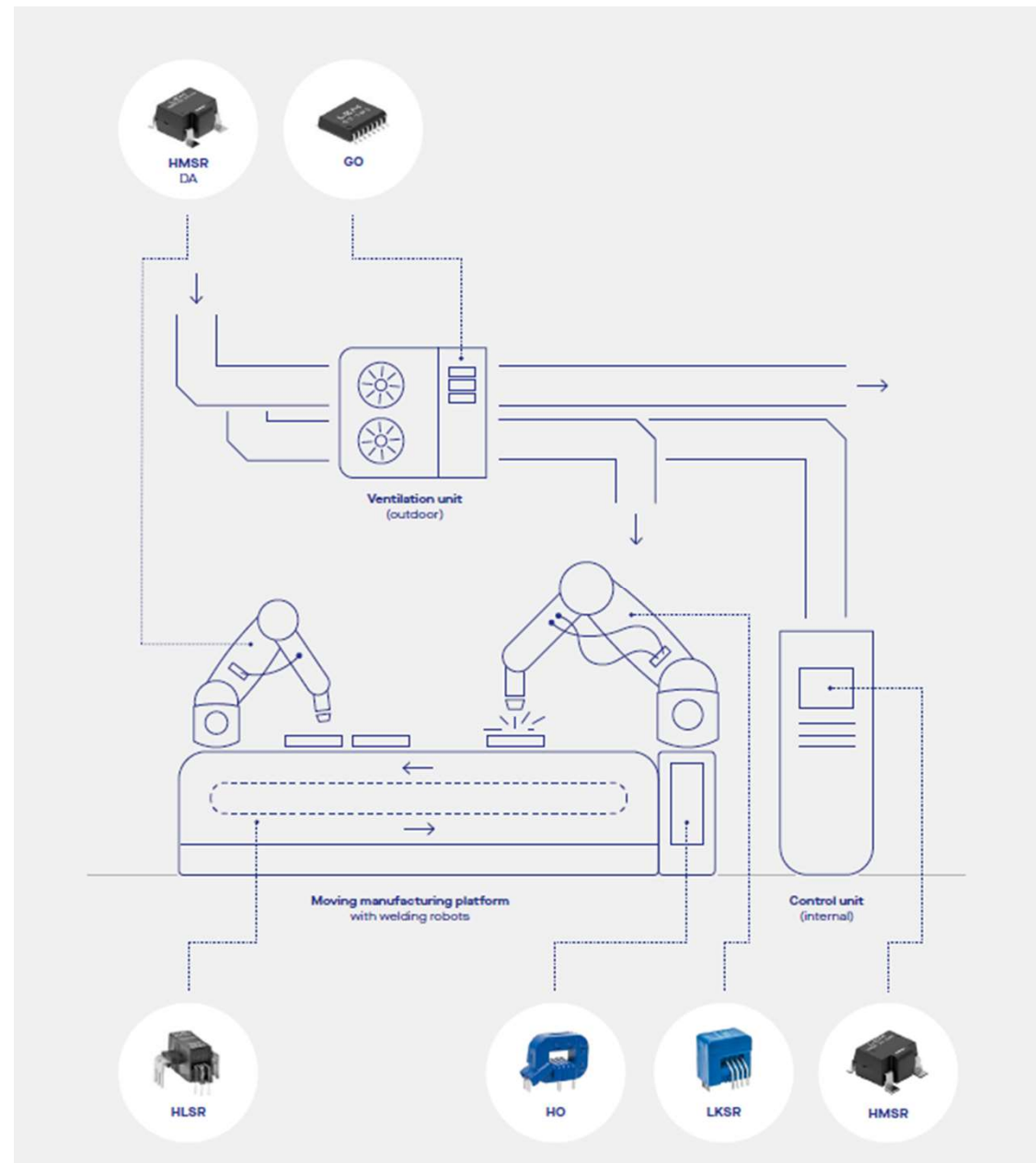
0.005 – 24,000

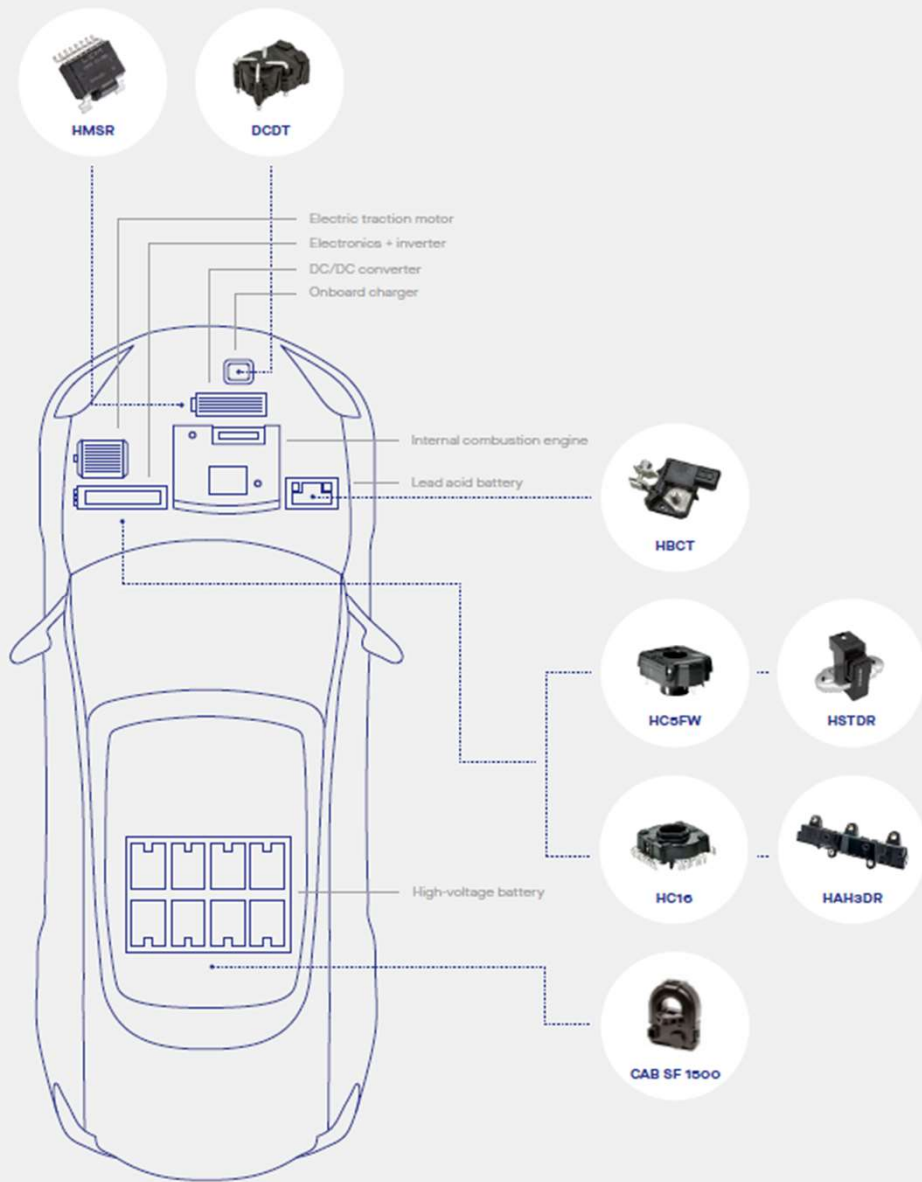
Amps
measurement range

