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## INTRODUCTION

Volkswagen Group, usually known as Volkswagen AG, is a significant German vehicle manufacturer that was established in 1937 by the German government to mass-produce a low-cost "people's car." Wolfsburg, Germany is home to the company's headquarters. The corporation was previously run by the Nazi-affiliated German Labor Front (Deutsche Arbeitsfront). The German labor front engaged Austrian automotive engineer Ferdinand Porsche, who was responsible for the car's initial design, in 1934, and ground was laid for a new factory in the state of Lower Saxony in 1938. Before scale production could commence, the facility was converted to produce military equipment and vehicles due to the onset of war in 1939. Volkswagen's military engagement made its manufacturing a target for allied bombers, and the factory was destroyed at the conclusion of the war. It was reconstructed under British supervision, and Volkswagen mass production began in 1946. The corporation was handed over to the West German government and the state of Lower Saxony in 1949. Volkswagens accounted for more than half of all passenger cars made in the country at the time. In the 1950s, Volkswagen's output grew rapidly. In 1950, the business released the Transporter van, and in 1955, the Karman Ghia coupe. Sales in most export countries were good, but sales in the United States were initially sluggish due to the car's small size, unique rounded shape, and historical ties to Nazi Germany. However, as the 1950s progressed, the car began to gain recognition in the United States, and Volkswagen of America was founded in 1955. In 1959, Doyle Dane Birnbach, an American advertising agency, was appointed to promote the brand and the outcome was a groundbreaking advertising effort that helped popularize the car as the "Beetle" and marketed its tiny and odd form as a consumer benefit. The ad was a huge success, and the Beetle remained the most popular imported car in the United States for many years. The core rear-engine design and rounded appearance of the Volkswagen Beetle remained

unchanged, despite numerous detail alterations. Other rear-engine cars with more modern style and improved engineering were created by.

**Relevance of the topic** - For Volkswagen, sustainability means pursuing economic, social and ecological objectives simultaneously and with equal energy. It is our aim to create lasting values, offer good working conditions, and conserve resources and the environment. When it comes to the emissions issue, we have failed to live up to our own standards in several areas. The irregularities in the handling of emissions tests contradict everything we stand for. We will do everything in our power to prevent incidents of this kind from recurring, and are fully committed to re-embracing our standards and winning back public trust. With our sustainability concept we want to ensure that opportunities and risks associated with our environmental, social and governance activities are identified as early as possible at every stage of the value creation process. In keeping with this aim, we are determined that our corporate social responsibility (CSR) activities will have a lasting, positive impact on the Company's value and reputation.

**The purpose of the work-** The purpose of the work is to provide information on the social the environment governance at Volkswagen. . When it comes to the emissions issue, the company failed to live up to our own standards in several areas.

**The objective of the work** -The objective is to get a clear understanding on how Volkswagen operates through it strive for excellence in both environmental and social governance. The company, but none were as successful as the Beetle. The company's increasingly unstable finances, combined with competition from compact cars with more current styling, forced a shift in corporate strategy toward manufacturing more current and sportier car models. As a result, starting in the 1970s, Volkswagen began to phase out rear-engine vehicles in favor of front-engine vehicles. Engine front-wheel-drive designs. The first of those new cars was the short-lived K70 in 1970, followed by the Passat in 1973. Most significant, however,

was the Golf, initially called the Rabbit in the United States, which was introduced in 1974. The Golf was an instant sales success, effectively replacing the Beetle in the company's lineup and ultimately becoming Volkswagen's best-selling model worldwide. Joint ownership of Volkswagen by the West German government and the state of Lower Saxony continued until 1960, when the company was mostly denationalized with the sale of 60 percent of its stock to the public. Since the 1950s Volkswagen has operated plants throughout much of the world, including in Mexico, Brazil, China, and the United States. In addition to passenger cars, the company also produces vans and commercial vehicles. Volkswagen owns several other automotive companies, including Audi and Porsche in Germany, SEAT (Sociedad Española de Automóviles de Turismo) in Spain, Skoda in the Czech Republic Bentley in the United Kingdom, Lamborghini in Italy, and Bugatti in France. In mid-2015 Volkswagen briefly held the distinction of being the world's largest car manufacturer by volume after surpassing Toyota motor cooperation. However, shortly thereafter Volkswagen faced a public relation crisis when the U.S. Environmental protection agency (EPA) determined that the manufacturer's diesel-powered cars contained software that altered the vehicle's performance in order to pass emissions tests. Volkswagen admitted to installing the "defeat device," and it recalled more than 10 million automobiles worldwide. In the United States alone, the carmaker faced fines of more than \$4 billion, and several Volkswagen officials later were found guilty of various crimes. Despite the scandal, Volkswagen sales worldwide continued to increase. In 2019 Volkswagen ended production of the Beetle, which had undergone various redesigns over some eight decades. For Volkswagen, working conditions, and conserve sustainability means pursuing economic, social and ecological objectives simultaneously and with equal energy. It is our aim to create lasting values, offer good resources and the environment.

**The object of the study** - The object is to understand how Volkswagen deal with environmental disaster. When it comes to the emissions issue, we have failed to live up to our own standards in several areas. The irregularities in the handling of emissions tests contradict everything we stand for. We will do everything in our power to prevent incidents of this kind from recurring, and are fully committed to

**The subject of the study** - The subject of the study is to know how Volkswagen impact the environment by learning for emissions disaster of 2015. Reembracing our standards and winning back public trust. With our sustainability concept we want to ensure that opportunities and risks associated with our environmental, social and governance activities are identified as early as possible at every stage of the value creation process. In keeping with this aim, we are determined that our corporate.

**The overview of the problem** - The irregularities in the handling of emissions tests contradict everything the company stand for. We will do everything in our power to prevent incidents of this kind from recurring, and are fully committed to re-embracing our standards and winning back public trust. Social responsibility (CSR) activities will have a lasting, positive impact on the Company's value and reputation. When it comes climate change Volkswagen intend to become a Carbon neutral company by 2025. by 2025 Volkswagen plan to reduce total cycle greenhouse gas emissions of passenger cars and light duty vehicles by 30% compared to 2015. Volkswagen also actively contribute to the transition towards renewable energies along the entire life cycle. When it also comes resources Volkswagen intend to maximize resource efficiency and promote circular economy approaches in the areas of materials, energy, water and land. By 2025 Volkswagen plan to have reduced the production related environmental externalities (co2, energy, water, waste, volatile chemical chemicals) by 45 percent per vehicle compared to 2010. The Volkswagen are also pushed e-mobility forward to improve the local air quality. By 2025 the

share of battery electric car in the model lineup will be between 20 to 25 percent. The share of electric vehicles in the group fleets is to climb to at least 40 percent by 2030. With environmental also in mind the group aim is to become a role model for a contemporary to achieve this goal, the following issues need to be addressed.

- This target dimension focuses on the diverse needs of our customers and on tailor-made mobility solutions. We aspire to exceed our customers' expectations, thus generating maximum customer benefit. This requires not only the best products, the most efficient solutions and the best service, but also flawless quality and an outstanding image. We want to excite our existing customers, win over new ones and retain their loyalty in the long term – because only loyal and faithful customers will recommend us to others. The strategic KPIs consist of the conquest rate and KPIs pertaining to loyalty, customer satisfaction and quality.

- To achieve sustainable success, we need skilled and dedicated employees. We aim to foster their satisfaction and motivation by means of equal opportunities, an attractive and modern working environment, and a forward-looking organization of work. An exemplary leadership and corporate culture forms the basis for this, allowing us to retain our core workforce and attract new talents. The strategic KPIs of this target dimension cover internal employer attractiveness determined by means of the opinion survey, external employer attractiveness, an external employer ranking as well as the diversity index.

- Every day, we at the Volkswagen Group assume and exercise responsibility in issues relating to the environment, safety and society. This commitment should be reflected both in our thoughts and actions and in all our decisions. We pay particular attention to the use of resources and the emissions of our product portfolio as well as those of our sites and plants, with the goal of continuously improving our carbon footprint and lowering pollutant emissions. Through innovations and outstanding quality, we aim for maximum product safety. Our primary objectives in

this process include complying with laws and regulations, establishing secure processes and dealing openly with mistakes so that they can be avoided or rectified in the future. In terms of integrity, Volkswagen aims to become a role model for a modern, transparent and successful enterprise. The strategic KPIs of this target dimension consist of the decarbonization index and fleet CO2 emissions figures, compliance, a culture of dealing openly with mistakes, and integrin

- Investors judge us by whether we are able to meet our obligations as regards interest payments and debt repayments. As equity holders, they expect appropriate dividends and a long-term increase in the value of their shares. We make investments with a view to achieving profitable growth and strengthening our competitiveness, thus keeping the Volkswagen Group on a firm footing in the future and ensuring it remains an attractive investment option. The goals we have set ourselves are operational excellence in all business processes and becoming the benchmark for the entire industry. The strategic KPIs are operationalized for internal management purposes: target and actual data are derived from.

**Methodology** - Volkswagen mission is to pursue progress for people everywhere. They believe that they can harness science and technology to help tackle many global challenges. Always guided by a robust set of values, we approach all our actions and decisions with a sense of responsibility. Sustainability has therefore been vital to us for many generations. For us, sustainable entrepreneurship and profitable growth go hand in hand; we can only ensure our own future success by also creating lasting added value for society. As a sustainable enterprise, we create long-term value through our core business while seeking to balance environmental, social and governance aspects – for us as a business, for our stakeholders and for society at large. In doing so, we are helping tackle the great challenges facing today's world, such as disease, poverty, hunger, and climate change. For a global science and technology company like us, sustainability is an

essential component of our Group strategy. Through our business activities, we want to be economically successful and create value for society. At the same time, we endeavor to avoid generating subsequent costs for society.

## **SECTION 1. THE THEORETICAL ASPECTS OF SOCIAL AND ENVIRONMENTAL GOVERNANCE AT VOLKSWAGEN GROUP**

### **1.1 Essence of social and environmental governance at Volkswagen group**

The essence of social and environmental governance at Volkswagen has to do with many factors. Factors that are affecting social and environmental governance at Volkswagen.

- Scandal amongst Volkswagen (mid-September)
- Known of diesel eco-friendly cars
- Code of conduct
- CEO's involvement
- Illegally using (cheat devices for 6 years
- 230 lawsuit fields
- Downfall of their company
- Head of CSR Involvement

For Volkswagen, sustainability entails pursuing economic, social, and environmental goals at the same time and with equal zeal. Our goal is to establish long-term values, provide good working conditions, and conserve resources and the environment. In various places, the corporation has fallen short of our own requirements when it comes to emissions. Inconsistencies in the processing of emissions testing go counter to everything we believe in. We will do everything we can to prevent situations like this from happening again, and we are totally dedicated to re-establishing our standards and regaining public trust. We want to make sure that opportunities and risks related with our environmental, social, and governance activities are identified as early as possible at every stage of the value creation process with our sustainability concept. In order to achieve this goal, we are How is Volkswagen socially responsible? For the Volkswagen Group, sustainability entails

pursuing economic, social, and environmental objectives in a way that prioritizes them equally. They want to build long-term value, provide good working conditions, and take care of the environment and resources. Volkswagen has failed to meet its own standards in a number of ways in relation to the emissions issue. Our irregularities in handling emissions data go against everything Volkswagen stands for. We are deeply sorry and recognize that we have disappointed our stakeholders. We're doing everything we can to prevent something like this from happening again. We're working hard to live up to our own high standards once more and regain the trust of our customers and society. They are undergoing a comprehensive realignment. Emission catastrophe Volkswagen claims to have a total of 11 million vehicles with software that could have helped them pass pollution tests. Affected are five of Volkswagen's 12 car, motorcycle, and commercial vehicle brands.

#### **What does Volkswagen do for the environment?**

|                     |                  |
|---------------------|------------------|
| Vw car              | 5.0 million cars |
| Audi                | 2.1              |
| Commercial vehicles | 1.8              |
| Skoda               | 1.2              |
| Seat                | 0.7              |

Statements on environment Specifies the priority action areas for our environmental activities, including climate change, resources, air quality, and environmental compliance. Environmental policy. Outlines our commitment to becoming an environmental role model, including leadership behavior, adherence to legal and regulatory obligations, and collaboration with stakeholders. Sharping mobility for generations to come. . For millions of people, Volkswagen has always made individual and affordable mobility a reality. With our strengthened TOGETHER 2025+ Group strategy, we are giving answers to today's and tomorrow's challenges under the new vision "Shaping mobility - for generations to

come." Our goal is to make mobility a viable option for both current and future generations. Our promise: We will make the automobile clean, quiet, intelligent, and safe by combining electric powertrain, digital networking, and autonomous driving. Our primary product, meanwhile, gets even more emotional and provides an entirely new driving experience. When it comes to climate and environmental protection, it is also becoming a part of the answer. In this sense, the car may remain a cornerstone of modern, individual, and economical transport for the foreseeable future. Role for the environment, safety and integrity. We've arrived at a critical juncture: climate change is one of humanity's most pressing issues. Stopping global warming is a collective responsibility for all of us. Volkswagen, as the world's largest vehicle manufacturer, takes responsibility and leads the way. We are continually focused on electro mobility in order to maintain the environment and implement political requirements. The Volkswagen Group as a whole will be CO<sub>2</sub>-neutral by 2050 at the latest. Integrity, adherence to rules and laws, and the safety of our clients are among our highest values, as is the open discussion of faults in order to correct and prevent them in the future. We actively assume our societal responsibilities: we conduct our business in a socially responsible and values-based manner.

