

VOLKSWAGEN

AKTIENGESELLSCHAFT

SASB INDEX 2021

CATEGORY	REQUIREMENT	ANSWER
Product Safety	Percentage of vehicle models rated by NCAP programs with an overall 5-star safety rating, by region	<p>Volkswagen Passenger Cars attaches great importance to the safety of its vehicles when designing and developing its products. In 2021, a wide range of Volkswagen Passenger Cars products achieved top grades in global consumer tests.</p> <p>Our Golf PHEV, Tiguan PHEV and Touareg PHEV vehicles achieved the top 5-star rating in the Euro NCAP consumer test.</p> <p>In addition to achieving the best possible rating of 5 stars, the all-electric ID.4 was also given an award by Euro NCAP for its “Car2X – local hazard warning” safety system, which is fitted as standard.</p> <p>In the USA, the ID.4 achieved the top safety rating in the “Top Safety Pick Plus” IIHS consumer test as well as 5 stars in the US NCAP test. The Chinese organization C-IASI also rated the safety of the ID.4 as GOOD, its top rating.</p> <p>Polo, Golf and Sagitar achieved 5 stars in the China NCAP test, while Viloran was rated at 5 stars plus.</p>
	Number of safety-related defect complaints, percentage investigate	<p>The Product Safety Department ensures that all issues (100%) are procedurally regulated and that there is a secure process in place (approved by independent third parties). Information concerning recalls is made public and visible to consumers through the authorities. We will not give detailed information and/or give figures on these events. This is justified by the fact that the number of product recalls and vehicles, the cost of product recalls and service actions do not provide a serious base to evaluate general product quality and are always worth interpreting in comparison with other manufacturers.</p> <p>Our aim is to protect consumers as best as possible and to provide information about possible dangers quickly and transparently in coordination with the authorities.</p>
	Number of vehicles recalled	In 2021, 1,392,939 vehicles were subject to a recall.
Labor Practices	Percentage of active workforce covered under collective bargaining agreements	
	(1) Number of work stoppages and (2) total days idle	

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Fuel Economy & Use-phase Emissions	Sales-weighted average passenger fleet fuel economy, by region	<p>The Volkswagen Group's new passenger car fleet (excluding Lamborghini and Bentley) in the EU (EU27+2) emitted an average of 119 g CO₂/ km (WLTP) in the reporting period in accordance with statutory measurement bases, compared with a statutory target of 121 g CO₂/km (WLTP). Owing to the semiconductor shortage and contrary to original planning, it was only just possible to achieve the target despite improvements, compared with 2020.</p> <p>The Volkswagen Group's new light commercial vehicles fleet in the EU emitted an average of 202 g CO₂/ km (WLTP) in the 2021 reporting period in accordance with statutory measurement bases, compared with a statutory target of 198 g CO₂/km (WLTP)¹. Owing to the semiconductor shortage and contrary to original planning, it was not entirely possible to achieve the target. The target for the CO₂ pool established together with other manufacturers was achieved.</p> <p>In the USA, the GHG CO₂ forecast value for the passenger car and light commercial vehicle fleets in model year 2021 was an average of 147 g CO₂/km (model year 2020: 151 g CO₂/km), compared to a statutory target of 142 g CO₂/km (model year 2020: 139 g CO₂/km). By applying the statutory flexibility in GHG and CAFE as well as externally acquired credits, the Volkswagen Group was able to comply with the applicable requirements – subject to confirmation by the authorities – for model year 2021.</p>																										
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Discussion of strategy for managing fleet fuel economy and emissions risks and opportunities	<p>The two levers with the greatest influence on greenhouse gas emissions across the entire life cycle of Volkswagen products are the Group's electric offensive and the Renewable Energies strategy. This strategy involves the integration of renewably generated electricity into the use phase of electric vehicles and plug-in hybrid electric vehicles and globally switching plants' external power supply to renewable energy. Around 90% of the decarbonization targeted by the Group can be realized through electrification of the fleet and switching to green energy.</p>																											

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Materials Sourcing	Description of the management of risks associated with the use of critical materials	<p>The Volkswagen Group has implemented a Raw Material Due Diligence Management System (RMDDMS).</p> <p>The RMDDMS is overseen by a Steering Group and guided by a Working Group that included representatives from Sustainability in Procurement teams from all brands.</p> <p>It covers 16 high risk raw materials that have been derived from the results of the Material Change Report (DRIVE Sustainability 2018). Those 16 raw materials are: battery raw materials cobalt, lithium, nickel graphite; conflict minerals (3TG) tin, tantalum, tungsten gold; and other materials aluminium, copper, leather, mica, platinum group metals (PGM), rare earth elements (REE), natural rubber and steel.</p> <p>The RMDDMS is a strategic and systematic group wide approach to identify and assess raw material risks (sourcing, processing and in their specific supply chains). Based on the risk assessment systematic mitigation measures are being developed and implemented. Constant monitoring and, if needed, adjustments to those measures are part of the RMDDMS and will be conducted annually.</p> <p>The report on the Group's 2020 activities are available in the report: Responsible Raw Materials Report. The report entails a detailed description of the RMDDMS process, the lead brands, the type of risk identified for each raw material as well as the implemented risk mitigation measures and an outlook for the following year.</p> <p>The report on the Group's 2021 activities is currently being prepared and will be available shortly.</p>
Materials Efficiency & Recycling	Total amount of waste from manufacturing, percentage recycled	<p>Total production-related waste: 2,496,478 metric tons</p> <p>Waste for recycling: 1,810,531 metric tons</p> <p>Recycling rate: 72.52%</p>
	Weight of end-of-life material recovered, percentage recycled	Roughly one third of the vehicle, in vehicle weight terms, is made from recycled materials (as a percentage of all materials). The largest percentage is accounted for by recycled metals.
	Average recyclability of vehicles sold	In line with the European Directive on end-of-life vehicles, passenger cars and light commercial vehicles must be 85% recyclable and 95% recoverable at end of life. All our vehicles registered in Europe comply with these standards.
Activity Metrics	Number of vehicles manufactured	8,282,954
	Number of vehicles sold	8,881,957