Our 5 businesses



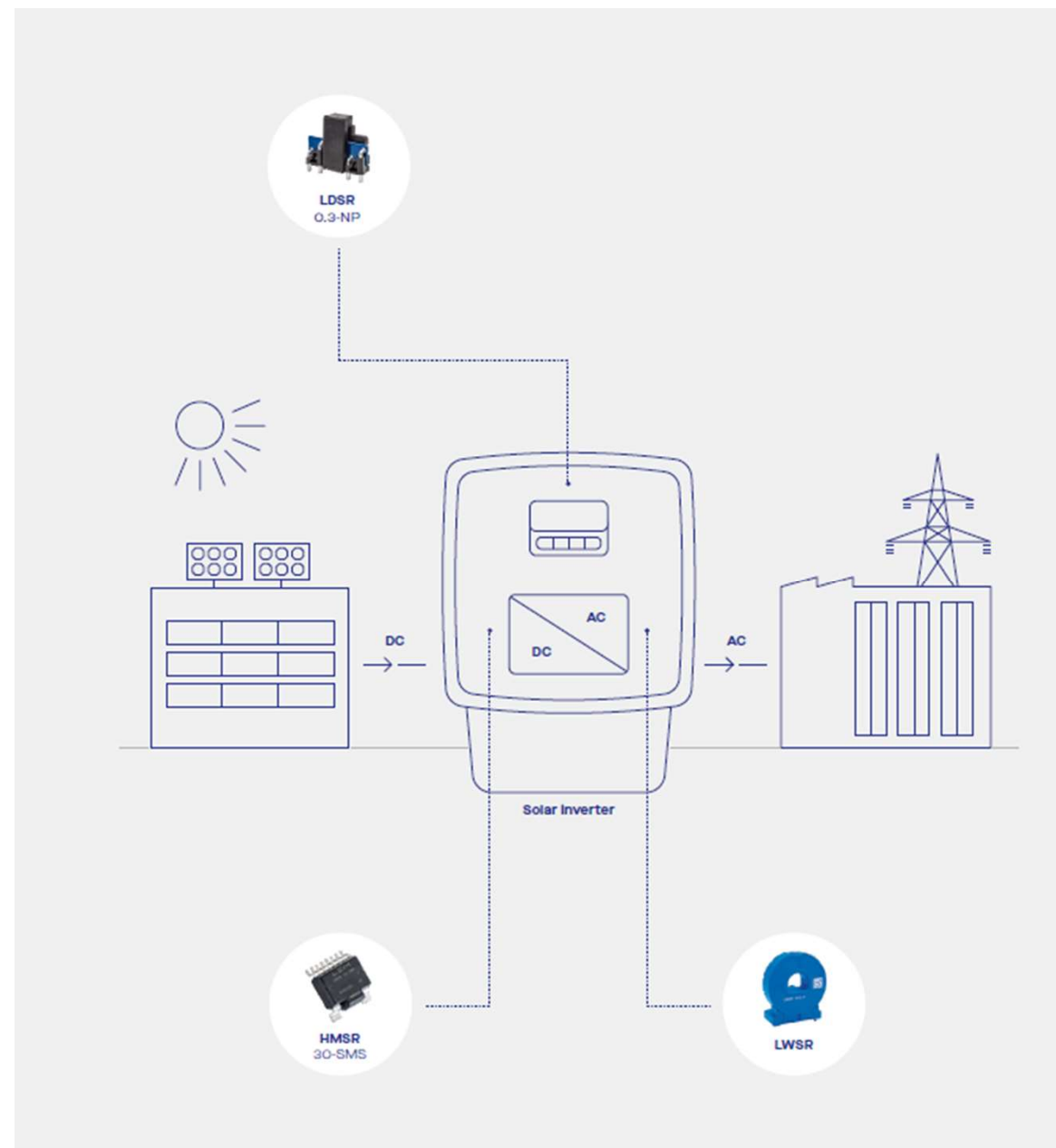
Automation

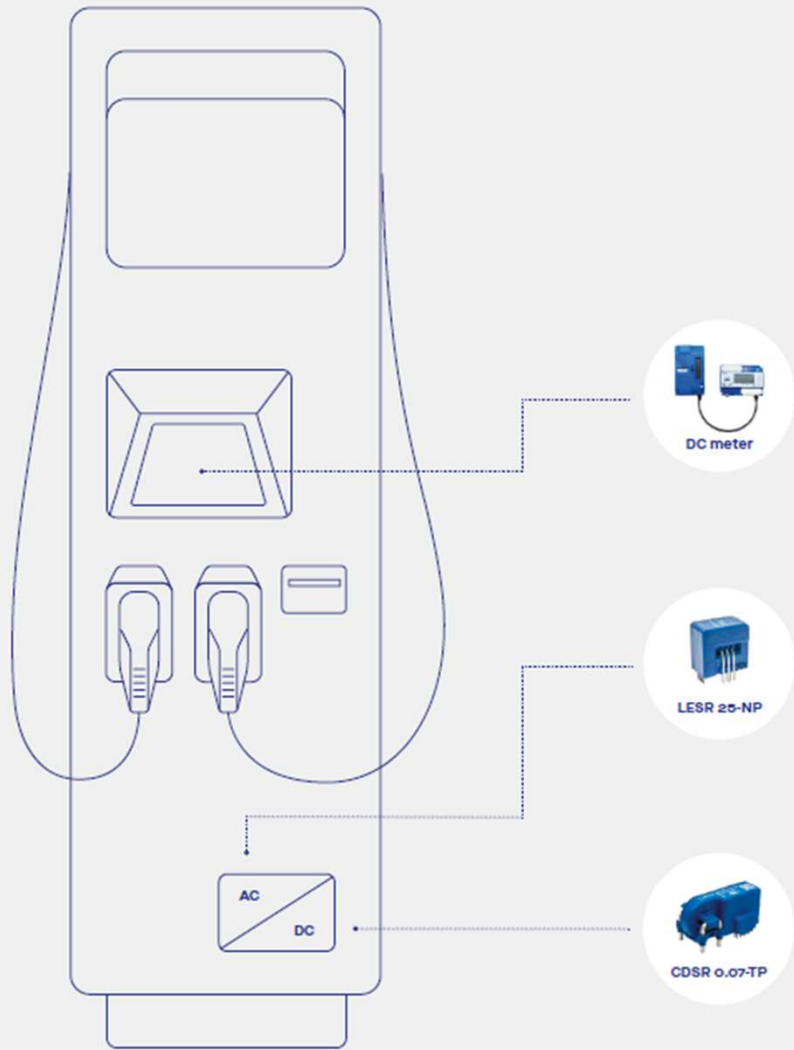




Automotive

