

FACT SHEET

CHINAPLAS 2021, Shenzhen, China, April 13, 2021

BUILDING & CONSTRUCTION

OVERVIEW

With the ongoing movement of people to the cities, the challenges of urbanisation are evolving on an unprecedented scale as consumers demand a high-quality life while maintaining a desire for their homes to be long lasting, and enhance energy efficient.

SABIC building and construction solutions are here to provide a response to the growing demand for better infrastructure, booming PV industry and more sustainable, safe and eco-friendly materials.

INDUSTRY LANDSCAPE

The building and construction industry is one of the cornerstones of the Chinese economy and is set to become more important in boosting the domestic economy amidst downward economic pressure in the post-pandemic period. The 14th Five-Year-Plan released by the (CPC's) 19th Central Committee for 2021-2025 highlighted planned construction projects in a number of areas, including infrastructure (such as 5G base station construction), new urbanization, transportation, water conservancy and other major engineering projects. Among these projects, new urbanization will have a noticeable impact on the demand for quality construction. This will ultimately increase demand for higher quality building materials.

Meanwhile, more than two-thirds of the world's population is projected to be living in urban areas by 2050. Rapid urbanization has intensified various challenges, such as increasing impact on environment, challenges of natural resources, the escalation of solid waste production and a rising carbon footprint for materials. PV industry, as an important pillar to develop clean energy, will booming in the coming years.

SABIC SOLUTIONS FOR BUILDING AND CONSTRUCTION

Innovative materials solutions for the PV industry:

- **SABIC® POE FORTIFY™ C5075DP and C13075DP** are applied in photovoltaic encapsulation. The excellent volume resistance and superior water vapor transmission consistently protect PV modules and significantly reduces potential-induced degradation (PID), effectively ensuring greater energy output and reliability. The stable structure, unlike any previous generation acetic acid, extends PV module service life. Under various critical temperature environments, the excellent mechanical properties maintain increased efficiency.

- **PV floating barrels with SABIC HDPE B1054** have excellent ESCR and are a long-service life solution for the renewable energy industry. With collaboration with energy companies, solar fields are being built on lakes using these innovative structures to make solar energy viable without using valuable land resources.

SABIC's reliable and high-performance pipe solutions

- **SABIC HDPE P4200RT** are a high-density polyethylene (HDPE) with a high melt viscosity suitable for extrusion. The product provides excellent environmental stress crack resistance properties (ESCR) combined with very good long-term hydrostatic strength, high heat and extremely high extraction stability. It is designed to fulfil all the requirements of DIN 16833 / ISO 24033 for PE-RT Type II. PE-RT pipes made from SABIC HDPE P4200RT are typically applied in multi-layer pipes for heating and plumbing, including underfloor heating pipes and oil pipes.
- **SABIC P1600A** shows superior abrasion resistance, excellent chemical and corrosion resistance, easy processability, and good compatibility with HDPE pipes. Typical customer applications are mining and dredging application, a section of piping for use in transporting abrasive slurries requires pipeline with improved abrasion resistance.
- **SABIC HDPE P5808U** is a multi-modal HDPE grade specifically designed for outdoor fish farming cage. It has excellent UV-resistance, outstanding ESCR (environmental stress crack resistance), excellent mechanical properties, very good toughness and stiffness balance, long lifetime and easy extrusion processability.
- **SABIC HDPE P6006LS** for large-sized, black PE pressure pipes. P6006LS is a black compound multimodal high density (classified as PE112) specifically designed for pressure pipe low sagging (LS) applications. It delivers exceptional low sag performance and good processability for large-diameter pipes and pressure pipes with low standard dimension ratio (SDR). P6006LS is specially developed for pressure pipes for portable water, gas, sewage and other liquids