Report on Risks and Opportunities

(CONTAINS THE REPORT IN ACCORDANCE WITH SECTION 289(5) OF THE HGB)

Our Company’s long-term success also depends on how promptly we identify the risks and opportunities arising from our operating activities and how forward-looking we are in managing them. A comprehensive risk management and internal control system helps the Volkswagen Group deal with risks in a responsible manner.

In this chapter, we first explain the objective and structure of the Volkswagen Group’s risk management system (RMS) and internal control system (ICS) and describe the system relevant for the financial reporting process. We then outline the risks and opportunities arising in our business activities.

OBJECTIVE OF THE RISK MANAGEMENT SYSTEM AND INTERNAL CONTROL SYSTEM AT VOLKSWAGEN

Only by promptly identifying, accurately assessing and effectively managing the risks and opportunities arising from our business activities can we ensure the Volkswagen Group’s sustainable success and the systematic implementation of our Strategy 2018. The Volkswagen Group’s RMS/ICS aims to identify potential risks at an early stage so that suitable countermeasures can be taken to avert the threat of loss to the Company, and any risks that might jeopardize its continued existence can be ruled out.

Uniform Group principles are used as the basis for managing risks in a transparent and appropriate manner. These include

> promoting a culture of openness with regard to risks
> aligning the RMS/ICS with corporate goals
> weighing up risks and opportunities so as to be able to leverage opportunities where the related risks are transparent and manageable
> complying with rules (compliance, see also page 57)
> ensuring the adequacy of the RMS/ICS in relation to the nature, scope and complexity of, as well as the risks involved in, the specific business activities and the business environment
> regularly reviewing the effectiveness and efficiency of the RMS/ICS.

STRUCTURE OF THE RISK MANAGEMENT SYSTEM AND INTERNAL CONTROL SYSTEM AT VOLKSWAGEN

The organizational design of the Volkswagen Group’s RMS/ICS is based on the internationally recognized COSO (Committee of Sponsoring Organizations of the Treadway Commission) framework for enterprise risk management. Volkswagen has chosen a holistic, integrated approach that combines a risk management system, an internal control system and a compliance management system in a single management strategy (governance, risk and compliance strategy). Structuring the RMS/ICS in accordance with the COSO framework for enterprise risk management ensures that potential risks are covered in full; opportunities are not captured.

In addition to fulfilling legal requirements, particularly with regard to the financial reporting process, this approach enables us to manage significant risks to the Group holistically, i.e. by incorporating both tangible and intangible criteria.

Another key element of the RMS/ICS at Volkswagen is the three lines of defence model, a basic element required, among others, by the European Confederation of Institutes of Internal Auditing (ECIIA). In line with this model, the Volkswagen Group’s RMS/ICS has three lines of defence that protect the Company from significant risks occurring.

No significant changes were made to the RMS/ICS compared with the previous year.

151
First line of defence: operational risk management

The primary line of defence comprises the operational risk management and internal control systems at the individual Group companies and units. The RMS/ICS is an integral part of the Volkswagen Group’s structure and workflows. Events that may give rise to risk are identified and assessed locally in the divisions and at the investees. Countermeasures are introduced immediately, their effects are assessed and the information is incorporated into the planning in a timely manner. The results of the operational risk management process are incorporated into budget planning and financial control on an ongoing basis. The targets agreed in the budget planning rounds are continually reviewed in revolving planning updates.

At the same time, the results of risk mitigation measures that have already been taken are incorporated into the monthly forecasts on further business development in a timely manner. This means that the Board of Management has access to an overall picture of the current risk situation via the documented reporting channels during the year as well.

The minimum requirements for the operational risk management and internal control system are set out for the entire Group in uniform guidelines. These also include a process for the timely reporting of material risks.

Second line of defence: capturing systemic risks using the standard Governance, Risk and Compliance process

In addition to the units’ ongoing operational risk management, the Group Governance, Risk and Compliance (GRC) department each year sends standardized surveys on the risk situation and the effectiveness of the RMS/ICS to the material Group companies and units worldwide (standard GRC process). This feedback is used to update the overall picture of the potential risk situation and assess the effectiveness of the system.

Each material systemic risk is assessed using the expected likelihood of occurrence and various risk criteria (financial and nonfinancial). In addition, the risk management and control measures taken are documented at management level. This means that risks are assessed in the context of any risk management measures, i.e. in a net analysis. In addition to strategic, operational and reporting risks, risks arising from potential compliance violations are also integrated into this process. Moreover, the effectiveness of key risk management and control measures is tested and any weaknesses identified in the process are reported and rectified.

All Group companies and units selected from among the entities in the consolidated Group on the basis of materiality and risk criteria – including Ducati Motor Holding S.p.A., which was consolidated in 2012 – were subject to the standard GRC process in fiscal year 2013. Only the Scania, MAN and Porsche brands were excluded.

The Scania brand, which has been consolidated since July 22, 2008, has not yet been included in the Volkswagen Group’s risk management system due to various provisions of Swedish company law. According to Scania’s Corporate Governance Report, risk management and risk assessment are integral parts of corporate management. Risk areas are evaluated there by the Controlling department and reflected in the financial reporting.

MAN SE and Dr. Ing. h.c. F. Porsche AG had already implemented their own central processes for capturing risks at the time they were consolidated and are included in the Volkswagen Group’s annual reporting.

Third line of defence: checks by Group Internal Audit

Group Internal Audit helps the Board of Management to monitor the various divisions and corporate units within the Group. It regularly checks the risk early warning system and the structure and implementation of the RMS/ICS as part of its independent audit procedures.