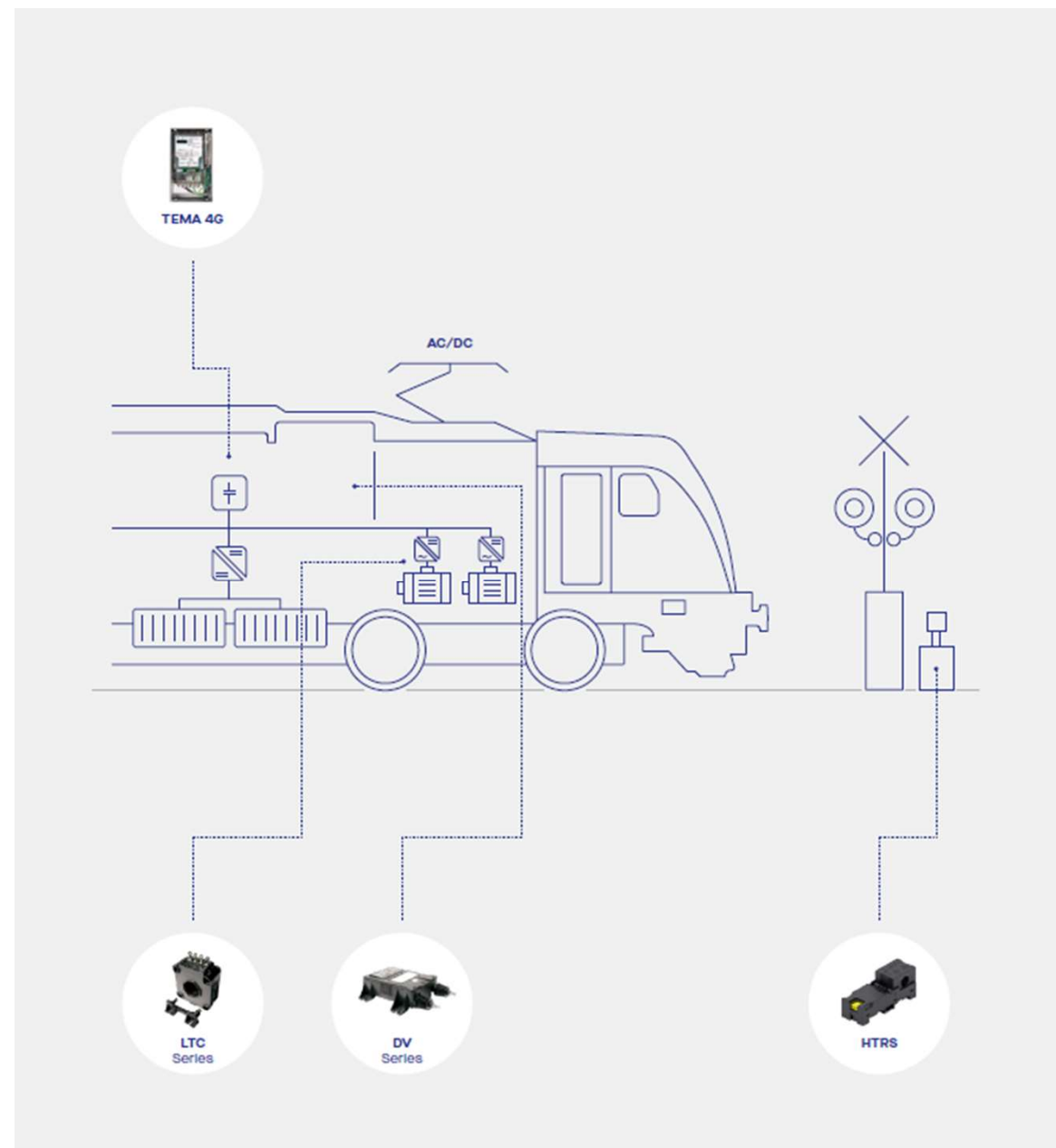
Renewable Energy



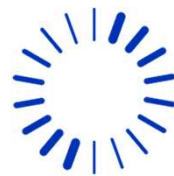


Energy Distribution and High Precision

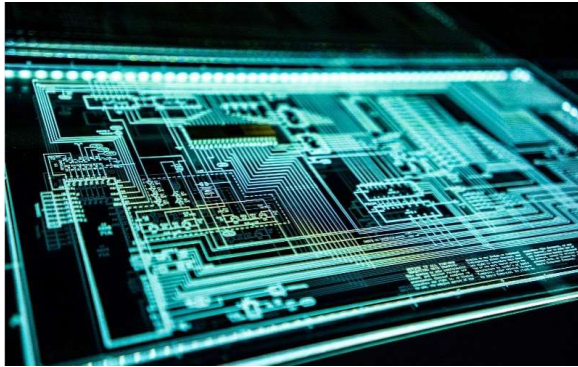
Track



Investing in a sustainable future



Continuously growing our expertise and know-how



ASIC DESIGN

to make sure electronics
is tailored to your
application constraints
and sensing needs



