

## Press Release

GENEVA, March 4, 2013

### Volkswagen to Present XL1 with Advanced, Lightweight Automotive Window Glazing Technology from SABIC

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At the Geneva Motor Show, Volkswagen plans to present its XL1 plug-in hybrid vehicle with some of the world's most innovative automotive solutions, including lightweight LEXAN™ polycarbonate (PC) side windows with advanced EXATEC™ plasma coating technology from SABIC. This makes the Volkswagen XL1 the first vehicle to feature this advanced plasma coating technology on two component (2K) injection-molded PC windows. Use of LEXAN PC window glazing with SABIC's advanced coating technologies reduces weight in those applications by 33 percent vs. conventional glass solutions, while delivering a high quality optical appearance and scratch-resistant surface. Use of SABIC's PC glazing solutions in the XL1's side windows demonstrates the feasibility of plasma coating technology for serial vehicles, while underscoring Volkswagen's pioneering leadership in the use of lightweight, innovative materials to improve vehicle performance.

"The LEXAN plasma-coated windows from SABIC are one of many distinguishing features on the XL1 that help us lighten the vehicle to reduce energy consumption," said Dr. Ulrich Hackenberg, Member of the Board Volkswagen Passenger Cars.

"It is chemistry and collaboration that enable designers to bring their innovative products to the world," said Greg Adams, Automotive vice president of SABIC's Innovative Plastics business. "We were excited to work with an industry leader like Volkswagen to bring our advanced EXATEC plasma coating technology to life. This is a big milestone in driving innovation forward for the windows of future automobiles. We commend Volkswagen for constructing the ultra-efficient, iconic XL1 vehicle and making extraordinary strides in its design with the use of lightweight, fuel-efficient technologies."

#### **PC Windows Prove Practical for Volkswagen, SABIC Demonstrates PC Glazing Capability**

The use of PC glazing proves to be practical for energy-efficient vehicles by enabling a substantial weight reduction, while meeting styling and functional requirements at a high level of quality.

In addition to providing the high-performance materials, SABIC delivered full application development assistance, technical leadership and program management from its Global Application Technology Center in Bergen Op Zoom (Netherlands) and its state-of-the-art Advanced Glazing Technology Development Center in Wixom, Mich. (United States).

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In the XL1's fixed and roll-down side windows, SABIC features its injection-molded LEXAN resin with EXATEC PC plasma coating system. The requirements for plastic glazing are met by depositing SABIC's E900 plasma coating on the parts after molding. This glass-like plasma coating, applied over a hard coat, delivers enhanced weathering, durability and abrasion performance and enables compliance with global requirements and regulations for plastic glazing applications.

The XL1's fixed and roll-down side windows are produced through two-shot injection compression molding using a color-matched LEXAN GLX resin in combination with black CYCOLOY™ XCM resin. The LEXAN GLX grade, specially formulated for automotive glazing applications, provides optimal visibility and delivers high cleanliness, weatherability, easy processing and compatibility with protective coatings. The CYCOLOY grade, a blend of PC and acrylonitrile-butadiene-styrene (ABS) resin, provides superior dimensional stability, excellent aesthetics and coating compatibility.

LEXAN PC glazing enables weight reductions up to 50 percent vs. comparable glass materials, depending on the complexity and design of the window part.

### **Plasma-coated PC Glazing Ready for Large-scale Production**

PC glazing technology continues to enable the development of advanced, lightweight window designs for the automotive industry. Just last October, SABIC announced with ULVAC – a leading, global supplier of mass production systems – the commercial availability of a machine for the efficient, high-volume production of lightweight, plasma-coated PC glazing components.

For additional information on SABIC's resins for automotive applications, please go to [www.sabic-ip.com](http://www.sabic-ip.com). For technical product inquiries, please contact us at [www.sabic-ip.com/prtechinquiry](http://www.sabic-ip.com/prtechinquiry).

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**PHOTOS: Volkswagen Presents XL1 Production Model with Advanced, Lightweight Automotive Window Glazing Technology from SABIC**

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# Notes to Editors

- Brands marked with <sup>TM</sup> are trademarks of SABIC
- SABIC is a registered trademark of SABIC Holding Europe B.V.
- High-resolution photos are available upon request
- SABIC should be written in every instance in all uppercase

## About SABIC

Saudi Basic Industries Corporation (SABIC) ranks among the world's top petrochemical companies. The company is among the world's market leaders in the production of polyethylene, polypropylene and other advanced thermoplastics, glycols, methanol and fertilizers.

SABIC recorded a net profit of SR 24.72 billion (US\$ 6.59 billion) in 2012. Sales revenues for 2012 totaled SR 189 billion (US\$ 50.40 billion). Total assets stood at SR 338 billion (US\$ 90.13 billion) at the end of 2012.

SABIC's businesses are grouped into Chemicals, Polymers, Performance Chemicals, Fertilizers, Metals and Innovative Plastics. SABIC has significant research resources with 17 dedicated Technology & Innovation facilities in Saudi Arabia, the USA, the Netherlands, Spain, Japan, India and South Korea. The company operates in more than 40 countries across the world with around 40,000 employees worldwide.

SABIC manufactures on a global scale in Saudi Arabia, the Americas, Europe and Asia Pacific.

Headquartered in Riyadh, SABIC was founded in 1976 when the Saudi Arabian Government decided to use the hydrocarbon gases associated with its oil production as the principal feedstock for production of chemicals, polymers and fertilizers. The Saudi Arabian Government owns 70 percent of SABIC shares with the remaining 30 percent held by private investors in Saudi Arabia and other Gulf Cooperation Council countries.

## About Innovative Plastics

**SABIC's Innovative Plastics business** is a leading, global supplier of [engineering thermoplastics](#) with an 80-year history of breakthrough solutions that solve its customers' most pressing challenges. Today, Innovative Plastics is a multi-billion-dollar company with operations in more than 35 countries and approximately 9,000 employees worldwide. The company continues to lead the plastics industry with customer collaboration and continued investments in new polymer technologies, global application development, process technologies, and environmentally responsible solutions that serve diverse markets such as Healthcare, Transportation, Automotive, Electrical, Lighting and Consumer Electronics. The company's extensive product portfolio includes thermoplastic resins, coatings, specialty compounds, film, and sheet. Innovative Plastics ([www.sabic-ip.com](http://www.sabic-ip.com)) is a wholly owned subsidiary of Saudi Basic Industries Corporation (SABIC).

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