RISK EARLY WARNING SYSTEM IN LINE WITH THE KONTRAG

The Company’s risk situation is ascertained, assessed and documented in accordance with the requirements of the Gesetz zur Kontrolle und Transparenz im Unternehmensbereich (KonTraG – German Act on Control and Transparency in Business). The requirements for a risk early warning system are met through the elements of the RMS/ICS described above (first and second lines of defence). Separately, the auditors check the processes and procedures implemented for this as well as the adequacy of the documentation on an annual basis. The plausibility and adequacy of the risk reports are examined on a test basis in detailed interviews
with the divisions and companies concerned that also involve the auditors. The auditors assessed our risk early warning system based on this volume of data and established that the risks identified were presented and communicated accurately. The risk early warning system therefore meets the requirements of the KonTraG.

In addition, the Financial Services Division is subject to scheduled inspections as part of the audit of the annual financial statements and unscheduled inspections within the meaning of section 44 of the Kreditwesengesetz (KWG – German Banking Act) by Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin – the German Federal Financial Supervisory Authority), as well as inspections by the Prüfungsverband deutscher Banken (Auditing Association of German Banks).

**Monitoring the effectiveness of the risk management system and the internal control system**

The RMS/ICS is regularly optimized as part of our continuous monitoring and improvement processes. In the process, equal consideration is given to both internal and external requirements – such as the provisions of the Bilanzrechtsmodernisierungsgesetz (BiMoG – German Accounting Law Modernization Act). External appraisers assist in the continuous enhancement of our RMS/ICS on a case-by-case basis. The objective of the monitoring and improvements is to ensure the effectiveness of the RMS/ICS. The results culminate in both regular and event-driven reporting to the Board of Management and Supervisory Board of Volkswagen AG.

**THE RISK MANAGEMENT AND INTEGRATED INTERNAL CONTROL SYSTEM IN THE CONTEXT OF THE FINANCIAL REPORTING PROCESS**

The accounting-related part of the RMS/ICS that is relevant for the financial statements of Volkswagen AG and the Volkswagen Group comprises measures that are intended to ensure the complete, accurate and timely transmission of the information required for the preparation of the financial statements of Volkswagen AG, the consolidated financial statements and the combined Group management report. These measures are designed to minimize the risk of material misstatement in the accounts and in the external reporting.

Main features of the risk management and integrated internal control system relevant for the financial reporting process

The Volkswagen Group’s accounting is organized along decentralized lines. For the most part, accounting duties are performed by the consolidated companies themselves or entrusted to the Group’s shared service centers. The audited financial statements of Volkswagen AG and its subsidiaries prepared in accordance with IFRSs and the Volkswagen IFRS accounting manual and reported on by the auditors are transmitted to the Group in encrypted form. A standard market product is used for encryption.

The Volkswagen IFRS accounting manual, which is prepared using external expert opinions in certain cases, ensures the application of uniform accounting policies based on the requirements applicable to the parent. In particular, it includes more detailed guidance on the application of legal requirements and industry-specific issues. Components of the reporting packages required to be prepared by the Group companies are also set out in detail there and requirements established regarding the presentation and settlement of intragroup transactions and the balance reconciliation process that builds on this.

Control activities at Group level include analyzing and, if necessary, adjusting the data reported in the financial statements presented by the subsidiaries, taking into account the reports submitted by the auditors and the outcome of the meetings on the financial statements with representatives of the individual companies. These discussions address both the reasonableness of the single-entity financial statements and specific significant issues at the subsidiaries. Alongside reasonableness reviews, control mechanisms applied during the preparation of the single-entity and consolidated financial statements of Volkswagen AG include the clear delineation of areas of responsibility and the application of the dual control principle.
The Group management report is prepared – in accordance with the applicable requirements and regulations – centrally but with the involvement of and in consultation with the Group units and companies.

In addition, the accounting-related internal control system is independently reviewed by Group Internal Audit in Germany and abroad.

**Integrated consolidation and planning system**
The Volkswagen consolidation and corporate management system (VoKUs) enables the Volkswagen Group to consolidate and analyze both Financial Reporting’s backward-looking data and Controlling’s budget data. VoKUs offers centralized master data management, uniform reporting, an authorization concept and maximum flexibility with regard to changes to the legal environment, providing a future-proof technical platform that benefits Group Financial Reporting and Group Controlling in equal measure. To verify data consistency, VoKUs has a multi-level validation system that primarily checks content plausibility between the balance sheet, the income statement and the notes.

**RISKS AND OPPORTUNITIES**
In this section, we outline the specific risks and opportunities, which we have grouped into categories. Unless explicitly mentioned, there were no material changes to the specific risks and opportunities compared with the previous year.

We use competitive and environmental analyses and market studies to identify not only risks but also opportunities with a positive impact on the design of our products, the efficiency with which they are produced, their success in the market and our cost structure. Risks and opportunities that we expect to occur are already reflected in our medium-term planning and our forecast. The following therefore reports on internal and external developments as risks and opportunities that may result in a negative or positive deviation from our forecast.

**Macroeconomic risks and opportunities**
We currently see risks to continued global economic growth primarily in the persistent structural deficits in developed economies. The unanswered questions surrounding the economic and institutional stability of the eurozone are particularly noteworthy in this context, as are the unresolved debt problem in many industrialized countries. In the eurozone, the situation of numerous financial institutions whose stability and ability to withstand a crisis remain in doubt is hindering sustained economic recovery.

Structural deficits also pose a risk to the growth of many emerging economies. Overindebtedness, reliance on capital inflows, violent clashes and corruption are some of the main threats to these countries’ development going forward.

As the global economy becomes increasingly interconnected, declines in growth in key countries and regions often have an immediate impact on the state of the global economy and therefore pose a central risk. The trend in the large economies of Europe, the USA and China is especially important for global growth.

Geopolitical risks result primarily from tensions in the Middle East and North Africa and may impact negatively on global energy and commodity prices. In addition, a large number of local and regional conflicts pose a threat to the performance of both individual economies and entire regions.

