FOUR-DOOR UP! 2012 – BENSBERG DRIVE

up!

UP! 2012

VIERTÜRER / FOUR-DOOR UP!

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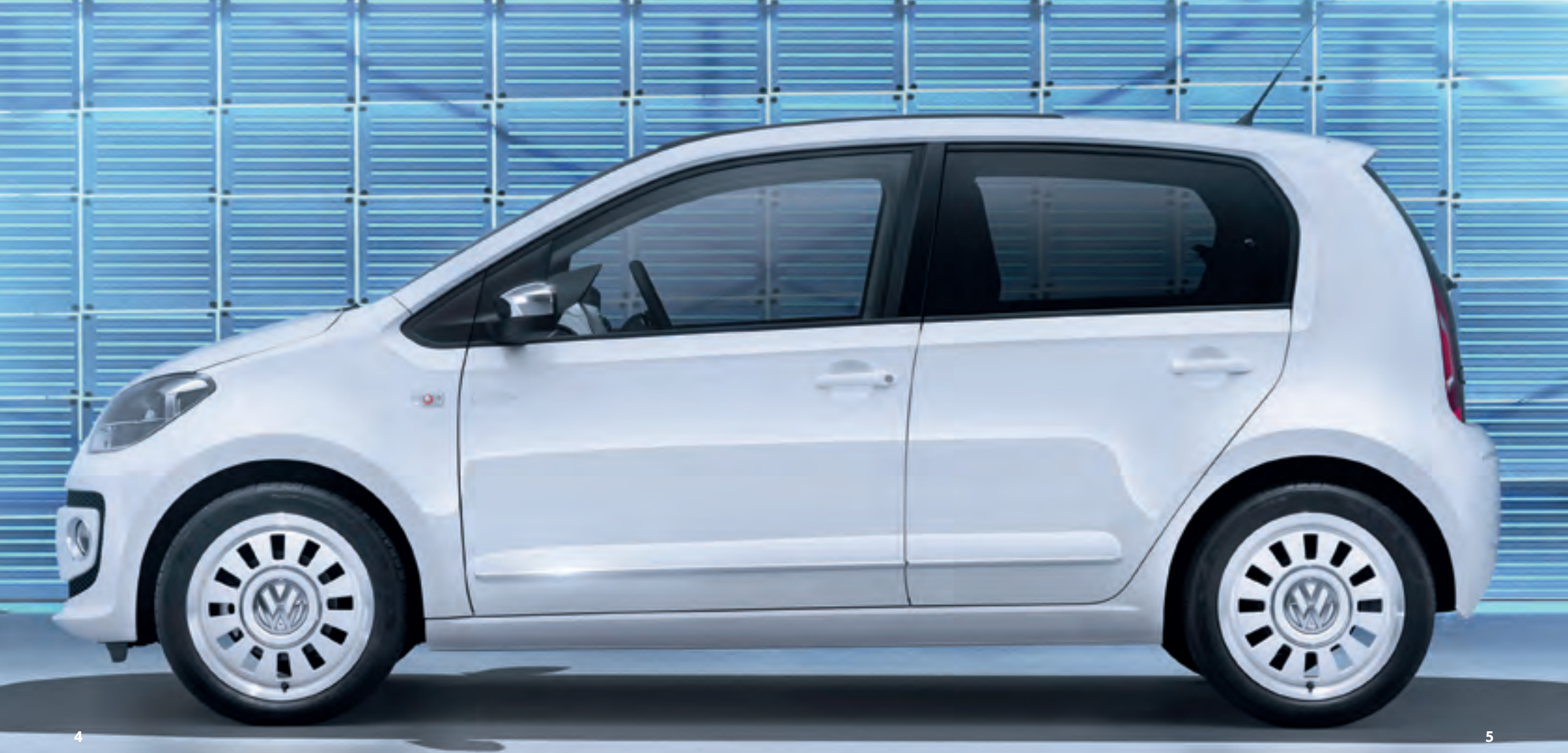
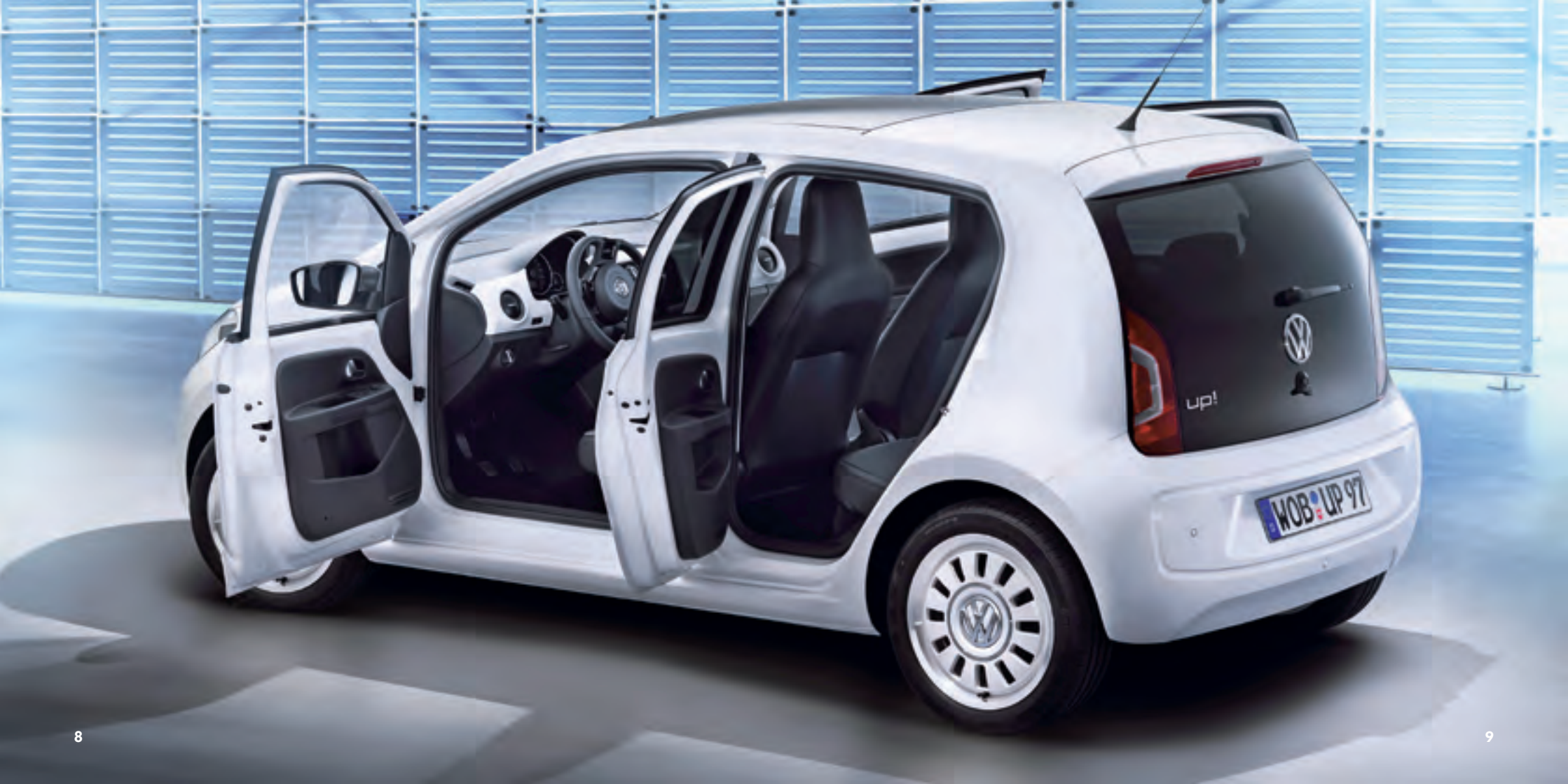


up!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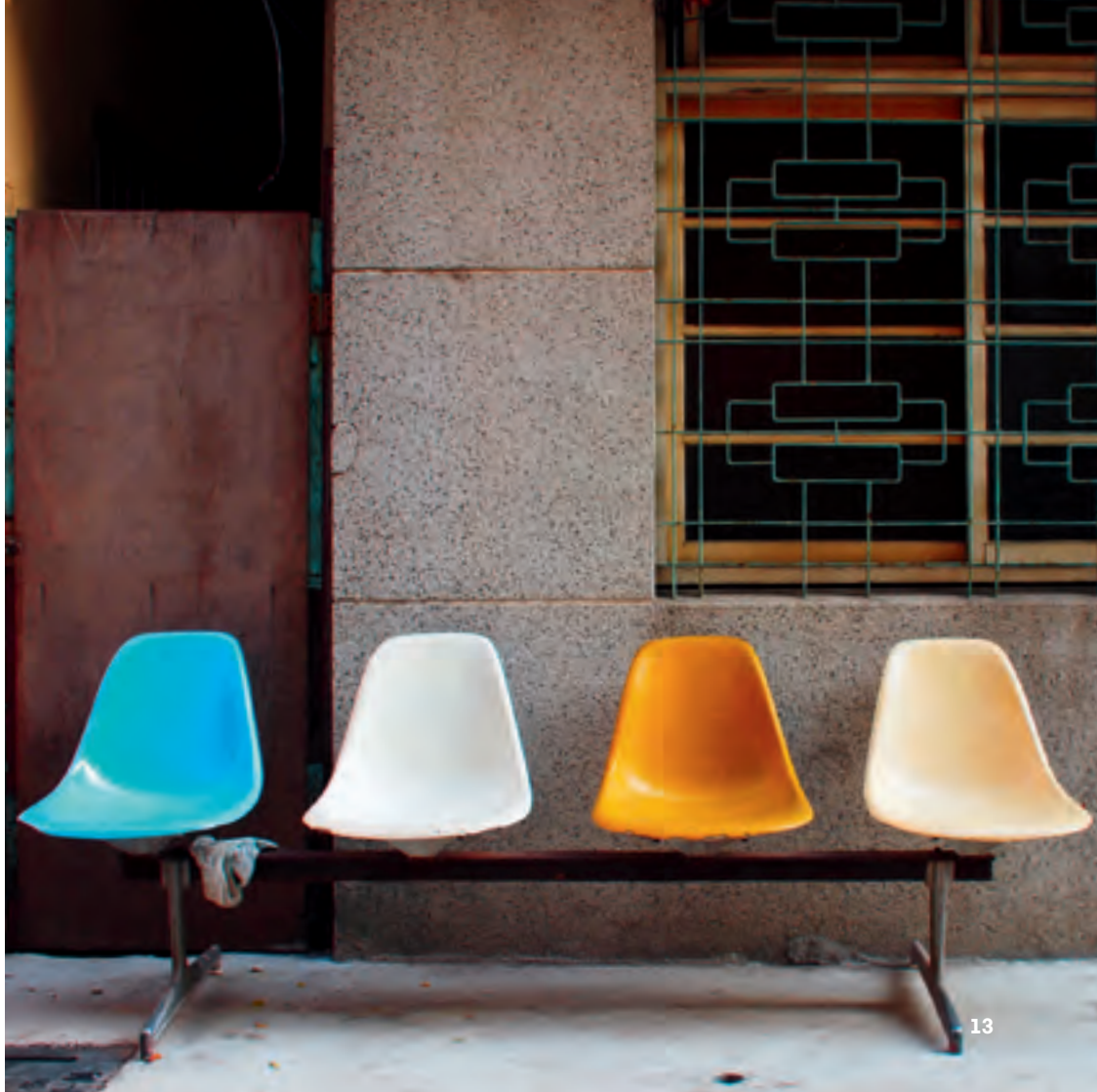
WOB UP 97

Volkswagen

up! four-door – Driving Presentation

Bensberg, March 2012



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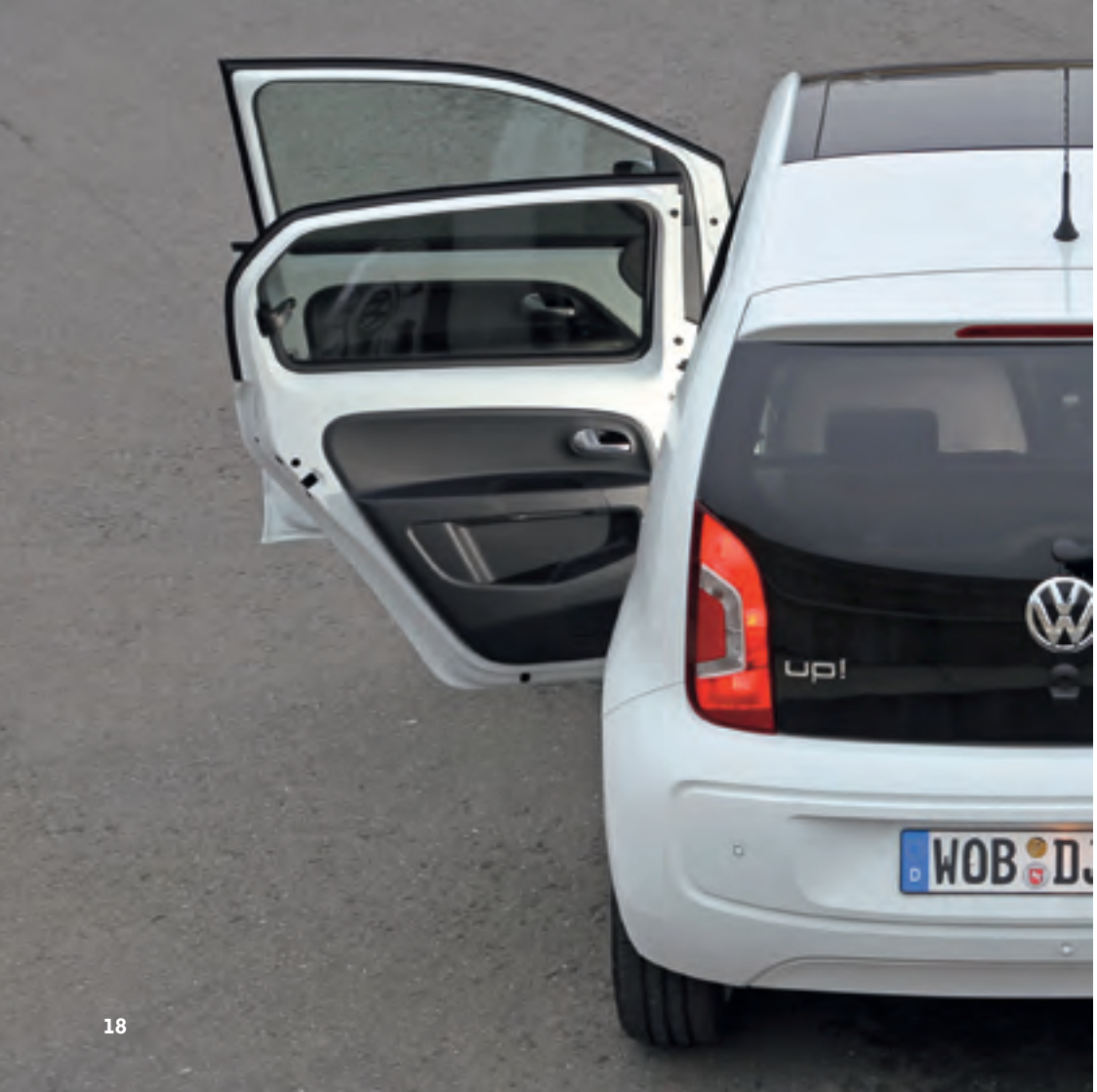
To the point

