Impact

What impact does an MAN product have on the market in which it moves, what impact does it have on our society? And above all, of course: what added value do we bring to our customers?

Regardless of whether we’re bringing digital cloud solutions to the road, thereby boosting productivity in the transportation industry, or whether our school buses enable children in Brazil’s rural areas to access education. Regardless of whether we are getting started with a new van in our portfolio, making us more present than ever on the market, whether we are making old ships fit for the future again, ensuring increased sustainability on the world’s seas, or whether our engines are propelling power ships that provide many people in developing countries with access to electricity.

The question that we ask ourselves over and over again in everything that we do is quite simple: what impact do we have? It is the driver behind every new development at MAN. And the yardstick by which we measure our success.
A transporter that knows no bounds

MAN Truck & Bus now has a van. With its new MAN TGE, the company has broken into the LCV segment and brought a real all-rounder onto the market. Whether as a parcel service or construction vehicle, or a garage on wheels – the MAN TGE can be customized depending on the area of use and it comes with an enormous cargo volume and numerous safety systems to boot. Opting for a preconfigured vehicle means benefiting from short delivery times via online sales portal “Vans to go” – industry vehicles with inspected structures and add-ons can be delivered within 48 hours.

18.4 m$^3$

maximum cargo volume
From van to tractor-trailer

The new TGE makes MAN Truck & Bus a full-range supplier with a fitting solution to offer for every type of transportation task. MAN is now more present than ever on the road. A true one-stop shop – Klaus Stemig, Managing Director of assistance partner GmbH, puts the advantages for customers in a nutshell: “We opted for the TGE because we value MAN’s understanding of the needs of our breakdown operators. In addition to the high quality that we’re used to from its vehicles, we can now also use the MAN customer service that we are familiar with in the truck field for vans too – quick and easy assistance with flexible garage opening hours.”
They are deployed wherever the need for energy is great and capacities are exhausted. Turkish energy company Karpowership’s vessels drop anchor offshore to alleviate electricity shortages. The Powerships are equipped with MAN Diesel & Turbo engines that run on both natural gas and liquid fuel. Twelve engines are to be delivered by the start of 2017. A framework agreement has been signed for an additional 48.
STABLE GROWTH ON LAND

Economic development needs reliable electricity. In areas where power cuts are the order of the day, productivity suffers and growth stagnates. This results in lower wages and a declining standard of living. One option to counteract this is the use of floating power plants like those from Turkish company Karpowership, the vessels of which are propelled by MAN engines. They can cover energy needs until the necessary infrastructure is put in place on land and then sail on to wherever they are needed next.
Harmonious colors, indirect lighting, and a spacious feel: the new NEOPLAN Tourliner creates an atmosphere that invites you to relax. The perfectly coordinated interior concept includes comfortable seats, each with their own USB charger, a high-quality infotainment system, and indirect ventilation which is guaranteed to be draught-free. The full package for the ultimate in comfort. And thanks to safety systems of the highest standard, a journey with the NEOPLAN Tourliner is a stress-free trip all round.
Anyone who has ever been able to kick back and relax while traveling the world would do it again in a heartbeat. And because the NEOPLAN Tourliner is not only comfortable and secure but is also kind to the environment as it uses 10 percent less fuel than its predecessor, you can discover the world in this coach with a clear conscience.

A fall trip to the Swabian Alb offering stunning castle views.

Feeding the pigeons in Rome – a favorite pastime for tourists.

A quick stop in no man’s land – then on with the world discovery tour.

A platform-free floor, Wi-Fi, and state-of-the-art safety systems make the NEOPLAN Tourliner a perfect travelling companion.
A real omnibus

Gravel, mud, and dusty tracks: the journey to school can sometimes be a real adventure for children in Brazil’s rural areas.

To make school routes safer and ensure continuous access regardless of poor road conditions, Brazil’s government launched the “Caminho da Escola” program back in 2007.