**Environmental policy** - Motor vehicles and mobility services are developed, produced, and distributed by us. We have made a commitment to influencing mobility for ourselves and future generations in this role, and we have established ourselves as a role model for environmental conservation. Volkswagen follow all legal and regulatory obligations, as well as our own internal standards and goals. To guarantee that environmental compliance duties are understood and met in our company activities, we implement Environmental Compliance Management Systems. Environmental fraud and misconduct will be viewed as a serious compliance violation, and compliance with Group environmental obligations will be examined and reported to the Group's and individual entities' boards of management

on an annual basis. We employ our global innovation capability to address environmental concerns throughout all life cycle stages of our mobility offerings to help the group decrease its environmental footprint. Our mobility solutions will also assist our clients in reducing their environmental impact while also ensuring the competitiveness and employment of our company. Leadership. They are in charge of ensuring that this policy is implemented in their business units and that all personnel are informed, trained, and held accountable for their assigned obligations. They provide an adequate framework in their area of responsibility in which employees and business partners can openly and without fear of negative consequences discuss particularly sensitive environmental concerns. Environmental leadership will be considered equally to other commercial criteria by the Group's and each entity's boards of management in critical company decisions. Compliance. Environmental Compliance Management Systems are used by the group to ensure that our environmental compliance obligations are understood and met in our business activities. Environmental infractions, misbehavior, and purposeful neglect or fraud are all treated as violations of rules under our organizational norms. Compliance with this Environmental Policy Statement and Group environmental standards shall be evaluated and reported to the Group's and each entity's boards of management on an annual basis.

**Environmental protection.** Volkswagen uses cost-effective strategies to reduce its environmental impact across the life cycle of its operations, goods, and services. Our efforts are validated every year by the public release of key performance indicators.

**Stakeholder collaboration.** Our Environmental Compliance Management System, as well as our activities and products, take stakeholder feedback into account and reflect it. As well as products and services we pledge to communicate with and report to our stakeholders in a transparent and dependable manner. Continue

improvement. Moreover, our environmental management systems are subject to a continuous improvement process. To uncover and transfer best practices in environmental technology and management, we rely on our global network of subject matter experts. To fulfil or exceed our obligations, we stay on top of developing environmental advances in regulations, science, technology, and stakeholder expectations. Volkswagen creates products and services that are as ecologically friendly as possible. We take into account not only the production and use phases, but also the raw materials, precursors, and suppliers, as well as the recycling process at the end of life. The life cycle principle refers to this cradle-to-grave strategy. Applying the life cycle approach to Volkswagen means that our obligation begins long before anything enters our factory gates and continues long after a vehicle is sold. When estimating environmental impacts, we use the same principle. We can only arrive at the correct outcome by adding up all of these affects from beginning to end. When comparing two possible variations, this is especially significant. If a model is more environmentally friendly to manufacture, this advantage can be negated by problematic outsourced components.

**Employment** - The Volkswagen Group's 2018 Strategy lays out how it plans to achieve its objective of becoming the global market leader in terms of unit sales and the best in terms of customer happiness and profitability in the automobile industry. Volkswagen likewise aspires to be the most appealing employer in the automotive industry by 2018. Customers, shareholders, employees, and other stakeholders are all represented in the Group's business plan, which is a multidimensional stakeholder strategy. The Volkswagen Group took full use of the potential presented by its excellent current model lineup in the 2010 fiscal year, gaining new consumers and extending its market share across the world. However, it can only meet current and future difficulties if its workers – from apprentices to

senior executives – continually provide great results, ensuring that product quality and innovation stay at the highest levels in the industry.

In the long run Volkswagen's HR strategy prioritizes ensuring exceptional performance, achieving success, and providing employees with a stake in the company's earnings. Having a top team is an HR principle that applies across the Group's global activities in order to achieve the great performance required to ensure Volkswagen's pole position in the world automobile industry. And it's a principle that's especially vital when the company is expanding, as it has been in recent years. On December 31, 2010, the Volkswagen Group employed 399,381 workers worldwide, an increase of 8.4% over December 2009. (368,500 employees). However, as our staff expands, so does the Group's complexity. As the Group transitions from conventional to hybrid and electric drive cars, the number of production sites, the range of technology utilized, and the diversity of processes are all growing. As a result, it's more critical than ever for the Group to have access to the right capabilities at the right time and in the right place.

**Trading and development skills** - The demand for vocational training, skill development, and transfer is expected to rise in the coming years across the Group. Volkswagen places a high value on being a learning and teaching organization, and it makes every effort to ensure that all of its sites have the right skill levels. Our HR development approach relies heavily on excellent vocational training and comprehensive supervisor training. The Volkswagen brand is launching a global supervisory certification based on a uniform standard, allowing us to hire highly qualified supervisors across the board. The goal is to make the supervisory grade a critical job in all sites, and training and skills development programmed are now being developed to accomplish this. Volkswagen places a strong value on vocational training, and it is through this route that the bulk of its highly skilled employees join the company. The company's German locations feature long-standing, high-quality

vocational training facilities that will serve as a model for all future Volkswagen operations. This will also help the company meet its goal of hiring even more apprentices. In September 2010, the number of Volkswagen Group employees enrolled in vocational training surpassed 10,000 for the first time. at the very first time Volkswagen AG trained roughly 4,500 apprentices and students in 32 professions and 21 courses under the StiP integrated study and traineeship programmed in its six German locations (Wolfsburg, Hanover, Braunschweig, Kassel, Emden, and Salzgitter) at the end of 2010. In February 2010, the newly formed Volkswagen Osnabruck GmbH hired a total of 99 StiP apprentices and students from the bankrupt Karmann Company. Apprentices at Volkswagen can participate in a variety of extra training programmed and activities while completing their vocational training. A collaboration between Volkswagen's vocational training division and "Jugend gründet," a statewide online business/high-tech competition with a prize for the greatest product or company idea, is one of them. The Volkswagen Group also hosts the "ProTalent" and "ProMechaniker" competitions, which allow apprentices and students to combine their technical skills with their enthusiasm for motor racing. Working on the production floor or in the back office isn't the only option. The Auschwitz Memorial and Museum has been staffed by Volkswagen apprentices for the past 20 years. Since 1990, Volkswagen has sent four groups of apprentices to Auschwitz each year to spend two weeks learning from, assisting, and connecting with survivors of the concentration camps. The International Auschwitz Council and Volkswagen Coaching GmbH, our subsidiary, brief and monitor the groups.

## **1.2 Features of social and environmental governance at Volkswagen group**

For millions of people, Volkswagen has always made individual and affordable mobility a reality. With our strengthened TOGETHER 2025+ Group strategy, we are giving answers to today's and tomorrow's challenges under the vision "Shaping mobility - for generations to come." Our goal is to take a more active role in shaping the future of transportation while also ensuring its long-term viability — for current and future generations. Is to make mobility a long-term investment for us and future generations. Our promise is as follows: We aspire to make cars greener, quieter, more intelligent, and safer by using electric motors, digital connections, and autonomous driving. We've set the objective of continuing to excite and suit our customers' different demands with an appealing product line of remarkable automobiles and forward-thinking, tailor-made mobility solutions. As a result, the automobile can remain a cornerstone of contemporary, individual, and economical transport in the future.

**Exciting costumers** this target dimension focuses on our customers' various needs and personalized mobility solutions. We strive to exceed our clients' expectations in order to provide the most value to them. This necessitates not only the best products, solutions, and services, but also perfect quality and an excellent image. We want to excite our current clients, win new ones, and keep their loyalty throughout time, because only loyal and faithful customers will refer us to others. The conquest rate and KPIs related to loyalty are among the key KPIs. We require qualified and devoted employees to ensure long-term success. Equal possibilities, a beautiful and modern working environment, and a forward-thinking work structure are all aimed at fostering their pleasure and motivation. The foundation for success is excellent leadership and corporate culture, which allows us to maintain our workers while also attracting new talent. Internal employer attractiveness, as

measured by an opinion survey, is one of the strategic KPLs of this goal dimension. The diversity index and the external employer ranking

Role for the environment, safety and integrity Every day, we at the Volkswagen group assume and exercise responsibility in issues relating to the environment safety and society this commitment should be reflected both in our thoughts and actions and in all our decisions. We pay particular attention to the use of resources and the emissions of our product portfolio as well as those of our sites and plants, with the goal of continually improving our carbon footprint and lowering pollutants emissions through innovation and outstanding quality, we aim for maximum product safety.

**Competitive profitability.** As equity holders, they anticipate suitable dividends and a long-term increase in the value of their shares, so investors judge us on our ability to fulfil our responsibilities in terms of interest payments and debt repayment. We make investments with the goal of achieving profitable growth and enhancing our competitiveness, ensuring the Volkswagen groups long-term our objectives are to achieve operational excellence in all business operations and to become the industry's benchmark. For internal management, strategic KPIs (key performance indicators) are operationalized.

To fully realize our Group's potential, the strategies of our brands, regions, and functional areas must be perfectly coordinated with one another. We've established five modules as core work packages under the TOGETHER 2025+.

### **1.3 Methodical approaches to social and environmental governance at Volkswagen group**

The goal of the study is to see if there are any links between the VW emissions crisis and CSR. The study used revelatory statistical facts to analyses how social irresponsible behavior affects company performance. Our research is based on

quantitative data gathered from corporate financial reports as well as market data. We focus on the most recent data in this study, which is given below: You're being moved. Volkswagen's rigorous methods to social and environmental governance are moving forward. For Volkswagen, sustainability entails pursuing economic, social, and environmental goals at the same time and with equal zeal. Our goal is to establish long-term values, provide good working conditions, and conserve resources and the environment. In some areas, Volkswagen have fallen short of our own requirements when it comes to emissions. Inconsistencies in the processing of emissions testing go counter to everything we believe in. We will do everything we can to prevent situations like this from happening again, and we are totally dedicated to re-establishing our standards and regaining public trust. We want to make sure that opportunities and risks related with our environmental, social, and governance activities are identified as early as possible at every stage of the value creation process with our sustainability concept. We are committed to ensuring that our corporate social responsibility (CSR) efforts have a long-term, positive influence on the Company's value and reputation in order to achieve this goal.

It's all about policy. The Volkswagen Group has pledged to operate its business in a sustainable, transparent, and responsible manner. In accordance with the German government's suggestions Volkswagen implement Group-wide sustainability coordination and forward-looking risk management, and we ensure a clear framework for the future-oriented handling of environmental challenges, employee responsibility, and social involvement by our brands and in various areas through the Corporate Governance Code.

The cornerstone and backbone of our strategic sustainability objectives are voluntary undertakings and principles that apply across the Group. The following are some of them: Sustainability Council For assistance on strategic topics of sustainability and societal responsibility, the Volkswagen Group appointed an

international Sustainability Council in September 2016. The renowned experts from business, politics, science and society advise the company on the topics of sustainable mobility and environmental protection, social responsibility and integrity as well as the future of work and digitization. They act independently, are not bound by instructions and have extensive rights of information, consultation and initiative. The Council meets regularly with the Group Management Board as well as the employee representatives and also exchanged perspectives with the Monitor team. The Council advises the company and makes recommendations as to what steps it considers necessary to become a world-leading provider of sustainable mobility. In 2020, the Volkswagen Group extended the mandate of the Sustainability Council until 2022. By visiting Volkswagen's first ID.3 manufacturing plant in Zwickau as well as the Glassine Manufacture and test-driving the ID.3, the Council supervised the commencement of the new e-mobility era in 2020. The Sustainability Council also discussed the prospects and challenges of workforce transformation with the Volkswagen Group Board of Management and the Group Works Council. The Volkswagen Group extended the Sustainability Council's mandate through 2022 in September. The Council's position as a driver of new subjects and pain points, as well as a competitor to Volkswagen's strategic sustainability initiatives, will be expanded. Rebecca Harms, a former member of the European Parliament, and Magdalena Gerger, CEO and President of the Swedish firm System bolaget AB, have also joined the Council as new members. The autumn meeting focused on the reorganization of the Council and its future direction. Aside from the meeting with the Group Board of Directors, the The Council obtained insight into the capital market's sustainability criteria as well as sustainability in China, South Africa, and Scania. In 2020, the following Council projects will be completed: By the end of the year, the study on the impact of e-mobility and digitalization on employment had

released its findings. With the cooperation of the Council, the internal project team working on the development of a complete sustainability narrative integrated

Their findings and concepts into the Group strategy. The Open Source Lab on Sustainable Mobility created a “MECO2” prototype mobility emission tracking app, an open mobility taxonomy, and a sustainable mobility kit. They also published additional research on public-private mobility collaborations. They completed their work by making all project resources open source and incorporating their efforts into the DFKI. On their end project website, the research project on transportation policy instruments for achieving international climate targets published more scientific data, policy papers, and public simulation tools. The project team began work on a new research on fiscal reforms for inclusive mobility at the same time. Projects of the sustainability council.

Effects of electric mobility and digitization on the quality and quantity of employment at Volkswagen. What will happen to the structure of automotive employment when the industry transitions to e-mobility? What effect will digitization have on jobs in the coming years? What is the relationship between trends and their consequences? The Fraunhofer IAO and the Volkswagen Human Resource and Production Department collaborated to gather, analyses, and model data to assess the qualitative and quantitative impact of e-mobility and digitization on employment. The project's findings will provide a sound foundation for defining and creating measures for a successful workforce transformation. The social dimensions of the change, as well as mobility services and the proposed software organization, were discussed at length at the 2019 Council meetings. Two stakeholder roundtables on decarbonization and commuter transportation were also held. Meanwhile, the projects that began in 2018 have begun to provide results: The Open Source Lab on Sustainable Mobility hosted discussions and released the first white papers. First mechanisms were implemented as part of the international

programmed on forecast-based financing. The first policy papers from the research project on transportation policy instruments for achieving international climate targets were released. The professorship on Open Science has begun its work.