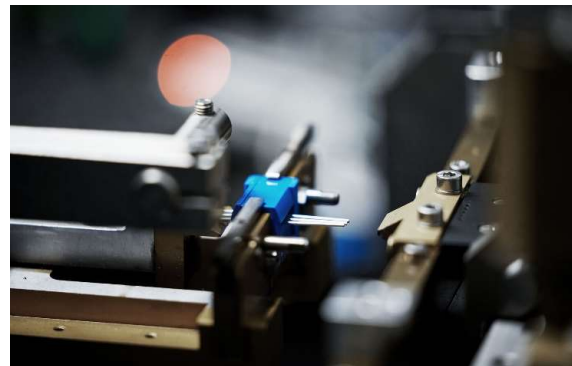
PRODUCT DEVELOPMENT

to fit the needs
of the markets tomorrow



EMBEDDED SOFTWARE

to process and display
the data our sensors
and systems collect

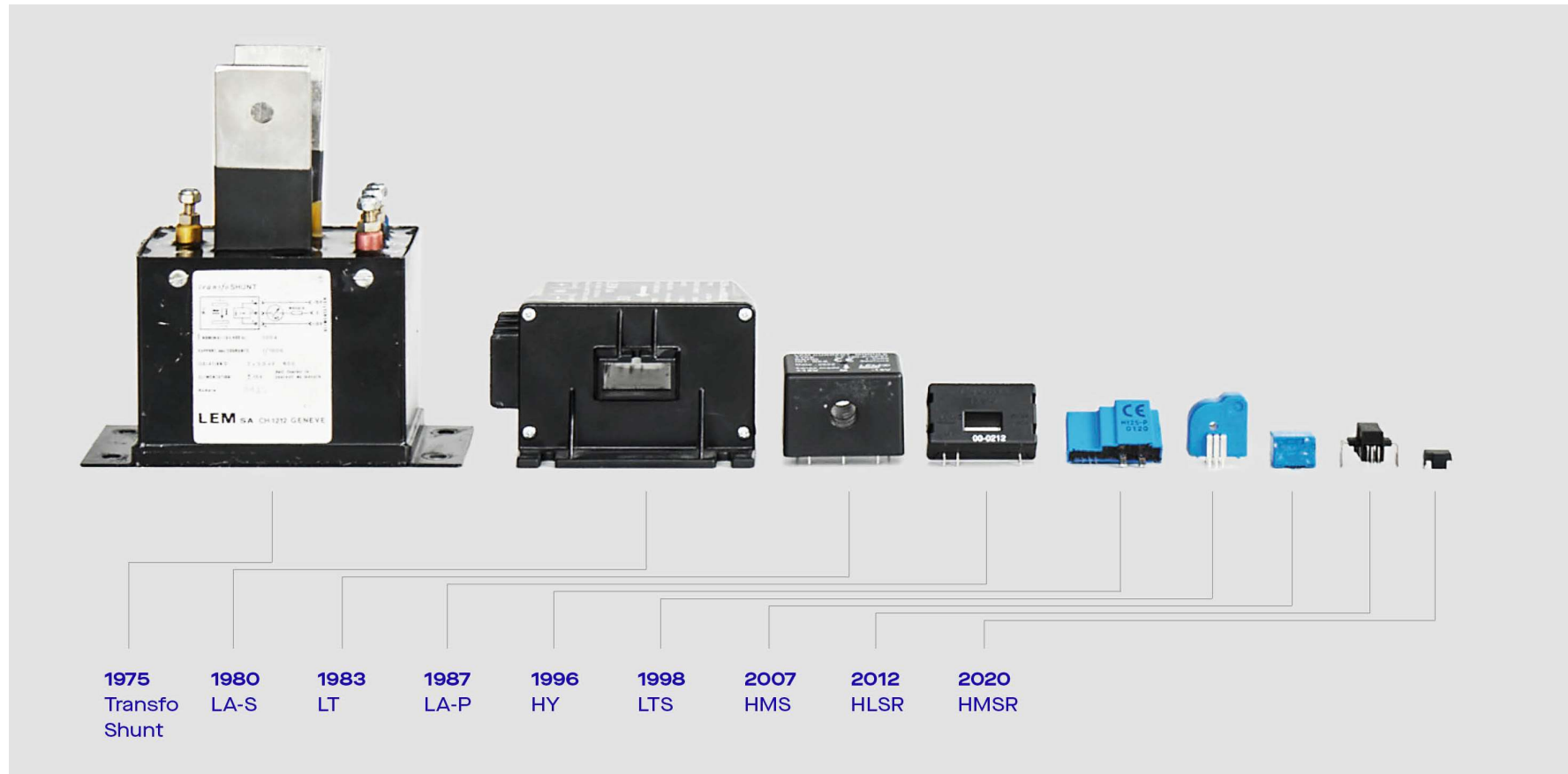


MANUFACTURE AND TESTING

to ensure state-of-the-
art industrialization
solutions

New technologies drive miniaturization

Precision DC and AC current sensors are getting smaller and smarter



R&D at LEM



R&D key figures

22/23

14%

of our workforce

32.3m

CHF investment

Our focuses for innovation



- Leveraging new technologies: smart sensors
- Capturing new opportunities in integrated current sensing
- Developing innovation at scale
- Collaborating closely with our customers and local universities
- Developing capabilities