Overall, we consider the probability of a global recession to be low. Due to the risk factors listed, however, the possibility of a decline in global economic growth or a period of below-average growth rates cannot be ruled out.

The macroeconomic environment may also give rise to opportunities for the Volkswagen Group if actual developments differ in a positive way from expected developments.

**Sector-specific risk and market opportunities**
The growth markets of Asia, South America, and Central and Eastern Europe are particularly important for the Volkswagen Group in terms of the global trend in demand for passenger cars and commercial vehicles. Although these markets harbor considerable potential, the underlying conditions in some of the countries in these regions make it difficult to increase unit sales figures there. Some have high customs barriers or minimum local content requirements for domestic production, for example. Following the reduction in the number of new vehicles allowed to be registered in places such as Beijing, further restrictions on registrations could enter into force in other Chinese metropolitan areas as well. Furthermore, a potential global economic slowdown could impact negatively on consumer confidence in some of these countries. Equally, we cannot entirely rule out the possibility of freight deliveries being shifted from trucks to other means of transport and of demand for the Group’s commercial vehicles falling as a result.

At the same time, if the economic and regulatory situation permits, there are opportunities for faster growth above and beyond current projections in emerging markets where vehicle ownership rates are still low. The demand that builds up in established markets during a crisis could also lead to a strong recovery in these markets should the economic environment ease more quickly.

Price pressure in established automotive markets is a particular challenge for the Volkswagen Group as a supplier of volume and
Report on Risks and Opportunities

GROUP MANAGEMENT REPORT

premium models due to its high level of market coverage. As the global economy is still under strain, competitive pressures are likely to remain high in the future. Some manufacturers will respond by offering incentives in order to meet their sales targets, putting the entire sector under additional pressure, particularly in Western Europe, the USA and China.

Western Europe is one of our main sales markets. A drop in prices due to the economic climate as demand falls in this region would have a particularly strong impact on the Company’s earnings. We counter this risk with a clear, customer-oriented and innovative product and pricing policy. Outside Western Europe, overall delivery volumes are broadly diversified throughout the world. The Chinese market accounts for an increasing share. We either already have a strong presence in numerous existing and developing markets or are working hard to build such a presence. Moreover, strategic partnerships help us to increase our presence in these countries and regions and cater to requirements there.

The global economic climate deteriorated tangibly in fiscal year 2013. The resulting challenges for our trading and sales companies, such as efficient warehouse management and a profitable dealer network, are considerable and are being met by appropriate measures on their part. However, financing business activities through bank loans remains difficult. Our financial services companies offer dealers financing on attractive terms with the aim of strengthening their business models and reducing operational risk. We have installed a comprehensive liquidity risk management system so that we can promptly counteract any liquidity bottlenecks at the dealers’ end that could hinder smooth business operations.

We continue to approve loans for vehicle finance on the basis of the same cautious principles applied in the past, taking into account the regulatory requirements of section 25a(1) of the Kreditwesengesetz (KWG – German Banking Act).

Volkswagen may be exposed to increased competition in aftermarket for two reasons: firstly, because of the provisions of the new Block Exemption Regulations, which have been in force for after-sales service since June 2010, and, secondly, because of the amendments included in EU Regulation 566/2011 dated June 8, 2011, which expand independent market participants’ access to technical information.

The European Commission is planning to end design protection for visible vehicle parts. If this plan is actually implemented, it could adversely affect the Volkswagen Group’s genuine parts business.

Below, we outline the market opportunities for the Volkswagen Group. We see the greatest potential for growth in the markets of the Asia-Pacific region and in North America.

China

China, the largest market in the Asia-Pacific region, saw further market growth in 2013. Here, demand for vehicles will continue to increase in the coming years due to the need for individual mobility, although growth will probably shift from the large cities on the coast to the country’s interior. To be able to leverage the considerable opportunities offered by this market and defend our strong market position in China over the long term, we are continuously expanding our product range to include models that have been specially developed for this market. We are further expanding our production capacity in this growing market through additional production facilities.

India

India achieved a lower market volume in fiscal year 2013 than in the previous year due to the difficult environment. Demand was impacted in particular by high inflation and increased fuel prices. We expect demand to stabilize in the coming years, however. The Group is currently consolidating its activities in this difficult environment. Despite the current situation, India is still a strategically important market of the future for the Group.

ASEAN

The automotive markets in the ASEAN economic area offer substantial growth opportunities in the aggregate. The Volkswagen Group is gradually working toward the long-term penetration of these markets. High price sensitivity means that having a local manufacturing operation in the region is a condition for a competitive offering. Alongside with the Passat, we have been additionally producing the Polo hatchback and notchback, plus the Jetta, since 2013. To further strengthen our market position, we are investigating and evaluating opportunities for assembling vehicles locally in additional countries in the region. Independent of this, we are working hard to improve local sales structures.

North America

The government crisis in the USA had relatively little impact on the vehicle market in 2013. Despite the political uncertainty, pent-up demand and the availability of auto loans pushed the overall market above the prior-year level in 2013. We anticipate further growth but slower momentum in 2014. In Canada and Mexico, market growth was moderate in 2013; it is expected to continue in 2014. North America remains a growth region for the Volkswagen Group. In the United States, we are systematically pursuing our strategy of becoming a full-fledged volume supplier. Together with an engine plant, the development of additional production capacity in the region to manufacture the Golf and the Audi Q5 will allow us to better serve the market in the future. We are also working hard on offering additional products tailored specifically for the US market, for example a large SUV.
BRAZIL

In 2012, the Brazilian government supported local industry, including the automotive industry, by providing tax breaks. This support was partially withdrawn in January 2013, slowing growth in the automotive market. In the first half of the year, the market trend was also impacted by rising interest rates and an upturn in inflation. To prevent a further decline in the Brazilian market as a whole, the tax breaks will be initially continued in 2014 in a weakened form. The growing number of automobile manufacturers with local production has resulted in a sharp increase in price pressure and competition. The Brazilian market plays a key role for the Volkswagen Group. To strengthen our competitive position here, we offer vehicles that have been especially developed for this market and locally produced, for example the Gol and the Fox.