Key aspects

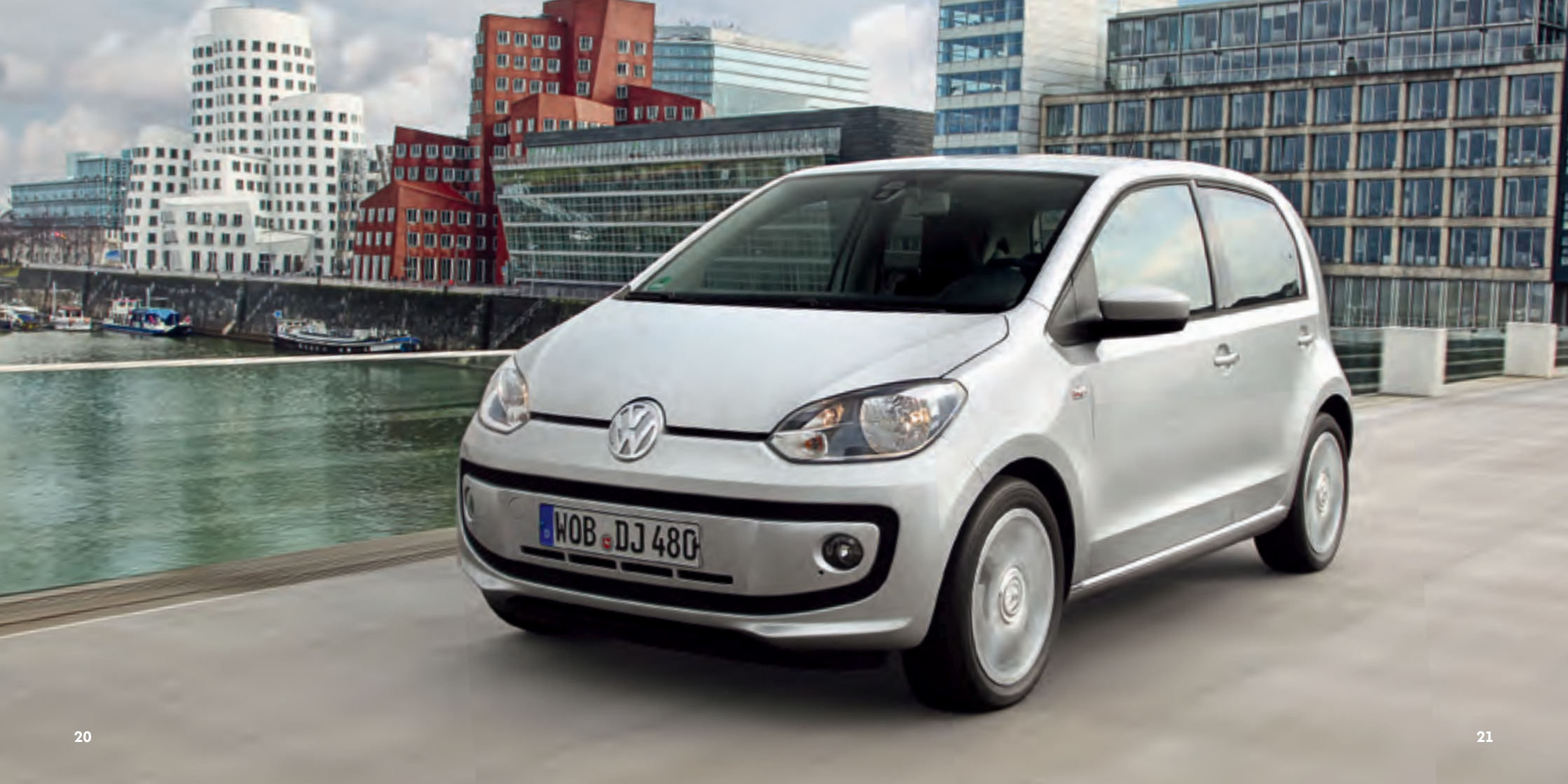


City specialist makes its debut as a four-door vehicle:

Second body version of the up! launches in March

Four-door up! share will be about half of production volume

up! to be launched this spring with automatic gearbox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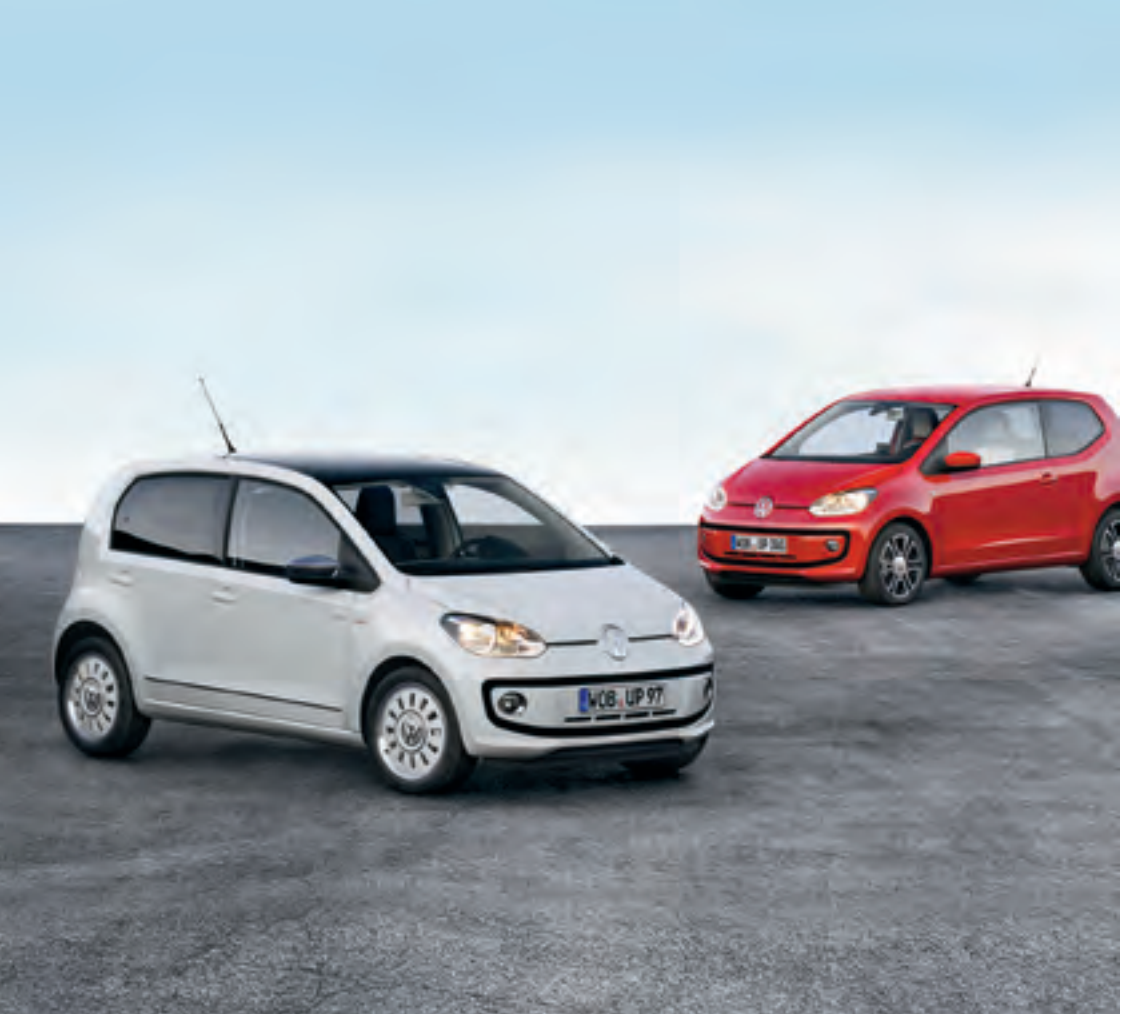


Wolfsburg / Bensberg, March 2012. The two-door up! by Volkswagen is one of the most important automotive highlights of the past year. All signs point to a big future for the small car. In Germany, for example, the up! immediately garnered first place in its class in registration statistics. Now, in 2012 Volkswagen is raising the bar by presenting, alongside the eco up!, the four-door version of the city specialist. In May, the four-door version will arrive at dealers in Germany; market roll-out of the four-door car will be complete by early summer for all of Europe. The four-door has the same engines (44 kW/60 PS and 55 kW/75 PS), equipment versions (take up!, move up!, high up!, black up!, white up!) and dimensions (3,540 mm long, 1,641 mm wide without mirrors, 1,478 mm high) as the two-door cars.

Independent side profile

- Naturally, the car's four doors have changed the look of its side profile. While the lower window line of the two-door rises towards the rear near the C-pillars, it forms a straight line on the four-door car. This gives the new body version a high level of independence. The crisp and short body overhangs are also distinctive on the four-door. The front and rear sections are identical on both body versions. This also means that buyers of the four-door version will get to enjoy a bootlid whose outer skin consists of a continuous glass surface; this gives the bootlid the high-tech and high-end look of a smartphone. Beneath the bootlid, there is a boot with a volume of 251 litres; cargo capacity can be extended to up to 951 litres by folding down the rear backrest (60:40 split bench from the move up!).

Comfortable driving with four persons

- The rear doors open wide and offer comfortable entry – including for adults. The four-seat, four-door car offers the same good interior space as the two-door, and the amount of space is remarkable given the vehicle's size. Headroom in the rear is 947 mm, while it is 993 mm in front. Legroom in the second row is a comfortable 789 mm. The seat height on the rear bench has a pleasant effect: the height of the so-called H-point – the vertex where the seat surface and backrest meet – is 378 mm in the rear, which is higher than in front (306 mm). This higher seat position gives rear passengers a better view over the shoulders of the driver and front passenger. Just as important: there is plenty of space under the front seats for the feet of the rear passengers.

Braking automatically

- It is only logical that Volkswagen would offer the same optional features in both the four-door and two-door up!. They include clever systems such as City Emergency Braking. The up! is the first car in its class that can be automatically braked by such a function in a tight situation; the function is active over a speed range from 5 to 30 km/h.

maps+more

- Also available as an option is a portable navigation and infotainment system with touchscreen. It contains a navigation system, hands-free telephone unit, display of various vehicle parameters and media player. In addition, apps can be used to customise maps+more to personal requirements. maps+more is snapped into place on the dashboard and then it is networked with the electronic systems of the up!. A rare treat in the segment of small cars is the enormous panoramic tilt/slide sunroof that Volkswagen decided to include in the up!.

Standard version is well equipped

- Outside, the small Volkswagen in the basic version, the take up!, is equipped with 14-inch wheels, body-coloured bumpers and green tinted heat-insulating glass. As on all up! models, the body is partially galvanised. Inside, details such as the folding rear bench seat, colour contrasting air vent surrounds (in the colour 'white'), carpeted floors and a fabric-lined bootspace cover are used. Convenience features distinguishing the take up! include a rear windscreen wiper, electromechanical power assisted steering, height-adjustable steering column, convenience direction indicators (1 press = 3 flash cycles) and daytime running lights. Sophisticated: the gloss black panel in the middle of the dashboard. When it comes to passive and active safety, standard features include front airbags and head-thorax side airbags plus a seatbelt fastening reminder for driver and front passenger, belt tensioners in front, ABS with ASR, ESP electronic stabilisation programme (in Germany), ISOFIX fixtures and top-tether fittings for mounting suitable child seats in the rear and a deactivation function for the front passenger airbag (when using a child seat there).

Engines and gearboxes of the up!

- Fuel economy and driving performance values are identical for both up! body versions. They are powered by three-cylinder petrol engines with 44 kW/60 PS or 55 kW/75 PS; both engines fulfil the Euro 5 emissions standard and drive the front wheels. The combined fuel consumption as a BlueMotion technology version (with such features as a Stop/Start system, battery regeneration and tyres optimised for low rolling resistance): 4.1 l/100 km (60 PS) and 4.2 l/100 km (75 PS). Both 1.0-litre engines satisfy the 100 g/km CO_2 emissions limit. As an alternative to the standard 5-speed manual gearbox, for the first time Volkswagen will be offering these two petrol engines with a new, automatic 5-speed gearbox as an option over the course of the year. In the 'D' automatic mode, the gearbox selects the optimal switch moment in terms of consumption, thus lowering consumption again compared to the manual version.

up!
grade

Finance, insurance and servicing paid via new up!grade package:

Flexible financing and substantially reduced running costs

Finance through up!grade: AutoCredit[2] affordable even for first-time drivers

Insurance through up!grade: save several hundred euros per year with FairPay

AUTO CREDIT²

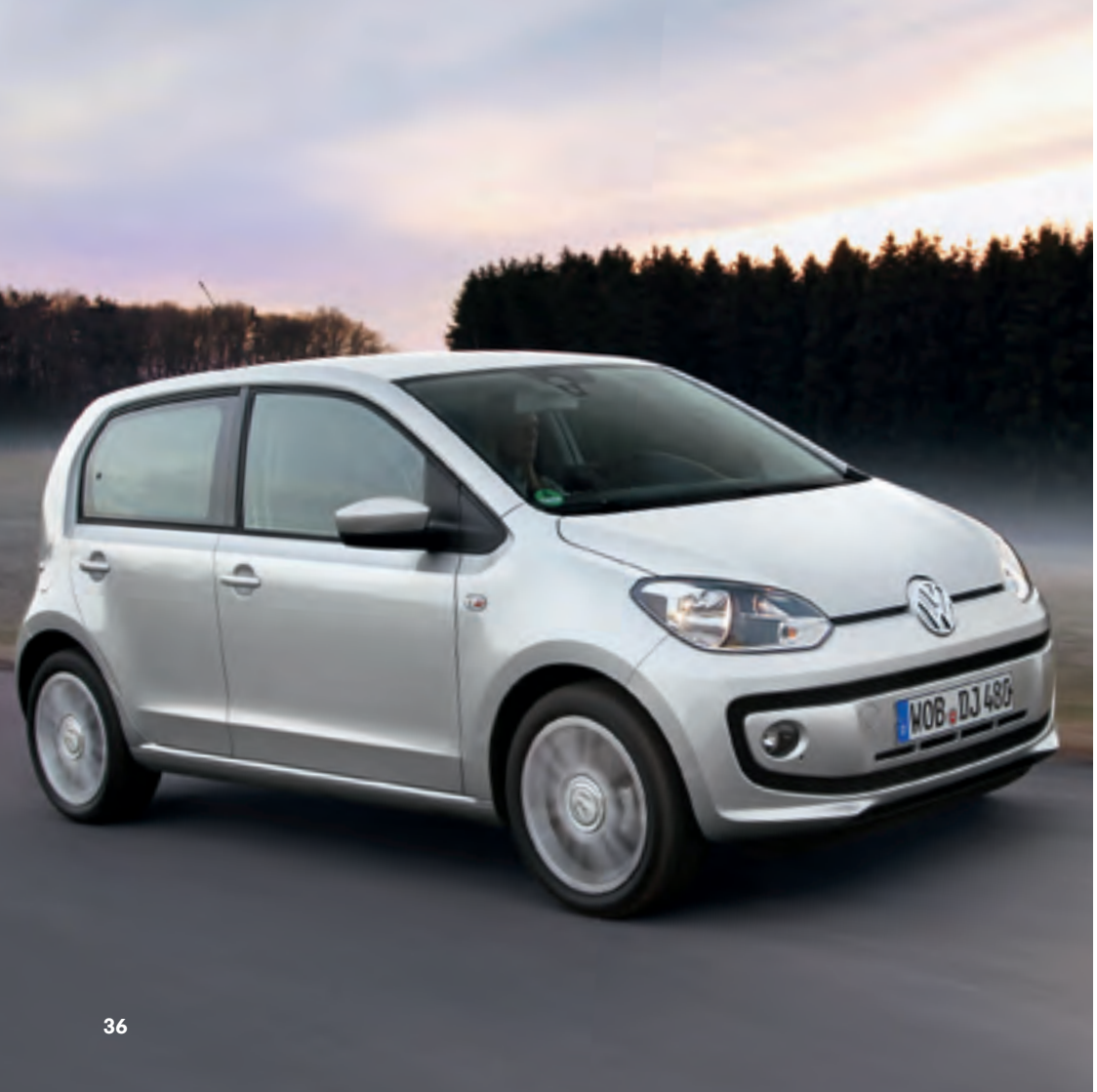
Wolfsburg / Bensberg, March 2012. Especially important for all those who do not want their personal budget to be excessively strained by the purchase of a new car or cannot afford one: the four-door up! can also be ordered with the up!grade package. This is the name for the financial services package that consists of flexible financing, economical car insurance and maintenance and service for a fixed monthly rate.

AutoCredit². The first component is AutoCredit² financing at an effective interest rate of 3.90 per cent. This financing gives new car buyers the option of dividing the loan agreement period into two halves with different interest rates – this can fit very nicely with an individual's changing life situation. As an alternative, in 'classic' AutoCredit the up! may be financed at a uniform interest rate or leased under favourable conditions.

FAIRPAY

FairPay insurance. The second component of the up!grade package is FairPay insurance. This is a general liability and full comprehensive insurance for customers at least 23 years of age (and a minimum no-claims category of 'SF1') at a fixed monthly rate of 29.90 euros. And for younger customers too – for whom maintenance costs often prevent the purchase of a new car – FairPay provides for comprehensive insurance at a monthly rate of 59.90 euros. The very economical FairPay insurance offers up! drivers considerable cost advantages of up to several hundred euros per year.