In addition, the Council approved on new initiatives to begin in 2020: Volkswagen conducted a study on the implications of digitization and e-mobility on employment. Above all, the Sustainability Council made additional recommendations on how to achieve the essential technological policy and cultural shifts to make the transition a success.

Future Pact, integrity and cultural change, as well as e-mobility, were all hot themes in 2018. In this context, the Council learned about the Roadmap E and I.D. models and joined the Volkswagen Group Management Board at the Volkswagen Future Mobility Days. The Sustainability Council also decided on three new initiatives: a project on a sustainable battery supply chain, a visiting professorship on open labs and cultural transformation, and the development of a holistic sustainability narrative for the Volkswagen Group.

The Council's focus in 2017 was on worldwide CO<sub>2</sub> rules for the automobile industry, as well as the company's transition process. Through two sessions in the form of a stakeholder roundtable on global emission standards in the passenger vehicle and truck sectors, the Sustainability Council established and moderated an open conversation between Volkswagen representatives and NGOs. In addition, the Council launched three projects: a dialogue platform on innovation and cultural change in the field of sustainable mobility; an international programme to mitigate the effects of climate change through forecast-based disaster financing; and a dialogue platform on innovation and cultural change in the field of sustainable mobility. In 2016, the Volkswagen Group Sustainability Council convened for the first time in Berlin with the Volkswagen Group Board of Management.

## **SECTION 2. PRACTICAL ASPECTS OF SOCIAL AND ENVIRONMENTAL GOVERNANCE AT VOLKSWAGEN GROUP**

### **2.1 Organization and economic characteristic of the Volkswagen group**

Council were given firsthand information about Volkswagen's strategic ambitions and long-term sustainability. Business and human right at Volkswagen group At Volkswagen, we place a high value on human rights and believe that sustainable economic operations can only be achieved by operating ethically and with integrity. In the context of our business operations, we are fully committed to our human rights responsibilities.

We reaffirm our adherence to applicable international treaties and declarations, including the International Human Rights Charter and the International Labor Organization's (ILO) core labor standards. Our company activities are structured in accordance with the United Nations Guiding Principles on "Business and Human Rights" (UNGP). The ten principles of the UN Global Compact serve as important guiding foundations for our Group's actions. We uphold universal human rights, even in places where national laws fall short of the level of protection offered by international norms, and we work to enhance the latter, in accordance with the UNGP. We strive to be a leader in the automotive sector in terms of corporate respect for human rights by continuously improving our processes, systems, and taking forward-thinking action. Within the Volkswagen Group, there is a long history of social sustainability – always in consultation with our employees and social partners. As a result, the following work priorities have been established: "serious business and human rights issues."

Labor Within the Volkswagen Group and its connected companies, we aim to guarantee that good working conditions, as well as freedom of association and collective bargaining, are maintained. Human rights violations, such as child or forced labor, are wrong. We refer to our current position on the British "Modern

Slavery Act," as well as the Code of Conduct and the Code of Conduct for Business Partners, when discussing working conditions. Tolerance Cooperation that is tolerant and non-discriminatory is crucial to us. We value cultural diversity, courteous interactions with one another, and mutual respect and support equitable opportunity for all employees. Safety. If someone's safety is at jeopardy, we act quickly, responsibly, and appropriately.

The Volkswagen Group is one of the most well-known multiband automobile conglomerates. The Automotive and Financial Services divisions are responsible for the company's operations. With the exception of the Volkswagen Passenger Cars and Volkswagen Commercial Vehicles brands, all brands under the Automotive Division are separate legal companies. The Passenger Cars, Commercial Vehicles, and Power Engineering business areas make up the Automotive Division. The Volkswagen Group's passenger car brands are grouped together under the Passenger Cars Business Area. The development of vehicles and engines, the manufacturing and sale of passenger cars, and the commerce of genuine components are all priorities. The product line comprises everything from fuel-efficient compact cars to high-end luxury automobiles, as well as motorbikes, and will be augmented by mobility solutions throughout time. The Commercial Vehicles Business Area is responsible for the development, manufacturing, and sale of light commercial vehicles, trucks, and buses under the Volkswagen Commercial Vehicles, Scania, and MAN brands, as well as the related authentic parts business and services. The TRATON GROUP coordinates the relationship between the MAN and Scania commercial vehicle companies. Commercial vehicles include everything from pickup trucks to big trucks and buses. Large-bore diesel engines, turbomachinery, special gear units, propulsion components, and testing equipment are all part of the Power Engineering Business Area. The Financial Services Division's activities include dealer and customer financing, car

leasing, direct banking and insurance, fleet management, and mobility services. The Volkswagen Group is represented in all relevant markets across the world through its brands. Western Europe, China, the United States, Brazil, Russia, and Mexico are currently the Group's most important sales markets.

The Volkswagen AG Board of Management manages Volkswagen AG and the Volkswagen Group in accordance with the Volkswagen AG Articles of Association and the Supervisory Board's rules of procedure for the Volkswagen AG Board of Management. In spring 2018, the Volkswagen Group added an extra internal operational structure to its leadership and management approach. Volkswagen is certain that this will allow it to make better use of existing competencies and economies of scale, as well as more systematically utilized synergies and accelerate decision-making. The Volkswagen Group collaborates across six operating divisions in addition to Finance & IT, Human Resources, Integrity and Legal Affairs. The “Volume”, “Premium”, “Sport & Luxury”, “Truck & Bus” brand groups, as well as the Components & Procurement and Financial Services operational divisions, all have a presence in China. Volkswagen Passenger Cars, SEAT, KODA, and Volkswagen Commercial Vehicles are all part of the "Volume" brand group. The "Premium" brand group brings together the Audi, Lamborghini, and Ducati brands. Porsche, Bentley, and Bugatti are all part of the “Sport & Luxury” category. The Scania and MAN brands are combined under the “Truck & Bus” brand group. Components & Procurement will operate as a single organization, supporting all of the brands. Financial Services has been consolidated into a single business unit. This positions the Volkswagen Group for a simpler, leaner, and more effective management structure, as well as strengthening the brands by providing them more autonomy. Decisions shall be made at the lowest competent level, near to company operations, in accordance with the subsidiarity principle. Simultaneously, by

dispersing the Group's management responsibilities more widely, responsibility is assigned more clearly and definitely. Every member of the Board of Management has taken on additional responsibilities at a higher level for the Group. At the same time, members of the Volkswagen AG Board of Management are responsible for a brand group or operating unit, increasing collaboration between the brands and the Group as a whole, and ensuring that Group management is a shared duty. Each Volkswagen Group brand is overseen by a brand board of management, which ensures that the brand's development and commercial operations are independent and self-contained. To the degree authorized by law, the board conforms to the Volkswagen AG Board of Management's Group aims and criteria, as well as the agreements in the brand groups. This permits the Group's objectives to be followed while also conserving and reinforcing the unique features of each brand. To the degree authorized by law, matters of importance to the Group as a whole are brought before the Group Board of Management in order to reach an agreement amongst the parties involved. The legal rights the rights and obligations of the applicable brand company's statutory bodies are unaffected. The Volkswagen Group's companies are administered independently by their respective management teams. In addition to the interests of their own firms, each individual company's management considers the interests of the Group, the relevant brand group, and individual brands, all within the legal framework.

Committees at the Group level also discuss critical strategic problems such as product planning, investments, risk management, and management challenges. During the reporting year, the portfolios of these committees and the regulatory landscape at Group level were altered, and a committee was formed to handle the technology strategy. The Group's governance has been strengthened as a result of this. The Organization 4.0 Group project is also helping the Company's transformation as part of our future programmed TOGETHER – Strategy 2025.

The goal of this programmed is to link activities across divisions, launch innovative organizational concepts, and permanently embed them in the Group. This will not only allow, but also actively stimulate, innovation, entrepreneurship, and change. The control and profit and loss transfer agreement between MAN SE (at the time Volkswagen Truck & Bus AG), a wholly owned subsidiary of Volkswagen AG, as the controlled company, and TRATON SE (at the time Volkswagen Truck & Bus AG), as the controlling company, became effective on July 16, 2013. The control and profit and loss transfer agreement replaced a de facto management control group with a contractual group, allowing for far more efficient and less bureaucratic interaction between the MAN Group and the rest of the Volkswagen Group. The Higher Regional Court in Munich made a final decision in the award proceedings in the summer of 2018, ruling that the cash settlement amount set out in the contract should be increased to €90.29 per share and the annual compensation to €5.47 gross per share for the no controlling interest shareholders of MAN SE. Following the finalization of the commercial decisions, No controlling interest owners had until August 2018 to offer their shares in compliance with section 305 of the Aktiengesetz (German Stock Corporation Act) within a two-month period, according to the register. The award decision resulted in a large increase in the annual compensation to be paid to MAN SE shareholders with no controlling interest. The profit transfer from MAN SE and other benefits stipulated in the control and profit and loss transfer agreement were no longer proportionate in the opinion of the Board of Management at TRATON SE (at the time TRATON AG); TRATON SE therefore exercised its right to extraordinary termination in accordance with section 304(4) of the German Stock Corporation Act on August 22, 2018 and term TRATON SE owned 87.04 (75.73%) of the ordinary shares and 83.05 (46.95%) of the preferred shares in MAN SE at the end of 2018. Following the announcement of the termination of

the control and profit and loss transfer agreement and its recording in the commercial register on January 3, 2019, no controlling shareholders of MAN SE had the right to tender their shares to TRATON SE within a two-month period at a cash settlement, in accordance with the terms of the control and profit and loss transfer agreement. The Board of Management seeks to ensure the Volkswagen Group's competitiveness and financial performance as a forward-thinking mobility provider by focusing on its core business with the Optimize business portfolio Group effort. To that aim, we are constantly monitoring and assessing our portfolio so that we may make any necessary purchases or sales in a timely manner. A corporation can only be successful in the long run if it behaves with integrity, follows all applicable laws around the world, and adheres to its voluntary commitments and ethical ideals. Course. The Company's Code of Conduct serves as the foundation for all decisions and provides advice for ethical behavior. Other Volkswagen Group publications provide more thorough information and recommendation

## **2.2 Analysis of social and environmental governance at Volkswagen group.**

### Management at Volkswagen

The Volkswagen Group has established a clear management structure to coordinate the Group's environmental operations, including corporate citizenship. The Group Board of Management is its highest committee. The Group Sustainability steering group briefs it on all problems linked to sustainability and corporate responsibility on a regular basis. Executives from central Board of Management business sectors, as well as representatives from the Group Works Council and the brands, make up the Group Sustainability steering group. The steering group's responsibilities include establishing important action areas, making strategic

sustainability objectives and programmatic decisions, using indicators to track progress toward these goals, and approving the sustainability report.

The functional area Group Sustainability plans and manages sustainability actions. Its responsibilities include managing all sustainability efforts throughout the Group, brands, and regions. Stakeholder management at the group level, for example, engagement with sustainability-focused analysts and investors, is also included. In addition, project teams collaborate across business divisions on themes including decarbonization, human rights, and supplier sustainability. This coordination and working structure is well-established across all brands and continues to grow. During fiscal year 2018, we focused on strategically realigning Group Sustainability and anchoring sustainability in our core business, as well as implementing a sustainability program that prioritized climate protection and sustainable supply chains, among other things.

Goals and strategic With the 2016 announcement of the future programmed TOGETHER Strategy 2025, we strive to make the Volkswagen Group more focused, efficient, inventive, customer-oriented, and sustainable, as well as methodically directed toward profitable growth. The programmed establishes the framework and foundations for us to realize our goal of being one of the world's top providers of sustainable mobility. In the world of tomorrow's mobility, we want to be one of the world's top providers of sustainable mobility. This is why the future programmed TOGETHER – Strategy 2025 has been grounded in the Group. With the 2016 announcement of the future programmed TOGETHER – Strategy 2025, we strive to make the Volkswagen Group more focused, efficient, inventive, customer-oriented, and sustainable, as well as methodically directed toward profitable growth. The programmed establishes the framework and foundations for us to realize our goal of being one of the world's top providers of sustainable mobility. Contracts and specifications, particularly the Code of

Conduct for Business Partners, include sustainability criteria. Suppliers are educated, and there is a greater awareness of the importance of sustainability. You can learn about supplier training alternatives [here](#). The supply chain's sustainability risks are carefully examined and prioritized. The Group's material contract award decisions are grounded on sustainability, and an assessment of potential suppliers' sustainability performance (S-Rating) is applied. A self-assessment tool and on-site checks based on a risk-based approach serve as the foundation for this. To respond to the identified risks and repercussions, a variety of options are available. These include a consistent corporate process for reviewing supplier breaches and action plans based on on-site inspections. The main goal is to correct and avoid violations, as well as to improve suppliers' sustainability performance actively and effectively.

Our actions and thinking are long-term and future-oriented, as evidenced by the time horizon through 2025. TOGETHER is a mindset that will become even more important to the Volkswagen Group's long-term success in the future. Our goal with the new Group strategy is for everyone in the Volkswagen Group to join us in creating exciting vehicles and forward-thinking, tailor-made mobility solutions that will continue to inspire our consumers while addressing their diversified demands with a strong brand portfolio. We actively take and exercise responsibility for the environment, safety, and society every day, and we want to be a role model in these areas. Integrity, dependability, quality, and passion are thus the cornerstones of our work. As a result, we will strive for technological leadership in the market, maintain our competitive profitability, and continue to be an exceptional, dependable, and secure employer. The Group strategy is built on the foundation of the Code of Collaboration, which was developed as part of the future programmed. This Code explains how Within the Group and between employees in their day-to-day work, teamwork is expected. The keywords

"authentic," "straightforward," "open-minded," "as equals," and "together" encapsulate the organization's key ideals. We pay special attention to protecting those categories of persons who are at particularly high risk of human rights violations in our supply chain as part of our sustainable supplier management initiatives. The application of due diligence processes with regard to human rights, as mandated by the UN Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises, guides us in this regard. In this context, due diligence refers to a process of continual risk detection and the implementation of prevention and mitigation actions.

