



NEW AUTO Strategy Presentation

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Speech of Herbert Diess

Chairman of the Board of Management Volkswagen AG

- check against delivery –

It is always fascinating to see **the engagement of our people**. It's our **diversity** and **scale** – our **enthusiasm for individual mobility** – that make us so **unique**.

And it is the **rich history** of mobility that has excited generations – **iconic products** like the Volkswagen **Beetle**, the **Golf**, the Audi **Quattro** or the Porsche **911**.

With our **electric models**, the **IDs**, the Audi **e-trons** or Porsche **Taycan**, we have laid the foundation for fascinating and precious, future-proof brands.

Six years ago we set ourselves a strategic target: to become **global market leader in EVs**. Our strategic timeframe was 2025. And **we are well on track**.

Now it is time to move on, to look ahead. Our new focus: **The world of mobility in 2030**. We are setting **new priorities**.

There is strong evidence that **many parameters, paradigms, rules of thumbs, heuristic knowledge** and **experience** we have accumulated over the past 100 years of automotive history will **fundamentally change**. So it is time to reinvent.

We are currently experiencing the **transition from the combustion engine to e-mobility** – an important step towards a cleaner planet.

The next much **more radical change** is the transition towards much **safer, smarter** and finally **autonomous cars**.

As the car is becoming the **most complex, most sophisticated and most desirable internet device**, the logic of the **smartphone industry** might apply.

That means for us: **Technology, speed and scale** will matter more than today. Customers logging into reliable **digital eco-systems** to get new functions by the day will be the new rule of the game.

Until 2030, the world of mobility will have seen the greatest transformation **since the transition from horses to cars** at the beginning of the 20th century.

The future of cars, the future of individual mobility, will be bright!

Today we will present our **strategy through 2030**. We call it „**NEW AUTO**“ because cars are **here to stay**.

Individual mobility will remain the most important means of transport in 2030. In fact, people driving or being driven in **owned, leased, shared or rented cars** will still account for **85% of mobility**. Those 85% will be at the **core of our business**.

At the same time cars and our business models **will change more than ever before**.

Let me take you on a **journey to the year 2030**. Mobility in 2030 will be **autonomous, digital, smart, sustainable and safe**.

Our industry will be able to deliver completely **new user experiences**: **Autonomous vehicles** will be driving us around in an **emission-free, connected, electric world**.

Until 2030, the **market for mobility as a service** is forecast to grow from **less than 10 billion dollars** today to **more than 100 billion dollars**. Propelled by driverless robo taxis moving around in cities and suburban areas.

Imagine that your **grandmother** or your **8-year-old son** can hop in a **VW-CAB** to visit one another whenever they want, without mom or dad behind the wheel.

Or maybe you just need a **quick ride within the city**. You can use one of our **mobility apps** – and an **ID.BUZZ¹** will pick up you and your friends, driverless.

Like in **robo taxis**, in **private cars**, too, **autonomous driving** will be available – at least on open **highways** in many parts of the world.

You can spend your time in the car **working, playing with your children, talking to friends or watching movies**.

First-class business trips can happen in total privacy, driverless, in premium Audis, or Bentleys. The **mobile office** will become reality.

Travelers can **sleep** in **electric busses** that drive **overnight**, waking up relaxed at their holiday spots of choice.

Traffic will be much **safer**: **Vehicles** and **infrastructure** will be **communicating** to significantly **reduce traffic jams and accidents**. Today, most accidents are caused by

¹ The vehicle is not for sale yet

human error, failure or fatigue. The **virtual driver** will be much **better** and **safer** than any human.

Cars will become **emission-free**. Even big SUVs will be **environmentally friendly** and **sustainable**. Cars are **losing** almost **all their negative attributes**.

And, chances are good that **cars** will become **more accessible** in many parts of the world. Because the **energy efficiency** of EVs is just so much better. And in most parts of the world **electric energy is already cheaper** than gasoline.

The new world of individual mobility will bring **other benefits for society**, too. Electric cars will be part of the **public electricity management**.