RUSSIA

We continue to expect that Russia has the potential to grow into one of the largest automotive markets in the world. However, its heavy reliance on currently stagnating oil revenues is slowing economic growth. The discontinuation of subsidized loans in 2014 is also depressing demand for vehicles. The market remains of strategic importance for the Volkswagen Group, which is why it is a primary focus of our activities. In addition to the local production in Kaluga, our contract manufacturing agreement with local manufacturer GAZ has added capacity that will enable us to better serve the market. We are also examining additional opportunities to further strengthen our market position.

MIDDLE EAST

Despite economic and political instability, the Middle East region offers growth opportunities. We are leveraging the potential for sustainable growth without operating our own production facilities by offering a range of vehicles that have been specifically tailored to this market. Optimized sales channels are also intended to help lift our market share.

RESEARCH AND DEVELOPMENT RISK

We conduct extensive trend analyses, customer surveys and scouting activities so as to adequately reflect our customers’ requirements during product development. In this way, we ensure that we identify trends at an early stage and examine their relevance for our customers in good time.

We counter the risk that it may not be possible to develop products or modules within the specified timeframe, to the required quality standards, or in line with cost specifications by continuously and systematically monitoring the progress of all projects and increasingly analyzing third-party industrial property rights, including in relation to communication technologies. We regularly compare this progress with the project’s original targets; in the event of variances, we introduce appropriate counter measures in good time. Our end-to-end project organization supports effective cooperation among all areas involved in the process, ensuring that specific requirements are incorporated into the development process as early as possible and that their implementation is planned in good time.

OPORTUNITIES ARISING FROM THE MODULAR TRANSVERSE TOOLKIT

The Modular Transverse Toolkit (MQB) and the Modular Production Toolkit (MPB) enable us to cut both development costs and the necessary one-time expenses and manufacturing times as well as to leverage expenditure over several vehicle generations. The toolkits also allow us to produce different models in different quantities and even from different brands using one and the same plant in a single facility. This enables us to deploy our capacity more flexibly across the entire Group and to achieve efficiency gains.

Procurement risks and opportunities

Although European demand for vehicles steadied in the reporting period, there are still considerable economic differences in the regional markets. These are affecting our suppliers, especially those focused on Southern and Western Europe. In 2013, this situation once again contributed to a cautious stance on the part of investors. As a result, greater consideration was given to suppliers’ financing options when making lending decisions. The Volkswagen Group’s procurement risk management system is well prepared for the current environment: changes at the suppliers’ end are continuously monitored and a suite of different measures deployed in the event of any negative developments. This allows us to minimize supply risks and the financial effects of crises and insolvencies at suppliers.

The modular structure of our toolkits make them the ideal starting point for requests for bundled volumes of vehicle parts and for synchronized order and procurement processes. We will systematically enhance this strategy with the Modular Transverse Toolkit in the A0 vehicle class and combine worldwide volumes into a single request. In doing so, we consider both market requirements and conditions at the location, with the objective of a globally harmonized supplier strategy. This process creates the conditions for us to exploit regional and transregional synergies. Furthermore,
start-up risks in the Volkswagen Group are minimized, one-time expenses are optimized and the security of planning and supplies are ensured at a global level.

**Production risk**

The weakness in the European automotive market also had a noticeable effect on production at the Volkswagen Group in 2013. Changes in the demand environment, partly due to weak domestic markets, caused production volumes of several vehicle models to fluctuate at some plants. We have various tools at our disposal with which to smooth out these market-driven fluctuations, such as flexible working time models and dynamic capacity utilization at our sites. “Turntable concepts” are used to keep capacity utilization at our production sites at a consistently high level. In addition, we are better able to smooth out fluctuations in demand at multi-brand sites, the number of which is growing in the Group.

Short-term changes in demand for special equipment features or components of our products and the decreasing predictability of those changes may lead to supply bottlenecks. We minimize this risk, among other things, using a revolving process that examines the feasibility of different future demand scenarios for vehicle features. If there are signs of bottlenecks in the supply of materials, countermeasures can be introduced with sufficient lead time.

Regular preventative maintenance measures ensure that plant availability is high and that output at our production facilities remains stable.

We select new sites for vehicle or drivetrain plants by means of a transparent process that is consistent for all Group brands. In addition to economic, geological and technical factors, environmental factors, environmental laws and compliance requirements are assessed and considered in detail in the course of this process.

**Risks arising from long-term production**

In the case of large projects, risks may arise that are often only identified in the course of the project. These may result in particular from contracting deficiencies, miscosting, post-contract changes in economic and technical conditions, weaknesses in project management and poor performance by subcontractors. We use an enhanced project control process that covers all project phases and a lessons learned process to endeavor to identify such risks at an even earlier stage and to take appropriate measures to eliminate or minimize them before they occur.

**Risks arising from changes in demand**

Consumer demand is shaped not only by real factors such as disposable income, but also by psychological factors that are impossible to plan for.

Increased fuel and energy prices could result in unexpected buyer reluctance, which could be further exacerbated by media reports, for example. This is particularly the case in saturated automotive markets such as Western Europe, where demand could drop as a result of owners holding on to their vehicles for longer. In the reporting period, the effect of unplannable psychological demand factors was exacerbated by the euro crisis and its impact on the global economy and the entire automotive industry. Several automotive markets, particularly in Southern Europe, were unable to recover from their record lows in the reporting period and even contracted further in some cases. We are countering this buyer reluctance with our attractive range of models and in-depth customer orientation.