The initiative aims to expand and renew the public transportation network for the carriage of schoolchildren and adapt the school bus fleet to the conditions on the road and the needs of the children. Having provided over 16,000 Volksbuses, MAN Latin America currently supplies the majority of the vehicles for the program.

The buses feature reinforced suspension and a reduced overhang at the front and rear so that potholes and other obstacles are no longer hurdles.

Emergency windows, comfortable seats with safety belts, and a built-in speed limit also make the route to school safer.

The buses feature reinforced suspension and a reduced overhang at the front and rear so that potholes and other obstacles are no longer hurdles.

Emergency windows, comfortable seats with safety belts, and a built-in speed limit also make the route to school safer.

MAN Latin America’s school buses are equipped with MAN D08 engines and meet Euro 5 emission standards.
A ride for everyone

Education plays a crucial role in a better future. A good school education for everyone – whether they live in the city or in the country, whether they are rich or poor – is a great equalizer and powerful force for social and economic change.

If access to educational facilities is difficult, this results in illiteracy, unemployment, and poverty.

In the rural areas of Brazil in particular, the level of education is often low. School route improvements can reduce this inequality.

The fewer school days missed due to breakdowns, accidents, and poor road conditions and the more reliable a school bus is in bringing children to their destination, the higher the chance of a successful school-leaving qualification and a better future.

MAN Latin America buses help children in Brazil’s rural regions gain access to education.
Wherever electricity is needed, heat often is too. As is the case at the Shanghai Volkswagen Automotive Company site where an MAN Diesel & Turbo gas turbine power station is operated using electric energy while also being supplied with heat. The principle is as simple as it is ingenious: the waste heat that is produced when the electricity is generated and that would normally be lost is used for manufacturing processes and heating.
59,000 tons less CO₂ per year – the environmental footprint of the new gas turbine power station at the Shanghai Volkswagen Automotive Company site is impressive. This is thanks to its reduced need for fuel and the fact that it runs on natural gas. At maximum energy efficiency, total efficiency increases to over 80 percent, which is good for the Shanghai locals and helps China to achieve its set CO₂ emission targets.

SHANGHAI
The changeover from coal to gas is intended to improve the air in China’s industrial centers.
One after another is best: in platooning, two or more trucks travel directly behind one another with the leading vehicle setting the speed and direction of travel. A close distance of less than 15 meters is constantly maintained through technical driver assistance and safety systems as well as car-to-car communication. Making the platoon concept a reality in Europe primarily depends on the legal framework and requires the member states and the partners involved to work together. A successful demonstration run already took place in 2016. As part of the European Truck Platooning Challenge, an MAN platoon made up of two MAN TGX semitrailer tractors set off from Munich and drove in a convoy all the way to Rotterdam. In addition to this, MAN Truck & Bus has joined forces with logistics specialist DB Schenker to launch a development project for studying platooning in practice.
Electronic vehicle convoys can help to increase safety on the road. Some 90 percent of all road accidents in Germany are due to human error. In Europe, more than 30,000 accidents a year happen because the driver reacts too late. The majority of these are collisions. Thanks to the electronic drawbar that connects the individual trucks in convoys like the MAN platoon, the response time and braking distance adapts exactly to that of the vehicle in front. This makes it virtually impossible for the trucks in the platoon to run into one another. On top of this, the linked truck lines relieve the driver, make better use of space on the roads, and are kind to the environment: depending on the type of vehicle and length of the convoy, driving in the slipstream can generate fuel savings of up to 10 percent and save CO₂ at the same time.
Ahoy again