Maintenance and service inspection costs. The third component of the up!grade package is coverage for maintenance and service inspection costs at an inexpensive monthly rate. For 11.90 euros per month, for example, the up! gets all scheduled service inspections listed in the service schedule (maximum of 48 months and 10,000 km annually). This also makes the up! one of the most affordable cars on the market for first-time car owners.

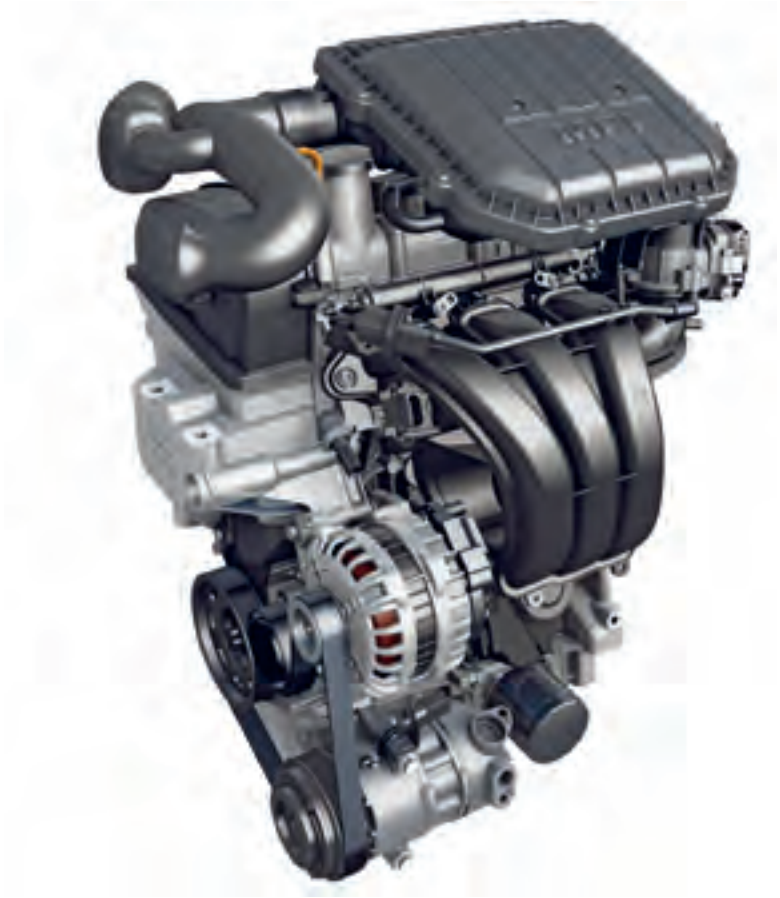


Innovative and yet affordable:

up! scores with new drive system, safety and information technology

Sustainable:
natural gas debuts in 2012
and electric drive in 2013

Ingenious:
world's first small car with
City Emergency Braking and maps+more



Wolfsburg / Bensberg, March 2012. The up! is a small car. Yet, today even small cars have to handle tremendous technical tasks. More than ever, stringent requirements for fuel efficiency, safety, comfort and infotainment demand tremendous efforts in small car development. This especially applies to the up!. This car, available as a two-door or four-door model, is a completely new design. A look at its technologies – with new engines and gearboxes as well as multimedia modules – makes this very clear.

New EA211 engine generation

Efficient petrol engines with 1.0 litre displacement. Together with the up! debut at the end of 2011, a new generation of three-cylinder petrol engines (EA211) also made its debut. Although the new 999 cc four-cylinder engines share the same 82 mm cylinder spacing of Volkswagen's successful EA111 engine series, they are completely new engine designs. The engines output 44 kW / 60 PS and 55 kW / 75 PS, fulfil the Euro 5 emissions standard and drive the front wheels. Combined fuel consumption values for the BlueMotion Technology version (with such features as a Stop/Start system, battery regeneration, low-friction ancillary engine component drives and tyres optimised for low rolling resistance): 4.2 l/100 km (60 PS) and 4.3 l/100 km (75 PS). Both 1.0-litre engines satisfy the 100 g/km CO_2 emissions limit. These petrol engines can be ordered with either the standard 5-speed manual gearbox or an optional 5-speed automatic gearbox, also new. The two-door and four-door models do not exhibit any differences with regard to fuel economy, emissions or driving performance data.

Natural gas engine with record value of 79 g/km CO_2. An up! version with a natural gas engine with 50 kW / 68 PS and the same basic technology will follow later this year. Its combined fuel consumption of 2.9 kg/100 km (CNG) is equivalent to a groundbreaking CO_2 value of 79 g/km; the up! EcoFuel will launch on the market as a BlueMotion Technology version as standard. There are also firm plans for an up! with an electric drive in 2013, and a study of the up! Blue-e-Motion was also shown at the IAA in September.

Variable intake camshaft. The new petrol and EcoFuel engines, all produced from aluminium, are as compact as they are lightweight, and they were systematically designed for the least possible internal friction. The two overhead camshafts are driven by toothed belts; the intake camshaft is variable – this further reduces emissions and fuel consumption and improves the power curve in the lower rev range. The valves are activated via cam followers with very low friction. The engine's dual-circuit cooling system and integrated water-cooled exhaust manifold ensure short engine warm-up times for a quick transition to the optimal engine temperature range. Each cylinder is equipped with a separate ignition coil.

All of the internal combustion engines in the up! have bore / stroke dimensions of 74.5 / 76.4 mm. The compression ratio of the petrol engines is 10.5:1, while the natural gas version has a compression ratio of 11.5:1. Engine control is performed by a Bosch Motronic unit, type ME 17.5.20.

Aluminium crankcase. The three-cylinder engines of the up! each have an aluminium crankcase that is die-cast in 'open deck' construction. To reduce weight here, most of the mounting points for ancillary components are located directly on the crankcase. This eliminates the need for an otherwise usual ancillary drive bracket. The grey cast iron cylinder liners enable reliable engine operation with all of the types of petrol available in the world.

Innovative crankshaft drive makes balancer shafts unnecessary. In laying out the crankshaft drive, engineers were able to reduce further moving masses, thereby minimising friction in the system. The connecting rods and pistons are weight-optimised to such an extent that the balancer shafts that are otherwise obligatory in three-cylinder engines could be eliminated – while maintaining the same comfort levels. Engine weight and drive friction – and therefore fuel consumption – were further reduced by the small main and connecting rod bearings. Six crankshaft counterweights are used to reduce mass forces and therefore the load on the main bearing. These are design measures that have given the up! engines the potential to be literal endurance runners.

Cylinder head has 12 valves. The cylinder head of the up! with four valves per cylinder is cast from an aluminium alloy. The valves suspended at the tops of the combustion chambers are laid out angles of 21 degrees (intake) and 22.4 degrees (exhaust), and as noted they are activated by cam followers. The valve stems have a diameter of 5 mm. The cylinder head has an integrated exhaust manifold, which, as mentioned previously, brings the engine's operating temperature up to its optimal level faster. The engine coolant is heated faster during the cold start phase, because the exhaust channels within the head merge at a central flange. In normal operation, on the other hand, the exhaust gas stream is cooled more intensively, and the engines can be operated at an optimal fuel-to-air ratio of $\lambda=1$. Once again, the results are reduced emission and fuel consumption values.

Acoustic comfort of a large car. The topic of weight reduction runs like a common thread throughout the engine area, all the way to the engine's swivel mounts: the solution implemented in the up! with its rubber-metal elements not only provides for very good isolation of the body from vibrations of the three-cylinder engine; it is also the lightest in the entire competitive field. Furthermore, it was already verified that weight-optimised insulating and damping concepts could be implemented in the up! in the initial concept phase. An example: in the concept, engineers provided sufficient installation space in the area of the engine bulkhead for the usual, relatively expensive firewall insulation, but it is not designed as the usual moulded part – instead as a more economical and very lightweight stamped part. Good sound insulation of the interior was achieved by special tuning of structural damping in its interaction with other acoustic elements. The up! development team also focused on systematic sealing of the body to minimise entry of undesirable noises into the passenger compartment, and this also minimised the need for sound-absorbing materials. In general, the new up! is characterised by a noticeably lower noise level than in many other vehicles in this class, because of its excellent insulation and acoustic damping.

ECO

1.0 MPI with 44 kW / 60 PS. From its 999 cc displacement, this entry-level engine develops a lively 44 kW / 60 PS at 5,500 rpm. Its maximum torque of 95 Nm is available between 3,000 and 5,000 rpm. 90 per cent of maximum torque is available between 2,000 and 6,000 rpm. This results in good agility in nearly all engine rev ranges. In the base version with the 5-speed manual gearbox, a combined fuel consumption of 4.5 l/100 km is attained, which is equivalent to 105 g/km CO_2. For the version with BlueMotion Technology, the values are 4.2 l/100 km and 97 g/km. In conjunction with the 35-litre fuel tank used in the up!, this yields a theoretical range of 833 km. The up! with 60 PS and a manual gearbox accelerates to 100 km/h in 14.4 seconds and reaches a top speed of 160 km/h (161 km/h and 14.5 seconds as a BlueMotion Technology version).

1.0 MPI with 55 kW / 75 PS. The more powerful version of the 1.0-litre engine has the same displacement and same bore (74.5 mm) and stroke (76.4 mm) dimensions. The power gain is achieved by a modification to the engine controller. This results in a maximum power of 55 kW / 75 PS at 6,200 rpm. The maximum torque of 95 Nm is identical. With a manual gearbox, the 75-PS engine has a combined fuel consumption of 4.7 l/100 km (equivalent to 108 g/km CO_2). The BlueMotion Technology version attains 4.3 l/100 km and 99 g/km CO_2. The 'large' up! with a manual gearbox has a top speed of 171 km/h and completes the sprint to 100 km/h in 13.2 seconds (174 km/h and 13.3 seconds as a BlueMotion Technology version).

1.0 EcoFuel with 50 kW / 68 PS. Volkswagen's EcoFuel badge has long stood for one of the cleanest and most fuel-efficient ways to drive a car – with natural gas (CNG – Compressed Natural Gas). Until now, EcoFuel engines were reserved for the Touran, Passat and Caddy. Now, for the first time Volkswagen will be launching an EcoFuel version in a very small model – in the new up!. Here too, the company is using the newly developed 1.0-litre three-cylinder engine which in this case outputs 50 kW / 68 PS (at 6,200 rpm) and develops a maximum torque of 90 Nm (between 3,000 and 4,300 rpm). Compared to versions exclusively fueled with petrol, this engine's compression ratio was increased from 10.5:1 to 11.5:1. The valves and valve seat rings were also reinforced to withstand the higher loads of natural gas combustion. In addition, the induction manifold has separate mounting points for the supplemental stainless

steel gas distributor. With this engine configuration, the eco up! accelerates to 100 km/h in 15.8 seconds. Its top speed: 168 km/h. Combined fuel consumption of the EcoFuel engine in conjunction with the BlueMotion Technology pack (including Stop/Start system and battery regeneration) that is standard here: 2.9 kg/100 km natural gas. This fuel consumption is equivalent to a CO_2 value of 79 g/km. Fuel costs per 100 km are below 3.00 euros (based on fuel price in Germany in February 2012). It is hardly possible to drive a car more economically in Europe today.

Natural gas tanks in the underbody. These incredible values are enabled by the high energy content of the natural gas; one kg of CNG has the same energy content as about 1.5 litres of petrol. The natural gas is stored in two underfloor tanks (34.5 and 37.5 litre capacity) located near the rear axle. Tank no. 1 is located in front of the axle together with a 10-litre reserve petrol tank; tank no. 2 makes use of the spare wheel recess. The natural gas reservoir together with the petrol reserve tank – the EcoFuel engine has a 'quasi monovalent' design and can also be operated with petrol – enable a range of over 550 km. Since the entire EcoFuel system was integrated in the vehicle structure, it does not impose any limitations on the car, except for the use of the spare wheel recess.

BlueMotion Technology – Stop/Start system. In the BlueMotion Technology versions, the up! is equipped with a Stop/Start system and a mode for recovering braking energy in battery regeneration. In addition, BlueMotion Technology models have an additional battery data module (to acquire momentary charge status), a heavy-duty starter, a DC/DC converter (guarantees voltage stability of the onboard electrical system) and a battery with excellent deep cycle performance. This is how the Stop/Start system works: the driver approaches a red light, slows to a stop, shifts to neutral and takes his or her foot off the clutch (with an automatic gearbox it is sufficient to press the brake pedal). This immediately shuts the engine off. The 'Stop/Start' indicator now appears on the multi-function display. As soon as the traffic light turns green and the driver puts his or her foot on the clutch, the engine automatically starts, the 'Stop/Start' indicator goes out, the driver puts the vehicle into gear and drives on. The Stop/Start system reduces fuel consumption by up to six per cent in city driving.

BLUE MOTION

BlueMotion Technology – battery regeneration. Battery regeneration helps to utilise the energy expended in driving as efficiently as possible. During coasting and braking phases of the up! – i.e. whenever the driver releases the accelerator pedal or brakes – the system elevates the voltage of the alternator (generator), and this electricity is used to charge the vehicle's battery. Thanks to this alternator control as a function of engine efficiency and the fact that the battery is thus always optimally charged, the alternator's voltage can be reduced, e.g. during acceleration or when constantly maintaining a desired vehicle speed. It is even possible to shut off the alternator entirely. This reduces engine load, which in turn lowers fuel consumption. The optimally charged battery also supplies the onboard electrical system with sufficient energy whenever the engine is stopped (e.g. at a traffic light). Battery regeneration requires special software for the energy management system and modified engine controller software.

Newly developed gearboxes

Five forward gears – manually. Volkswagen has specially tuned the new 5-speed gearboxes, which are made out of aluminium, to the three-cylinder petrol engines. The conventional manual gearbox version, referred to as the MQ100, weighs just 25 kg including transmission fluid, which makes it the world's lightest gearbox in this torque class (the gearbox also comes with indicators for the recommended gear and the engaged gear in the instrument cluster as standard). The gearbox is also built very compactly with a length of 341 mm and width of 462 mm.

Five forward gears – automatically. Also new is the automatic version of the gearbox. With a weight of less than 30 kg, the SQ100 is one of the lightest automatic gearboxes ever built. The automatic transmission offers 'D', 'N' and 'R' selections; as an alternative, the driver can switch over to manual shifting mode at any time. In the automatic 'D' mode, the gearbox selects the optimal fuel economy shift point and forward gear, which reduces fuel consumption even more compared to the manual version. An interesting fact found by gearbox developers is that during driving, twice as many shifting operations occur with the automatic version as with the manual gearbox. The automatic gearbox also exhibits a few differences in car operation compared to a conventional automatic with torque converter lockup clutch: this very efficient automatic transmission does without the park stage 'P'. This means that the up! is not started in 'P' (as is usual in other cars), rather in 'N' (neutral). If the car is stopped in the 'D' position, the gearbox automatically shifts to first gear.

Fifth gear as economy overdrive gear. Both gearboxes are designed for a maximum input torque of 120 Nm. The manual and automatic versions also both have a fifth gear with a long gear ratio. This economy gear reduces engine revs at higher vehicle speeds, lowering acoustic and exhaust emissions and of course reducing fuel consumption. The SQ100 is offered in conjunction with the two petrol engines of the up!.

SAFE

Agile and safe running gear

up! in Germany has ESP as standard. Since the introductions of the first Polo, Golf and Passat, Volkswagen has been relying on front-wheel drive technology. Since that time nearly four decades have passed, during which the principle of the Volkswagen front-wheel drive system was continually perfected. By the time the electronic stabilisation programme was introduced, the alliance of front-wheel drive and ESP revolutionised active safety. The up! cars are also offered with ESP as standard in countries like Germany. The system is integrated in the network of a MacPherson strut-type front suspension and a semi-independent rear suspension. The goal of this layout was to realise a very neutral, highly safe and comfortable chassis without losing sight of the special cost sensitivity of a small car.