Volkswagen focus our measures, in accordance with the requirements of a risk-based strategy, on supply chains that are associated with particularly high risks of negative impacts, based on our analysis. These include our raw materials supply networks in particular. The OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas has influenced how we manage responsible raw material sourcing. This document covers management recommendations, risk identification and prevention guidelines, smelting inspection guidelines, and communication and reporting instruments. Particular requirements of human rights due diligence. Volkswagen pay special attention to protecting those categories of persons who are at particularly high risk of human rights violations in our supply chain as part of our sustainable supplier management initiatives. The application of due diligence processes with regard to human rights, as mandated by the UN Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises, guides us in this regard. In this context, due diligence refers to a process of continual risk detection and the implementation of prevention and mitigation actions. We focus our measures, in accordance with the requirements of a risk-based strategy, on supply chains that are associated with particularly high risks of negative

impacts, based on our analysis. These include our raw materials supply networks in particular. The OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas has influenced how we manage responsible raw material sourcing. This document covers management recommendations, risk identification and prevention guidelines, smelting inspection guidelines, and communication and reporting instruments.

**Decarbonization** The Volkswagen Group recognizes the seriousness of climate change and has pledged to contribute to the achievement of the Paris Agreement's goals. To achieve these objectives, the Volkswagen Group strives to constantly avoid or reduce greenhouse gas emissions throughout the vehicle's life cycle. We must distinguish between the three phases of a vehicle's life cycle: supply chain, production, and use phase. We focus on reducing emissions in the supply chain in procurement. Because the conversion to electric mobility transfers emissions away from the use phase and toward production and the supply chain, the supply chain is becoming increasingly important. On the basis of our vehicles' life cycle assessment data, we identify the main sources of emissions along the supply chain in order to encourage suppliers to take steps to reduce greenhouse gas emissions. Joint roadmaps were produced in multiple workshops with suppliers from important industries, based on a hotspot analysis, in order to coordinate and pursue CO<sub>2</sub> reduction objectives and initiatives. The HV battery cell is the most significant source of emissions in the electric mobility supply chain. As a result, we've made renewable energy utilization a contractual obligation for the manufacture of our HV battery cells. We collaborate with our strategic HV battery cell suppliers to reduce CO<sub>2</sub> emissions in both their manufacturing and sub-components.

All larger aluminum parts are a special focus of our work due to the energy-intensive manufacture. CO<sub>2</sub> emissions from the primary material are reduced through techniques such as the use of green energy in aluminum production or the

use of recycled secondary material. In addition, numerous European locations have a closed-loop system in place that gathers scrap sheet metal and returns it to aluminum producers. Steel, plastics, and natural rubber are among the materials included in our Group-wide decarbonization roadmap, which includes all implemented and planned procedures. It also includes the Volkswagen Group's brands and other departments, which work together to ensure that the Measures are implemented efficiently.

### **2.3 Evaluation the effectiveness of social and environmental governance at Volkswagen group**

With the production strategy "TRANSFORM.TOGETHER," Volkswagen has built the overarching structure. Volkswagen has outlined eight primary action areas comprising tangible strategies to drive the production process at all Volkswagen plants in order to achieve its objectives. "We strive to be among the best in productivity," said Dr. Andreas Tostmann, a member of the Board of Management responsible for Production and Logistics. We need to create competitive returns from current activities in order to fund crucial future investments and so secure today's jobs for the future." Volkswagen can thus be consistent in its efforts to optimize the customer order process across departments such as production, procurement, and sales. Customers will receive their cars sooner as a result of the lean and stable operations. Production will be integrated into the product development process from the outset, much earlier than previously, following the philosophy of "design for manufacturing." Early communication with design and development allows vehicles to be created with efficient processes and without flaws. The focus for boosting efficiency and lowering reworking and manufacturing costs per vehicle is on products and procedures that do not require reworking (1.5 hours less by the end of 2020). Volkswagen is targeting global standardization with 27 production sites in 12

countries. “In order to become an efficiency lever for the Volkswagen brand, we aim for leaner and more consistent procedures. Tostmann noted that the question of efficiency is particularly relevant because it considers indirect processes as well. As a result, production networks can learn from one another, and successful measures

The impact of CO2 emission reduction efforts is accounted for in the "Decarbonization Index" (DKI), which acts as a key performance indicator in our “Together 2025” strategy, which outlines our objective of becoming the world's leading provider of sustainable mobility. Volkswagen is committed to social responsibility and promotes cultural diversity in a variety of projects, particularly at its corporate headquarters. All of the support stems from our desire to make culture more accessible to as many people as possible while also supporting our cultural partners in their efforts. Volkswagen supports innovative culture programmed that introduce people to new experiences at art associations, museums, and festivals. Volkswagen Art4ALL, a monthly offering at the Kunstmuseum Wolfsburg, is one example. Volkswagen gives free admission to the exhibitions on the last Wednesday of every month, as well as monthly tours, workshops, and a unique creative programmed. Volkswagen and National Gallery have collaborated since 2012, initiating and completing various cooperative projects throughout that time. One of these was Katharina Grosse's show at the Hamburger Bahnhof Museum für Gegenwart Berlin, which ran from June to January 2021. With her piece "It Wasn't Us," the artist has used color, shape, and virtuoso painting to modify the museum's interior as well as the external area behind the old building. As a result, the viewers' accustomed perceptions transformed. Visitors can walk around like explorers on a voyage of discovery thanks to the artist's dazzling painting on a variety of surfaces.

Can be rolled out across the board, saving time and money in the development process. Employees will be educated sooner for future ramp-ups to ensure that ramp-up management operates as smoothly as feasible. The Modular Transverse Toolkit

(MQB) is also important in this regard: It enables Volkswagen to switch production to new models without having to make large tool and equipment changes.

We aim for leaner and uniform processes - Volkswagen is targeting global standardization with 27 production sites in 12 countries. "In order to become an efficiency lever for the Volkswagen brand, we aim for leaner and more consistent procedures. Tostmann noted that the question of efficiency is particularly relevant because it considers indirect processes as well. As a result, production networks can learn from one another, and successful measures can be rolled out across the board, saving time and money in the development process. Employees will be educated sooner for future ramp-ups to ensure that ramp-up management operates as smoothly as feasible. The Modular Transverse Toolkit (MQB) is also important in this regard: It enables Volkswagen to switch production to new models without having to make large tool and equipment changes. The Volkswagen plant, which is the largest in the international production network, has set a single aim for itself: in the future, the Volkswagen brand's main factory and heart will set the norm for growing productivity. Facility management and employees presented the Board of Management and the Works Council with extensive proposals to increase efficiency at the Wolfsburg plant at the site symposium 2019. Volkswagen is aiming for a 25% improvement in productivity at its Wolfsburg factory between 2016 and 2020, as stipulated in the Pact for the Future. "Over the last few months, we've looked at over 400 workshops and 700 work steps to see where the remaining efficiency reserves are. We discovered a total optimization potential of roughly €186 million. By 2020, we want to reduce the number of work phases and create leaner, more standard procedures and best-practice solutions. Dr. Stefan Loth, plant director of Volkswagen Wolfsburg, stated, "Our goal is to make the Volkswagen brand the benchmark for the international production network."

Production and efficiency at Volkswagen Tostmann, a member of the Board of Management responsible for Production and Logistics, and plant director loth present measures and instances of increased efficiency and productivity at the Wolfsburg factory during a tour of the facility. And it becomes obvious: Increased productivity can be observed throughout the manufacturing process and in a variety of job phases. Volkswagen's goal to boost assembly automation by increasing the employment of robots – notably in less ergonomic professions – is one of these stages. In the interior and engine compartment, robots perform jobs such as fastening cross beams, fittings for belt ends, and bolts. To complete the fastening, robots always utilize the same amount of force. This ensures constant quality and a shorter overall production time. In general, ergonomics plays a crucial role. Assembly seats, lifting assistance, and ergonomic gadgets help workers on the assembly line do their physical responsibilities more efficiently. Workers have the materials and tools they need at arm's length thanks to carts that roll along the line. This cuts walking distances in half, improves ergonomics, and eliminates unnecessary maneuvering. These actions alone save 30 stages of labor. Another example, according to Loth, is shop floor management: In daily status meetings held at each of the plant's 100 work floor points, the manager and employees discuss concrete Assignments. The team's independent action and solution recommendations are specifically needed. Now is the time to set the course for tomorrow.

Volkswagen must use its remaining efficiency reserves to stay competitive in the future and secure long-term success. “We need to set the course for tomorrow now,” Tostmann says. The key to achieving this is efficient production using lean and automated methods. Small, seemingly insignificant steps can frequently make a big difference. Productivity has improved at Wolfsburg, the brand's heart, since 2018; now it's all about optimizing existing processes and continuing to apply new ideas. “With the steps outlined, we are strengthening the competitiveness of the

Wolfsburg location,” says plant manager Loth. Our team has made significant progress and has proved its ability to innovate on numerous occasions. This is an excellent beginning point for applying additional optimization potential and considerably increasing our production cost, productivity, and investment efficiency at the Wolfsburg location.” Volkswagen's mission is to be regarded as a market leader in the sales and distribution of spare parts, and to provide excellent economic services; expansion and growth are always characterized firm. The Group's objective is to provide vehicles that are appealing, safe, and environmentally friendly, and that set international standards in their respective classes in order to compete in an increasingly competitive market (Volkswagenag.com). For the Volkswagen Group, this means conducting business in a responsible and long-term manner. Customers and investors, society, and, of course, employees all gain from the company's success. In this approach, doing a good work and treating resources and the environment with care are the foundations for creating long-term value. Volkswagen supports projects that promote culture and the arts, education, science, health, and sports as the next priority. VW, as a global enterprise, bears the obligation of being responsible for a global society that cannot be satisfied just through charitable donations. Volkswagen, on the other hand, prioritized the person and, above all, the long-term commitment. Corporate social responsibility (CSR) has taken the Volkswagen Group a long time to reach a genuine commitment to the community outside the factory gates. Volkswagen sees itself as a source of encouragement for the growth of the local economy and equitable opportunities by promoting social, cultural, and social projects. VW supports more than 200 programmed throughout the world that aim to strengthen the economic and social structure, with a focus on continuity and long-term sustainability. The company's Chairman is Dr. Herbert Diess. Volkswagen has been part in one of the world's largest and most important CSR initiatives since 2002. Together with 12,000 firms from over 170 countries,

Volkswagen works on international CSR projects aimed at making the global economy more sustainable and equitable, forming the basic ideals of the Global Compact. Volkswagen will be a different, better firm as a result of the Group's reorientation. This procedure, however, will take some time. In light of this, Volkswagen has decided to allow members of the UN Global Compact to participate during that time. Volkswagen has incurred losses of 1.86 million euros, according to the most recent accounting report.

Volkswagen Group produces passenger cars under the Volkswagen and Seat brands, as well as subsidiaries such as Bugatti, Audi, Bentley, Lamborghini, and Skoda. Volkswagen Commercial Vehicles, Man, and Scania are among the brands they sell. Ducati is a brand owned by the group that sells motorcycles. In 2016, the firm sold 10.3 million automobiles.

Italdesign Giugiaro, based in Moncalieri, Italy, is where Volkswagen delivers automotive design services. Volkswagen also offers finance options to customers, such as finance, insurance, and leasing. The Volkswagen Financial Service segment, which was renamed in 2016, had an operational income of 1641 million Euros. Outbound Logistics In 153 countries, Volkswagen sells passenger automobiles, commercial vehicles, and motor vehicles. Volkswagen has delivered vehicles to dealers by road, sea, and air. Volkswagen has delivered 5.2 million automobiles to customers throughout the world. Volkswagen has put more effort into shipping vehicles by water, shipping about 2.5 million vehicles in over 8700 ships.

Marketing and Sales Normally, Volkswagen uses print and media advertising to convey and promote the brand. Volkswagen's marketing strategies emphasize the brand's innovativeness and efficiency. Volkswagen's sales activities are primarily focused on providing ongoing client satisfaction. The German company is currently concentrating on new consumer strategies. Volkswagen's marketing approach not

only provides satisfaction by meeting quality standards, but it also meets emotional needs. Service Volkswagen is regarded for providing exceptional service both before and after the sale, which is one of the company's primary competitive advantages. The organization strives to maintain the greatest level of customer satisfaction by providing specific feedback and solutions to customer needs. By providing the right people with the correct tools, the company's service fixes vehicles according to quality standards. Technology Development Volkswagen is looking for ways to address future issues. Volkswagen has made advancements in technology spanning from powerful engines to comfortable travel. Volkswagen has introduced infotainment systems that make it easier to use apps and navigation systems. To lessen the possibilities of a car being damaged, Volkswagen has added automotive assistance technologies such as blind spot sensor and emergency braking. Volkswagen has developed fuel-efficient engines that deliver maximum power while using the least amount of fuel.

