

# WHO CARES? WE DO!

Sustainability@MAN.



# MAN SUSTAINABILITY COMPASS.

Our vision is to simplify our customers' business by providing leading solutions that contribute to greater sustainability. For us, sustainability is a core element in meeting our responsibilities and facing global competition. Smart and innovative offerings for digitalisation, zero emissions and autonomous driving are therefore increasingly in our focus.

Alongside climate protection, MAN also wants to make a contribution to social responsibility and good corporate governance. A total of six areas of action are therefore included in our sustainability compass.

## Decarbonisation

### By 2030

- Reduction of greenhouse gas emissions per vehicle kilometre of trucks, buses and vans sold by MAN by 28 percent (base year 2019)
- Reduction of greenhouse gas emissions at company locations worldwide by 70 percent (base year 2019)
- Achievement of CO<sub>2</sub>-neutral production in terms of our carbon footprint by reducing emissions by at least 95 percent and offsetting a maximum 5 percent share of unavoidable CO<sub>2</sub> emissions (base year 2015)

### By 2050 at the latest

- Achievement of greenhouse gas neutrality in terms of our carbon footprint, i.e. Net-Zero emissions along MAN's entire value chain, including the life cycle of all new products sold

## Circular Economy

- Closing the material loop, also by reducing the consumption of primary raw materials
- Optimising the lifetime of products and components
- Improving product usage and capacity utilisation
- Promoting innovative business models

## Social Sustainability

- Creating attractive, competitive and flexible structures in the company
- Targeted promotion of young talent and further training for all employees and managers
- Continuous improvement of occupational health and safety
- Promoting diversity and equal opportunities in all aspects of the company, including the goal of at least 30 percent women in management by 2029
- Establishment of an open feedback culture
- Increasing employee retention through skill matching<sup>1</sup>
- Early identification of development opportunities

<sup>1</sup> Skill matching means that employee skill profiles are superimposed on job requirement profiles to determine successful matches and identify suitable jobs and candidates.

MAN sustainability compass with our six strategic action fields



## Value Chain

- Strengthening sustainability management in procurement
- Responsible use of resources along the supply chain
- Compliance with employee and human rights at our suppliers and business partners

## Compliance, Ethics, and Integrity

- Creating a culture that only accepts ethical conduct with integrity
- Ensuring a robust corporate structure through supportive and effective management systems
- Continuously improving implemented standards and guidelines
- Implementation of the requirements of the German Supply Chain Due Diligence Act (LkSG) in order to further define and improve MAN's activities for the protection of human rights

## Road, Product and Service Safety

- Continuous safety review and monitoring of our products
- Increasing the reliability and safety of our products through continuous innovation
- First autonomous driving operation of a truck by the end of 2024
- Maximising customer satisfaction

# GUIDE FOR OUR SUSTAINABILITY STRATEGY.



The Sustainable Development Goals\* (SDGs) adopted by the UN General Assembly in 2015 form the framework for an effective contribution to sustainable development.

The 17 goals aimed at governments, but also at civil society, the private sector and the scientific community go hand in hand with the principles of the UN Global Compact\*\* – to which MAN Truck & Bus expressly commits itself.

We are determined to make a substantial contribution to achieving the SDGs and have therefore focused the development of our sustainability strategy on these goals.

[Read more](#)

\* The content of this publication has not been approved by the United Nations and does not reflect the views of the United Nations or its officials or Member States.

\*\*The TRATON GROUP is a participant in the UN Global Compact and reports on progress annually in the "Communication on Progress".



# WE CARE ABOUT ENVIRONMENT.

The global transport industry is responsible for around 8 gigatonnes of CO<sub>2</sub> emissions\*. As a global provider of transport solutions, we take our responsibility for climate and environmental protection seriously and see it as our responsibility to make an active contribution to decarbonisation and the circular economy.

Our decarbonisation targets and actions focus on reducing the greenhouse gas (GHG) emissions that are mainly generated by the use of our product portfolio and at our sites. In addition to the transition to zero-emission commercial vehicles, we are working in particular on the potential to reduce GHG emissions along our entire value chain and throughout the lifecycle of our products.



\*Based on data from the International Energy Agency (IEA) for 2022.