A combination of buyer reluctance as a result of the crisis and increases in some vehicle taxes based on CO₂ emissions – such as those already formulated in some European countries – is driving a shift in demand towards smaller segments and engines in individual markets. We counter the risk that such a shift will negatively impact the Volkswagen Group’s earnings by constantly developing new, fuel-efficient vehicles and alternative drive technologies, based on our drivetrain and fuel strategy. In automotive markets around the world, risks arise due to government intervention in the form of tax increases, for example, which could curb private consumption.

As industrial goods, commercial vehicles are influenced by the general economic environment, which means that the market is highly cyclical. Although production volumes are significantly lower, the complexity of the trucks and buses range even exceeds that of passenger cars, since they are tailored to the customers’ requirements. The priorities for commercial vehicle customers are overall running costs, vehicle reliability and the service provided.

MAN Power Engineering’s two-stroke engines are produced exclusively by licensees, particularly in China and Korea. Weaker demand could result in licensees having excess capacity and consequently in risks due to declining license revenues or bad debt losses up to and including the loss of licensees. We address the risks by constantly monitoring the markets, carefully managing business relationships with licensees and, if necessary, agreeing payment plans.
Dependence on fleet customer business
In fiscal year 2013, the percentage of total registrations in Germany accounted for by fleet customers fell to 12.5% (12.7%). The Volkswagen Group’s share of this customer segment decreased to 47.2% (47.7%).

In Europe, the Volkswagen Group was unable to extend its position in this customer segment despite its comprehensive product range and customized support for this target group; registrations by business fleet customers were down 2.2% year-on-year, while the Group’s share fell to 28.8% (29.4%). The fleet customer business continues to be marked by increasing concentration and internationalization. With its broad product portfolio, the Group is well positioned to face the growing importance of the issue of CO₂ and the trend towards downsizing. No default risk concentrations exist for individual corporate customers.

Quality risk
Right from the product development stage, we aim to identify and rectify quality problems at the earliest possible point so as to prevent potential delays to the start of production. The increasing use of modular components means that, when vehicle defects occur, the cause of the defect must be identified and eliminated as quickly as possible. In the reporting period, we further optimized the process by which defects are rectified in the brands and improved its organization so as to counter the related risks.

Growing production volumes, increasing complexity and the use of the Group’s toolkit system mean that the need for high-grade supplier components of impeccable quality is also rising. To ensure production and hence meet customer expectations, it is extremely important that our own plants and our suppliers deliver on time. The introduction of an internally-tested risk management system at suppliers is an important step towards ensuring long-term quality and supply capability early on in the supply chain. In this way, quality assurance helps to fulfill customer expectations and consequently boost our Company’s reputation, sales figures and earnings.

Sustained high demand in the Volkswagen Group’s key markets also presents particular challenges for quality assurance. Quality assurance is of fundamental importance especially in the growing automotive markets of Brazil, Russia, India and China, for which dedicated vehicles are developed and where local manufacturing operations and suppliers have been established. We analyze the conditions specific to each market and thus ensure growth in these regions. In cooperation with the central quality assurance function, we continuously develop effective measures to counter identified local risks and then implement those measures locally, minimizing quality defects from the outset.

Vehicle registration and operation criteria are set and monitored by national and, in some cases, international authorities. Some countries also have special, and in some cases new, rules aimed at protecting customers in their dealings with vehicle manufacturers. Therefore, we systematically ensure that the Volkswagen Group brands and their products fulfill all applicable requirements and the local authorities receive timely notification of all issues required to be reported. By doing so, we reduce the risk of customer complaints, administrative fines and other negative consequences for Volkswagen.

Personnel risk
The individual skills and technical expertise of our employees are a major factor contributing to the Volkswagen Group’s success. Our aim of becoming the top employer in the automotive industry improves Volkswagen’s chances of recruiting and retaining the most talented employees.

Our strategic, end-to-end human resources development strategy gives all employees attractive training and development opportunities, with particular emphasis placed on increasing technical expertise in the Company’s different vocational groups. By continuously expanding our recruitment tools and boosting training programs, particularly at our international locations, we are able to adequately address the challenges posed by growth from a human resources perspective.

In addition to the standard twin-track vocational training, programs such as our StP integrated degree and traineeship scheme ensure a pipeline of highly qualified and motivated employees. We counter the risk that knowledge will be lost as a result of employee fluctuation and retirement with intensive, department-specific training. We have also expanded our base of senior experts in the Group to ensure that the valuable knowledge of specialists retiring from Volkswagen is transferred to other employees.

Participation and codetermination are factors in the Volkswagen Group’s success. Employee involvement and motivation are two sides of the same coin. We aim to maintain a culture of participation at Volkswagen internationally as well. The challenge lies in crafting labor relations with the many trade unions and stakeholder representatives worldwide. We have created a framework for this with our Labor Relations Charter and have pledged our commitment to it.

IT risk
At Volkswagen, a global company geared towards further growth, the information technology (IT) used in all divisions Group-wide is assuming an increasingly important role. IT risks include
Unauthorized access to sensitive electronic corporate data as well as limited systems availability as a consequence of downtime or natural disasters.

We address the risk of unauthorized access to corporate data by using firewall and intrusion prevention systems and a dual authentication procedure. We achieve additional protection by restricting the allocation of access rights to systems and information and by keeping backup copies of critical data resources. We use technical resources that have been tried and tested in the market, adhering to standards applicable throughout the Company. Redundant IT infrastructures protect us against risks that occur in the event of a systems failure or natural disaster.

In addition, we continuously take measures to combat identified and anticipated risks during the software development process, when protecting the IT infrastructure and also in the allocation of access rights to systems and data resources. These preventative measures are taken with the aim of counteracting the growing intensity and quality of attacks on our IT systems and data resources at an early stage.