## **SECTION 3. IMPROVEMENT OF SOCIAL AND ENVIRONMENTAL GOVERNANCE AT VOLKSWAGEN GROUP**

### **3.1 Ways to overcome weaknesses social and environmental governance at Volkswagen group**

The Volkswagen brand's strategy is firmly rooted in sustainable mobility. Increasing product environmental compatibility, developing innovative mobility solutions to relieve the strain on cities and customers, continuously reducing the environmental impact of production and logistics, and optimizing ecological and social aspects along the entire value chain from raw material extraction to recycling are all important considerations. ESG factors will become increasingly important in investment decisions, necessitating a strengthening of Volkswagen's ESG reporting, providing transparency and measurability. "With its global sustainability programmed, Volkswagen has the opportunity to distinguish itself apart from the competition," said Georg Kell, Founding Director of the UN Global Compact and Spokesperson for the Sustainability Council. The Council advised developing a proprietary data system to operationalize an even more systematic ESG management. Former EU Commissioner for Climate Action Connie Hedegaard stressed the importance of robust engagement between CEOs and European politicians to show that European firms support the objective of reducing EU greenhouse gas emissions by 55 percent by 2030 compared to 1990 levels. Volkswagen is a founding member of the "CEO Alliance for Europe's Recovery, Reform, and Resilience," and as such has been fostering dialogue between politics and business in order to help implement the European Green Deal and demonstrate the European Union's commitment to the EU's ambitious climate targets. The challenges of a carbon border adjustment mechanism, which will require international cooperation, as well as the necessity for industry to invest in pilot projects on negative emission technology, were highlighted by Ottmar Edenhofer,

Director of the Potsdam Institute for Climate Impact Research (carbon capture). The members of the Council also urged Volkswagen to align its decarbonization aims with the objective of limiting global warming to 1.5 degrees Celsius.

In response to a question about a specific timetable for the end of the internal combustion engine, Volkswagen CEO Herbert Diess stated that transitioning to battery-electric vehicles only makes sense from a climate standpoint in countries with sufficient green energy resources. Diess reaffirmed, "We're absolutely committed to becoming climate-neutral." "It's critical to recognize that our story is one of change, and we anticipate that the transformation will take two car model lifecycles." After 2030, the combustion engine may be phased out in Europe before it is phased out in Latin America. Overall, the effectiveness of e-mobility as a climate-protection driver is determined by primary energy use.

The Council's top priorities for the next two years include assisting Volkswagen in becoming a purpose-driven organization, which the Council believes is critical to ensuring employee buy-in to the transition. Magdalena Gerger, CEO and President of Systembolaget AB, said, "It's the cause that makes employees get out of bed every morning." Volkswagen chose to incorporate the purpose discussion in its "Strategy 2030," which will be released later this year, after being encouraged by the Council's advice. Employment and workforces will be impacted by the move to e-mobility and digitalization. According to a report commissioned by the Sustainability Council by Fraunhofer Institute for Organization and Industrial Engineering IAO, e-mobility and digitalization will result in a lesser reduction in the workforce at Volkswagen than earlier research studies had suggested. Former President of the Confederation of German Trade Unions Michael Sommer presented the concept for a new research project on work and qualification in 2030 during the meeting. The current Chinese five-year plan was also examined, as well as its implications for Volkswagen. The plan's implementation is projected to necessitate

more ambitious decarbonization measures, according to Council Member Ye Qi, Professor of Environmental Policy and Management at Tsinghua University Beijing. All production locations for the fully electric MEB-platform will be powered entirely by renewable energy, according to Volkswagen Group China.

By improving good working environment Of course, we are all familiar with our own homes; after all, that is where we live! Do we have a choice? Could you make a detailed list of everything you have in each room in your home? In every nook and crevice of the pantry, in every corner of the cellar? Perhaps there are hidden gems in the attic; it's worth investigating. Volkswagen is already doing so. Even major corporations have forgotten corners that result in lost resources and expenditures. Volkswagen is aware of this and undertakes thorough inspections on a regular basis. Material flow analysis is used by environmental experts to examine Volkswagen production processes and determine exactly where – and how efficiently – materials, feedstocks, and energy are used. All essential material flows are recorded in the form of meter readings or material units across the company. The comparable numbers are then analyzed by group environmental officers and on-site experts to discover any irregularities. When it comes to rinsing a work item, how much water is truly required? Where do volatile organic compounds (VOCs) come from, and which ones are they? They then apply what they've learned to create specific modifications and address the problem. This means that, even if a production process appears to be running well and producing the desired high-quality output, there may be hidden flaws. We'll use the Volkswagen Slovakia paint shop in Bratislava as an example, where material flow analysis indicated an unexpectedly significant volume of water in the filter waste containers at the paint line's conclusion. These had to be emptied far more frequently than anticipated. The fundamental reason was quickly identified and readily remedied with the installation of a new drip tray. This has saved the company over 9,000 filters every year, which

is worth roughly €100,000, and decreased waste by 3.7 tons per year. These results are centralized in a Group-wide tool, together with a description of the effective measures, which are made available as examples of best practice. This is one occasion where it is not only acceptable, but actively encouraged to imitate. Even the building itself makes a statement, with 10,000 square meters of space for a technological center, laboratories, and offices, its architecture demonstrating an incredible lightness of touch. As a result, it's safe to state that the Open Hybrid Lab Factory provides a perfect setting for scientists from business and academia to collaborate on lightweight solutions for the future of transportation. In this case, the crucial word is "hybrid." The scientists combine numerous materials such as metals, polymers, and textiles in their attempt to build industrial components that are not only lightweight but also sturdy and low-cost. A 30-meter-long textile laying machine processes glass fibers fed from reels on high shelves. Light-colored glass fibers are mixed with black carbon fibers in the machine's core section to make a nonwoven that is durable bonded on a calendar at high pressure and temperature. "Carbon fibers are lighter and stronger than glass fibers, but they are also far more expensive. Carbon fibers will be present in the ideal fabric at precisely those spots where high stresses occur, making them crucial. That's what we're working on here," says Felix Eichleiter, the former Managing Director of the Open Hybrid Lab Factory and now a Volkswagen Components Production employee. A house-sized press for mixing metal and plastic is also housed at the Open Hybrid Lab Factory's technical center. With a force of 3,600 tones, the press bends metals like steel into the desired shape and attaches it to hot liquid plastic, which is then allowed to cool. The first component made by the Open Hybrid Lab Factory, a prototype seat backrest for SITECH, was created on a machine like this. "The lightweight backrest clearly demonstrates that lightweight components can be produced economically if we use materials optimized for the loads they will be expected to bear and ensure smart

function integration,” says Martin Zubeil, Managing Director of the Open Hybrid Lab Factory and a structural development expert. The technological center is surrounded by twelve laboratories where professionals do materials analysis and test the quality of hybrid joints, among other things. But, no matter how amazing these ideas are, Volkswagen, of course, digs deeper, looking at their environmental balance sheet throughout the course of their whole life cycle. The Open Hybrid Lab Factory brings together 28 partners under the leadership of the Lower Saxony Research Center for Motor Vehicle Technology at the Technical University of Braunschweig. Major enterprises, such as Volkswagen and ThyssenKrupp, as well as universities and Fraunhofer Institutes, are among them.

Turning old in to new Vehicle parts are made up of expensive raw materials. That's why Volkswagen accepts for remanufacturing a wide range of used components, from engine and transmission parts to electrical systems. These refurbished parts, known as Volkswagen Genuine Remanufactured Parts, can subsequently be utilized in other vehicles after final testing. If their car requires repair, Volkswagen customers can pick between a brand-new replacement part and a Genuine Remanufactured Part at the repair shop. These remanufactured parts have the same quality as new components, but at a fraction of the cost. Furthermore, using such components saves a significant quantity of raw resources and energy, as well as lowering CO2 emissions. At Volkswagen, these savings have been meticulously calculated. Volkswagen analyzed the environmental implications of a newly manufactured MQ 250 5-speed transmission and compared them to those of a Genuine Remanufactured Part in a Life Cycle Assessment (LCA) conducted in line with ISO 14040. For the remanufactured transmission, the LCA found savings in energy usage and CO2 emissions of 33 percent and about 28 percent, respectively. Photochemical ozone damages, sometimes known as "summer haze," are reduced by 41% when compared to a fresh transmission. The concept of repurposing old

parts to create new ones isn't new. Volkswagen was the first carmaker to offer a range of remanufactured parts, all of which were backed by a warranty, back in 1947. This effort was so well-received that it inspired a slew of other automakers to begin their own initiatives. Genuine Remanufactured Parts, which are currently available from Volkswagen, Volkswagen Commercial Vehicles, Audi, Seat, and Skoda, allow customers to save money while also helping the environment. Diversification strategy Volkswagen's revenue is significantly more evenly distributed among brands, product categories, and geographic locations than its competitors'. The company's diversified brand portfolio allows it to better target different consumer segments and meet their various needs. Volkswagen also provides a wide range of automotive and maritime products, as well as financial services, which help to diversify the company's revenue streams. The primary 'Passengers Cars' sector accounts for only 74.5 percent of Volkswagen's revenue. The remaining 12.4 percent, 1.9 percent, and 11.2 percent of income is generated by 'Commercial Vehicles,' 'Power engineering,' and 'Financial Services,' respectively. Volkswagen has the best geographically diversified revenue of any automobile company, with no single market accounting for more than 20% of revenue. Little expertise and no competence in making battery driven vehicles.

Volkswagen has long ignored electric vehicle demand and made no efforts to enter the industry. Only in 2014 did the business introduce its first all-electric e-Golf to the market. Many e-cars had already been on the market for a few years at the time. Volkswagen has only two all-electric vehicles on the market right now. The range of the Volkswagen e-Golf is just about 83 miles, compared to 107 miles for the Nissan Leaf at approximately the same price. Volkswagen will need to acquire additional patents, learn new skills, and gain more knowledge in order to meet its goal of introducing up to 30 all-electric vehicles by 2025. The corporation has stated that it will spend billions to obtain the technology. Volkswagen is currently unable

to compete with other electric vehicle manufacturers and is far behind Tesla, the industry's leading competitor. Fuel prices are expected to rise in the near future. Fuel costs have been low for several years, but they are projected to rise in the near future owing to supply disruptions. The desire for bigger cars such as pickup trucks and SUVs has surged as gas costs have dropped. Because of their strong SUV and pickup truck lines, many businesses, notably GM, Ford, and Chrysler, have benefited from low fuel prices. Volkswagen, on the other hand, has chosen to compete in the smaller car segment rather than expanding its light truck line. When gasoline prices are high, demand for tiny automobiles always grows. Volkswagen might potentially accelerate its plans to launch the first competitive electric vehicle before 2020, taking advantage of rising demand.

**Digital cars** It should come as no surprise that digital services have become an integral part of our daily life. The buzzword here is "connected": we want to be able to communicate with our surroundings at all times and from anywhere – including in the car. From intelligent entertainment systems to dependable smartphone connections, both private persons and company car drivers now regard connectivity as a must-have. There is no doubt that there is a huge demand for digital services. But what about the current and future supply of services? Is there anything on the market that will truly provide value for regular drivers? From Wolfsburg to Martorell, from Audi to Volkswagen, a glance at the Volkswagen Group brands and their innovations demonstrates how completely the problem of the "digital automobile" is being handled.

Car2X connectivity, which is standard on the Volkswagen Golf's eighth generation, allows for the exchange of traffic-related data with other cars and local transportation infrastructure across a distance of up to 800 meters. What makes this unique is that information may be transmitted between vehicles of various manufacturers and the cloud utilizing the European Car2X standard (Lamp/ITS G5).

The 3D mixed reality head-up display from Audi: A navigation arrow that precisely indicates to the side of the road where the destination may be found? This should become a reality in the near future, thanks to Audi's 3D mixed reality head-up display. At CES 2020, the technology, which was co-developed with Samsung, was demonstrated live for the first time. The technology, like a 3D television, shows two pictures of each scene for each eye: SEAT, a Spanish automaker, is focusing its digital advancements on giving customers the greatest possible experience. The SEAT Connect system and linked smartphone app, which will be available for the SEAT Leon in 2020, are the most recent example. Users of business cars can remotely lock and unlock their vehicles using the smartphone app. Even horns and turn signals may be activated rapidly.

Whether it's initiating navigation to a desired location, locating a favorite piece of music, or sending an SMS, anybody who travels by automobile on a regular basis wants to make the ride as enjoyable as possible while maintaining concentration. This is where the long-established Czech brand KODA's digital voice assistant Laura comes in. The new, improved voice control adds to the Acquire skills and competences through acquisitions Volkswagen will need to build new capability in battery technology, digitization, and autonomous driving in order to achieve the targets specified in the new strategy plan. Buying smaller businesses that have already established the skills and technologies required by Volkswagen is the quickest and least expensive method to do so. Acquisitions are usually expensive, but because interest rates are at an all-time low, money can be obtained for a reasonable price.

Demand for autonomous vehicles Nearly 33 businesses are now working on self-driving cars. Only a few of them, such as Google, Ford, and Tesla, are testing their self-driving cars on public roads, and none of them are selling them to the general public. It's difficult to predict the exact demand or market value for

autonomous vehicles (estimated to be worth US\$45 billion by 2025), but based on the efforts of all major manufacturers, it appears that autonomous vehicles are the industry's next "big thing." "Volkswagen intends to launch its self-driving cars by 2025. To achieve a larger market share and enhance revenues, the corporation needs launch its driverless vehicles sooner.