# OUR DECARBONISATION STRATEGY.

The fact that the transport sector is responsible for around 29% of CO<sub>2</sub> emissions in the European Union\* shows the extent of our responsibility for climate protection.

Our goal is to be greenhouse gas neutral by 2050 at the latest, and we have committed to achieving this by 2021 as part of the Science Based Targets (SBTi)\*\* initiative.



SCIENCE  
BASED  
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

We therefore aim at fulfilling this responsibility in various business areas:

## Products

To decarbonise the transport industry, we continue to focus on battery electric vehicles. These currently have clear advantages over other alternative drives in terms of energy efficiency as well as operating and energy costs. However, trucks powered by hydrogen combustion engines are a useful alternative for specific applications and markets. That is why we have added an attractive product to our zero-emissions portfolio - the hydrogen-powered MAN hTX, which will be available in small series from 2025.

## Production

We aim to reduce our Scope 1 and 2 CO<sub>2</sub> emissions from production by at least 95% compared to 2015 through the systematic conversion and modernisation of our energy supply, the use of renewable energy sources and energy efficiency measures. The remaining emissions, which cannot be reduced due to the process, will be offset.

## Supply Chain

Through our supplier specifications, S-rating\* and lighthouse projects, we encourage suppliers to actively develop and improve their sustainability performance.

## Transportation and Logistics

In order to systematically reduce CO<sub>2</sub> emissions, we record these from inbound and outbound logistics and work on optimising transport structures and processes.

## Employee mobility

MAN's requirements for air travel, car rental and rail travel are aimed at keeping greenhouse gas emissions from business travel as low as possible.

\* More information here: <https://www.eea.europa.eu/data-and-maps/data/data-viewers/greenhouse-gases-viewer>

\*\* SBTi is a partnership between the CDP (Carbon Disclosure Project), the United Nations Global Compact, the World Resources Institute (WRI) and the World Wide Fund for Nature (WWF). The initiative supports companies in setting targets that are in line with the Paris Climate Agreement, which was adopted by the United Nations in 2015.

\*\*\*The S-Rating assessment is a multi-step process. The first step is to determine a risk exposure based on a combination of country risk and the supplier's corporate processes and policies. In addition, the sustainability performance of the companies is reviewed through selective on-site audits. The aim is to limit global warming to 1.5°C, if possible, and at least to well below 2°C compared to pre-industrial levels.

# SCIENCE-BASED TARGETS.

By joining the Science Based Targets Initiative (SBTi) for climate protection in 2021, MAN has set itself binding, scientifically-based targets for reducing greenhouse gas emissions:

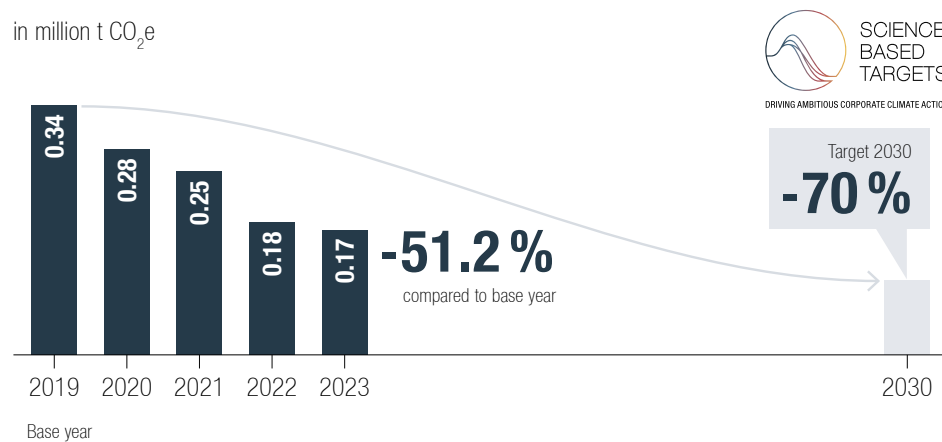
GHG emissions are to be saved at MAN's sites worldwide compared with the base year 2019 (Scopes 1 and 2). By the end of 2023, a reduction of 51.2 percent has already been achieved.