Volkswagen supplements its reliable technical protection against unauthorized access to sensitive data by systematically providing its employees with information and training. A Company-wide information security campaign was launched back in 2012, covering topics such as how to handle sensitive data.

Environmental protection regulations
The EU Regulation governing CO₂ emissions from passenger cars (443/2009/EC) and the EU Regulation governing light commercial vehicles of up to 3.5 tonnes (510/2011/EU), in effect since April 2009 and June 2011 respectively, set the specific emission limits for all new passenger car and light commercial vehicle models and the fleet targets calculated from the individual vehicle data of brands and groups in the 28 EU member states for the period up to 2019. They are an important component of European climate protection regulations and therefore form the key regulatory framework for product design and marketing by all vehicle manufacturers operating in the European markets.

From 2012 onwards, the average CO₂ emissions of European manufacturers' new passenger car fleets may not exceed the figure of 130 g CO₂/km. Compliance with this requirement is being introduced in stages: 75% of the fleet had to meet this requirement in 2013, 80% must meet it in 2014 and the entire fleet in 2015. A further significant reduction in European passenger car fleet emissions to 95 g CO₂/km from 2020 onwards has also been resolved.

The EU’s CO₂ regulation for light commercial vehicles requires limits to be met from 2014 onwards, with targets being phased in over the period to 2017: the average CO₂ emissions of new registrations in Europe may not exceed the figure of 175 g CO₂/km, a target required to be met by 70% of the fleet in 2014. The long-term target has also been set, subject to the European Commission’s current review: for the period after 2020, the limit is to be set at 147 g CO₂/km. Like the CO₂ regulation for passenger cars, the regulation provides for derogations from the targets, for example by offering relief for eco-innovations.

The European Commission intends to set out the CO₂ regime for the period after 2020 by the end of 2014. Politicians are already discussing reduction targets for the transport sector for the period to 2050, such as the 60% reduction in greenhouse gas emissions from 1990 levels cited in the EU White Paper on transport published in March 2011. It will only be possible to meet these long-term goals by also making extensive use of nonfossil sources of energy, in particular in the form of renewable electricity.

At the same time, CO₂ or fuel consumption regulations are also being developed or introduced outside Europe – in Japan, China, South Korea, India, Brazil, Mexico and Australia, for example. In the USA, a new consumption regulation will impose uniform fuel consumption and greenhouse gas rules in all states of the USA for the period from 2017 to 2025. The law was signed by the US president in mid-2012.

The increase in CO₂ and consumption regulations mean that the latest mobility technologies are required in all key markets worldwide. Electrified and pure-play electric drives will also gain more and more ground.

The Volkswagen Group closely coordinates technology and product planning with its brands so as to avoid breaches of emission limits, which would entail severe sanctions. In principle, the EU legislation permits some flexibility. For example:

- Excess emissions and emission shortfalls may be offset between vehicle models
- Emission pools may be formed
- Relief may be provided in the form of credits that are granted for additional eco-innovations contained in the vehicle and that apply outside the test cycle
- Special rules are in place for small series producers and niche manufacturers.

Whether the targets are met, however, depends crucially on the Group’s technological and financial capabilities, which are reflected, among other things, in our drivetrain and fuel strategy (see page 140).

The other main EU regulations affecting the automotive industry include:

- EU Directive 2009/33/EC on the promotion of clean and energy-efficient road transport vehicles (Green Procurement Directive)
- EU Directive 2006/40/EC relating to emissions from air-conditioning systems in motor vehicles
- Passenger car energy consumption labeling directive 1999/94/EC
- Revised Energy Taxation Directive 2003/96/EC: updates the minimum tax rates for all energy products and power.
The implementation of the above-mentioned directives by the EU member states serves as a flanking measure for the CO₂ regulations in Europe. As well as vehicle manufacturers, they are also aimed at other stakeholders such as the mineral oil industry. Vehicle taxes based on CO₂ emissions are having a similar effect; many EU member states have already incorporated CO₂ elements into their rules on vehicle taxation.

Heavy commercial vehicles put into operation from 2014 onwards are already subject to the stricter emission requirements under the Euro 6 standard in accordance with EU Regulation 595/2009/EC. At the same time as the CO₂ legislation for passenger cars and light commercial vehicles, the EU is preparing a further CO₂ regulation for heavy commercial vehicles. Setting one overarching limit for these vehicles – like that in place for passenger cars and light commercial vehicles – is extremely complicated because of the wide range of variants (tractor units with different trailers or bodywork). With the support of the European Automobile Manufacturers’ Association (ACEA), the European Commission is currently preparing a simulation-based method that can be used to determine the CO₂ emissions of heavy commercial vehicles of over 7.5 tonnes according to their typical use (short- and long-haul trips, service on construction sites, city buses and coaches). This method is expected to be the basis for the European Commission’s concrete regulatory proposals, which are anticipated by the end of 2014 and likely to enter into force in 2017/2018.

Manufacturers of heavy commercial vehicles are urging the adoption of a system for quantifying CO₂ figures that is accessible to everyone and that looks at the vehicle as a whole, and not simply at the engine or the tractor, in order to increase transparency and therefore competition in the market.

As part of its efforts to reduce the CO₂ emissions of heavy commercial vehicles, the European Commission is also planning to revise the provisions regarding the maximum permissible dimensions of trucks (Directive 1996/53/EC, the Weights and Measures Directive). By relaxing the legal length restrictions, it may be possible to design vehicles in an aerodynamic way without losing any loading space. Air resistance falls in a rounded and streamlined design, cutting fuel consumption. Considering the vehicle as a whole could save up to 25% in fuel through the aerodynamic design of cabs and trailers, as well as additional technical innovations (e.g. low rolling resistance tyres, hybridization).