Compact and lightweight suspensions. The driven front axle of the up! is, as mentioned, designed as a system with MacPherson-type struts and wishbones. A central component here is a subframe to which the single-shell transverse link is joined. At the same time, it absorbs forces of the stabiliser that is joined directly to the strut tower, as well as the steering unit and the swivel mount of the engine bearing. The lightweight but very rigid subframe is produced from high-strength steel that is only 1.8 mm thick. The semi-independent rear suspension also exhibits low weight and very compact construction. The up! will be available with an optional sport chassis as well; in this case, the body of the Volkswagen – equipped with stiffer spring-damper tuning – rides 15 mm lower to the road.

Economical power steering. All versions of the up! are equipped with electro-mechanical power assisted steering as standard. Volkswagen is also implementing steering systems of this type in numerous other models. Its main advantage: electro-mechanical power steering only operates when there is demand, i.e. only when it is needed. And this saves up to 0.2 l/100 km of fuel. Another advantage is the system's programmability; for example, it is possible to tune the steering for more sporty and direct responsiveness or for more comfortable steering. In the case of the up!, the parameters are the selected degree of active self-centring to the middle position and the steering comfort as well as a feeling of safety. The important self-centring characteristic, even over the slightest of steering angles, and speed-dependent build-up of steering torque convey a sense of very high precision to the driver. From lock to lock, there are exactly 2.9 steering wheel turns in the up!.

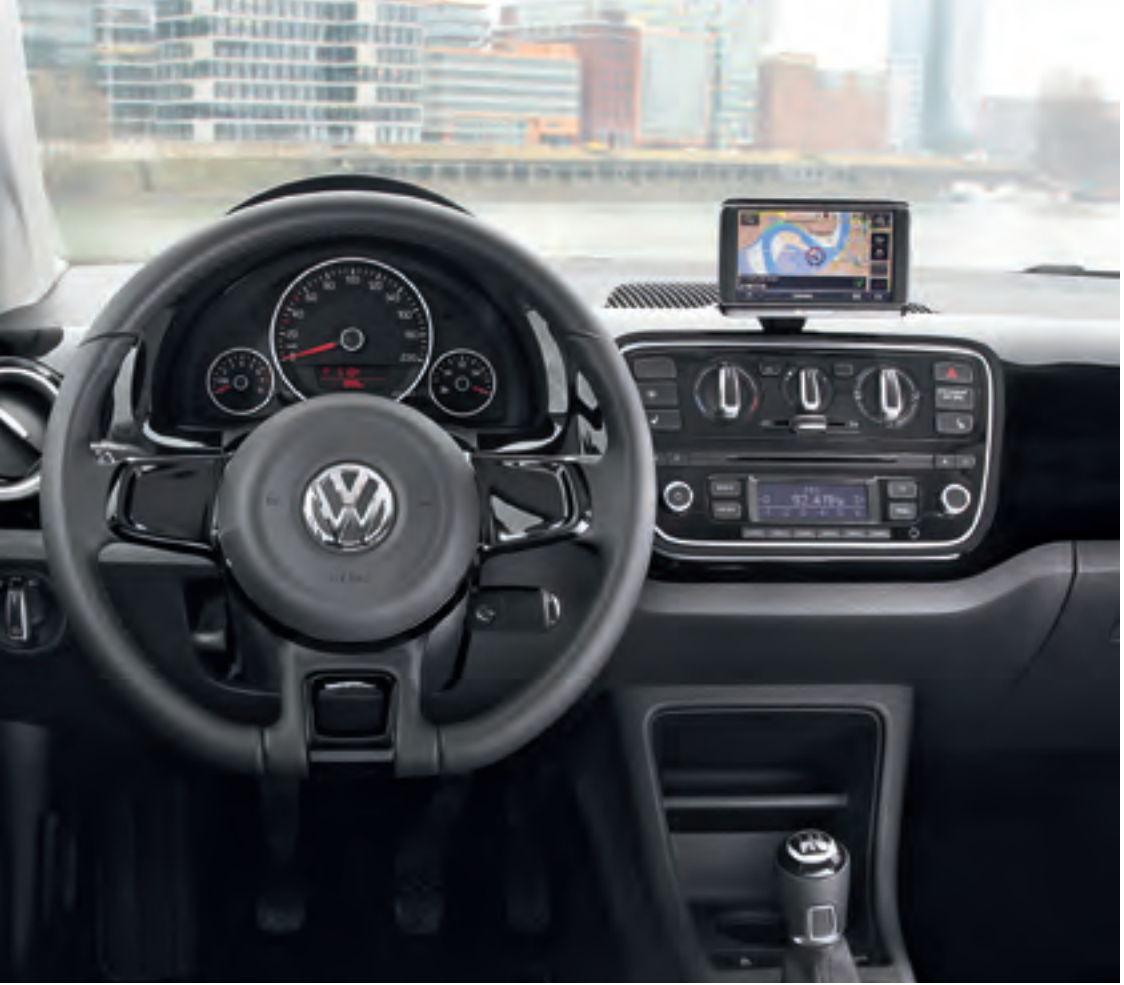
Sturdy brake system. At the front, the up! is decelerated with completely newly developed, ventilated 14-inch disc brakes. Compared to the brake discs of this size used by the company to date, Volkswagen was able to reduce their weight (per vehicle) by 1.5 kg; this too saves fuel. The reduction in unsprung mass has a positive effect on driving comfort as well. At the rear, Volkswagen is implementing a drum brake derived from the Polo, which ideally fits the power range and weight of the up!. A 9-inch brake servo unit optimises braking power. An innovative aspect of the system is that the power range of the brakes is subdivided into two maps. In the comfort braking range, the focus is on good force metering ability. Meanwhile, if more powerful braking is required, the second map is activated with a higher servo boost factor. This significantly reduces the 'foot force level' during hard braking – the force with which the brake pedal must be pressed –, and in the end this improves safety. In markets like Germany, the up! will also be equipped with the ESP electronic stabilisation programme as standard. Also included in the vehicle is an ABS anti-lock brake system.

City Emergency Braking

Automatic hard braking. A safety technology highlight of the up! is the optional City Emergency Braking function. It is automatically active at speeds below 30 km/h; it uses a laser sensor (integrated in the upper area of the windscreen) to scan a space 10 metres in front of the up! and detect the risk of an imminent collision. If such a collision with a moving or stationary object is imminent without any reaction by the driver, then the brake system is pre-conditioned, and in a second stage the hydraulic brake assistant is switched to a more sensitive mode. Depending on the situation, City Emergency Braking might then initiate, as a third stage, automatic hard braking to a stop, or alternatively support the driver with full braking power if the driver is braking insufficiently. When maximum risk of collision exists, the up! is braked with a deceleration of 10 m/s^2. Depending on the vehicle's speed and the driving situation, City Emergency Braking can reduce accident severity by automatic brake interventions – and possibly even avoid a crash. Nonetheless, the driver still assumes responsibility for the braking process.

Driver always has full access to the system. If it is deemed necessary, the driver can deactivate the intervention by City Emergency Braking at any time by pressing the accelerator pedal, steering or activating the clutch pedal. In addition, City Emergency Braking can be shut off entirely by pressing a button in the lower part of the centre console (e.g. for towing or on a dynamometer test stand). In this case, a related symbol appears in the instrument cluster with the text 'OFF' for 5 seconds to indicate the deactivation; in addition, the indication appears whenever the relevant vehicle speed range of 5 to 30 km/h is reached. If City Emergency Braking is defective, the symbol flashes slowly and continually. When City Emergency Braking is triggered, the symbol intermittently flashes briefly and at a quick interval.

maps + more



Multi-functional system maps+more

Mobile Information. The maps+more system, a multi-functional portable infotainment system, is debuting in the up!. It includes a navigation system, a hands-free telephone unit, displays of factual information related to the vehicle and a media player. In addition, apps can be used to tailor maps+more to a driver's highly individualised requirements profile. maps+more is snapped into a very high-end and sturdy bracket above the centre console, which interfaces it with the electronics network of the up!. maps+more offers the most systematic form of integration of portable devices being launched on the market today.

Affordable information. maps+more takes a comprehensive approach to offering infotainment for new cars at affordable prices. That is why, in the economically priced up!, a system was developed for organising the areas of navigation, telephone, information and entertainment at a competitive cost. In addition, this system was designed so that it could be brought up to the latest software levels by a simple update. In cooperation with Navigon, one of the world's leading suppliers of portable navigation systems, a special solution was tailored to the up! which is affordable for all buyers – maps+more.

maps+more in detail. In Germany, maps+more will cost 355 euros. In this case, the RCD 215 radio-CD system must also be ordered, and the radio can also be controlled via maps+more. Why are these two units coupled? Because playback of MP3 songs or the voice output of the navigation system or telephone conversations only operate properly if their output is via the radio system and the car's loudspeakers. The radio module with its two loudspeakers also costs 355 euros; for an added price of just 120 euros, the loudspeaker configuration can be extended from two to six. So, in the maximum configuration costing 830 euros, the buyer gets a complete radio-navigation system with voice control, CD/MP3 player, SD card interface (32 Gigabytes) for playing back music and images, hands-free telephone unit, multifunctional trip computer with fuel-saving trainer and other applications whose broad assortment is hardly matched by any other system on the market. The system's basic functions are organised under four main menus: 'Vehicle', 'Navigation', 'Media' and 'Telephone'. Each of these four menus is activated from the 5-inch colour touchscreen.

'Vehicle' menu

This menu is used to display information on the up! itself and helpful apps. They include…

- Information from the 'trip computer' (driving range, fuel consumption, average fuel consumption, vehicle speed, driving time and distance) with digitally generated analogue gauges for the tachometer, engine temperature and outdoor temperature;
- 'Door monitoring' (a visual representation of open doors, if the up! is equipped with central locking);
- 'Visual reversing assist' (a supplementary visual display of the optional acoustic-based ParkPilot function);
- The 'Notepad' function (input of signature via touchscreen), which can be installed from the Navigon Fresh portal;
- The 'High beam' flashlight/light function (the headlights of an up! light up in the display), which is also installed via Navigon Fresh;
- The 'ThinkBlue. Trainer'.

‘ThinkBlue. Trainer’ assists in sustainability

This trainer helps to save fuel and makes it easier to realise an eco-friendly and anticipatory style of driving. It monitors and analyses the use of the accelerator pedal, brakes and gear shifting, and it gives tips to drivers on how they might modify their style of driving to reduce fuel consumption.

In the start menu of the ‘Think Blue. Trainer’, the three functions ‘Driving’, ‘Fuel consumption’ and ‘Shifting’ are displayed as circular symbols. These three symbols let the driver know, very quickly, just how eco-friendly the car trip is going. The ‘Driving’ symbol, for example, with its integrated silhouette of the up! inside a circle, indicates by the size of the circle how fuel-efficient the driver’s driving style has been so far during the drive – the larger the circle, the less fuel-efficient the driving style over the driven time period. The ‘Fuel consumption’ symbol shows the average fuel consumption value since the beginning of the current driving trip. When the driver touches one of the three symbols on the screen, the related submenu is opened which shows further specific information. Under the ‘Driving’ menu, tips on driving behaviour are shown; this information can be used straight away to drive in a more eco-friendly way. The submenu under ‘Shifting’ provides detailed information on the ideal shift time points and how ideally shift recommendations were implemented over recent minutes. When the ‘Fuel consumption’ submenu is called, a graphic display shows fuel consumption values over the past 30 minutes.

Last but not least, maps+more thinks with the driver and – when the navigation system or map display is active – it can automatically seek out the next fuel refilling station at a specific fuel reserve level; this function is called ‘Low fuel warning’.

‘Navigation’ menu

First, this menu refers to a classic navigation system with voice control and TMC. Yet, maps+more clearly offers much more in this area as well.

- There is the ‘My vehicle’ menu item, for example. When parking the car (ignition off), the system automatically saves the position of the parked up!. On the way back to the vehicle, maps+more, now operating as a mobile navigation system, finds the way back to the parking location. This can be really helpful in unfamiliar cities.

- Of course, maps+more can also locate car parks.
- Those using the up! as a business car will also enjoy the 'Trip log' function.
- In addition, addresses and routes can be imported via Outlook, and different route profiles may be selected.
- Those who wish to can display their own motifs as a maps+more screensaver; in this case, the screen also shows the date, time and outdoor temperature.
- The system can also accept about 500 navigation destinations as personal favourites (POI = Points of Interest) and show map details in 3D.
- maps+more can also point out about two million POIs or attractions.
- The 'Call for help' command can be used (in this case, the display always shows the car's current position) to have maps+more place a call for emergency services at the nearest control centre.

'Media' menu

The combination of maps+more and the RCD 215 offers these options for playing music over the loudspeakers of the up!: the radio, a micro-SD card reader (for cards up to 32 Gigabyte) or the CD/MP3 player of the RCD 215. Photos and videos can also be displayed from an SD card. Those using an iPod or iPhone can also play back music over the system (streaming) via Bluetooth.

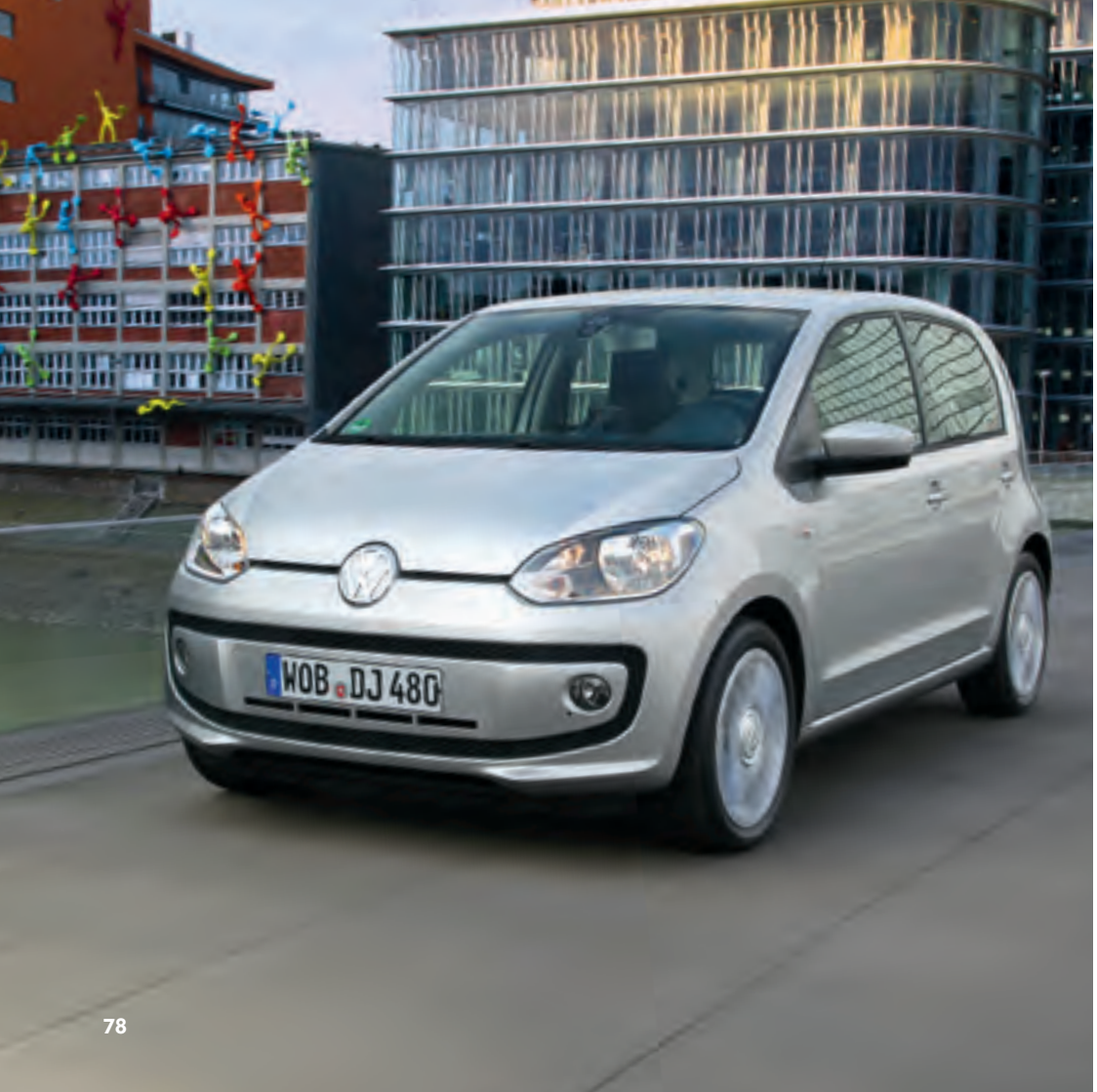
- In its visual display of individual media functions, maps+more enables a number of new options for the automotive field. For example, the radio broadcasting station can be shown conventionally as a name in text format, or it can be shown by the station's logo (the latest station listing can be downloaded at any time via Navigon Fresh).
- Just as on many MP3 players, it is also possible to display the album cover of the MP3 songs currently being played from the SD card.
- Photos can be presented as a slideshow via maps+more.
- Last but not least, radio and sound settings can be adjusted quickly and intuitively from the touchscreen under the 'Media' menu.