By 2030, the greenhouse gas emissions per vehicle kilometre of MAN's trucks, buses and vans (Scope 3) must be reduced by 28 percent in comparison with 2019. In the year under review, 2023, a reduction of 12.8 percent has been achieved.

The main challenge for MAN is to enable economic growth while at the same time reducing absolute greenhouse gas emissions along the value chain and throughout the life cycle of our products. The figures for 2019 to 2023 show that this is possible. Thanks to the increased use of environmentally friendly technologies and the introduction of more efficient production processes, MAN has been able to significantly reduce its greenhouse gas emissions by around 12 percent between 2019 and 2023. At the same time, MAN has strengthened its market presence and increased sales by around 14%. This success demonstrates not only our commitment to sustainability, but also our ability to combine environmental responsibility with economic success.

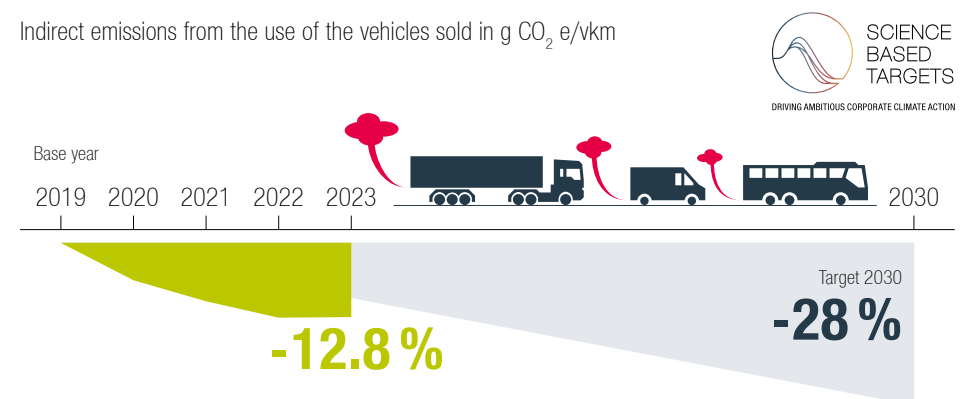
## Scope 1 und 2 emissions

in million t CO<sub>2</sub>e



## Scope 3 emissions – Category 11

Indirect emissions from the use of the vehicles sold in g CO<sub>2</sub> e/vkm

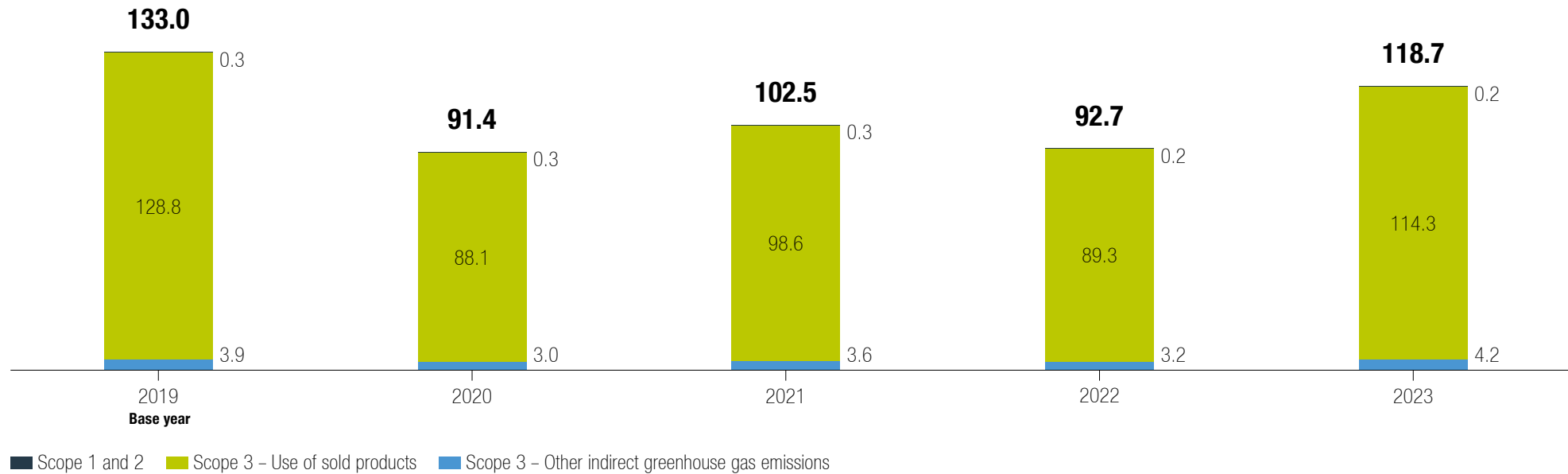




## Emissions along the value chain and the life cycle of our products



in GHG emissions Mt CO<sub>2</sub>e



**Scope 1** comprises the direct greenhouse gas emissions that arise directly in MAN production processes, for example. MAN's own vehicles also cause GHG emissions, which are counted as Scope 1.

**Scope 2** covers indirect greenhouse gas emissions. They arise when MAN purchases electricity or heat.

All other indirect greenhouse gas emissions that occur along our value chain and along the life cycle of our products (including from the use of our products by customers, through the purchase of products and services as well as through business trips) are attributed to **Scope 3**.

# TOWARDS ZERO EMISSIONS.

MAN continues to drive forward the reduction of fuel consumption of MAN trucks with conventional driveline. Fuel consumption and thus CO<sub>2</sub> emissions have been reduced by a further 16.9 percent between 2015 and 2023, equivalent to an annual reduction of around 1.88 percent (g CO<sub>2</sub> per vehicle kilometre)\*.