Serving as the **relevant buffer to stabilize grids** and **shaving the peaks of oversupply** – several 100 hours per year in many grids worldwide – with the share of renewables increasing.

A **gigantic power bank** for private homes, cities and entire regions.

Cars will **balance the renewables capacity**. Customers will be **compensated** for this. Which, as a result, **will make charging free of cost** at certain hours.

Autonomous driving will also become more **affordable** over time through scale: Software, miles driven and the small proportional cost of silicon for computer chips will make autonomy relatively cheap given the additional convenience it offers.

Autonomous driving will **become a mass market**.

For our **business models**, that means **revenue** and **profit pools** will shift gradually through 2030: First from the **internal combustion engine – or ICE – to electric vehicles**, and later to **software and services**, with autonomous driving offering **new sources of revenue**.

The **ICE market** is set to **decline** by over 20 percent over the next 10 years.

Maintaining **high cash flows** from our ICE business to **finance the transition** will be paramount. Our **CFO Arno Antlitz** will tell you later why we are **confident** that we will be **able to finance the transition** from our own cash flows.

At the same time by 2030, the **global electric vehicle** market will be **on par with ICE sales**.

We will be more profitable with EVs because **batteries and charging** will **increase the share in value add** and with our **platforms** we will be **more competitive**.

Keeping the **batteries** for **second-life use** and finally for **recycling** will allow for **additional value creation**. We are aiming at keeping **control** of the valuable **raw material production** for **first use in the car, second use as home storage** and then **full recycling**. The **circular economy**.

Direct customer contact and more **consecutive lease-cycles** will allow us to keep **customers longer** with us and **generate resilient revenues** over the entire life cycle of a car, finally also maintaining **higher residual values**.

We are aiming at **higher market shares in EVs**. With our **global platforms** we will **increase scale** right from the start, in China, the EU and the U.S., allowing even **other industry players** such as **Ford** to **benefit** from our economies of scale.

Electric cars will get **cheaper** over time driven by advancements in **battery technology** and **scale**, with the **price for mobility falling below today's level**.

Industry revenues are going to **double** in size compared to today.

The **data** we gather through **direct customer relationships** will allow us to **constantly expand** and offer **better services**.

This might explain why **tech companies** are **seeking to enter the mobility industry** despite enormously high entry barriers such as capital intensity and long lead times to reach relevant size and customer acceptance.

For comparison: **Revenues** in the **global smartphone market**, including app stores, amounted to **500 billion dollars** last year. The **automotive market** is projected to total **5 trillion euros** by 2030 – that's ten times as much.

With our own combination of world-class brands, supported by then globally leading technology platforms, our position to tap into those profit pools is good.

In the NEW AUTO world, **brands** will remain a **key differentiator**.

Customers will still choose a **specific design, body style and brand or service quality**. But more than ever, **brand differentiation will come from software and services**.

Our brands will **evolve and modernize**, become **more specific and precise** in their value propositions. They will change their customer approaches radically with **direct touch points and more immediate and continued customer proximity**.

Already today, our brands are **leading in their segments**.

Audi is the most advanced premium brand electrifying its product portfolio. The Audi e-tron is the industry's first fully-electric premium SUV. The Q4 e-tron the first Audi on the MEB platform – probably the most desirable one with clear premium appeal. The e-tron GT² has become Audi's new brand shaper with 800V charging capabilities, impressive performance and outstanding design.

And **Audi will further increase its e-product portfolio**. Its new strategy is called Vorsprung. Audi is ready to take the lead.

With its high-tech project **Artemis** – a highly efficient, sophisticated electric car with level 4 driving features – Audi will yet again develop **cutting-edge technology for the whole Group**. Focusing much more on the spacious luxury interior, which will give the car new proportions and start a **new design era** for Audi.

² Audi e-tron GT - combined power consumption in kWh/100 km: 20.2 - 18.8 (NEDC); combined CO2 emissions in g/km: 0; efficiency class: A+

Now in control of **Bentley**, Audi will use this technology to build the most sophisticated **luxurious Bentley**, thereby entering segments that haven't been accessible to the Audi brand before.