‘Telephone’ menu

When used with suitable Bluetooth telephones, maps+more offers a range of functions equivalent to that of a hands-free telephone unit. After interfacing to the telephone, the touchscreen displays a keyboard, the entire telephone book of the interfaced telephone and a directory of recent calls. Moreover, the telephone can be operated by voice control.

Other apps for maps+more

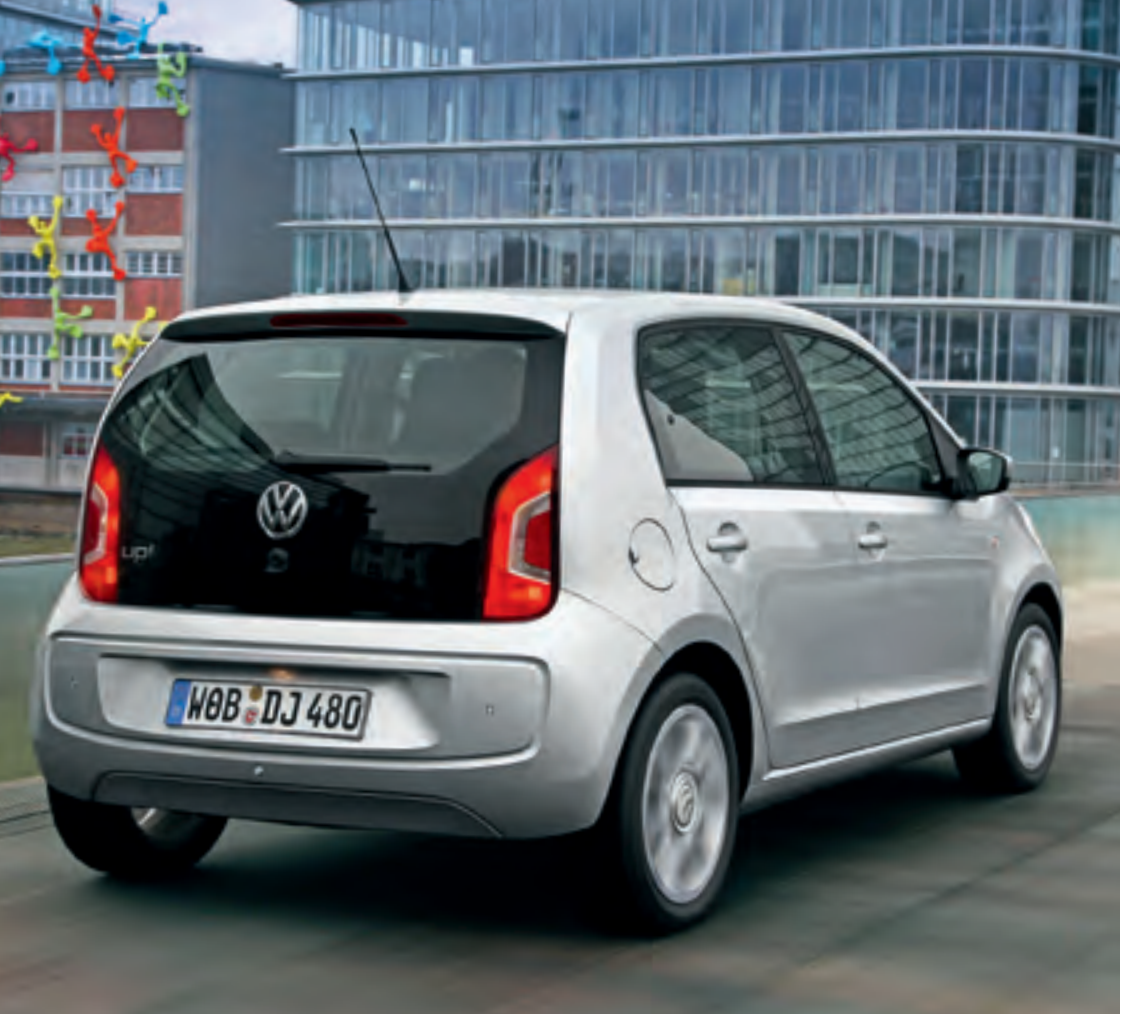
up! drivers can download additional apps for maps+more via the maps+more download portal. Extended functionalities are available free of charge. They include a First Aid app, a licence plate catalogue and a technical encyclopaedia. In addition, other apps are available from Navigon. Applications that can be downloaded include various travel guides, a 3D City View and a directory of natural gas refilling stations. For a low fee, up! drivers can also obtain an update of map materials for all of Europe (price in Germany: 19.99 euros for 24 months).



Lightweight, safe and aerodynamic:

Styling and dimensions for the world's metropolitan areas

Two body versions:
four-door supplements range
of the New Small Family



Wolfsburg / Bensberg, March 2012. At 3.54 m in length and 1.64 m in width (without door mirrors), the up! is one of the smallest of four-seat cars. The Volkswagen is 1.48 m tall. These dimensions are identical for both body versions of the up!. Its overall length consists of remarkably short body overhangs and a very long wheelbase (2.42 metres) – a body layout that fully utilises the available enclosed space.

Styling for a new era

up! front end. Viewed from the front, the up! appears to smile, due to the lines of the bumper. And it is intentionally smiling. A narrow black band runs between the headlights (with integrated daytime running lights). Integrated here is the Volkswagen logo, which is the only chrome element at the front end. The up! can make do without large air cooling intakes due to its small petrol and natural gas engines and electric motor that will follow later. The headlights are significantly smaller than those of other Volkswagens, yet they are visually very prominent. Klaus Bischoff, Head of Design of the Volkswagen Brand comments: “The front-end designs – from the up! to the Phaeton – all follow the same styling guidelines. The models are unified by such style elements as a strict emphasis of horizontal lines, joining of the grille and headlights and the conciseness of short angles. And yet, despite their clear brand affinities all Volkswagens are differentiated from one another. Crucial here are the differences in the proportions of the individual components. This leads to highly individual vehicles that span the model range from the congenial up! to the sophisticated Phaeton.”

up! side profile. In side profile, the significant flares of surfaces and alternation of convex and concave forms define the car’s styling. A slight concave groove above the side sill creates an accent in the continuous surface. The side profile does not show any seams or edges except for the wheel housings and the look of the side windows. The wheels are placed in powerful wheel housings, whose lateral surfaces – the so-called wheel mirrors – are very large, making the diameters of the small wheels (14 to 16 inch) appear visually larger.

Two-door. The look of the windows gives the up! an unmistakable look as well. A short angle in front creates a formal connection from the lower-lying window edge to the bonnet. A long ascending line in the rear third of the vehicle matches that formed by the rear wheel and the distinctive C-pillar. The interplay of the car’s the long wheelbase and its short overhangs – underscores the crisp proportions of the up!.

Four-door. Naturally, the car has a different look in side profile with four doors. While the lower window line on the two-door version ascends at the rear near the C-pillar, on the four-door it follows a straight line. This gives the new body version a high level of independence. The crisp, short body overhangs are also quite noticeable on the four-door car.

up! rear section. The up! has a large bootlid, which extends down to the bumper. This so-called hybrid bootlid consists of three basic layers. Similar to a modern smartphone, its outer skin consists of a transparent glass element. The bootlid forms an integral unit with the vertically oriented rear lights. In detail, the bootlid is constructed of a load-bearing framework upon which a second sheet-metal layer is laser welded in place with the trailing edge of the roof integrated in this layer. The third, outer layer of the bootlid is the glass element that is joined by adhesive. It extends down from the trailing edge of the roof over the entire bootlid; that is, it incorporates the rear window as well as the lower area of the lid. The border around the rear window and the lower section are coated in black from the inside. Forming a contrast to the black are the chrome surfaces of the Volkswagen logo and the up! badge. The bootlid is opened by pressing a button in the handle beneath the Volkswagen logo.

Unmistakable rear lights. Although they look like parts of the bootlid, the large tail-lights of the up! are actually joined to the body. Their red surfaces are very distinctive, especially in their interplay with the white C-shaped elements. The lower third of the rear section is dominated by the bumper with its wide licence-plate panel and seam running around it. The front and rear bumpers are painted in body colour as standard.

Aerodynamic perfection

Low aerodynamic drag means lower fuel consumption. With a Cd value of 0.32, the up! achieves exemplary aerodynamic performance for its class. The results: less wind noise and lower fuel consumption. At Volkswagen, the first steps in refining a car's aerodynamics are made in a very early project phase utilising a simulation process known as CFD (Computational Fluid Dynamics). Because of its cost and time advantages, this process has since replaced evaluation and optimisation with real 1:4 models. In this context, an important aspect of the process is its ability to very realistically represent vehicle details digitally. Step by step, this method optimises a car's aerodynamics on the computer. Not until this process has been fully exploited are wind tunnel measurements conducted on a real full-scale aerodynamic model at a suitably mature development level. This aerodynamic model is covered with an exterior skin of clay, enabling quick changes to the vehicle's shape. In addition, the 1:1 model already has realistic shapes of engine compartment and underbody structures. In turn, this enables quick optimisation of parts that are very important to aerodynamics such as the front and rear spoilers and underbody panelling. The designs of aerodynamically relevant add-on parts are then finalised based on measurements from the first prototypes.

Eliminating every superfluous gram of CO_2 emissions in the wind tunnel. In establishing the car's aerodynamics, special attention was given to attaining a minimal front overhang. With this goal in mind, the sides of the front section of the up! were shaped so that the air would flow around the wheel housings with minimal turbulence. In the pursuit of reducing every possible gram of CO_2 emissions, the position and size of the front spoiler was also optimised progressively. Measurement series in the wind tunnel demonstrate that this refinement of the design has saved another 1.1 g/km CO_2 – that may seem like just a little, but the sum of all optimisation measures has yielded impressive values such as the 79 g/km CO_2 that the up! EcoFuel BlueMotion Technology will attain. At the same time, the final front spoiler design reduces front and rear aerodynamic lift coefficients of the up!. This has resulted in even safer driving characteristics.

Total aerodynamic drag is a very good 0,67 m². The design of the rear section also has a crucial effect on the car's aerodynamic performance. Intensive fine tuning of the aerodynamics of the up! has resulted in contours that both preserve styling targets and achieve defined flow separation, including in the side panels at the rear. In the process, the rear spoiler contour was tuned to the design of the lateral trailing edges. The sum of all of these measures yields the Cd value of 0.32 mentioned above for the take up!, which is very good for a vehicle in this class. In conjunction with the vehicle's frontal area of A = 2.07 m² the total aerodynamic drag of the up! attains a very good value of 0.67 m².

High eco-friendly rating for the up!. Considering the car's aerodynamic properties, weight reductions and efficient drive technologies, it is little wonder that an environmental analysis of the new up! has produced very positive results. Background: Volkswagen analyses a vehicle's impact on the environment (ISO standard 14040/44) over its entire life cycle (manufacturing, usage, recycling). The results of this analysis flow into an environmental rating. And a high rating is exactly what the new up! has already received ahead of its market launch. This rating was confirmed by the independent testing company TÜV Nord. A basic result: the environmental impact of the up! over its lifecycle was reduced by 21 per cent compared to that of its predecessor.

Top levels of safety and quality

Overcoming the upward weight spiral. Weight down, crash safety up – this is only possible with innovative manufacturing technologies. The body of the up! – which was awarded a top rating of five stars in Euro-NCAP crash testing – consists of 8.1 per cent 'hot-formed' steel, and so these body parts exhibit extreme toughness (including the floor and B-pillars); car body weight was reduced by 13 kg just due to the use of hot-formed steel. Moreover, by consistently downsizing engine technology, using high-strength steel and relentlessly removing every superfluous gram, developers succeeded in reducing the weight of the new up! by 140 kg or 13 per cent to 929 kg compared to its immediate predecessor (the Volkswagen Fox) – that is a world of difference, and not only in this class.

Special high-strength steels. In the area of the front side members, sills and side roof frame, so-called dual-phase steels are used which, together with hot-formed steel panels, create the basic structure for the safety occupant cell. The up! also sets top values in the segment with its 39.3 per cent share of ultra-high-strength steels and 17.2 per cent share of high-strength steels. Only 24.9 per cent of the weight of the body structure consists of conventional deep-drawing steels, which are used for visual parts that are very challenging to manufacture, such as exterior parts of the side body or rear wheel housings.

Comfort standards of the next class up. The especially rigid body structure of the up! even meets comfort levels of the next vehicle class in terms of its acoustic and vibration behaviour. This is attributable to the layout of nodes and load transmission points. Background: the available installation spaces are optimally utilised by means of a three-shell body structure, so that the occupant cell is surrounded by sturdy, computationally optimised profiles. Despite challenging requirements for body rigidity and crash properties, the car's lightweight index – a measure of the efficiency of weight utilisation – was improved by 34 per cent compared to the predecessor of the up!, the Lupo. The up! also sets new standards in its class with its static torsional rigidity of 19,800 Nm/degree. High torsional rigidity has a definite positive effect on comfort and handling properties. In parallel, the dynamic rigidity of the up! is also excellent at 49 Hz – and this benefits acoustics, vibration and driving comfort. In its smallest model, Volkswagen is clearly following the same maxims of safety, quality and comfort it follows in every other segment – without compromises.

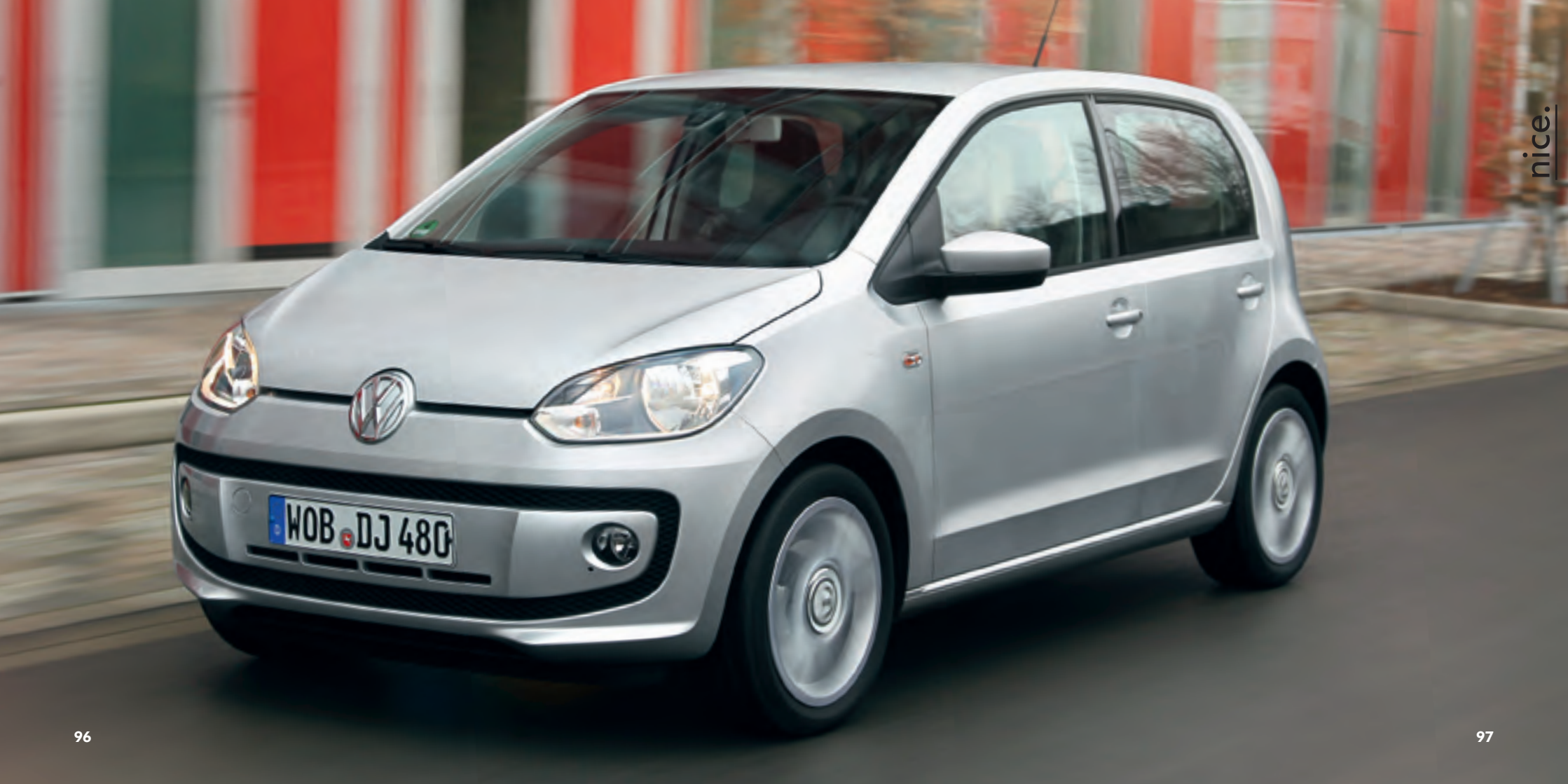
Safe like a large car. The up! – with its excellent results in Euro-NCAP crash testing –demonstrates that small cars can exhibit very good passive safety characteristics. In this Volkswagen, not only are the passengers themselves optimally protected, but so too are other traffic participants. The keyword here is pedestrian protection. In this area, the up! rises to the challenge with such features as its new, compact three-cylinder engines, directly screw-mounted ancillary engine components and the very compact gearboxes. Thanks to the suspended layout of the gearbox mounts next to the

side members, it was possible to mount the battery in a very low location – and this low mounting point is essential for good pedestrian protection. Overall, the deformation space between the bonnet and engine block helps to minimise the risk of injury to pedestrians. The hinges of the bonnet were also further optimised for this purpose.