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## Highly efficient MAN engines.

The further development of the diesel engine to meet the Euro VI emission standard and component optimisation resulted in fuel savings of up to 7.6 percent. Additional savings were achieved through improvements in aerodynamics and the powertrain, as well as on a functional level through topography-dependent cruise control.



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## Fuel-saving MAN EfficientHybrid.

The MAN EfficientHybrid automatic start-stop system offers a compelling solution in terms of fuel consumption by combining combustion engine with electric drive and the associated conversion of kinetic energy into electrical energy.

\* The long-haul truck is used as the reference vehicle.

# OUR ZERO-EMISSIONS PORTFOLIO.

As we transform our product portfolio towards greenhouse gas-free powertrains, we are mainly focusing on battery electric vehicles. The combination of low operating costs and very good energy balance makes battery electric vehicles the optimal technology for future low-CO<sub>2</sub> commercial vehicle fleets. Nevertheless, in addition to battery-electric drives, MAN also sees hydrogen-powered trucks as a complementary option for special applications and markets.



[Read more](#)

## MAN eTGX & eTGS.

More than 95 percent of the CO<sub>2</sub> emissions from heavy-duty combustion-engine vehicles are generated during operation. Thus, switching to a new MAN eTGX or eTGS will result in a significant reduction in greenhouse gas emissions during vehicle use.



[Read more](#)

## MAN hTGX.

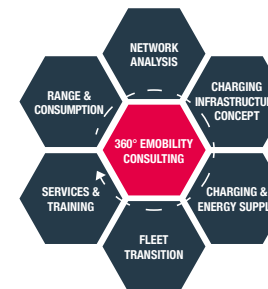
The MAN hTGX offers an alternative zero-emission drive option for special applications such as the transport of heavy goods. The MAN hTGX is also a locally CO<sub>2</sub>-free alternative to battery-electric trucks for use in areas without the necessary charging infrastructure or in markets where sufficient hydrogen is already available.



[Read more](#)

## MAN Lion's City E.

The MAN Lion's City E, voted „Sustainable Bus of the Year 2024“, has been in successful operation across Europe since 2020 and it has been the market leader for electric buses in Europe in 2023.



