

## Press Release

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DSM Innovation Center  
e-mail: [lieke.jong-tops-de@dsm.com](mailto:lieke.jong-tops-de@dsm.com)  
[www.dsm.com](http://www.dsm.com)

# Beneq and DSM partner to introduce a novel aerosol deposition technology for solar applications

*Combination of nFOG™ and KhepriCoat® technologies to deliver superior quality of anti-reflective (AR) coating on solar cover glass*

Royal DSM, the global Life Sciences and Materials Sciences company, and Beneq, the Finnish supplier of production and research equipment for thin-film ALD and aerosol coatings, are working together developing and commercializing a completely new and superior aerosol deposition technology for AR coatings for solar glass applications.

In this exclusive collaboration, Beneq will contribute its recently released nFOG™ aerosol coating technology while DSM will provide its unique KhepriCoat® AR coating. The combination of these two technologies provides an AR coating solution that is ideal for applications that require a superior coating quality on solar glass.

*"The demands of the solar market industry in terms of quality are increasing," says Oscar Goddijn, Vice President of DSM Advanced Surfaces. "We're delighted to partner with Beneq, which has established itself as an undisputed leader in the development of innovative deposition technologies for the solar industry. This kind of open innovation is also extremely important to DSM. Together, we'll be able to leverage and amplify our unique areas of expertise to offer the solar market the next generation of AR coating technology that's designed to meet their needs."*

### Combining top technology

nFOG™ is Beneq's innovative new atmospheric wet coating technology, which offers a unique combination of high speed, cost effectiveness and great flexibility in terms of the dimensions of the substrates it can be used with.

DSM's unique KhepriCoat® is the best-performing anti-reflective coating technology for solar cover glass on the market today. It maximizes light transmission by minimizing reflection, which can lead to an energy gain in solar module output in the range of 4%. KhepriCoat® can be used in a wide range of solar applications, including cSi, thin-film, concentrated photovoltaic modules and solar thermal collectors. KhepriCoat® improves the cost/performance ratio, lowering both the cost/Watt-peak (Wp) and the Levelized Cost of Energy (LCOE). KhepriCoat® combines high durability with easy cleanability in the module production and installation process, as well as throughout the module lifetime.

### Faster, more flexible response to industry

*"With this new joint offering, we look forward to taking our new nFOG™ technology to the market faster with the unique KhepriCoat® AR coating material. Together with DSM, we can now approach customers with a highly superior, complete solution that offers both the material and the coating technology," says Sampo Ahonen, CEO, Beneq.*

### Meeting future energy needs

Solar energy is widely recognized as an important alternative and renewable source of energy. By the end of 2014, global installed photovoltaic capacity will have reached 180 GW (data from European Photovoltaic Industry Association). This can generate approximately 1% of the global demand for electricity, which is comparable to the capacity of 180 large-size nuclear power plants. Worldwide growth of the global photovoltaic market is predicted to be 10-20% annually (EPIA).

### About Beneq

Beneq, a leading supplier of production and research equipment for thin-film coatings, is also the world's premier manufacturer and developer of thin-film electroluminescent (TFEL) displays. Beneq equipment and thin-film experience is used for improving the efficiency of crystalline silicon and thin-film solar cells, enhancing the durability of organic electronics and protecting silver from tarnishing. In addition to process equipment, Beneq also offers job coating.

Beneq is a registered trademark of Beneq Oy. nFOG™ is a trademark of Beneq Oy.

### About DSM - Bright Science. Brighter Living.™

Royal DSM is a global science-based company active in health, nutrition and materials. By connecting its unique competences in Life Sciences and Materials Sciences DSM is driving economic prosperity, environmental progress and social advances to create sustainable value for all stakeholders simultaneously. DSM delivers innovative solutions that nourish, protect and improve performance in global markets such as food and dietary supplements, personal care, feed, medical devices, automotive, paints, electrical and electronics, life protection, alternative energy and bio-based materials. DSM's 24,500 employees deliver annual net sales of around €10 billion. The company is listed on NYSE Euronext. More information can be found at [www.dsm.com](http://www.dsm.com).

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#### **For more information:**

DSM Innovation Center  
Communications  
Lieke de Jong-Tops  
tel. +31 46 476 3771  
e-mail [lieke.jong-tops-de@dsm.com](mailto:lieke.jong-tops-de@dsm.com)

Mr. Sampo Ahonen  
CEO, Beneq  
tel. +358 40 520 1090  
e-mail [sampo.ahonen@beneq.com](mailto:sampo.ahonen@beneq.com)

#### Forward-looking statements

This press release may contain forward-looking statements with respect to DSM's future (financial) performance and position. Such statements are based on current expectations, estimates and projections of DSM and information currently available to the company. DSM cautions readers that such statements involve certain risks and uncertainties that are difficult to predict and therefore it should be understood that many factors can cause actual performance and position to differ materially from these statements. DSM has no obligation to update the statements contained in this press release, unless required by law. The English language version of the press release is leading.