In the Power Engineering segment, the International Maritime Organization (IMO) has implemented the International Convention for the Prevention of Pollution from Ships (MARPOL), which aims to reduce marine pollution and which is phasing in limits on exhaust emissions from marine engines. Emission limits also apply, for example, under EU directive 1997/68/EC and the US EPA (Environmental Protection Agency) marine regulations. As regards stationary equipment, national rules are in place worldwide and have to be applied locally. On December 18, 2008, the World Bank Group set limits for gas and diesel engines in its “Environmental, Health, and Safety Guidelines for Thermal Power Plants”, which are binding if individual countries have adopted no or less strict national requirements. In addition, back in 1979, the United Nations adopted the Convention on Long-range Transboundary Air Pollution, setting limits on total emissions as well as nitrogen oxide limits for the signatory states (including all EU states, other countries in Eastern Europe, the USA and Canada). Enhancements to the product portfolio in the Power Engineering segment are focusing on improving the efficiency of the equipment and systems.

In order to be optimally prepared for the third emissions trading period starting in 2013, we calculated and disclosed the required CO₂ emissions to be reported for our German plants in accordance with the Datenrhebungsverordnung (DEV 2020 – German Data Collection Regulation). We have submitted the appropriate applications for the allocation of certificates to the Deutsche Emissionshandelsstelle (DEHSt – German Emissions Trading Authority) for all our plants. Our other plants in the European Union were also checked in accordance with the relevant national laws in force at those locations and action was taken to ensure that applications were submitted to the relevant national authorities in good time.

The allocation method for emissions certificates changed fundamentally when the third trading period (2013 – 2020) began. As a general rule, all emission allowances for power generators are being sold at auction starting in 2013. For manufacturing industry and certain power generation installations (e.g. combined heat and power installations), a portion of the certificates are allocated free of charge on the basis of benchmarks applicable throughout the EU. The share allocated for free will gradually decrease as the trading period progresses; the remaining quantities of certificates required will have to be bought, and thus paid for, at auction. Furthermore, installation operators can partly fulfill their obligation to hold emission allowances using certificates from climate protection projects (Joint Implementation and Clean Development Mechanism projects).

For certain (sub-) sectors of industry where there is a risk that production will be transferred to countries outside Europe due to the amended provisions governing emissions trading (a phenomenon referred to as “carbon leakage”), a consistent quantity of certificates will be allocated free of charge for the period from 2013 to 2020 on the basis of the pan-EU benchmarks. The automotive industry is not on this list because in the past it did not meet the criteria examined. It is currently unclear whether it will be included in the carbon leakage list when this is updated in the future.

In 2013, the European Commission decided to initially withhold a portion of the certificates to be auctioned and to only release them for auction at a later date during the third trading period (“backloading”). This temporary shortage of certificates during the trading period may cause certificate prices to rise.
As well as the European Union, other countries in which the Volkswagen Group has production sites are also considering introducing an emissions trading system. Seven pilot projects have started in China, for example, although they have not so far affected the Volkswagen Group. The Chinese government plans to expand those pilot projects into a national emissions trading system.

Litigation

In the course of their operating activities, Volkswagen AG and the companies in which it is directly or indirectly invested become involved in legal disputes and official proceedings in Germany and internationally. In particular, such legal disputes and proceedings may occur in relation to suppliers, dealers, customers, employees, or investors. For the companies involved, these may result in payment or other obligations. Particularly in cases where US customers assert claims for vehicle defects individually or by way of a class action, highly cost-intensive measures may have to be taken and substantial compensation or punitive damages paid. Corresponding risks also result from US patent infringement proceedings.

Where transparent and economically viable, adequate insurance cover is taken out for these risks and appropriate provisions recognized for the remaining identifiable risks. The Company does not believe, therefore, that these risks will have a sustained effect on the economic position of the Group. However, as some risks cannot be assessed or can only be assessed to a limited extent, the possibility of loss or damage not being covered by the insured amounts and provisions cannot be ruled out.

ARFB Anlegerschutz UG (haftungsbeschränkt), Berlin, brought an action against Porsche Automobil Holding SE, Stuttgart, and Volkswagen AG for claims for damages allegedly assigned to it in the amount of approximately €1.8 billion. The plaintiff asserts that these claims are based on alleged breaches by the defendants of legislation to protect the capital markets in connection with Porsche’s acquisition of Volkswagen shares in 2008. The plaintiff may have to be taken and substantial compensation or punitive damages paid. Corresponding risks also result from US patent infringement proceedings.

Where transparent and economically viable, adequate insurance cover is taken out for these risks and appropriate provisions recognized for the remaining identifiable risks. The Company does not believe, therefore, that these risks will have a sustained effect on the economic position of the Group. However, as some risks cannot be assessed or can only be assessed to a limited extent, the possibility of loss or damage not being covered by the insured amounts and provisions cannot be ruled out.

The Annual General Meeting of MAN SE approved the conclusion of a control and profit and loss transfer agreement between MAN SE and Truck & Bus GmbH, a subsidiary of Volkswagen AG, in June 2013. In July 2013, award proceedings were instituted to review the appropriateness of the cash settlement set out in the agreement in accordance with section 305 of the Aktiengesetz (AktG – German Stock Corporation Act) and the cash compensation in accordance with section 304 of the AktG. It is not uncommon for noncontrolling interest shareholders to institute such proceedings. Volkswagen continues to maintain that the results of the valuation are correct. The appropriateness of the valuation was confirmed by the audit firms engaged by the parties and by the court-appointed auditor of the agreement.

Suzuki Motor Corporation has filed an action against Volkswagen AG at a London court of arbitration for retransfer of the 19.9% interest held in Suzuki, and for damages. Volkswagen considers the claims to be unfounded and has itself filed counterclaims. The court of arbitration is expected to reach a decision in 2014.
Strategies for hedging financial risks

In the course of our business activities, financial risks may arise from changes in interest rates, exchange rates, raw materials prices, or share and fund prices. Management of financial and liquidity risks is the responsibility of the central Group Treasury department, which minimizes these risks using nonderivative and derivative financial instruments. The Board of Management is informed of the current risk situation at regular intervals.