Audi can use the **supreme technology** at an even **higher price range** and **capitalize** on the **respective economies of scale**.

Bundling **Bentley's all-electric luxury** car portfolio with **Lamborghini** and **Ducati** in the Audi premium group will further **leverage all possible synergies** in premium.

With **Markus Duesmann** and his team now fully in charge of the Group's premium activities, we have **efficiently organized** our premium brand portfolio.

The leading premium brand.

On its Way to Zero, the **Volkswagen brand** is driving electrification worldwide with its **Accelerate strategy**. Volkswagen will be the **market leader in EVs by 2025**, by rolling out the **leading BEV platform**.

With the **complete ID. family** – the ID.3, ID.4, ID.5³ and ID.6⁴, as well as the **iconic ID.BUZZ**⁵ coming already next year, Volkswagen has been building up the **most comprehensive EV product portfolio** in the industry yet.

³ The vehicle is not for sale yet

⁴ The vehicle is not for sale in Europe

⁵ The vehicle is not for sale yet

All **relevant global segments** are already covered by **specific EV offerings**:

- Golf class: ID.3 (compact hatch)
- Tiguan: ID.4 / ID.5⁶ (compact SUV)
- Atlas: ID.8⁷ (mid-sized SUV)
- Passat: ID.6⁸ (B-sedan)
- T7: ID.Buzz⁹ (van)

And, with its high-tech future project **Trinity**, a level-4 ready fully electric car, the Volkswagen brand will bring the **Artemis** technology **into the volume segment. Affordable for all.**

Leading the volume group, Volkswagen provides scale and technology for our other brands:

CUPRA – with its emotional cars built on Volkswagen’s technology platform MEB – is already outselling Alfa Romeo and quickly gaining traction in both quality and quantity of sales.

Based on the same technology, **Skoda** offers state-of-the-art cars with an unbeatable value for money proposition.

With **Skoda** being the most profitable volume brand and **CUPRA** at the brink of sustainable profitability, **margins in the volume group** will continuously improve.

⁶ The vehicle is not for sale yet

⁷ The vehicle is not for sale in Europe

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⁹ The vehicle is not for sale yet

Volkswagen Commercial Vehicles is evolving more and more into a **lifestyle brand**, offering the range of famous California vehicles. And soon launching our most emotional electric car so far, the ID. Buzz¹⁰.

It will significantly **contribute to enhancing the appeal of the Volkswagen brand**, reloading it with **emotions** and **love**, particularly in the U.S. where the coming home after 30 years will boost our EV campaign in the market and bring back the emotional touch with all the memories from the `70s.

With the **ID. Buzz AD**, Volkswagen is preparing the ground for **autonomous robo taxis**, laying the ground for **Mobility as a Service** and **Transport as a Service**.

Through the combination of our commercial vehicle platforms with **Ford**, we are becoming **very competitive** in the light commercial vehicles and medium pickup trucks segment worldwide.

Commercial vehicles are currently undergoing the **most radical transformation** of all our brands with a lot of upside potential.

The leading volume brand.

Porsche performs in a league of its own. The company has shown resilient **EBIT margins of above 15%** over the past years.

¹⁰ The vehicle is not for sale yet

Porsche has always maintained a **higher degree of independence** while being **industrially integrated** into the Group – contributing technology and benefiting from scale and the Volkswagen manufacturing footprint.

Today, Porsche is **stronger** than ever before.

It has embraced **electrification early** and will sell **80% EVs by 2030**. The company will be **climate neutral** at that point as well.

Porsche is a strong testimony how an **automotive icon** can remain an **outstanding sports and performance brand** while **repositioning** towards **electrification** and **sustainability**.

The most desirable electric sports car.

To leverage future profit pools in a new mobility world, we are creating platforms that will be leading in the industry. The platform approach will be key to success in the new technology world.