[Read more](#)

## MAN Transport Solutions.

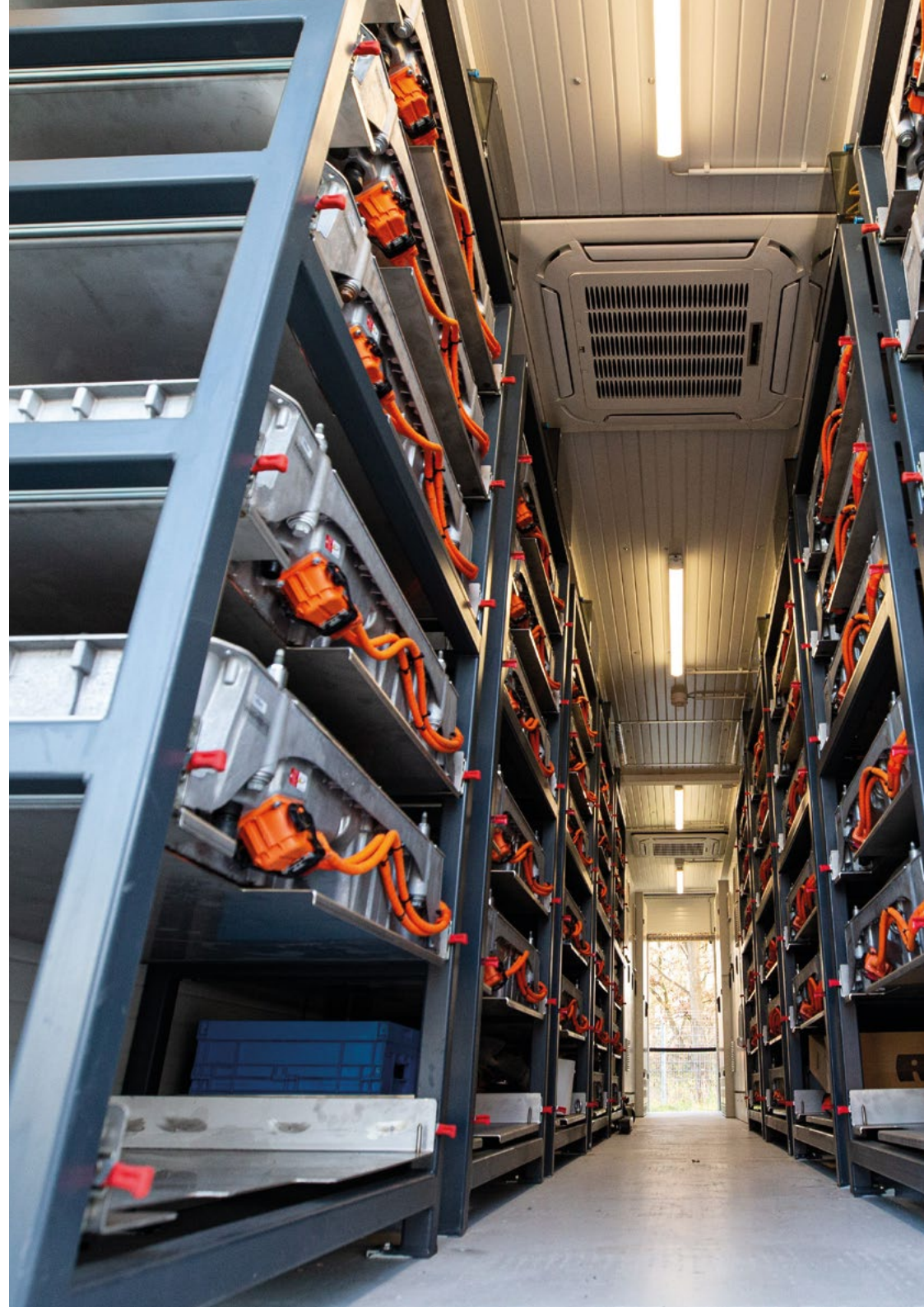
In cooperation with experienced charging infrastructure partners, MAN Transport Solutions offers customised eMobility solutions to simplify the electrification of our customers' fleet.

# WE CONTRIBUTE TO A CIRCULAR ECONOMY.

**Raw material shortages and unstable supply chains clearly show that the linear economic model is depleting the planet's natural resources. The consequences are already visible in many ways and affect us on an ecological, economic and social level.**

Therefore, we see the circular economy as the basis for our company's success and future viability. This includes the efficient and responsible use of raw materials, the reuse of parts and components and the avoidance of environmental pollution.

Optimising the service life of our products, improving product usage and capacity utilisation as well as integrated environmental and energy management are also important components of MAN's resource-saving management.





