



## News Release

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### **BASF partners with European Union's BIM project "SPHERE" for sustainable construction**

- » Utilizing a digital-twin platform, the SPHERE project aims at improving the energy efficiency of buildings
- » Innovative virtualization technology opens new opportunities in the conception and administration of buildings
- » Master Builders Solutions<sup>®</sup> as expert with the broadest BIM portfolio in the construction chemicals industry

BASF is a partner of the European Union's SPHERE project. The project aims at developing a digital-twin software platform to enable the virtual replication of buildings in order to increase their energy efficiency, optimize their life cycle, and reduce costs. The 'virtual twin' will incorporate a wide range of data on construction method, design, production of construction materials, structural elements, as well as the construction process. The project has been allocated €7.4 million of EU funding; its total volume is €12.8 million.

The new digital-twin platform is based on Building Information Modeling (BIM) – a technology where the construction experts from Master Builders Solutions<sup>®</sup>, BASF's global brand for construction chemicals solutions, have extensive expertise: At the beginning of this year, Master Builders Solutions launched its "Virtual Design and Construction Resource Center", comprising a range of digital resources with regard

to BIM as well as the selection of suitable products, specification, and the various applications of its construction products. “For us, virtual building models represent a key technology for the future conception and design of built structures”, said Philipp Kley, Senior Vice President Construction Chemicals Europe at BASF. “We want to leverage innovative software technologies to play a leading role with regard to Industry 4.0 in the construction industry.” Master Builders Solutions’ BIM portfolio is the largest in the construction chemicals industry – comprising, as of today, more than 200 BIM objects, and soon to include more than 400 Revit models from 13 different industry segments. This is the expertise that BASF can bring to the SPHERE project: “We are very happy to support this EU project with our know-how and, with partners from ten different countries, work on the development and refinement of virtual building models”, says Olivier Bayard, Regional Business Segment Manager Admixture Systems Europe at BASF. “In this way, we want to contribute to an increased energy efficiency in buildings and to lowering the costs involved in construction projects. Designers and owners benefit from a digital-twin model across all project stages: from planning and design to construction and maintenance to demolition.”

### **EU framework program Horizon 2020 for research and innovation**

Next to BASF, the SPHERE consortium includes software specialists, architects, engineers, as well as research and development centers. The project has received funding from the European Union’s Horizon 2020 research and innovation program under grant agreement No. 820805. As EU support program, Horizon 2020 aims at fostering a knowledge- and innovation-based society and competitive economy across the EU as well as contributing to sustainable development.

SPHERE is a four-year Horizon 2020 project, set to run until autumn 2022. On the basis of four new-construction and renovation projects in Italy, Finland, Austria and the Netherlands, the digital-twin platform and its range of new software tools are to be tested and developed toward marketability.

New BASF Construction Chemicals landing page:

[www.virtual-design.basf.com](http://www.virtual-design.basf.com)

BimObject library:

[www.bimobject.com/en/product?brand=basf](http://www.bimobject.com/en/product?brand=basf)

More information on the SPHERE project:

[www.sphere-project.eu](http://www.sphere-project.eu)

More information on Horizon 2020 projects:

[www.ec.europa.eu/programmes/horizon2020](http://www.ec.europa.eu/programmes/horizon2020)

### **About the Construction Chemicals division**

BASF's Construction Chemicals division offers advanced chemical solutions under the global umbrella brand Master Builders Solutions for the construction, maintenance, repair and renovation of structures. The brand is built on more than 100 years of experience in the construction industry. Our comprehensive portfolio encompasses concrete admixtures, cement additives, chemical solutions for underground construction, waterproofing systems, sealants, concrete repair & protection systems, performance grouts, performance flooring systems, tile-fixing systems, expansion joints & control systems and wood protection solutions.

The Construction Chemicals division's approximately 7,000 employees form a global community of building experts. To solve our customers' specific construction challenges from conception through to completion of a project, we draw on our specialist know-how, regional expertise and the experience gained in countless constructions projects worldwide. We leverage global BASF technologies and our in-depth knowledge of local building needs to develop innovations that help make our customers more successful and drive sustainable construction.

The division operates production sites and sales offices in more than 60 countries and achieved sales of about €2.5 billion in 2018.

### **About BASF**

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. The approximately 122,000 employees in the BASF Group work on contributing to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio is organized into six segments: Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care and Agricultural Solutions. BASF generated sales of around €63 billion in 2018. BASF shares are traded on the stock exchange in Frankfurt (BAS) and as American Depositary Receipts (BASFY) in the U.S. Further information at [www.basf.com](http://www.basf.com).