As strategic backbones, these platforms will **offer cutting-edge technology** at **unparalleled scale**, at **high quality** and **competitive cost**. Available **worldwide**. They will allow our brands to tailor unique customer experiences fast.

The Mechatronics Platform, the next generation of our hardware platforms in the succession of MQB, MLB, MEB and PPE, will allow us to reduce complexity over time as we will consolidate our existing platforms to one architecture for the entire e-product portfolio from entry level to top of the range, from 85 to 850 KW. Our super-platform.

It will be **100% electric** and ready for **autonomous driving**, available for all models and brands, allowing to address all segments and allow for excellent differentiation for our brands.

To improve and speed up our Mechatronics platform competencies we will invest around **800 million Euros** into a new **research and development facility** in Wolfsburg, further improving **best practices in platform design**. The core of the **SSP platform** and its modules will be designed in the new **campus Sandkamp**.

Markus Duesmann and **Thomas Schmall** will lead the entire program and Markus will tell you more about it later.

Hardware platforms are the backbones that ensure customers get the best product and quality at the best price. It's software that will ensure the seamless integration of NEW AUTO into our customers' digital lives. And it is software that will deliver even higher economies of scale.

CARIAD is developing the **software backbone** for all group cars – **our own software stacks**. The **Volkswagen OS** will be the platform to deploy new software and features anywhere at any time and turn the car into a **continuously improving self-learning machine**.

By 2030, we target that **60% of our sales** and **up to 40 million cars** will be based on our own software stacks, gathering **large amounts of data** that will constantly make our products better.

CARIAD is well on its way to define the next software platforms and is continuously contributing more and more to our advancements in software, **i.e. starting now the software updates in the ID. product range.**

With the electrification of our fleet, we are building up the core competencies: battery cell technology, including chemistry and raw materials, charging and energy.

Volkswagen will be one of the **biggest battery users** globally. That is why we are working on our **own cell format** across all brands, which we will start rolling out in 2023. By 2030 it will cover **80 percent** of our electric volume.

We will continue to expand our **charging network in our key regions** – for that we've teamed up with leading energy companies including BP, Enel and Iberdrola across Europe.

We are also continuing to invest into our **charging infrastructures** in the **U.S.** with Electrify America and in **China** with CAMs.

The expansion of our charging and energy business will allow us to provide **seamless services** from **charging to energy management.**

Thomas Schmall and **Elke Temme** will share exciting news on our battery and charging business later on.

By 2030, Volkswagen will also have systems capabilities for robo taxi fleets. Mobility and transport as a service, fully autonomous, will be an integral part of our business model in 2030.

Robo taxi services require **four different layers** of activities.

- **A booking platform** to match demand and supply, holding the customer data and managing the payments. This platform can be **highly profitable**.
- **The operation of the fleet**, a services business, which we are testing with our **MOIA** brand in Hamburg.
- **The autonomous vehicle**. We will start with the **ID. Buzz AD**. More specific designs for driverless operations and more convenience are already in development.
- And the **virtual driver**, the **most complex software system** the world has seen so far – in fact, a worldwide **active neuronal network**, which continuously improves its driving capabilities. Also **potentially very profitable** because this AI software system could theoretically replace millions of taxi drivers globally.

At the same time, we will grow our **finance and lease business** and **expand our sharing and subscription offerings**.

Christian Senger and **Christian Dahlheim** will give you more details later today.

Sustainability – reducing our CO2 footprint and so safeguarding the future of individual mobility – is our mission.

By 2030 we will **reduce the carbon footprint per car** by 30% over its entire lifecycle, in line with the Paris Agreement. This equals roughly 15 tons of CO2 per car from today's 34 tons.

By the end of the decade we anticipate our **share of BEV sales** will rise to around **50% worldwide**. Within the next two years, we will have switched our **manufacturing sites** in Europe to **100% renewable energy**.

By **2040**, we expect to achieve nearly **100% zero-emission vehicles** in all major markets. And by **2050** at the latest, our global operations will be **climate-neutral**.