In its transition to a circular economy, MAN is pursuing four key elements:

- **Closing the material loop:** Our aim is to increase the proportion of recyclable materials, enable the recovery of resources and thus reduce the impact on our environment. For example, MAN plans to achieve an almost closed cycle for battery raw materials - from cradle to cradle. The raw materials recovered by the recycling partners, such as nickel, manganese, cobalt or lithium, are to be channelled back into the production of new batteries.
- **Optimising the lifetime:** To achieve the goals of a circular economy, MAN is also focusing on optimising the service life of products and components. Under the name “MAN ecoline”, for example, we offer remanufactured engines and components with a two-year warranty. A long service life for individual components not only makes sense economically, but also avoids greenhouse gas emissions and resources that would be generated or consumed during new production.

[Read more](#)

- **Improving product usage and capacity utilisation:** To achieve better utilisation of our products, we want to make the best possible use of existing capacity. For example, upgrades can be installed flexibly in the vehicle using the MAN Now technology. In this way, we can add new functions to the software of vehicles that are already in use - without the need for a visit to the workshop or the installation of new hardware.
- **Innovative business models as accelerators:** We believe that new business models which accelerate the transition from a linear to a circular economic model are key to the success of the circular economy. As our product portfolio becomes increasingly electrified, we are stepping up our efforts to efficiently reuse vehicle batteries and the raw materials they contain.

# WE CARE ABOUT PEOPLE.

**At MAN, we consider diversity, equal opportunities and inclusion to be fundamental to securing the company's future.**

We invite our employees to share their skills, knowledge, experience and perspectives and thereby make a contribution to our corporate culture. To ensure that this is done consistently and sustainably, we have established the department "Diversity & Inclusion" in 2022.

Our „Strong Team“ approach is an important part of our corporate culture. This means attracting talented and skilled people now and in the future, offering them professional development opportunities, an innovative working environment and actively promoting diversity within the company. One focus is on equal opportunities for all genders. For example, MAN supports prospective specialists and managers who belong to a gender that is underrepresented in the company with special personnel development measures.

The integration of people with disabilities is another focus of our diversity and inclusion efforts. At our Munich plant, for example, we have redesigned workplaces and created new jobs for people with severe disabilities. We also provide barrier-free communication and support in designing working environments and routes for people with individual mobility impairments.

In addition, occupational medicine, prevention, workplace health promotion, reintegration management and ergonomics play a key role at MAN. They are all components of comprehensive occupational health and safety.

[Read more](#)

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At MAN, people in more than 120 countries work together. We live diversity – every single day. Diversity and inclusion are firmly anchored in our DNA and they are essential components of our corporate culture. Diverse teams make us even more competitive and foster our innovative strength.”

Hubert Altschäffl – Chief Human Resources Officer and Labour Director,  
MAN Truck & Bus SE



# WE CARE ABOUT SAFETY.

The mobility of the future should not only be clean, it should also be safe. In addition to decarbonisation, MAN is focusing in particular on the safety of its products for drivers and road users alike. With advanced digital driver assistance systems, increasingly automated products and our MAN ProfiDrive® professional driver training courses, we comply with the strict requirements for road safety.

## Driver assistance systems.

MAN is constantly innovating to increase safety in the vehicle and on the road. To further reduce the risks associated with road traffic, we develop solutions that enhance road safety for drivers and other road users alike.

Our latest safety system, Front Detection, for example, detects pedestrians and cyclists in hard-to-see areas in front of the vehicle and warns the driver acoustically and visually. The new safety feature is integrated within the Emergency Brake Assist (EBA), which warns the driver of objects and applies the brakes immediately if the driver does not react.

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## Autonomous Driving.

Autonomous freight transport has the potential to significantly improve transport costs and efficiency, reliability, sustainability and, above all, safety.

As the first European commercial vehicle manufacturer to test an autonomous truck on the motorway, our goal is to make our products even safer.

[Read more](#)



# DRIVER TRAININGS WITH MAN PROFIDRIVE®.

**MAN ProfiDrive® is the qualified training programme from MAN Truck & Bus that is available worldwide.**

Drivers learn how to avoid risks on the road through careful driving in industry-specific training courses in accordance with the Professional Drivers Training Act. This training is offered to truck drivers as well as bus and van drivers. The result is increased safety, lower fuel consumption and a reduction in the cost of wear and tear.



