Greater Tire Energy Efficiency in Urban Traffic: Conti CityPlus Concept Tire Premieres at IAA...

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BY CONTINENTAL AG

Greater Tire Energy Efficiency in Urban Traffic: Conti CityPlus Concept Tire Premieres at IAA Mobility

- New technology reduces CO2 emissions and extends the driving range of passenger cars in real urban driving conditions

- Energy consumption reduced by up to 10 percent; range extended by up to 3 percent

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> We see great potential, especially for electric vehicles, where every kilometer of range counts,

says Klaus Kreipe, Head of Continental Tires' original equipment business in the EMEA region

- Continental also shows the most sustainable series tire in the industry ever: the UltraContact NXT

Hanover, Germany, September 4, 2023. At IAA Mobility in Munich, Germany, Continental has unveiled its new tire concept Conti CityPlus. This state-of-the-art tire technology increases the total energy efficiency of a tire by up to 10 percent. The results are lower CO2 emissions from passenger cars with combustion engines and longer driving ranges for electric vehicles. This was achieved by optimizing the tire behavior during stop-and-go traffic in urban driving situations, increasing the range of passenger cars by up to 3 percent as a result. This correspondents to savings of 0.6 kWh per 100 kilometers for electric vehicles.

At the IAA Mobility, Continental will also be presenting the most sustainable series tire ever seen in the industry: Continental's

UltraContact NXT. With up to 65 percent renewable, recycled and ISCC PLUS mass balance certified materials, it has the highest share of sustainable materials ever seen in a production tire. All of its 19 sizes were awarded the highest EU tire label ratings for wet grip, pass-by noise and rolling resistance. Both tires exemplify the holistic approach that Continental – as a premium tire manufacturer – is pursuing to become the most progressive tire company when it comes to sustainability.

> We have set ourselves ambitious sustainability goals. At IAA we present the latest technological advances exemplifying our immense material competence. The Conti CityPlus technology reduces the total energy consumption of a tire. We see great potential, especially for electric vehicles, where every kilometer of range counts," says Klaus Kreipe, who heads Continental Tires' original equipment business in Europe, the Middle East and Africa (EMEA). He adds: "The UltraContact NXT is the most sustainable series tire to date. It combines a high proportion of sustainable materials with maximum safety and performance.

Up to 10 percent greater energy efficiency with the same rolling resistance levels

Urban traffic is characterized by constant stop and go. This causes torsional deformation of the tires in response to the applied torque, causing energy to dissipate in the process. The Conti CityPlus technology is designed to improve total energy efficiency under these kinds of driving conditions. This is especially beneficial for electric vehicles because their higher torque and weight additionally amplify energy loss in tires.

> We believe that it is important to look at the energy efficiency of tires as a whole. This includes free rolling as well as braking and acceleration. The result is up to ten percent greater energy efficiency with the same rolling resistance levels,

The Conti CityPlus is based on Continental's EcoContact 6 series tire. It has been specially engineered to offer high mileage and low rolling resistance. To achieve higher overall energy efficiency, the concept tire includes a range of modifications designed to reduce tire deformation during braking and acceleration. These include a specially designed tread pattern, newly constructed carcass, and

modified rubber compound. The tread strip features a special V-shape pattern, which creates a stiffer pattern structure. In addition, a new construction method results in a stiffer carcass which reduces tire deformation. The special system of fillers and an optimized polymer network in the rubber compound also contribute to the tire’s high overall energy efficiency.

When developing energy-efficient tires, tire engineers and material experts have up until now focused on optimizing a tire’s rolling resistance during free rolling at a constant speed. This approach has enabled Continental to minimize the rolling resistance of the passenger car tires in its portfolio in total by an average of 25 percent over the past decade.

Continental is already producing the most sustainable series tire ever

With the UltraContact NXT, Continental is also displaying the most sustainable series tire ever seen in the industry. Production started in July this year at Continental's tire plant in Lousado, Portugal. There will be a total of 19 sizes available. With up to 65 percent renewable, recycled and mass-balance-certified materials, the tire combines a high proportion of sustainable materials with maximum safety and performance. The proportion of renewable materials is as high as up to 32 percent. This includes, for example, resins based on residual materials from the paper and wood industries as well as silicate from the ash of rice husks. Recycled materials such as polyester fibers made from recycled PET bottles by ContiRe.Tex technology account for up to 5 percent. In addition, Continental obtains up to 28 percent ISCC PLUS mass-balance-certified materials from biobased, bio-circular and/or circular feedstock.

All dimensions of the UltraContact NXT have the top marks in the EU tire label ("A") in the areas of rolling resistance, wet braking, and external noise. The tire was designed for both electric and combustion engines, offering the highest label efficiency and optimum mileage performance. Continentals most sustainable series tire to date therefore bears the EV Compatible logo and will be available for various popular vehicles like the Kia Niro, VW ID.3, Mercedes-Benz EQA, Tesla Model 3, Audi Q4 E-TRON, Skoda Octavia, VW Golf 8, Audi A3 and many more.

Continental is working continuously to advance innovative

technologies and sustainable products and services throughout its entire value chain, from sourcing sustainable materials to recycling end-of-life tires. By 2030, the premium tire manufacturer aims to have over 40 percent renewable and recycled content in its tires. Continental is continuing its drive toward 100 percent sustainable materials in all its tire products by 2050 at the latest. The UltraContact NXT is an important step on the road toward fulfilling these ambitious sustainability goals and becoming the most progressive tire manufacturer, as laid out in Continental's Vision 2030 strategy program.

Continental can be found at this year's IAA Mobility in hall A2, booth 10. For more information on Continental's presentation at the IAA, visit www.continental-iaa.com.

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