As ships grow old, the returns of ship owners often shrink. An upgrade with retrofittable state-of-the-art technology can help. In these retrofits various construction parts on the hull are changed, supplemented, or replaced to improve flow. Adjustments to the engines also cut fuel consumption. The solutions offered by MAN PrimeServ to make older ships fit for the future again range from optimized propellers and flow-efficiency improving devices such as rudder bulbs and fairing cones or propeller boss caps with fins to complete slow steaming package concepts also including combustion optimization and other hardware solutions for the engine. In addition to this, MAN PrimeServ also offer manual or automatic monitoring and control systems to further improve propulsion efficiency. With modern 3D simulation programs it can be determined just how much the flow and propulsion efficiency can be improved and what fuel oil savings can be expected. The retrofit concept can be applied to all MAN Diesel & Turbo propulsion systems and even adapted to the systems of other manufacturers.
Depending on how the various retrofit solutions are combined, fuel savings of more than 20 percent can be generated. This was the case for Norwegian chemical transportation company Odfjell when it had a total of 19 tankers retrofitted by MAN PrimeServ. Fuel consumption can be reduced by more than 5 percent just by having a Kappel propeller with its slightly curved blade tips built in. When combined with a rudder bulb with fairing cone that bridges the gap between the propeller hub and the ruder so that the loss of flow behind the hub is reduced, this saving increases to more than 10 percent. Additional optimization measures for the propulsion system and main engine ultimately boost efficiency by up to 20 percent. In the Greenhouse Gas (GHG) Emissions Rating developed by agency RightShip, one of the oldest ships in the fleet improved as a result of the upgrade from D+ to an A+ rating, one which only the most efficient 2.5 percent of all the world’s ships enjoy. Thanks to the successful retrofit, the fleet is now not only more cost-efficient, but also more eco-friendly at the same time. This makes the ships more appealing again to clients who have undertaken to protect the seas in their statutes.
NO MORE EMPTY RUNS

Digital logistic platform RIO, a Volkswagen Truck & Bus GmbH brand, links all the players in the transportation chain, from freight ship and trucks or vans through goods trains, from dispatcher and driver through recipient. The cloud-based operating system bundles previously stand-alone solutions and independent data sources from telematics systems, navigation and weather services as well as software for order scheduling and cargo management, ensuring more transparency in the transportation industry. The platform initiated by MAN Truck & Bus uses all this data to develop recommendations for action in real time and supports operational processes. The thing that makes it so special: RIO has been designed to be independent of any manufacturer. This means that customers with mixed fleets can also analyze all the relevant information using a single big data solution. The platform can be used with various apps. It is easy to use and does not require any special IT knowledge. Existing individual solutions can be integrated simply. This makes RIO accessible to everyone – from the international corporation to small businessman.

The problem in the transportation industry: data is recorded throughout the entire supply chain – but is not shared with other players along the value chain. Blind spots occur, transportation flow is hindered.
Digital logistic platform RIO is set to make transportation processes faster and smarter – boosting revenue and profit. Smooth processes, the removal of disruptive elements, and avoiding empty runs all boost capacity utilization. If costs remain the same, more revenue can be generated – productivity increases. In order to keep logistics flowing, RIO has brought a number of partners on board: apps like Loadfox, for example, automatically assign additional loads to partially-loaded trucks along their route, which is good for the customer, the environment, and the transportation network because it means fewer empty runs. Much like an early warning system, transport monitoring provider Synfioo identifies disruptions like traffic, fog patches, road blocks, strikes, or waiting times at transshipment centers for which time-intensive rescheduling is required, thereby reducing transportation delays. RIO’s applications can be customized and expanded to include smart business forecasts. The effect is the same for all users: higher productivity and a reduced organization burden.
Twice the eMobility at the IAA Commercial Vehicles show

The IAA Commercial Vehicles 2016 sees MAN Truck & Bus showcase two concept vehicles in the field of electromobility: a fully-electric articulated MAN Lion’s City bus with modular concepts for charging and storing technology and a TGS semitrailer tractor with electric drive for use in inner-city night-time deliveries. A fully-electric city bus is set to go into series production before 2020. Both vehicles will be extensively field tested in advance. They will be on the road starting in 2018.