Our production capacities



4

Production centers
in China, Bulgaria, Switzerland, Japan
+ sub-contractors

11,000

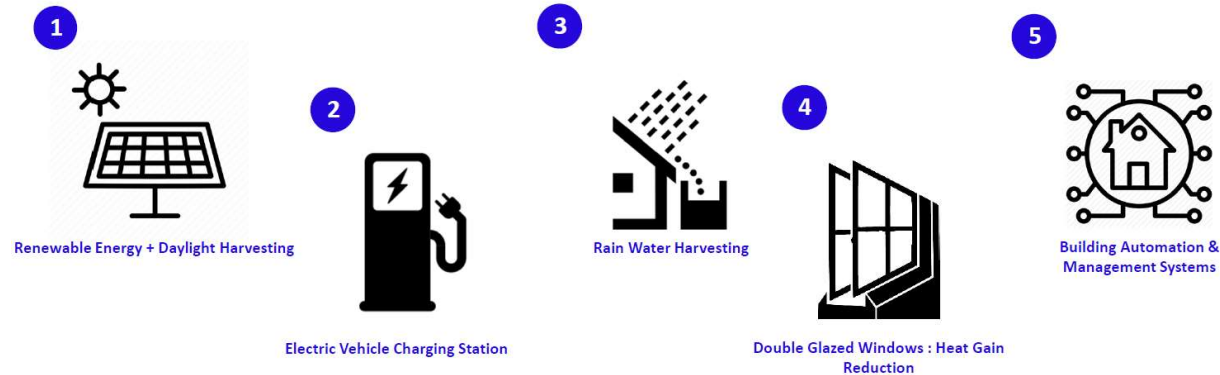
sqm total production surface

700

total production workers

Our new plant in Penang

- **Groundbreaking:** May 2022
- **Building:** 12'000 sqm, 2 floors, 8'000 sqm Operations
- **Environment:** Green Building Index



Our values



We believe that sustainable and ethical practices create long-term value for all stakeholders and assure the longevity of businesses.

Together we...

- are customer driven
- operate with integrity
- value teamwork
- commit to our goals
- strive for excellence
- lead innovation

This is the spirit and intent of everything we do.

1,700 professionals across 17 countries

Inspired by helping customers and society accelerate the transition to a sustainable future we embrace and enact a Constructive Culture



LEM Blue Behaviors

1

Innovation and continuous improvement mindset

2

Customer orientation and growth mindset

3

Team player mindset

4

Player/Learner mindset

Developing and recruiting the best talents

Human-sized company with a global footprint

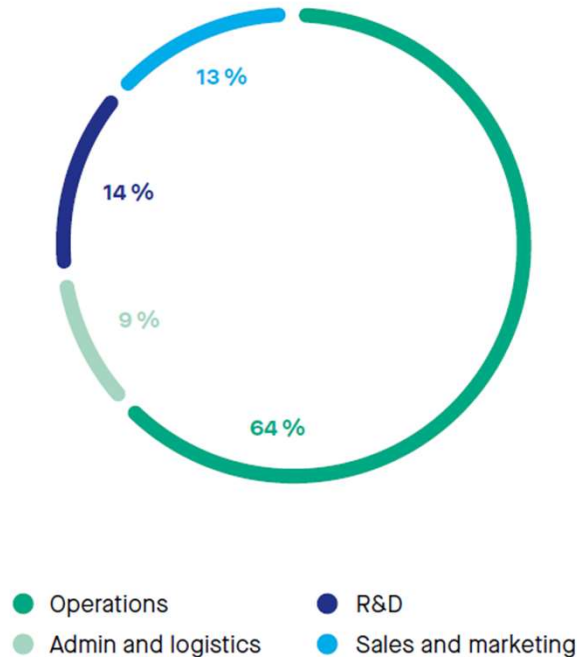
- Collaborative culture
- Mobility and career evolution
- Healthy work/life balance