Weakening euro exchange rate Volkswagen earns the majority of its money in Eurozone countries, where the euro is the sole currency. As a result, fluctuations in the euro exchange rate have a minor impact on the company's revenue and earnings. Nonetheless, exchange rates have an impact on exports to other nations, and the corporation profits from a weak euro against other currencies. Because of the lower euro exchange rate against the US dollar, Volkswagen automobiles are more affordable to Americans. For as long as the euro exchange rate is low versus other currencies, the corporation might push its exports to the United States or other nations. Focus on significantly improving sustainability policies to remedy damaged brand reputation Volkswagen's reputation as a green firm has been severely tarnished as a result of the emissions issue. The corporation is no longer regarded as a responsible firm that respects the environment and cares for the communities in which it operates. This is the primary harm caused by the company's pollution problem, according to the firm. If Volkswagen wants to recover the trust of its stakeholders, it must considerably expand its sustainability efforts. Intense competition Volkswagen is facing increasing competition from major automakers, new entrants, and market saturation in its key markets. New home-based Chinese manufacturers are competing in China, one of the company's core markets, by offering lower pricing but equal quality vehicles. New firms, such as Tesla, will make it extremely difficult for Volkswagen to compete in the electric vehicle category. Furthermore, Google, which is attempting to develop self-driving cars, is posing a threat to the traditional automobile business. The fact that global car

production capacity considerably exceeds demand fuels the competition even more. In 2015, the worldwide excess manufacturing capacity was expected to be 31 million units. Further fines and damages that will have to be paid Volkswagen's emissions issue has already resulted in a tarnished brand image, a loss of consumer trust, and €16.2 billion in fines and penalties. 1st This, however, is not the conclusion of the story Volkswagen is still facing numerous cases around the world, all of which attempt to condemn the business for falsifying emission statistics. The business will be forced to pay billions in further fines and damages, which will cut into its profits over the next few years. Increasing government regulations many governments throughout the world are working to reduce greenhouse gas emissions and promote fuel efficiency efforts. There is always the possibility that such environmental initiatives may increase automobile manufacturers' production costs, which will not be recoverable in such a competitive and price-sensitive industry.

### **3.2 Rationale for the improvement program of social and environmental governance at Volkswagen**

The rationale at Volkswagen. In his introductory remarks, Tostmann stated, "For a volume manufacturer like Volkswagen, output is by far the most essential means of boosting profitability." This is due to two factors. In 2017, the Volkswagen brand produced more than 6.3 million vehicles, accounting for the vast majority of the Group's nearly 11 million vehicles. Around two-thirds of the brand's total capital investments were spent on vehicle construction. It also employs roughly a third of the workforce – and that is just in Germany. Vehicle construction is much more prevalent at our VW locations around the world. As a result, the production division is one of the brand's most efficient levers. When compared to our competitors, an efficient manufacturing network offers a considerable contribution to improving the company's value." Volkswagen has achieved great progress in terms of profitability

in the previous two years – and production has played a significant role. Productivity has increased by an average of 7.7% at its German locations, and the brand's global return on sales has increased to 5%, exceeding all expectations. Volkswagen has determined that the greatest area for improvement is in the production structures and procedures, which are often thought to be far too complex in many places. Tostmann added, "There is certainly opportunity for improvement in standardizing our global production network." "That is why, in all factories, we are currently implementing identical structures as well as uniform and comparable key performance metrics. Through 2025, we have a potential efficiency gain of EUR 2.6 billion in production alone," Tostmann stated. In comparison to the reference year of 2010, the brand has set a goal of a 45 percent improvement in production.

#### **Environmental KPIs at its locations.**

|                             |                                |
|-----------------------------|--------------------------------|
| 2017 Vw produce             | 6.3 million vehicles           |
| In shares company generate  | 11 million in cars productions |
| Vehicle constructions ratio | 2/3                            |
| Total investment            | 1/3                            |
| Productivity average        | 7.7%                           |

The new TRANSFORM TOGETHER production strategy lays out a plan for maximizing present efficiency and attaining long-term productivity gains. Volkswagen Manufacturing has outlined eight primary action areas including actual actions to carry the production plan forward at all Volkswagen locations in order to achieve these lofty targets. Participants in the all-day Berlin event explored over 2500 efficiency improvement suggestions. Each participant was requested to submit five suggestions in advance, despite the fact that specialists at the global sites already knew what they wanted. Which fields have the greatest optimization potential? In several agile teams, practical ideas were presented.

The Board Member for Production was highly pleased with the initial results of the one-day session. “We're transforming Volkswagen Production from a cost center to a competitive advantage for the entire company, ensuring jobs for now, tomorrow, and beyond. That means our department will be more crucial than ever in the future for Production,” Tostmann added. “My coworkers are fantastic.” perfectly aware of what a unique opportunity this is. And they are highly motivated to take it.”

### **3.3 Effectiveness the improvement program implementation of social and environmental governance at Volkswagen**

What are the effectiveness and improvement program? Speaking of such we have to remember the emission scandal. The Volkswagen tragedy is a frightening lesson for anyone who doubts the destructive power of weak leadership and a disordered company culture. Culture and leadership are not “soft” issues. They represent lives ruined and hard-won billions of dollars lost in this case. In case you forgot, Volkswagen confirmed in September 2015 that it had installed "defeat devices" in millions of diesel-powered vehicles. When software noticed that automobiles were being tested for emissions compliance, it modified the engines to ensure that they passed. However, when the engines were in regular use, they released significantly more pollutants, including up to 40 times more nitrogen oxide, which causes to asthma, bronchitis, and emphysema. It has been going on for a long time. No one knows how many employees and executives knew exactly what they were doing and why they were doing it. Here's a rundown of what's been done so far:

Damage to business VW booked a \$7.3 billion charge to earnings days after the scandal broke in anticipation of fines, litigation fees, and other obligations. That was a bold statement. The corporation has booked \$35 billion

in charges to earnings so far, and there's little reason to believe that's the final figure.

**Damage to shareholders:** It's tough to say for sure, but the business lost 46 percent of its worth in the first two months of the scandal, or \$42.5 billion. The DAX index in Germany is now around where it was in September 2015, while the S&P 500 is up 68 percent, but VW stock is still 35 percent below its pre-scandal price.

**Damage to dealer:** Volkswagen paid \$1.2 billion to its U.S. dealers to compensate them for losses, but their overall losses have yet to be assessed, and the losses of thousands of dealerships around the world remain unknown.

**Damage to reputation:** Following the incident, the value of the Volkswagen brand plummeted. In Brand Finance, the brand has regained some of its lost position, but not all of it. It was the world's 18th most valuable brand prior to the incident; five years later, it ranked 25<sup>th</sup>. **Damage to brand Germany:** This is unquantifiable, yet VW is Germany's largest corporation, and engineering is Germany's pride, the beating heart of the country's corporate identity. VW couldn't get the emissions from its diesel engines to be acceptable, so it inserted software to hide their poor engineering. Embarrassing.

**The ways to improve by implementation** - The automotive industry is undergoing one of the most significant transformations in its history. The coming years will be shaped by alternative driving systems, the digitization of the entire supply chain, and quickly changing worldwide customer expectations of mobility. The Volkswagen Group has responded by launching the "Future Tracks" program, in which we are creating solutions for major upheavals and difficulties at the Board of Management and top executive levels. "Future Tracks" pulls together all of the subjects, actions, and measures that we are implementing now and will be implementing in the next years to prepare for future key concerns - across all brands,

regions, and the entire Group. Our work focuses on drive technologies, digitization, and product and production networking from a technological standpoint. New standards for individual mobility and mobility-related services have been added to the mix. Our efforts are aimed at ensuring that the Volkswagen Group is at the forefront of developing and influencing the new transportation landscape. To adequately address these difficulties, a strong business foundation is required. As a result, "Future Tracks" has been introduced as a programmed that is both forward-looking and efficient. Our goal is to continue to grow financially, ensuring that we are always able to invest in the Volkswagen Group's future. As a result, we're laying the groundwork for shaping the automotive transition and ensuring its long-term success. In a wide variety of projects, the Volkswagen Group supports the arts and culture, education, science, health, and sport; other efforts help to strengthen regional structures and conserve nature. These projects turn CSR into a learning platform for all of the Company's brands and territories. Our collaboration with the German Red Cross (DRK) and our efforts to assist refugees are two examples. Humanity, civic spirit, and responsibility are the ideals that underpin the work of the German Red Cross, and these are values that we at the Volkswagen Group share. In Germany and other worldwide places, we promote sound, balanced societal development. The Volkswagen Group is assisting the German Red Cross in finding even more people eager to give their time as part of a strategic relationship. This goal, together with expanding the Red Cross's rescue service, is at the heart of the collaboration. We are joining in the common job of accepting and integrating migrants who arrive in Europe and Germany under the motto "Helping Together." This is performed through a number of projects, ranging from immediate assistance in the initial housing facilities through local integration and education projects, as well as the provision of automobiles and non-monetary resources. A newly developed Internet platform acts as a volunteer database and information resource

for active volunteer workers. We believe that through their assistance, the Volkswagen Group, its brands, locations, and employees can not only make a humanitarian contribution, but also contribute to societal harmony. On December 31, 2015, our long-standing collaboration and consulting arrangement with the German Nature and Biodiversity Conservation Union (NABU) came to an end. As a result of the diesel issue, the contract extension and further collaboration have been put on hold for the time being. We want to keep our strategic cooperation with NABU going, so we're working hard to provide the right conditions for that to happen. This is a good example. The Volkswagen Group has established a clear management structure to coordinate sustainability and corporate social responsibility. The Group Board of Management is its highest committee (Sustainability Board). The Group CSR & Sustainability steering group keeps it up to date on topics of sustainability and corporate responsibility on a regular basis. Executives from core Board of Management business areas, as well as representatives from the Group Works Council and the brands and regions, make up the Group CSR & Sustainability steering group. The steering group, among other things, decides on strategic sustainability goals, evaluates their progress using management indicators, defines critical action areas, and approves the sustainability report. The steering group is supported by the CSR & Sustainability office. Its responsibilities include managing all sustainability efforts across the Group and brands, as well as organizing stakeholder dialogue at the Group level, such as with sustainability-focused analysts and investors. CSR project teams focus on a variety of themes, including reporting, stakeholder management, and supplier relationship sustainability. This coordination and working structure is well-established across all brands and continues to grow. Since 2009, the CSR and Sustainability coordinators for all brands and areas have met once a year to improve communication, build standard frameworks, and learn from one another. This Group CSR meeting has

established itself as an important component of the Group's overall coordinating framework. We examined the Group's sustainability performance based on an examination of strengths and shortcomings at the end of the reporting period, in light of the diesel issue. The findings are being examined in depth by the sustainability committees and will be incorporated into the Group's overall realignment.

Our Group-wide Code of Conduct gives direction to our employees in the case of legal or ethical issues in the course of their everyday job. It represents the Group's values of customer attention, high performance, value creation, renewability, respect, responsibility, and sustainability. All employees share equal responsibility for upholding these values. Our behavior is likewise governed by international conventions, legislation, and internal rules. We also profess our commitment to fundamental human rights, labor standards, and principles through the "Declaration on Social Rights and Industrial Relationships at Volkswagen" (Volkswagen Social Charter), the Charter on Labor Relations, the Charter on Temporary Work, and the Charter on Vocational Education and Training.

The Volkswagen Group is committed to transparent and responsible implementation at all levels, and every step of the value chain is a challenge: we are one of the world's largest corporations, with twelve brands, 119 manufacturing locations, and over 610,000 workers.

For the Volkswagen Group, sustainability is pursuing economic, social, and environmental objectives in a way that prioritizes them equally. We strive to build long-term value, provide good working conditions, and responsibly manage the environment and resources. Volkswagen has failed to satisfy its own requirements in a variety of ways in relation to the emissions issue. Our irregularities in managing emissions data go against everything Volkswagen stands for. We are extremely sorry and recognize that we have failed our stakeholders. We're doing everything we can to prevent something like this from happening again. We're working hard to live up

to our own high standards once more and regain the trust of our consumers and society. Our sustainability concept is undergoing a thorough revision. This is to ensure that we identify risks and development potential in the areas of the environment, society, and governance at an early point in the value chain. Our corporate social responsibility (CSR) actions will thereby contribute to the long-term enhancement of our Company's reputation and worth.