[Read more](#)

# WE CARE ABOUT INTEGRITY.

**MAN regards compliance, ethics and integrity as the basis of its corporate responsibility.**

We use an effective compliance management system to ensure that corporate, product-specific and environmental regulations are observed at national and international level. In addition, our Code of Conduct enables managers and employees to act with integrity and adhere to ethical standards and corporate values in their daily work.

In addition, the management of risks and opportunities is an integral part of corporate management and business processes. MAN has established a comprehensive risk management system in order to create transparency about risks and opportunities within the company at an early stage and to implement risk-reducing measures at management and process level.

[Read more](#)

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Compliance and integrity are essential for successful cooperation within MAN and with our business partners.”

Alexander Vlaskamp – Chief Executive Officer  
MAN Truck & Bus SE



MAN Truck & Bus supports and promotes the fight against corruption and advocates this position together with other companies. MAN is a participant in the UN Global Compact initiative. In addition, MAN is active in the Alliance for Integrity, an initiative of the German Federal Ministry for Economic Cooper-

ation and Development, together with the German development agency GIZ, the Federal Association of German Industries and numerous other German companies to promote integrity in business. MAN is also a member of the German Institute for Compliance (DICO e. V.) and Transparency International.



# WE TAKE RESPONSIBILITY ALONG THE VALUE CHAIN.

**As a global commercial vehicle manufacturer, MAN feels it has a special responsibility to do everything in its power to promote climate and environmental protection and to assume social responsibility. This includes, in particular, designing supply chains that are circular, CO<sub>2</sub>-neutral and fair.**

We are therefore committed to ensuring that our suppliers and business partners use resources sparingly and respect labour and human rights. As part of the Volkswagen Group, MAN is represented in the Sustainability Procurement Network, where we exchange information on current developments and long-term challenges in our supplier relationships across national borders.

The cooperation within the Volkswagen Group enables us to achieve a high leverage effect and greater transparency in the face of existing challenges.



# RESPONSIBLE SUPPLY CHAINS.

**We aim to create responsible supply chains and make a lasting contribution to ensuring that these are circular, CO<sub>2</sub> neutral and fair.**

In order to comply with the German Supply Chain Due Diligence Act (LkSG), which came into force on January 1st 2023, we introduced the “Responsible Supply Chain System (ReSC)” management approach in 2022.

Based on a systematic risk analysis, the new approach aims to avoid or minimise social or environmental risks, the risk of human rights violations as well as corruption along our entire supply chain. It is also intended to help eliminate violations in general and to continuously improve the sustainability performance of our suppliers.

The ReSC system consists of the following interdependent elements:

**Risk analysis:** A regular risk analysis serves to identify risks in the supply chain in advance. The analysis is carried out on the basis of the supplier’s business models and takes into account external and internal data on human rights and environmental risks. Based on the risk assessment, each supplier is assigned a high, medium or low sustainability risk. A country risk score is also used for suppliers with a low sustainability risk. If there is an increased country risk for the supplier, it is upgraded to the medium risk range. The risk analysis is updated once a year and/or on an ad hoc basis by the Group Procurement Sustainability in coordination with the relevant brands of the Volkswagen Group.

**Standard measures:** These proactive and reactive measures include the Code of Conduct for Suppliers and Business Partners, the Supply Chain Grievance Mechanism, media screening, the sustainability rating, as well as supplier and employee qualification.

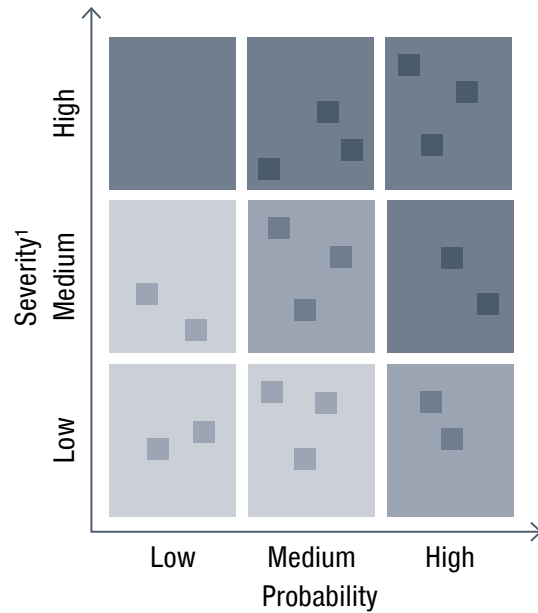
**Deep dive measures:** These measures include the Human Rights Focus System in the supply chain, the Raw Material Due Diligence Management System and the collaboration with external partners to further develop the concept of sustainability in the supply chain.