We hedge interest rate risk, where appropriate in combination with currency risk, and risks arising from fluctuations in the value of financial instruments by means of interest rate swaps, cross-currency swaps and other interest rate contracts with matching amounts and maturity dates. This also applies to financing arrangements within the Volkswagen Group.

Foreign currency risk is reduced in particular through natural hedging, i.e. by flexibly adapting our production capacity at our locations around the world, establishing new production facilities in the most important currency regions and also procuring a large percentage of components locally, currently for instance in Russia, China and Mexico. We hedge the residual foreign currency risk using hedging instruments. These include currency forwards, currency options and cross-currency swaps. We use these transactions to limit the currency risk associated with forecasted cash flows from operating activities and intragroup financing in currencies other than the respective functional currency. The currency forwards and currency options can have a term of up to six years. We use them to hedge our principal foreign currency risks associated with forecasted cash flows, mostly against the euro and primarily in US dollars, sterling, Chinese renminbi, Swiss francs, Mexican pesos, Swedish kronor, Polish zloty and Australian dollars.

Raw materials purchasing entails risks relating to the availability of raw materials and price trends. We limit these risks mainly by entering into forward transactions and swaps. We have used appropriate contracts to hedge some of our requirements for commodities such as aluminum, copper, lead, platinum, rhodium, palladium and coal over a period of up to seven years. Similar transactions have been entered into for the purpose of supplementing and improving allocations of CO₂ emission certificates.

Risks arising from financial instruments

Channeling excess liquidity into investments gives rise to counterparty risk. Partial or complete failure by a counterparty to perform its obligation to pay interest and repay principal would have a negative impact on the Volkswagen Group’s earnings and liquidity. We counter this risk through our counterparty risk management, which we describe in more detail in the section entitled “Principles and Goals of Financial Management” starting on page 97. In addition to counterparty risk, the financial instruments held for hedging purposes hedge balance sheet risks, which we limit by applying hedge accounting.

By diversifying when we invest excess liquidity and by entering into financial instruments for hedging purposes, we ensure that the Volkswagen Group remains solvent at all times, even in the event of a default by individual counterparties.

Risks arising from trade receivables and from financial services are explained in more detail in the notes to the consolidated financial statements, starting on page 254.

Liquidity risks

We ensure that the Company remains solvent at all times by holding sufficient liquidity reserves, through confirmed credit lines and through our tried-and-tested money market and capital market programs. We cover the capital requirements of the growing financial services business mainly by raising funds at matching maturities in the national and international financial markets as well as through customer deposits from the direct banking business. Financing conditions in the reporting period were almost unchanged compared with 2012.

For this reason and thanks to the broadly diversified structure of our sources of funding, we were always able to raise sufficient liquidity in the various markets.

Credit lines from banks are only used within the Group to cover short-term working capital requirements. Projects are financed by, among other things, loans provided at favorable interest rates by development banks such as the European Investment Bank (EIB), the International Finance Corporation (IFC) and the European Bank for Reconstruction and Development (EBRD), or by national development banks such as Kreditanstalt für Wiederaufbau (KfW) and Banco Nacional de Desenvolvimento Econômico e Social (BNDES). This extensive range of options means that the liquidity risk to the Volkswagen Group is extremely low.

A downgrade of the Company’s rating could adversely affect the terms attached to the Volkswagen Group’s borrowings. However, in
In the reporting period, hybrid notes were issued in the amount of €2.0 billion in order to further strengthen our liquidity and capital base with a view toward future global growth and the systematic implementation of our Strategy 2018. In June 2013, in addition to the mandatory convertible note issued in November 2012 in the amount of €2.5 billion, Volkswagen AG successfully placed a further mandatory convertible note in the amount of €1.2 billion, which entitles and obliges holders to subscribe for Volkswagen preferred shares. These transactions increased not only the Volkswagen Group’s net liquidity, but also its equity in accordance with International Financial Reporting Standards.

Residual value risk in the financial services business
In the financial services business, we agree to buy back selected vehicles at a residual value that is fixed at inception of the contract. Residual values are set realistically so that we are able to leverage market opportunities. We evaluate the underlying lease contracts at regular intervals and recognize any necessary provisions if we identify any potential risks.

Management of the residual value risk is based on a defined feedback loop ensuring the full assessment, monitoring, management and communication of risks. This process design ensures not only professional management of residual risks but also that we systematically improve and enhance our handling of residual value risks.

As part of our risk management, we use residual value forecasts to regularly assess the appropriateness of the provisions for risks and the potential for residual value risk. In the process, we compare the contractually agreed residual values with the fair values obtainable. These are determined utilizing data from external service providers and our own marketing data. We do not take account of the upside in residual market values when making provisions for risks.

More information on residual value risk and other risks in the financial services business, such as counterparty, market and liquidity risk, can be found in the 2013 Annual Report of Volkswagen Financial Services AG.

Other factors
Going beyond the risks already outlined, there are other factors that cannot be predicted and are therefore difficult to control. Should these transpire, they could have an adverse effect on the further development of the Volkswagen Group. In particular, these factors include natural disasters, epidemics and terror attacks.

OVERALL ASSESSMENT OF THE RISK AND OPPORTUNITY POSITION
The Volkswagen Group’s overall risk and opportunity position results from the specific risks and opportunities shown above. We have put in place a comprehensive risk management system to ensure that these risks are controlled. The most significant risks to the Group may result from a negative trend in unit sales of, and markets for, vehicles and genuine parts, from the failure to develop and produce products in line with demand and from quality problems. Taking into account all the information known to us at present, no risks exist which could pose a threat to the continued existence of significant Group companies or the Volkswagen Group.