Early Crash Sensor reacts before impact. To protect passengers in the up!, as already mentioned the body structure consists of high-strength and ultra-high-strength steels in the areas of highly-loaded load paths. Additional reinforcements, in the upper door, for example, increase passive safety – especially in case of severe accidents. In the event of a frontal collision, an Early Crash Sensor – integrated directly behind the front bumper – pre-activates restraint systems in advance of the actual impact. What happens then is a case for high-speed cameras: within just a few milliseconds, the belt tensioners tighten the fastened seatbelts to involve the driver and front passenger in the vehicle's deceleration as early as possible. Belt force limiters reduce chest loads, while front airbags restrain movement of the upper body.

The crash-active steering column makes an additional contribution towards safety, further reducing the risk of injury to the driver. In case of a side impact, the standard head-thorax airbags contribute to protecting the head and upper body of the driver and front passenger.

No unfastened seatbelt goes unnoticed. ISOFIX child seats are a safe place for children in the rear seating area thanks to ISOFIX and top-tether fittings; this system securely fastens the child seats to the car. If older children are aboard, the standard seatbelt status indicator in the multifunction display informs the driver of whether the rear passengers are actually buckled up. There is also an acoustic fasten seatbelts reminder for the front seats.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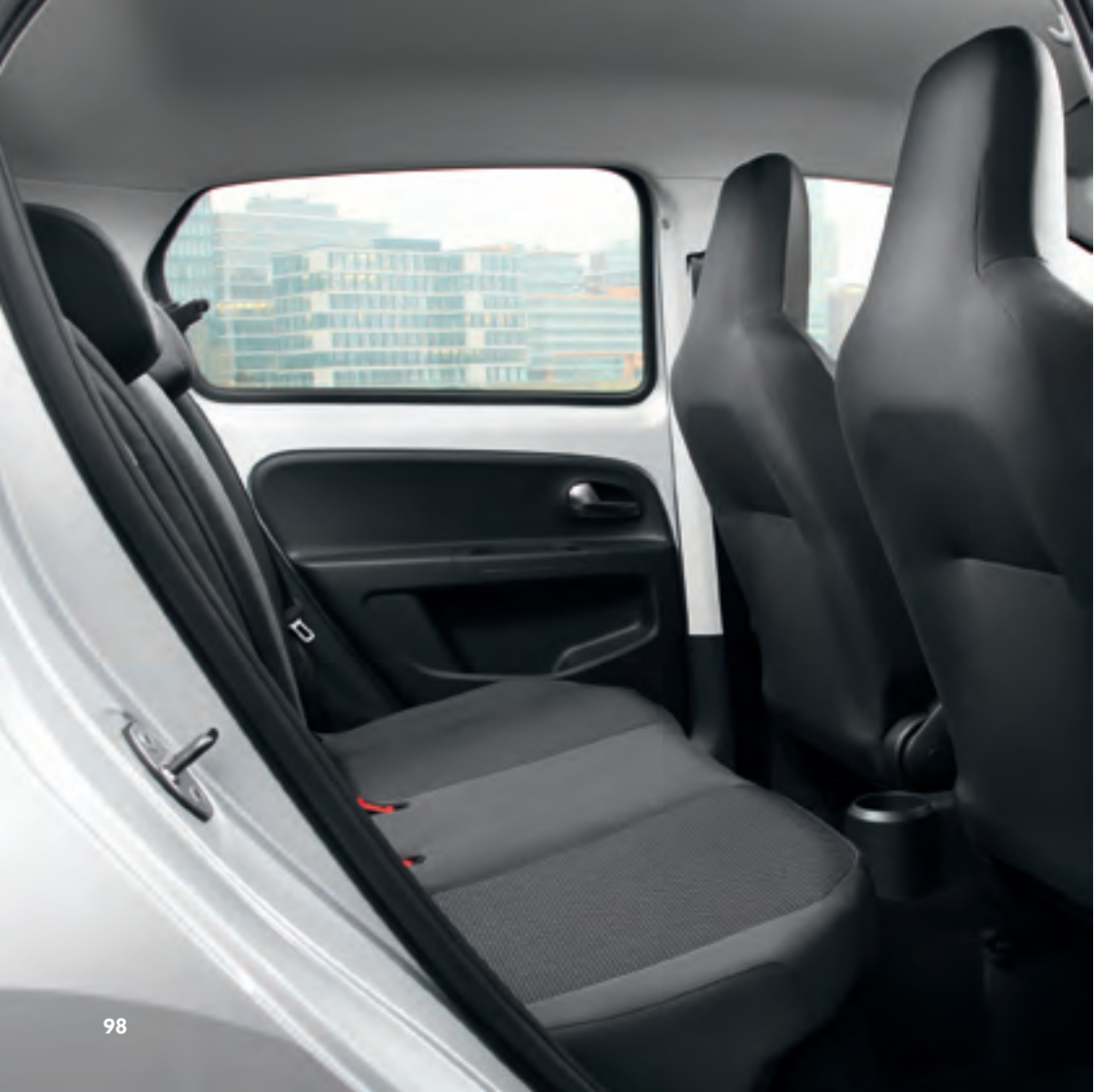
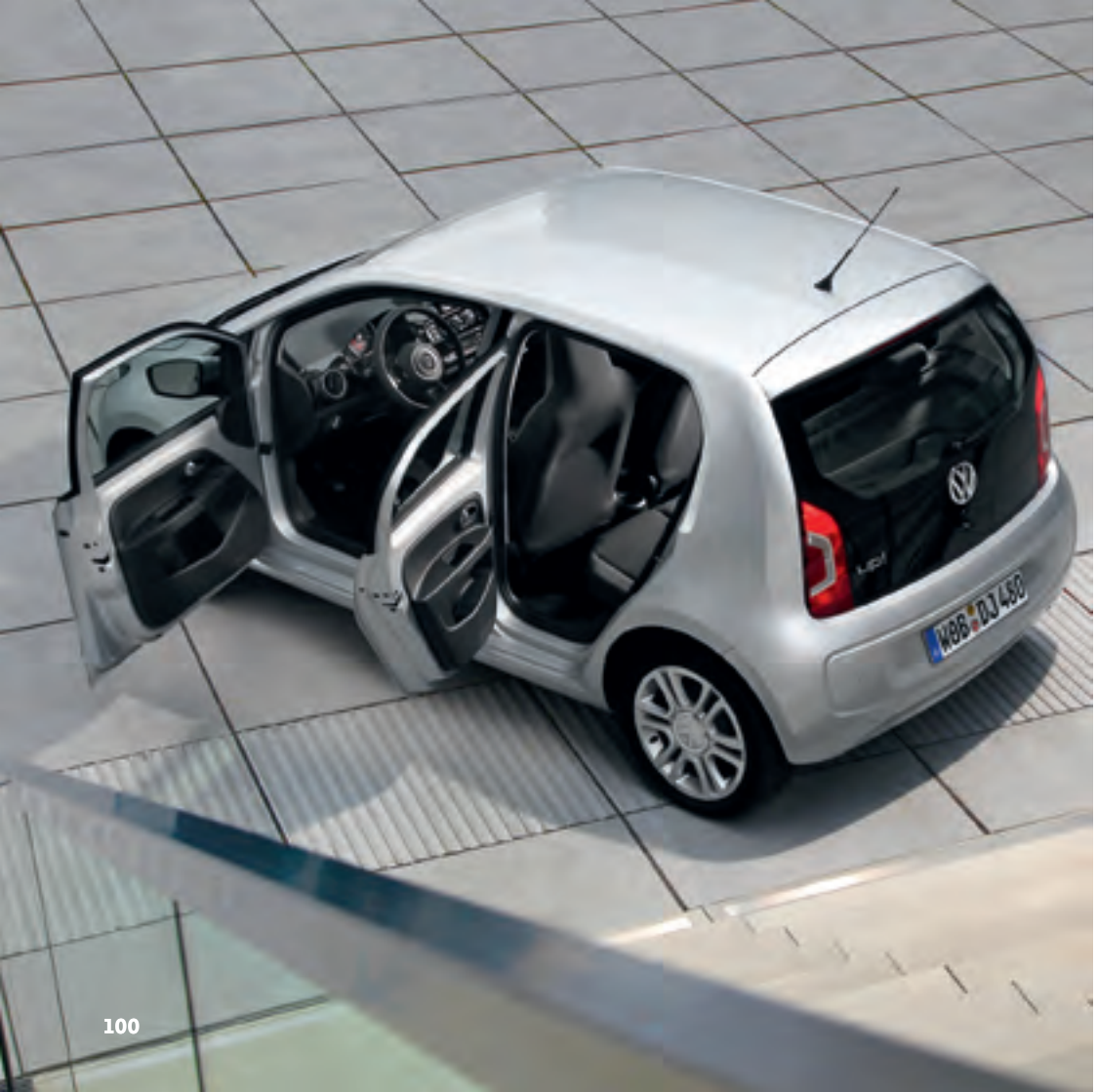


Clean, simple and appealing:

Space utilisation is uncompromisingly good

Small giant:
Space for four people and luggage with
251 litre cargo capacity

Extremely simple to operate:
up! means climb in, buckle up and drive off!



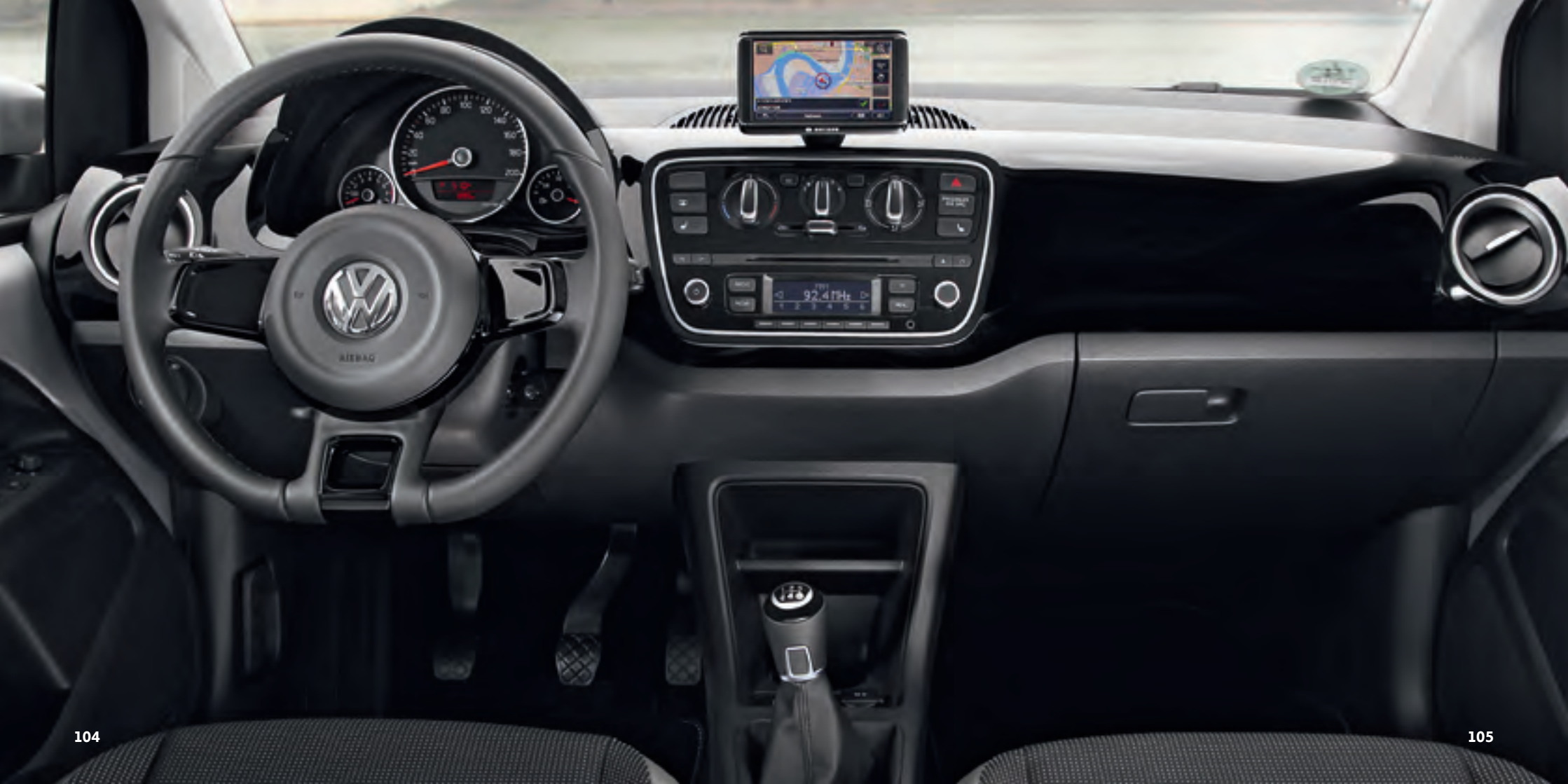
Wolfsburg / Bensberg, March 2012. Space utilisation in the car is exceptionally good, because of its wheelbase – one of the longest in the segment – together with a compact engine mounted well forward and a new running gear design. The driver, front passenger and rear passengers are travelling in a small car, but it is by no means cramped. The newly developed modular seats – which serve as the basis for a wide range of seat variants for specific up! versions – offer very good driving comfort. The front seats of the up! are 15 per cent lighter in weight than comparable concepts. The head restraints for the driver and front passenger are firmly attached to the seats – in the style of sports car seats. The advantage is that, regardless of a person's stature, they always give a proper fit. In the rear, fixed head restraints are less desirable, because they would detract from an optimal rear view for the driver; that is why they are equipped with conventional height adjustment.

Ergonomics and comfort like in the higher vehicle classes. As is typical of Volkswagen, the up! team under the leadership of Dr. Ulrich Hackenberg (member of the Board of Management for Technical Development) placed great emphasis on good ergonomics. “The up!,” says Hackenberg, “really is perceptibly more comfortable, because its occupants do not sit too low, and it offers ample leg support and knee room. Detailed refinements characterise the entire interior. Compared to the Lupo, for example, we positioned the steering column and steering wheel higher, but we designed the angle to the driver to be somewhat more horizontal. This has clearly improved the car’s ergonomics.”