Over the next 10 years, we will heavily invest in the largest transformation Volkswagen has ever gone through.

For investments in future technologies, we have earmarked **73 billion euros until 2025**, representing currently **50%** of our total investments.

And we will continue to **raise efficiency** throughout the Group.

- We are on track to meet our **5 percent fix cost reduction program** for the next two years.

- We have committed ourselves to **reducing material costs by another 7 percent** – a challenge given the soaring raw material prices
- We have started a **working capital management initiative**.
- And we are **optimizing our ICE business** with fewer models, a much reduced ICE drivetrain portfolio, which we just agreed to reduce by another third, and a better price mix.

In 2030, **China, the U.S. and Europe** will remain our **main focus of our activities**. The next level of technologies will evolve in China and the U.S., while the EU is set to become the leader in decarbonization.

Starting from a **strong basis** in our two home markets – Europe and China – North America will be our main focus to **grow our market share**.

In regard to the U.S. market, there's **never been a point in time** where we were **better positioned to significantly increase our market share**.

The **Biden plan** gives us a unique opportunity to start from a **better position than the competition**, having built up an **open charging infrastructure** across the U.S. and having **invested** in the transition towards EVs in Chattanooga already.

We are ready to bring a **wide range of highly attractive EVs** tailored to the U.S. market. And participate over-proportionally at a time when everybody **has to start from scratch**. The **ID.4** had a flying start.

In **China**, Volkswagen has been the **unrivaled market leader** for many years with high profitability.

Our goal is to **achieve this position** also in the **Chinese e-mobility world**, competing with very innovative and speedy local brands and technology companies.

China will play a **crucial role** for the success of our strategy through 2030.

We achieved major milestones in recent months: Taking **majority stakes** in e-mobility businesses for Audi and Volkswagen for the first time. Investing in **local battery manufacturing**. And ramping up our **software capabilities**, with a CARIAD subsidiary, and launching our worldwide EV portfolio in **dedicated sites, Shanghai and Foshan**.

With the ID.6¹¹, ID.4 and ID.3 we are **rapidly rolling out our e-portfolio** this year. Our key electric joint venture **Volkswagen Anhui** will become the **local hub** for our **mechatronic architecture**. A new R&D center is under construction.

As China will grow faster than the rest of the world, we are gearing up our operations **with more local skills and capabilities**.

Taking our **660.000 people** through the transition is the biggest task for our leadership and requires a **new flexibility and adaptability** for each individual. Giving vision, direction and confidence is key to making the transition a success.

We have the **right strategy** to be at **least as successful in NEW AUTO as in the old world**. We are providing the training, reskilling and adequate working environments.

¹¹ The vehicle is not for sale in Europe

Together with the **works council**, we have made our German sites **fit for the future**, turning our plant in **Zwickau** into an e-mobility site and planning similar groundbreaking transformations for our plants in **Emden** and **Hanover**.

The transformation of our **Group Components** is unparalleled in the industry. With **Trinity** and **Artemis** we are planning two flagship projects for **Wolfsburg** and **Hanover**.

Our workers representatives have been supporting the strategy, ensuring **alignment between management and the workforce** and facilitating change, starting with the “**future pact**” back in 2016. In times of unprecedented change, our employees at our German sites will have **job security** through 2029.

So **much restructuring in such a short time** would not have been possible without reliable labour relations. My thanks therefore goes to the **works council**, led by Daniela Cavallo.

Because **competitive profitability is a basis for long-term safe jobs**, it is an important goal for us. I am convinced that together with Daniela Cavallo we have a **solid basis** of trust to continue **working successfully** on our future.

The mobility world will be changing radically over the next decade.

Individual mobility has a **bright future** as we are making it **emission-free, safe and convenient**.

Being driven safe and comfortably, fast though smooth in beautiful cars will be a very desirable new experience.

Volkswagen, with its innovative brands and state-of-the art platforms in its NEW AUTO strategy, is preparing to play an important role in this new world.