RISK ANALYSIS

INDUSTRY-ORIENTED SUSTAINABILITY RISK ASSESSMENT

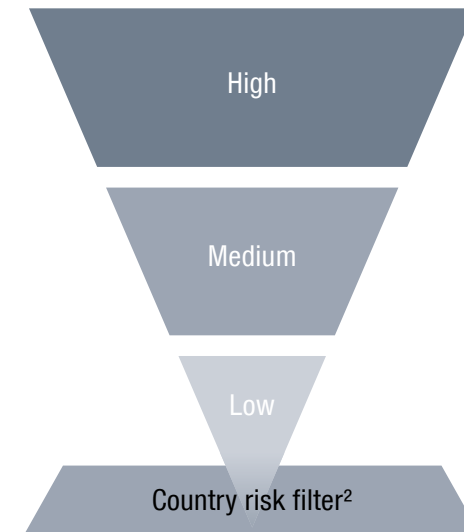


Probability and severity of human rights and environmental risks



<sup>1</sup>Severity for affected people and the environment.

SUPPLIER-ORIENTED ALLOCATION TO SUSTAINABILITY RISK



<sup>2</sup>Refers to the production site.

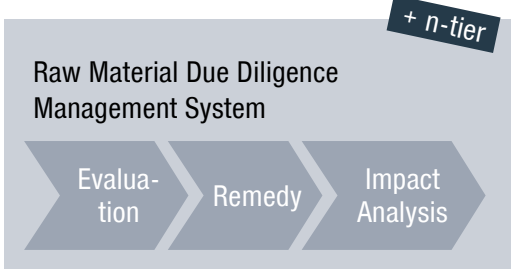
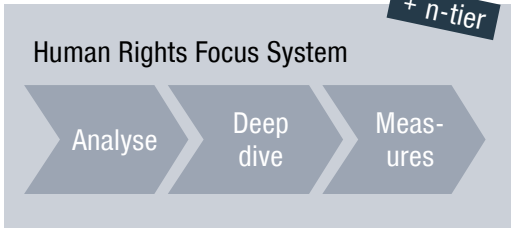
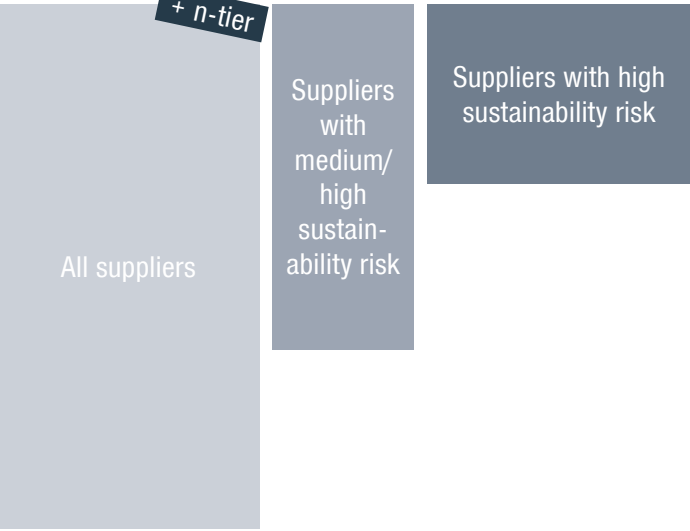
# MEASURES

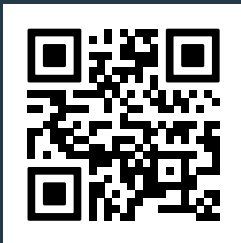
## PREVENTIVE AND REACTIVE STANDARD MEASURES

## DEEP DIVE MEASURES



Code of Conduct    Supply Chain Grievance Mechanism    Media screening    Sustainability-Rating    Supplier training





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