Small space wonder. The car’s interior dimensions support these remarks by Dr. Hackenberg; headroom in front is an impressive 993 mm, and 947 mm in the rear. The seats are positioned at a good height both front and back; for the driver and front passenger, the so-called H-point – the vertex where the seat and seatback meet that is relevant here – is at a height of 306 mm; in the rear the H-point is at 378 mm. This somewhat higher seating position for rear passengers affords them a better view over the shoulders of the driver and front passenger.

Utilising every millimetre. The up! is practical, through and through, in part due to its numerous storage compartments. Along with a large storage bin in the centre console and the glove box, there are storage surfaces and bottle holders (up to 1.0 litre bottles) in the two doors, three cupholders in the rear (two-door vehicle) and two bag hooks and a variable cargo floor in the boot (from the move up!). Two examples of attention to detail: the glove compartment is equipped with a holder for pens and pencils, a notepad and coins; there is also a compartment for eyeglasses; a coat hook was integrated in the B-pillar in such a way that it is visible through the window from outside, and so it can be found optimally – the typical search for this hook is a thing of the past in the up!.

Well-organised instruments. In terms of instruments and user interfaces, there are three central elements: the instrument cluster in front of the driver, the switch module in the middle of the vehicle with radio-CD and climate control and the detachable information, entertainment and navigation unit maps+more (radio-CD system, air conditioning system and maps+more are optional features). The instrument cluster consists of one or three (from move up!) analogue


AIRBAG
92.4 MHz

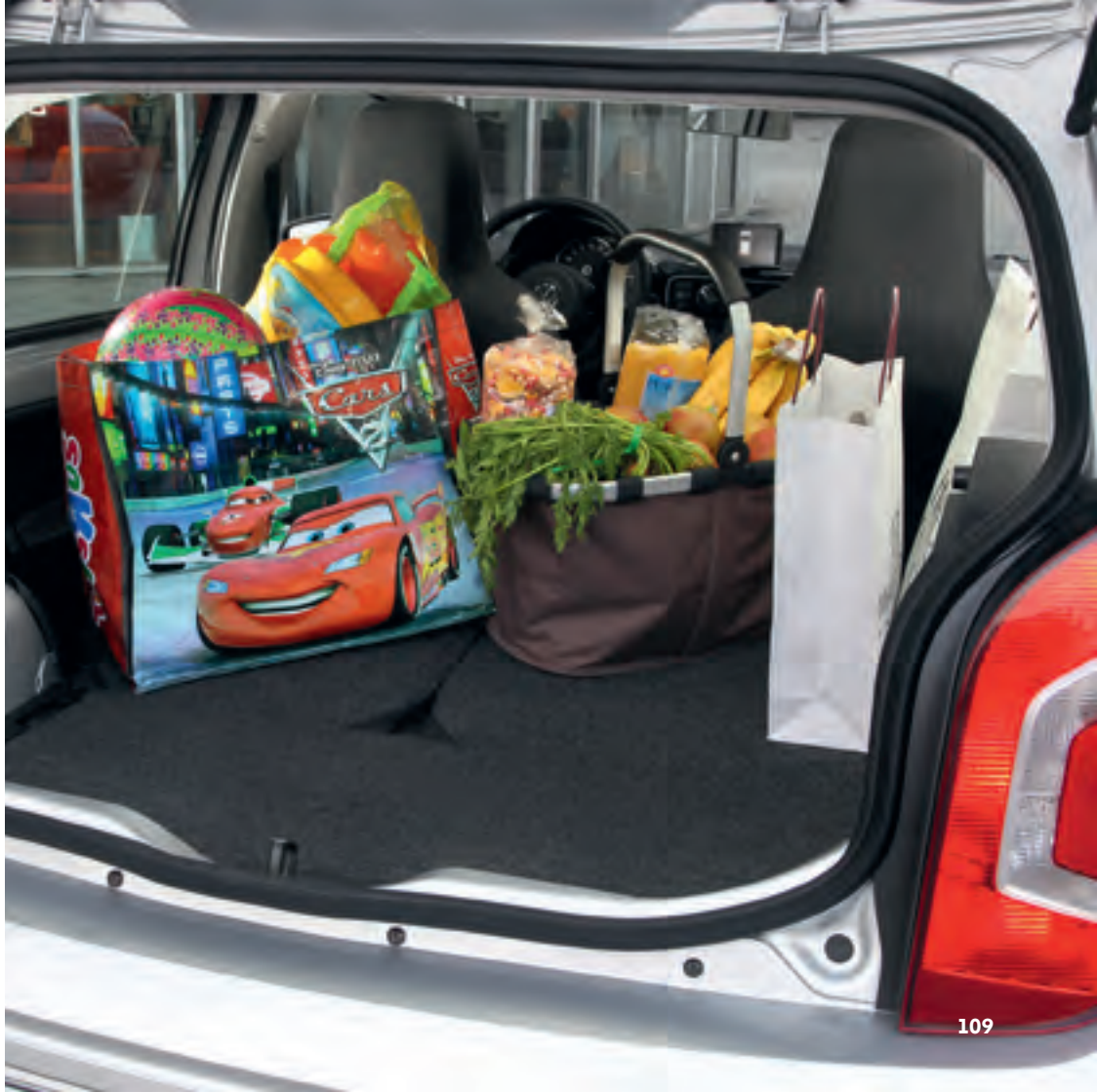
instruments and one digital display. In the move up! and high up!, for example, the largest of the three round analogue instruments is the speedometer in the centre with the integrated digital multifunction display that is an optional feature here. The multifunction display also displays information relating to City Emergency Braking and operational information of the Stop/Start system. To the left of the speedometer there is the tachometer, and to its right is the fuel gauge.

Intuitive controls. Controls for the ventilation or air conditioning system, radio-CD system, hazard indicator lights, seat heating and rear window defrost, as well as the switch for deactivating the Stop/Start system, are all located in the central dashboard module between the driver and front passenger. The entire unit is located up high – so that it is easy to see and use – and it is painted in a sophisticated glossy black. An interesting observation about the networking of systems: every up! is fitted with its 'own' individual wiring harness. This 'electrical system' is pre-configured for the features of each individual up! car, and it is fed into production in a just-in-time process. The advantage: unnecessary cabling is not installed, which reduces costs and weight.

Clean colours. Essentially, the up! interior has a very clean and well-organised layout. In addition, the new Volkswagen offers fun styling and a level of quality that will enhance the market segment. Especially high-end is the dash pad, the design panel in front of the driver and front passenger. Depending on the equipment line, the dash pad is either styled in grained beige or painted black or it is in body colour. While the upper section of the dashboard is always in 'anthracite', buyers of the move up! and high up! can order the lower dashboard section in the alternate light colour 'beige'. In this case, the centre console, door inserts and side trim panels in the rear are also in 'beige'.

Large bootspace in the small up!. At 251 litres, the boot offers one of the largest cargo capacities in the segment. And when the seatback of the rear bench is completely folded down, the up! can handle 951 litres of cargo. In this case, a nearly flat cargo surface is created. Since the front passenger's seatback can be folded down, large sports equipment or pieces of furniture with a length of up to 2.0 metres can be transported in the up!. The boot itself is upholstered with carpet, and so is

the cargo area cover, which opens wide and can be quickly removed if necessary. A variable cargo floor that can be adjusted to two different levels is available as an option in the up!. At the upper position, when the rear seat bench is folded down (in just seconds), the upper cargo floor position creates a nearly level cargo surface, and small objects can also be stowed beneath the cargo floor in this position. The lower cargo floor position is used if especially large and bulky objects need to be stowed in the boot. All of these details show that inside, the up! is a giant among small cars.



Small car, large selection:

As you like it – ten different up! versions

Five up! versions:
take up!, move up!, high up!,
black up! and white up!

Multiply by two:
each version is available as
a two-door or four-door

10

Wolfsburg / Bensberg, March 2012. Regardless of the engine selected, the Volkswagen is offered in the three equipment versions take up!, move up! and high up!. In addition, Volkswagen has designed two highly upgraded models based on the high up! that are also available: the black up! and white up!. An overview of all up! features follows.

take up! in Germany

The economical entry level. Outside, the small Volkswagen in this version is equipped with 14-inch wheels, body-coloured bumpers and green tinted heat-insulating glass. As on all up! models, the body is also partially galvanised, for long-term protection against rust. Inside, details such as the Easy Entry system (in two-door models), folding rear bench seat, colour contrasting frames of the air vents and centre console (in 'white'), carpeted flooring and a fabric-lined bootspace cover are used. Convenience features of the take up! include a rear windscreen wiper, electromechanical power assisted steering, height-adjustable steering column, convenience direction indicators (1 press = 3 flash cycles) and daytime running lights. The gloss black panel at the middle of the dashboard (in which controls are integrated for the heating / ventilation and optional audio system, for example) is particularly elegant.

Small car, great safety. When it comes to passive and active safety, standard features include front airbags and head-thorax side airbags plus a seatbelt fastening reminder for driver and front passenger, belt tensioners in front, ABS with ASR, ESP electronic stabilisation programme (in Germany), ISOFIX fixtures and top-tether fittings for mounting suitable child seats in the rear and a deactivation function for the front passenger airbag (when using a child seat on the front passenger seat).

move up!
(example of Germany; features compared to take up!)

The clever mid-range. At the next customisation level, the equipment line is called the move up!. Its safety equipment is identical to that of the take up!. The differences lie in its exterior, interior and convenience features. The door mirror housings and door handles of the move up! are painted in body colour; the full wheel covers and inner headlight housings are upgraded with chrome elements. Inside the car, the air vents and the area around the climate and audio controls are designed in glossy black; the dash pad is either grained beige or the alternate painted black. The driver's seat has height adjustment, and the interior door handles are chrome. Standard convenience features include central locking with wireless remote, Easy Entry system with memory function, electric windows in front, split rear bench seats, variable cargo floor, a glove box door, make-up mirror in the sun visor on the passenger's side and tachometer.

high up!
(example of Germany; features compared to move up!)

The sophisticated top version. The high up! is high-end in the truest sense of the term. Compared to the move up!, its exterior is upgraded with 15-inch alloy wheels ('spoke' type). Front fog lights contribute to the car's safety. Inside, customers can order the dash pad in 'black pearl', 'pure white', 'red', 'light blue' or 'dark silver'. The speedometer has a chrome surround as do the air vents and the surround of the centre console. Also designed in chrome are the parking brake grip and the switches for the lights and climate control. Perfecting the car's comfort are features such as electrically adjustable and heated door mirrors, RCD 215 radio-CD system with MP3 function, an air conditioner and a leather pack (steering wheel, parking brake grip).

black up!
(example of Germany; features compared to high up!)

The exclusive black up!. Based on the high up! are the two exclusive models black up! and white up!. Compared to the high up!, the black up! adds standard exterior features such as pearl effect paint in 'black pearl' and silver 16-inch alloy wheels ('classic' type) including black centre covers and size 185 tyres. Also standard here: a chrome look for the door mirror housings, fog light surrounds and side trim strips. The rear windows have an elegant dark tint starting at the B-pillar. At the front ends of the doors, the special model sports a 'black' signature.

black up! interior. The interior also makes a customised appearance. Here, the black up! is characterised by exclusive seat patterns in a grey-black tartan look and contrasting white seams as well as model-specific modifications to the leather-trimmed steering wheel and gear shift grip. In addition, the dash pad is painted in 'black pearl'. Completing the upgrades are floor mats with contrasting colour borders as well as door sill plates, gear shift grip and steering wheel badge with the 'up!'

signature. Meanwhile, the extensive set of convenience features is perfected by the RCD 215 audio system and maps+more pack with 5-inch touchscreen, Bluetooth hands-free telephone unit, navigation system and other functions.

white up!
(example of Germany; features compared to high up!)

The exclusive white up!. As might be expected, the exterior customisation of the white up! is like that of the black up!, except for its colour. The wheels of the white up! are white, while the matching paint is called 'pure white'. Inside, the dash pad and the outer areas of the door trim are painted in white. Also white: contrasting seams and piping and the decorative seams of the trim covers for the gear shift and hand brake grips.

Customising the up!

Colours and wheels. One person's taste is not the same as another's. And so, one up! will hardly look like another. This is already guaranteed by the extensive colour and wheel options for this Volkswagen. Eight exterior paints, five wheel types (14 to 16-inch), two interior trims, six different colours for the dash pad (including a grained beige version) and eight types of seat covers will satisfy any taste.

My up!. As with any car, classic individual features are available as special options. They include a very large panoramic tilt/slide roof, the RCD 215 audio system, maps+more (see 'Technologies' section), a sound system and a sport chassis. up! features can also be extended by what are known as 'packs' that are offered for specific versions. Take the example of the 'comfort pack' for the take up!. It includes electric windows, central locking with wireless remote, height-adjustable driver's seat, dual-tone fanfare horn, warning buzzer for lights left on and a parking light switch mode. The 'winter pack' for the move up! extends the car's features

to include seat heating in front, electrically adjustable and heated door mirrors and fog lights. Developed for the move up! and high up! is the drive pack 'plus' with cruise control, ParkPilot at the rear, multifunction display and City Emergency Braking. Exclusively tailored to the high up! is the 'sport pack' with 16-inch alloy wheels, sport chassis and tinted windows from the B-pillars back.

'up! boxes' – small things that make a big difference. The developers of the up! asked themselves whether everyday living could be structured in a simpler and friendlier way with the car. Their answer was a definitive "yes," because it is often the small things that make a big difference. And that is how the idea of the up! boxes came about: small, lightweight boxes for a wide variety of situations and needs. Take the 'kid box', for example, that was designed for parents with small children; it includes a bag for the thousand small items that are essential with small children; and of course a toy to cuddle and a lunch box for the obligatory snacks. Other up! boxes will be called the 'city box' and the 'travel box'. And their names describe what they are for.

FACTS

Key aspects

in alphabetical order

ADVANCE SALES,
FOUR-DOOR, GERMANY:
Since 6th March

ASSISTANCE AND
VEHICLE DYNAMIC SYSTEMS:
ESP electronic stabilisation programme,
anti-lock brake system,
City Emergency Braking, ParkPilot (rear)

AUTOMATIC TRANSMISSION:
Automatic 5-speed transmission

BLUEMOTION TECHNOLOGY:
Includes Stop/Start system, battery regeneration and tyres optimised for low rolling resistance

CARGO CAPACITY:
251 to 951 litres

CD VALUE:
0.32; Cd x A = 0.67

CHARACTER:
Clever city specialist for four persons

CO_2 EMISSIONS:
79 g/km to 108 g/km

COLOURS:
four monochrome paints ('white', 'pure white', 'light blue', 'red'); three metallic paints ('light silver', 'dark silver', 'dark blue'); one pearl effect paint ('black pearl')

CUSTOMISATION:
Individual features, 'packs' and 'up! boxes'

DIMENSIONS:
3,540 mm length,
1,641 mm width without door mirrors,
1,910 mm width with door mirrors,
1,478 mm height, 2,420 mm wheel-
base, 585 mm front overhang,
535 mm rear overhang

DRIVE TYPE:
Front-wheel drive

ENGINES – NATURAL GAS:
50 kW / 68 PS

ENGINES – PETROL:
44 kW / 60 PS, 55 kW / 75 PS

EQUIPMENT LINES:
take up!, move up!, high up!;

EXCLUSIVE MODELS:
black up!, white up!

FUEL CAPACITY, 1.0 MPI:
35 litres petrol; theoretical range
up to 833 km, depending on
specific engine

FUEL CAPACITY, 1.0 ECOFUEL:
72 litres. 11 kg CNG + 10 litres
petrol; theoretical range over 550 km

FUEL CONSUMPTION RANGE:
4.2 l/100 km to 4.7 l/100 km (Super unleaded), 2.9 kg/100 km (CNG)

INFOTAINMENT:
RCD 215, sound plus, Portable Infotainment Device maps+more with 5-inch touchscreen

INSURANCE:
FairPay starts at 9.90 euros per month plus AutoCredit[2] via the up!grade pack, optional coverage of maintenance and routine service costs

INTERIOR TRIMS:
'anthracite' (for take up!, move up!, high up!); 'beige' (for move up!, high up!)