Qualities of LEM people

- Technical excellence and leadership
- Creative and innovative thinking
- Ambition and accountability

Workforce by activity

1,716 total employees



Average length of service

1,488 permanent employees



Engaged in a sustainable future

... because

1

We have a **responsibility** to mitigate the risks of climate change, for all stakeholders

2

Our **customers** expect suppliers to have a robust CO₂ reduction program

3

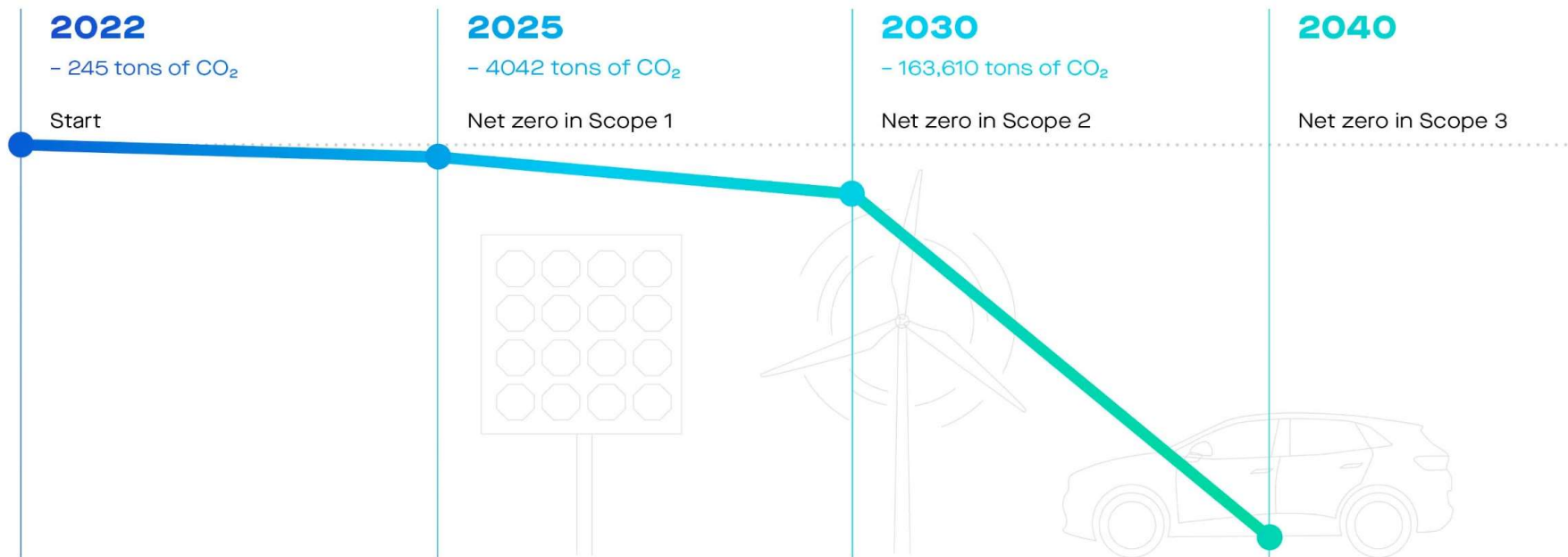
Our **employees** expect to work for a company that is acting responsibly towards the environment



On our way to CO₂ neutral

LEM's CO₂ reduction roadmap

Our ambition is to become net zero across all scopes until 2040. We aim to achieve this by avoiding and reducing most of our emissions and balancing any remaining emissions that cannot be avoided and eliminated.



**life
energy
motion**