However, due to many years of use for agriculture and peat extraction, alive or growing moors are now uncommon. For example, in Germany, 95 percent of the original 1.5 million hectares of moorland have already been dewatered, peat-exhausted, built over, or exploited for agricultural and forestry uses. It oxidizes and enters the atmosphere as the climate-damaging greenhouse gas carbon dioxide during draining and aeration of the peat body (CO<sub>2</sub>). Furthermore, moors play a critical role in biodiversity. Moors are important ecosystems where rare biogenesis (biotope-specific biological communities) and highly specialized species emerge over time. Moors also serve as essential resting and nesting areas for a variety of species. The original water level is restored during moor re-naturalization in order to permanently bind the bound carbon in the soil and create optimal circumstances for peat-forming plants. As a result, moor preservation programmed and re-naturalization projects aimed at rehydrating moors are not only important for preserving native species, but they also help to prevent future deterioration of peat bodies, lowering emissions of climate-relevant gases in Germany and around the world. Volkswagen creates products and services that are as ecologically friendly as possible. We take into account not only the production and use phases, but also the raw materials, precursors, and suppliers, as well as the recycling process at the end of life. The life cycle principle refers to this cradle-to-grave strategy. Applying the life cycle approach to Volkswagen means that our obligation begins long before anything enters our factory gates and continues long after a vehicle is sold. When

estimating environmental impacts, we use the same principle. We can only arrive at the correct outcome by adding up all of these affects from beginning to end. When comparing two possible variations, this is especially significant. If a model is more environmentally friendly to manufacture, this advantage can be negated by problematic outsourced components. Finally, the life cycle principle aids in the organization of Volkswagen's operations. Because, though we have expert teams for different parts of the life cycle, we can only achieve a truly beneficial environmental outcome by working collaboratively across the full life cycle. In layman's terms, this means: Volkswagen cultivates strategic collaborations with suppliers in order to accelerate environmental-friendly technologies. In our Roadmap E, we're undertaking one of the industry's most extensive electrification offensives, with the goal of making electric vehicles available to everyone. This translates to exciting new items and lower CO2 emissions throughout the use phase. Volkswagen is also developing new CO2-free fuels. The Volkswagen Group claims to be a leader in the field of environmental protection. There are also electric vehicles that are "up!" Blue-e-motion is a blue-e-motion song. "Audi A1 e-torn" and "Golf blue-e-motion." The Group's strategy will emphasize the importance of keeping e-mobility affordable. The Volkswagen Group can build on a strong legacy and corporate culture that has traditionally centered on a capacity for social and environmental transformation with these technological advancements. We are devoted to a sustainable and socially responsible path of action through our company values. Commercial success, in our opinion, must always be accompanied by environmental protection and social responsibility. Our fundamental stance remains that the Volkswagen Group acts responsibly toward its customers, shareholders, employees, and society. We are pursuing the long-term objective of securely embedding the Volkswagen Group among the world's most successful automakers with our Strategy 2018. This applies to profitability, customer happiness, and quality, as well as

expanding new markets and increasing production volume, as well as our employer appeal. The Volkswagen Group will methodically expand on its competitive advantages with a model portfolio based on environmental principles and a strong position of its brands in the global marketplace. Our expansion plan is focused on appealing automobiles that appeal to customers from all around the world while also meeting specific regional criteria and cost targets. In this regard, our modular approach will be extremely beneficial. The TSI® and TDI® engines work well together. The MQB, with its innovative DSG dual-clutch gearbox and future electric powertrains, will help the Volkswagen Group fulfil its aggressive fuel consumption and emissions targets. As a multi-brand corporation with broad product and segment coverage, the Volkswagen Group is in an almost unrivalled position to enable very rapid deployment of innovations in high-volume brands and marketplaces, resulting in significant efficiency gains. 07 In addition, we use our technology skills to benefit other products and services with the goal of preserving jobs, conserving the environment, and increasing profitability. Projects focusing on the development and usage of industrial engines or boat engines that combine better motor power with reduced fuel consumption and emissions are examples of this. The inclusion of the Salzgitter plant's million-selling 2-litre natural-gas engine in the Eco Blue tiny CHP units is a watershed moment in this regard. These are the Volkswagen packages that went towards the development of the "Home Power Plant" by the power collaboration with energy supplier LichtBlick. LichtBlick uses the Home Power Plants to create a new, intelligent heat and power supply idea. LichtBlick's long-term goal is to connect 100,000 distributed Home Power Plants to construct Germany's largest virtual gas power station. The plants will generate "swarm power," which is named by the fact that several small units will be travelling in the same direction, similar to a swarm of fish, to supplement fluctuating wind and solar power generation as needed. The heat generated will be stored and made available for

heating and hot water locally. In Hamburg, the first Home Power Plants have been installed to private and commercial users. 35 We can only achieve our ambitious aims as carmakers if we can recruit a large number of new clients from all over the world in addition to our existing customer base. With this in mind, Volkswagen will increase its support for its dealers, who serve as a critical link between the company and its customers, as well as enhance its marketing efforts. Brazil, China, India, Russia, and the United States have the most long-term growth potential in this regard. Localizing supplier relationships allows us to contribute to economic development and location upgrading in individual nations while also reducing our reliance on currency rates. Furthermore, our suppliers are held to the same environmental and ethical standards as our own manufacturing facilities. Our company's success is built on the skill of our personnel. Volkswagen will only be able to master the current and future challenges of the automobile manufacturing industry if all employees, from apprentice to top manager, consistently deliver the outstanding performance required to ensure the Volkswagen Group's excellent quality of innovation and products in the long run. Volkswagen's human resources strategy of being a good and attractive employer and establishing a top team is centered on outstanding performance, the resulting accomplishments, and participation in the rewards. Whether it's vocational training, on-the-job training, continuous professional development at home and abroad, a forward-thinking payment strategy, or employee involvement, the Volkswagen Group consistently sets high standards for good work in a dialogue with its workers. Women's progress and professional development, in particular, is a core principle of Volkswagen's personnel activity. We want to inspire even more female graduates to pursue engineering and scientific careers and contribute to the development of the car of the future. The "Woman Driving Award" is an example of one of our activities. Our 2018 Strategy will propel us forward on our predetermined path. In this framework,

we place a premium on ecological significance and long-term commercial viability. The actions we've already launched to improve productivity and quality will continue unabated. We will create the essential conditions for achieving our long-term profit goal and maintaining a high level of liquidity by exercising strict cost and capital expenditure control. For Volkswagen, “green mobility” entails setting new environmental standards in the automobile industry in order to produce the cleanest, most cost-effective – and, at the same time, most entertaining – vehicles possible. To this goal, Volkswagen has gathered the best available contemporary environmental innovations under the banner of Blue Motion Technologies. We will invest more than €8 billion per year over the next few years in developments such as optimizing our existing TSI, TDI, and DSG technologies, as well as continuing to improve our TSI technology to run on natural gas or as a flex-fuel powertrain. In addition, we will continue to make advancements in the realm of future biofuels. Finally, we will devote a significant amount of money and effort to the electrification of autos. The success of electric powertrains is heavily reliant on the batteries used, and there is still a lot of work to be done in this area. New mobility concepts are added to the mix, resulting in an appealing package of various modes of transportation and their applications. To put it another way, it will be some time before the paradigm change to electric vehicles occurs. Volkswagen's guiding principle remains unaltered in this regard: we will accept nothing less than the finest option for our consumers. CO<sub>2</sub> emissions are an important consideration when designing new automobiles. As a result, CO<sub>2</sub> emissions for all cars are assessed at every stage of the product development process, and every choice in favor of a specific product is made with the impact on the environment in mind. That way, we'll be able to ensure there is a council.

The Steering Group's work is to promote information sharing between expert divisions by fostering networks connecting internal activities. Our CSR project

teams work on cross-functional issues such as improving Group sustainability reporting, and there has been a regular international exchange of information with the CSR coordinators of the brands and regions since the foundation of a Group-wide CSR organization in 2009. One of the main areas of focus is the creation of an IT-based CSR key indicator system that spans regional and brand boundaries. We successfully completed the first phase of the implementation of this key indicator system during the previous fiscal year. We are now in a position to better direct CSR efforts, making them more transparent and successful. This has laid a solid platform for the Group's ongoing CSR and sustainability reporting. The key indication system is being rolled out across brands and regions in the second phase. As a result, Volkswagen is meeting the growing expectations of its stakeholders in terms of distinctive, up-to-date reporting of the Group's performance in the areas of CSR and sustainability. The Volkswagen Group provides its expertise and experience to CSR networks in the business sector at the national, European, and international levels, as well as supporting projects that are established there. Preparing information on ecological and social standards for suppliers is a crucial task. CSR Europe, the main European business network for corporate social responsibility, provides an important communication platform with international recognition for this aim. We're also participating in the steering committee of "condense," the German Business Forum for Sustainable Development, as well as various working groups on topics like "Making Sustainability Measurable" and "Sustainability in the Supply Chain." As a responsible "corporate citizen," we are committed to maintaining a constant interaction with our stakeholders. Volkswagen has been a supporter of former UN Secretary General Kofi Annan's Global Compact (GC) since 2002. This is the world's largest and most important CSR effort, with over 7,000 companies in over 135 countries. Its purpose is to create a more equitable and sustainable global economy. Volkswagen actively contributes to the achievement of this aim. The GC

is founded on ten principles in the areas of human rights, labor standards, environmental protection, and anti-corruption measures. In 2010, Volkswagen continues to connect its corporate activities across the board with these values. We share our expertise within the GC so that other businesses can fulfil their worldwide responsibilities as well. An annual report documents Volkswagen's progress as a result of its active engagement in the GC. Consider the following two examples: Volkswagen is a participant in the GC's "Supply Chain Sustainability" project. In June 2010, the project's findings were compiled into a manual and presented at the GC conference in New York. In addition, the international GC Yearbook included a report on Volkswagen de México's sustainability initiative for water utilization in the Izta-Popo mountain region of Mexico. In September 2010, we also presented the project at the Nagoya World Biodiversity Summit.

Volkswagen group has variety of brands, these brands include the following. Exclusivity, elegance, and power are the hallmarks of the Bentley brand. In 2020, Bentley will debut an upgrade to its popular Bentayga SUV, which was introduced five years ago as the first premium SUV on the market. The new Bentayga, like its predecessor, combines the capabilities of a high-performance grand tourer with the qualities of a luxury limousine and a large family car.

In 2020, Bentley drew notice with the unique and extremely restricted Bachler. Bentley Milliner, a specialist customizing firm with roots dating back to the 16th century, introduced the two-seater. The roofless luxury grand tourer, whose design is inspired by the 2019 EXP 100 GT concept vehicle, combines open-air driving with a powerful double-turbocharged W12 engine.

Audi. Audi's worldwide brand promise, "Vorsprung," is presently being redefined by the four-ringed brand as it moves away from a limited focus on technological feasibility and toward a new strategy that puts the consumer first. Audi is a key player in the Group when it comes to developing novel technologies, not

least with the Premium Platform Electric (PPE) for all-electric premium vehicles. Audi released the second model in its e-Tron product line during the reporting period. The Audi e-tron Sport back is a sporty SUV coupé that blends the power of a large SUV with the beauty of a four-door coupé and the forward-thinking nature of an electric vehicle. The all-electric powertrain may deliver up to 300 kW (408 PS), while the e-Tron S Sport back is a high-performance variant. (1.2) million automobiles A total of 656 (620) Audi automobiles were sold domestically through the Chinese joint venture FAW-Volkswagen. The Q3, A6, and e-tron variants were particularly popular. Automobile Lamborghini S.p.A. sold 7,460 (8,290) automobiles last year. Audi will build 1.7 (1.8) million vehicles globally in 2020. Lamborghini produced 7,250 (8,664) automobiles in total.

SEAT SEAT's 70-year adventure began on May 9, 1950, when the firm was created and immediately introduced mobility to the entire country of Spain. The firm has proven time and time again that it is capable of reinventing itself and effectively conquering problems over its 70-year history. SEAT has used the power of change to convert itself from a vehicle manufacturer to a mobility company.

CUPRA is a unique and emotionally charged brand that is characterized by its forward-thinking design and high-performance electric versions. The CUPRA Leon family, the CUPRA Ateca, and the CUPRA Formentor a powerful SUV and coupé crossover and the first model created expressly for CUPRA - were all introduced during the reporting year. There are a total of seven high-performance and high-capacity

SKODA - The SKODA models are known for their sophisticated understatement, with a superb roomy interior, the highest levels of utility, great value for money, and a unique design. A variety of "Simply Clever" concepts and new digital services have been added to the mix, all with the goal of making consumers' lives simpler. In 2020, SKODA AUTO celebrated its 125th anniversary as a

corporation, as well as the 115th anniversary of the 115th anniversary of the 115th anniversary of the 115th anniversary of the 115th anniversary of the 115th anniversary of the 115th anniversary of In 2020, SKODA will release another electric vehicle, the Octavia iV plug-in hybrid, which will also be available in a sporty, dynamic RS form. The Octavia G-Tec, which runs on compressed natural gas, and the tough off-road Octavia Scout Comb were both introduced to the market as part of the Octavia family. During the reporting period, the SKODA brand supplied 1.0 (1.2) million automobiles globally. China is a country that has it.

Bugatti - Ettore Bugatti started the company in 1909, and it was responsible for a slew of racing victories in the 1920s and 1930s, as well as aesthetic automotive marvels like the Type 41 Royale and Type 57 SC Atlantic, which are now among the most scarce and precious collectors' goods. Following Ettore Bugatti's death in 1947, BUGATTI halted operations. Following a brief yet spectacular renaissance,

Lamborghini Automobile Lamborghini was founded in 1963 and is based in Sant'Agata Bolognese, Northern Italy. Lamborghini presently makes two super sports car models: the V12-powered Aventador, which debuted in 2011, and the V10-powered Huracán, which debuted in 2014, as well as the Urus Super SUV, which debuted in 2017 and is powered by a twin-turbo V8 engine. The corporation has seen success with 167 dealerships throughout the world. The V10 Huracán series, the successor to the famous Gallardo, made its debut in 2014 with the 2017 Huracán Performance (Spider version in 2018), demonstrating its potential with a number of lap records. The new Huracán EVO (Coupe and Spider) was released in 2019, and it included the V10 engine from the Performance, as well as next-generation vehicle dynamic control and aerodynamics. The Huracán EVO RWD was unveiled for the first time. The firm has enjoyed worldwide sales increase over the previous nine years, with 8,205 automobiles sold in 2019. It has 167 showrooms throughout the world. Automobile Lamborghini has produced a constant succession

of fantasy vehicles for almost half a century, including the 350 GT, Miura, Espada, Countach, Diablo, and Mucilage, as well as limited editions like the Reventón, Sesto Elemento, Veneno, and the Centauro.

Porsche exclusivity and social acceptance, innovation and tradition, performance and everyday usability, design and functionality – these are the brand values of sports car manufacturer Porsche. In fiscal year 2020, Porsche presented its extensively revamped Panamera, which combines the performance of a sports car with the comfort of an exclusive saloon and now covers an even wider range: with its top model, the 463 kW (630 PS) Panamera Turbo S, the sports car manufacturer is underscoring its high standard of best-in-class performance. The Panamera 4S E-Hybrid is a consistent continuation of Porsche's E-Performance strategy and constitutes a new addition to the range of plug-in hybrids, offering a completely new drive system with 412 kW (560 PS). Compared with the previous hybrid models, the all-electric range has been boosted by up to 30%.