MARKET LAUNCH, TWO-DOOR, EUROPE:
December 2011

MARKET LAUNCH, FOUR-DOOR, EUROPE:
May 2012

PRICE OF TAKE UP!, TWO-DOOR, 44 KW / 60 PS, GERMANY:
9,850 euros

PRICE OF TAKE UP!, FOUR-DOOR, 44 KW / 60 PS, GERMANY:
10,325 euros

PRODUCTION SITE:
Bratislava plant (Slovakia)

RUNNING GEAR:
Front – suspension with MacPherson-type struts and wishbones.
Rear – semi-independent suspension.
Optional sport chassis
(ride height lowered by 15 mm)

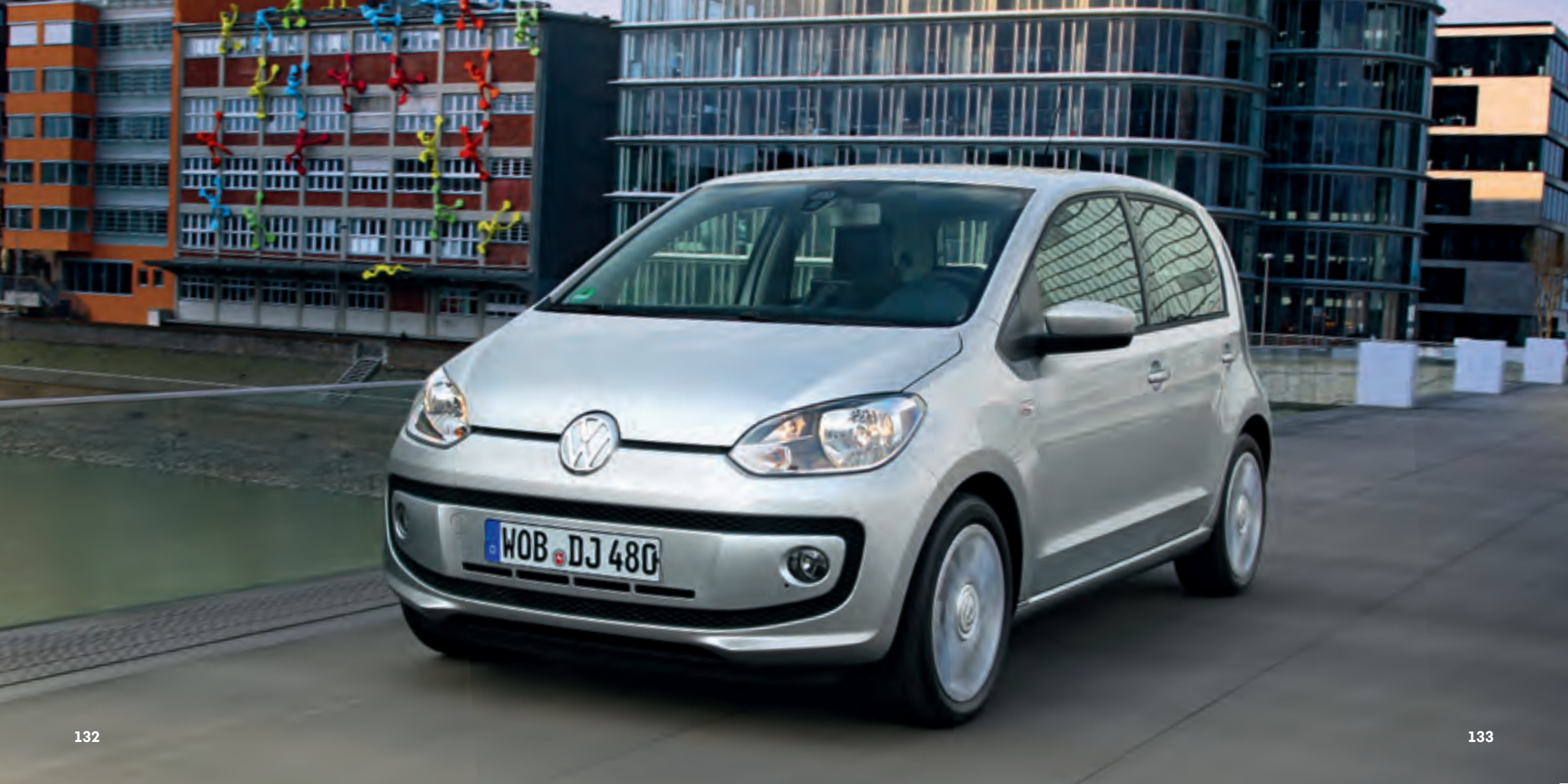
STANDARD TRANSMISSION:
5-speed manual gearbox

STYLING:
Walter de Silva (Group),
Klaus Bischoff (Brand)

TORSIONAL RIGIDITY:
19,800 Nm/degree (best in class)

WEIGHT OF TAKE UP!, 44 KW / 60 PS:
929 kg (EU kerb weight)

WHEELS: 14-inch steel wheels with full wheel covers and size 165 tyres, 15-inch alloy wheels in 'spoke' or 'waffle' style with size 185 tyres, 16-inch alloy wheels in 'classic' or 'triangle' style with size 185 tyres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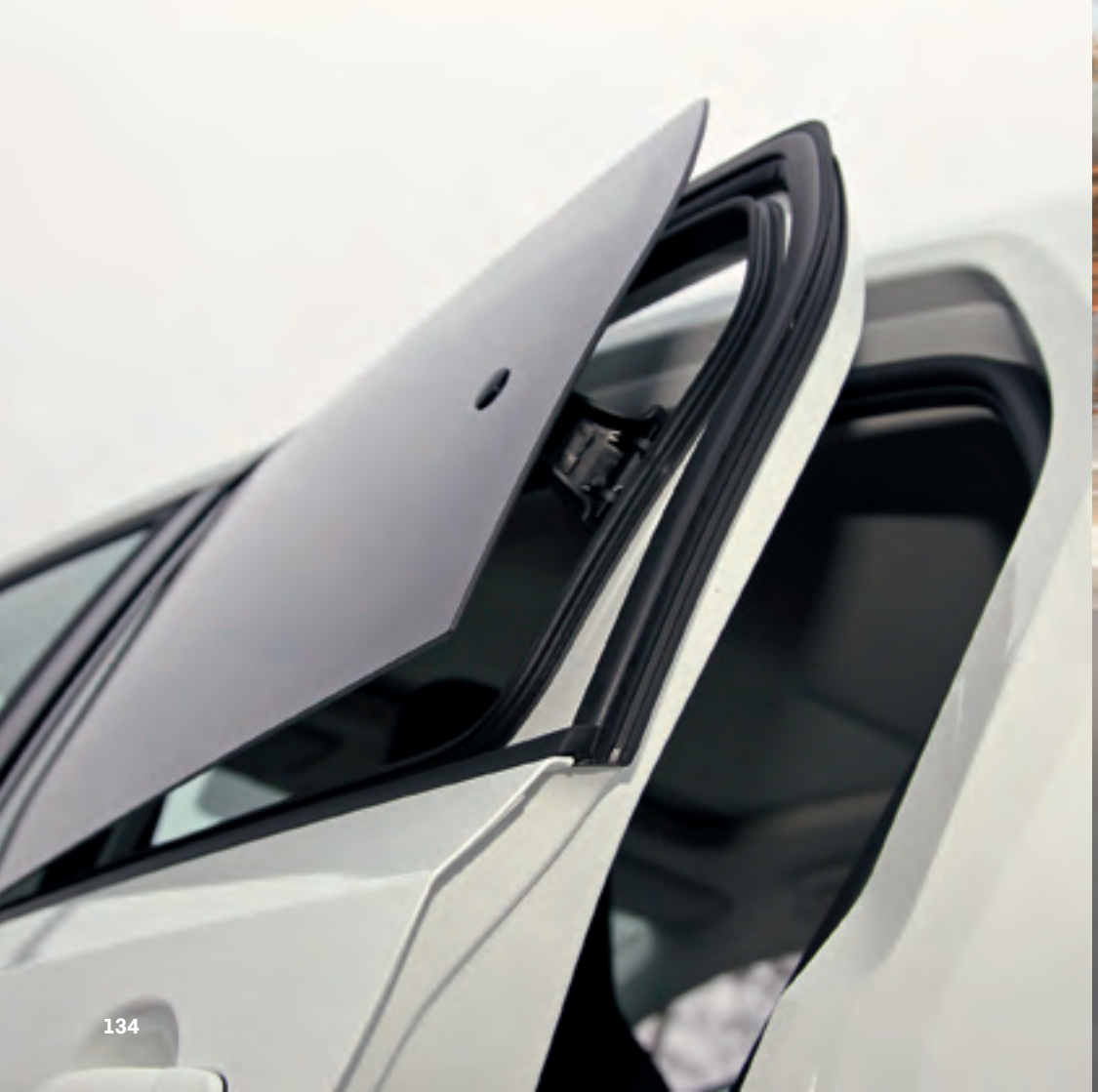

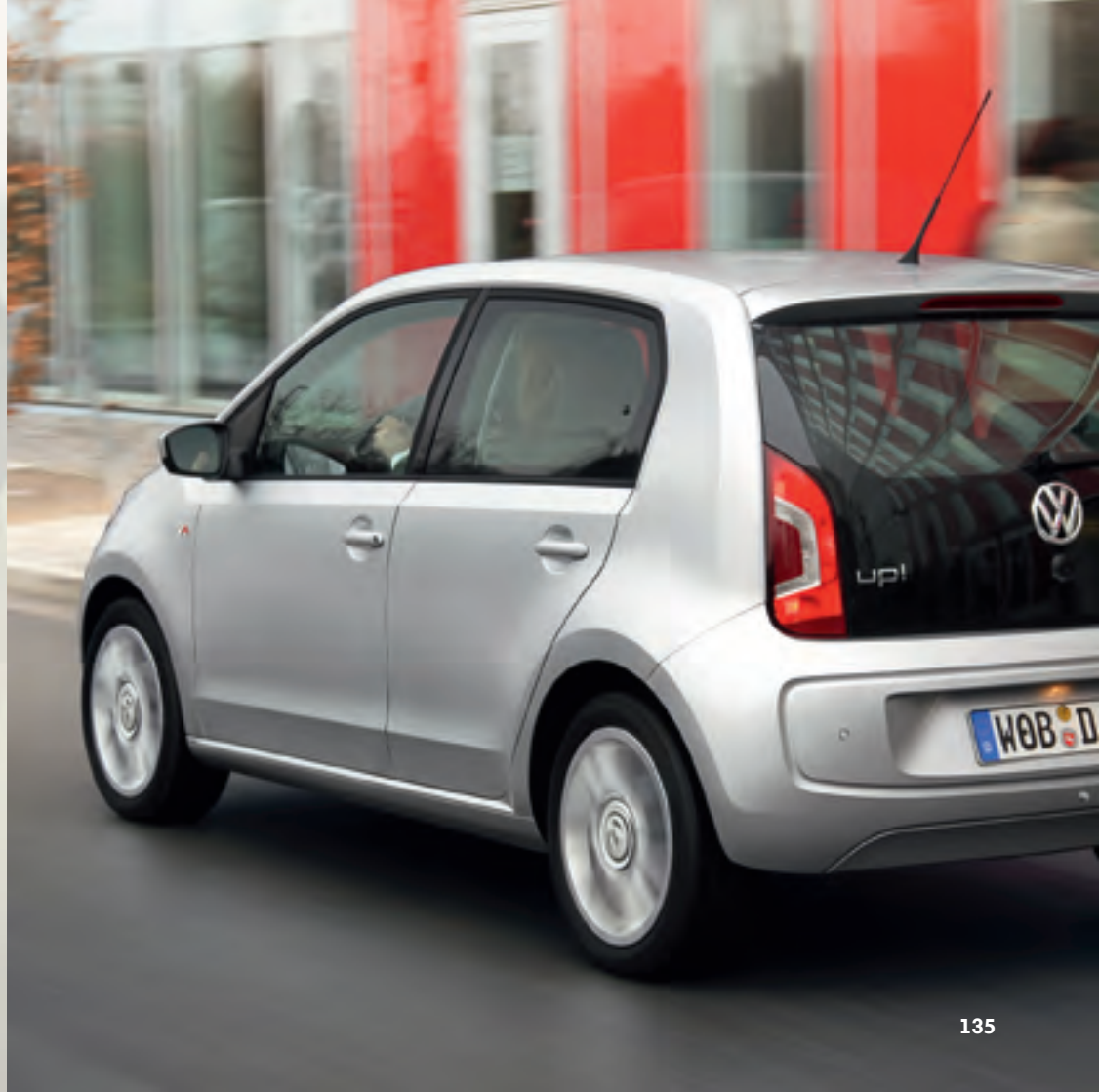
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YOUR up! NOTES

up!

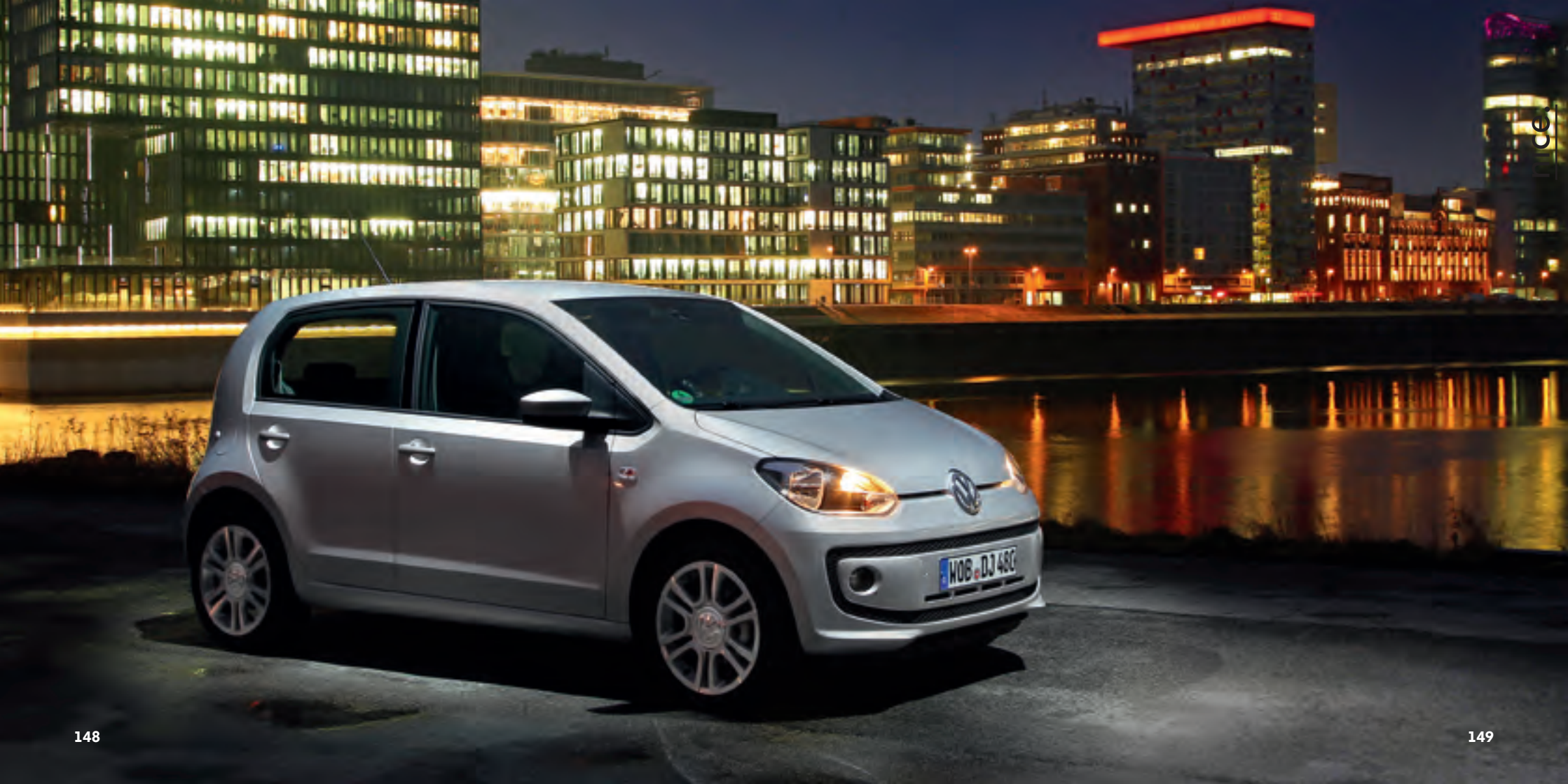

IMAGE SOURCES

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page 15: getwhatyoucan, yezz, kallejipp, Ishikaren / page 47: himberry /
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