New edition of the EfficientLine concept

The third generation of the tried-and-tested TGX EfficientLine combines all technical and aerodynamic fuel economy measures into a truck. The EfficientLine 3 demonstrates its fuel savings potential in July 2016 on a comparative journey with its predecessor, the EfficientLine 2, over 4,000 km through Europe. The journey is accompanied by TÜV SÜD, which confirms that the MAN TGX EfficientLine 3 saves an additional 6.35 percent of fuel compared with the MAN TGX EfficientLine 2.

A new gas-engine power plant for EnBW

MAN Diesel & Turbo is commissioned in summer 2016 by EnBW Energie Baden-Württemberg AG to design a gas-engine combined heat and power (CHP) plant with district heating of 30 megawatts. The plant at the Stuttgart-Gaisburg site is to be operated by three MAN Diesel & Turbo gas engines and to provide up to 30 MW of district heating in addition to its electrical output. The new power plant is intended to replace a thermal power station that is primarily coal-fired. The switch from coal to gas will enable CO₂ emissions to be cut by up to 60,000 tons per year. In January 2017, MAN Diesel & Turbo wins the contract to build the power plant.

6.35 %

less fuel consumption

Eco-friendly transportation: the fully-electric articulated MAN Lion’s City bus and the MAN TGS with electric drive.

A new gas-engine power plant for EnBW

MAN Diesel & Turbo’s large-bore gas engines are ideally suited to providing district heating.
Investment package for Brazil

In December 2016, MAN Latin America announced the biggest investment package that the company had ever seen. Over the next five years, the Brazilian commercial vehicle brand will be ploughing around €420 million into revamping its product portfolio, modernizing its 20-year-old plant in Resende, and developing connectivity services. In doing so, the company is preparing itself for the economic upswing to come after the current crisis in Latin America.

Test rig for Knorr-Bremse

Renk Test System GmbH delivers four test rigs to Knorr-Bremse AG in June 2016 for its new development center. The ATLAS (Advanced test Laboratory for Adhesion Based Systems) test rig, which is 15 meters high and weighs 760 tons, is the technical highlight in Knorr-Bremse’s new testing center in Munich. The wheel set test rig for railway applications simulates journeys of up to 350 kilometers per hour for bogie wheels or complete bogies. In this way, the test rig can model all track gauges, standards, and various environmental conditions, such as rain, driving wind, and temperatures.

First methanol-driven seagoing vessels

Shipping companies Waterfront Shipping, Marininvest/Skagerack Invest, Westfalen-Larsen Management, and Mitsui O.S.K. Lines start operating the first methanol-driven seagoing vessels in April 2016. The new ships use dual-fuel two-stroke engines from MAN Diesel & Turbo that can run on methanol, fuel oil, marine diesel oil, or gas oil. Methanol is an alternative fuel that can help ships meet the increasingly stricter emission limits.

Partnership with Mercy Ships

MAN Diesel & Turbo and non-governmental organization Mercy Ships continue their long-standing partnership with the signing of an agreement in September 2016 to deliver spare parts annually for the engines of the hospital ship M/V Africa Mercy in the amount of up to €250,000. The company equipped the ship with four GenSets back in 2010. M/V Africa Mercy is a Danish rail ferry built in 1980 that was repurposed. The floating hospital brings medical professionals from all over the world to Africa to operate, train, and expand their knowledge. The new agreement with the Danish branch of Mercy Ships runs until the end of 2018 with an option to be extended.

New truck generation, new engines

MAN Truck & Bus presents its truck range at the IAA Commercial Vehicles 2016 in Hanover – fit for the future with more power and revamped designs. For its 2017 models, the company has combined engines boasting higher horsepower of up to 640 and greater torque with finely tuned transmissions and switching functions for power trains optimized for their intended use. This is accompanied by a strong brand image. New exterior and interior design features in the TG series make the lion an emotional logo that is more prominent.