Porsche celebrated the world premiere of the 911 Targa 4 and 911 Targa 4S models in 2020, completing its new generation of the 911 with the third vehicle body variant. The innovative, fully automatic roof system remains a distinguishing feature on all versions of the Targa; and just like the legendary original Targa model from 1965, it features the characteristic wide bar as well as an automated retractable roof section above the front seats and a wraparound rear window. An eight-speed dual-clutch transmission and intelligent all-wheel drive Porsche Traction Management deliver compelling performance and sporty driving pleasure. In the 911 series, the new generation of the 911 Turbo S has also been available in Coupé and Cabriolet versions since 2020. The new range-topping 911 offers unprecedented power, driving dynamics and luxury. It is being launched with a new 3.8 l boxer engine that delivers 478 kW (650 PS) of power, a whopping 51 kW (70 PS) more than its

predecessor. The 911 Turbo S sprints from 0 to 100 km/h in just 2.7 seconds, while top speed is 330 km/h.

Porsche delivered 272 thousand sports vehicles to customers in fiscal year 2020, 3.1% fewer than in the previous year. China remained the largest single market, and Porsche was able to increase its sales there by 2.6% to 89 thousand vehicles. Porsche's unit sales amounted to 265 thousand vehicles in the reporting period. This was 4.2% fewer than in the previous year. The 718 and the Taycan saw growth. Porsche produced a total of 263 thousand vehicles in 2020, 4.1% fewer than in fiscal year 2019.

Ducati is an Italian motorcycle manufacturer that was founded in 1926 and has been a member of the Volkswagen Group since 2012. The company's reputation is built on its renowned racing accomplishments. In Bologna, it creates top-of-the-line motorbikes. The Panigale V4 R, the Monster 821 Stealth, two multistate variants, and four improved Scramble variants are among the Ducati products introduced in 2019.

Scania, the Swedish brand Scania follows its values "Customer first", "Respect for the individual", "Elimination of waste", "Determination", "Team Spirit" and "Integrity". In rolling out its first fully electric truck, Scania underpinned its position as one of the leading companies in the commercial vehicle industry for alternative drive technologies in 2020. Scania's E-Truck was designed for urban operation and has an electric range of up to 250 km. In the reporting year, Scania also presented a hybrid truck with an electric range of up to 60 km.

The new products will help Scania achieve its climate targets of reducing the carbon footprint from its business activities by 50% by 2025, and cutting emissions from Scania products by 20% in the same period. Vehicles with hydrogen technology are also playing their part: the Norwegian wholesaler ASKO is currently testing hydrogen-powered Scania trucks with fuel cell electric drives. To electrify

its model range, Scania plans to invest well over SEK 1 billion in a battery assembly plant in Sodertalje, Sweden, in the coming years. The plant, which will be built adjacent to the chassis assembly plant in Sodertalje, is to assemble battery modules and packs tailored to Scania vehicles. To gain a firmer foothold in the Asian and especially the Chinese market, Scania is investing in a wholly owned truck production facility in Rugao in Jiangsu Province. Series production is scheduled to start in early 2022.

In the long term, the company also plans to step up its research and development activities in the world's largest commercial vehicle market. The key figures presented in this chapter encompass Scania's truck and bus, industrial and marine engine businesses. Orders received at the Scania brand increased by 4.7% year-on-year to 93 thousand vehicles in fiscal year 2020. The number of vehicles delivered worldwide fell to 72 (99) thousand due to the pandemic; the number of buses delivered included in this figure declined to 5 (8) thousand units. Demand for services and replacement parts was also impacted by the Covid-19 pandemic, but the drop was comparatively smaller. New contracts signed at Scania Financial Services were also down on the prior-year figure, due mainly to lower unit sales. Scania manufactured 73 (97) thousand commercial vehicles in the past fiscal year, including 5 (8) thousand buses.

MAN, customer focus, enthusiasm for the product, and efficiency are the core values at MAN. In fiscal year 2020, MAN revealed its extensively upgraded truck generation, which is consistently designed to meet the changing needs of the transportation industry, setting the standards for assistance systems, driver orientation and digital connectivity. The improvements to the drivetrain, aerodynamics and the MAN Efficient Cruise efficiency assistant reduce fuel consumption in the new truck generation by up to 8% compared with the previous generation. The MAN TGX was named International Truck of the Year 2021 by 24

industry journalists. The award is one of the most prestigious in the transportation industry.

In the bus segment, the all-electric MAN Lion's City 18 E optimized for urban transportation was launched in 2020. The 18-meter articulated bus can carry up to 120 passengers and generates zero local emissions. The MAN Lion's City 18 E will begin scheduled operations in 2021 in Barcelona, Spain, and Cologne, Germany. MAN teamed up with partner companies during the Covid-19 pandemic to convert its TGE model into an innovative diagnostic vehicle. With the molecular diagnostic PCR test equipment on board the MAN TGE, the results of nasal or throat swabs are available in just 39 minutes. Up to 800 tests can be carried out per day and analyzed directly in the vehicle. In South America, Volkswagen Caminos e Omnibus expanded its product portfolio in 2020 with its largest truck model to date. The Meteor is used in the heavy-duty sector, which is enjoying especially strong growth in the Brazilian market. In addition to the new Meteor, the successful VW Constellation model also celebrated its premiere with the new generation of the 13 1 D26 engine. In 2021 in the field of alternative drive systems, Volkswagen Caminos e Omnibus plans to begin with the supply of 100 "e-Delivery" electric trucks to Amber, Latin America's largest beverage company. Amber intends to deploy the e-Delivery in São Paulo and Rio de Janeiro starting in the second half of the year.

Incoming orders at MAN Commercial Vehicles decreased in fiscal year 2020 by 11.0% year-on-year to 123 thousand vehicles; the market decline anticipated for 2020 – especially in the EU27+3 region – was exacerbated by the Covid-19 pandemic. In America, MAN Commercial Vehicles recorded lower demand with its Volkswagen Caminos e Omnibus brand, particularly in Brazil and Mexico. A total of 118 (143) thousand commercial vehicles were delivered to customers, of which 11 (14) thousand were buses.

Productive plants - In 2020, the Covid-19 pandemic had a strong impact on business at the Volkswagen Group and its brands; this led to lower figures in terms of unit sales, sales revenue and profit throughout the Group. The Volkswagen Group delivered 9.3 million vehicles to customers worldwide in fiscal year 2020 (2019: 11.0 million). The global market share rose to 13.0 percent (2019: 12.9 percent). Group sales revenue in 2020 totaled € 222.9 billion (2019: € 252.6 billion), while earnings after tax amounted to € 8.8 billion (2019: € 14.0 billion). The Group comprises twelve brands from seven European countries: Volkswagen Passenger Cars, Audi, SEAT, and ŠKODA, Bentley, Bugatti, Lamborghini, Porsche, Ducati, Volkswagen Commercial Vehicles, Scania and MAN. Each brand has its own character and operates as an independent entity on the market. The product spectrum ranges from motorcycles to small cars and luxury vehicles. The Commercial Vehicles Business Area primarily comprises the development, production and sale of light commercial vehicles, trucks and buses from the Volkswagen Commercial Vehicles, Scania and MAN brands, the corresponding genuine parts business and services. The collaboration between the MAN and Scania commercial vehicle brands is coordinated within the TRATON GROUP. The commercial vehicles portfolio ranges from pickups to heavy trucks and buses. The Power Engineering segment combines the large-bore diesel engines, turbomachinery, special gear units, and propulsion components businesses. Until October 2020, it also included the Rink business. In addition, the Volkswagen Group offers a wide range of financial services, including dealership and customer financing, leasing, banking and insurance activities, fleet management and mobility services. The Group operates 118 production plants in 20 European countries and a further 10 countries in the Americas, Asia and Africa. 662,575 employees worldwide produce vehicles, and work in vehicle-related services or other fields of business. The Volkswagen Group

sells its vehicles in 153 countries. Under the vision "Shaping mobility - for generations to come." the Volkswagen Group with its sharpened TOGETHER.

## CONCLUSION

The aim of this work is to understand the environmental and social aspects surrounding Volkswagen group. When it comes to the risks of protecting the environment and human life through climate change. With the scandal surrounding the emission system in 2015. after the scandal in 2015 Volkswagen have put more safety measure in to place to protect the environment and human life. However, findings suggest that VW emission scandal had different impact on all three variables investigated. First the scandal took a sharp in stock price, in less than a month stocks lost it value by 75%. Finally, less sensitive variable was related to the corporates financial performances. The number of vehicles sold changed insignificantly and the revenue slightly increase in the past year after the scandal of 2015. This report examines the corporate governance practices of the German automotive multinational, Volkswagen AG, in relation to the revelation of the diesel-engine emissions scandal by the U.S Environmental Protection Agency (EPA) in 2015. The Analysis focuses on how a monetary mindset and negligence towards other elements of 3P's (People, Planet, and Profit), that are embedded in corporate structure, ownership composition, Supervisory Board (SB) and Corporate culture leads to decisions that serve the interest of power-hungry shareholders at the expense of other stakeholders.

This paper presents identified issues and impacts that contributed to the firm's choice to move forward with a decision that led to Volkswagen Emissions Scandal, a disastrous scandal for the corporation. To improve good corporate governance practice in Volkswagen, this report provides various recommendations to modify internal governance procedures. A business can only succeed if its environment is feasible enough to promote growth and sustainability. Both external and internal

stakeholders play an important role in ensuring success. To achieve this, interests should be aligned ideally, which is not the case in Volkswagen due to the difference in ideas, leading to conflicts.

Firstly, setting a contract that specifies clear expectations and roles. Following this, the firm will benefit greatly by having regular evaluations and instilling a whistle-blower protection system managed by the third party. In view of Stakeholder Theory, it is found that Volkswagen's intention to save profits by carrying out activities that are unethical backfired, causing the firm to incur a massive loss and damage its brand image. Therefore, the company's long-term sustainability can only be achieved if the company aligns its profit intentions with ethical intentions of serving People and Planet. The finding reveals power imbalance and abuse-of-power from dominant shareholders; Porsche-Piëch family, the intrusion of Lower Saxony (German Government) to ensure national employment, risk of labor inclusion on SB under the Co-Determination Act and company culture focusing only on profit led to unethical conduct of 'implanting cheating device', hence displaying the firm's poor Corporate Governance procedures.

Lastly, to restore its brand image and gain stakeholders' trust, Volkswagen must rebrand and plan on fulfilling corporate social initiatives that will gear the firm into strategic success and sustainability in the long-run.

Many officials at Volkswagen were unaware of any wrongdoing, although this suggests the company can be salvaged and there are people at the top that can help turn this back around. It does also highlight the need for serious improvement in terms of the firm's internal controls. For issues on a scale as large as this, there should be a sound whistle blowing system in place to alert the correct people of such instances, so action can be taken before any issue further escalates. Additionally, with regards to internal controls, another department that may need to focus on improvement is that of Human Resourcing (HR). It seems logical that those that

participated in the design and implementation of the cheat device in any way should not have been employed by the firm to begin with. Clearly, to be willing to participate in a scandal such as this, the employee would not be meeting ethical standards of the company. Could a more rigorous employment process be introduced to stop people with these capabilities from slipping through the fingers of HR's controls?

Despite the emissions scandal, VW has achieved remarkable rates of growth in the past few years. During the time of the scandal, VW's CEO, Martin Winterkorn had set a goal of becoming the largest car maker internationally. Ironically, it achieved this in the first quarter of 2015, with "Group Sales Revenue up 10.3% on the prior year figure" (Volkswagen AG, 2015). This poses the question, did the so-called "defeat device" contribute to Volkswagen's global success? Well, yes. There is a tough market in America for cars, and as previously discussed there are strict emissions standards in the US. With VW cars appearing to be very efficient, this would have likely boosted their sales across the ocean - as well as on the home continent. However, it seems that size may have contributed to the unawareness of the defeat device installation in thousands of VW cars. Winterkorn's goal was to increase the growth of the firm; this would most likely have resulted in the introduction of steep targets for the firm's members. With these kind of targets comes pressure. This pressure could indeed have played a key part in convincing employees to push the boundaries and cheat the system. Not only this, but as mentioned earlier, with performance-related pay on the cards which is said to have racked up to the grand total of €63m across the VW board there is even more incentive for these targets to be met. With all this in mind, judgement may have stayed away from maintaining a high standard of ethical behavior. Therefore, a fair judgement would be that the provision of performance-related pay may be tied directly to the governance failure of Volkswagen.

## REFERENCES

1. Aliyah, C. (2017). Everything you need to know about the VW Diesel-Emissions Scandal. Resource document.
2. Barnett, M. L. (2007). Stakeholder influence capacity and the variability of financial returns to corporate social responsibility. *Academy of Management Review*,
3. Boston, W. (2017). VW sales rise in 2016 despite the scandal. Resource document.
4. Catherine, J., Sanker, S., & CB, B. (2014). Corporate crises in the age of corporate social responsibility. *Business Horizons*,
5. Chatterji, A., & Listokin, S. (2007). Corporate social irresponsibility. *Democracy Journal*, pp
7. Demandt, B. (2017). Volkswagen. Resource document. November 2017.
8. European Commission. (2017). Corporate Social Responsibility. Resource document. Accessed 10 November 2017.
9. FTSE Russell. FTSE4Good Index Series. Resource document. FTSE4Good. Accessed 12 November.
10. Hull, R. (2015). German vehicle regulator broadens investigation: 23 carmakers including BMW Ford, Mercedes and Toyota being tested. Resource document