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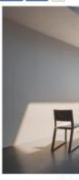
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**Switch on sunlight for a brighter future**

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Hospital patients, office workers and commuters will be among the first to benefit from COELUX technology, bringing the outdoors indoors. Indeed, the COELUX system is one of the technologies showcased at the 2014 Innovation Convention in Brussels in March and set to take a share of the €50 billion global lighting market.

Imagine sitting in a windowless room yet having the feeling of the sun shining on your face. This is the vision of the project COELUX, which is the COELUX EU-funded project which recreates the physical and optical effects of natural light indoors by creating the illusion of direct sunlight through the atmosphere. This phenomenon has been proven to have a positive impact on comfort and well-being experienced in indoor and underground environments.

By incorporating the latest energy-saving LED technology with a sophisticated optical system using nanomaterials, it creates a high-tech window system that not only has the potential to be a revolutionary innovation for the contemporary lighting and design industry, but also to boost the well-being of citizens in Europe and beyond.

"With COELUX, you can experience a sunny sky anytime, anywhere," said Professor Paolo Di Trapani, coordinator of the project and a physicist at the University of Innsbruck in Austria. "The research has been focused on how light can have a positive influence on our health and well-being. Warm, artificial, direct sunlight illuminates and motivates objects, making domestic and public spaces more attractive and welcoming. The COELUX system does this and gives them resilience and hope and above the way people feel and interact with their surroundings."

COELUX's light diffusing technology will benefit anyone who does not get enough sunshine. It has been designed with a focus on the healthcare industry, but can be applied in retail, hospitality, museum, airport, underground transport, sports centres, cinema, office and industrial environments. Those seeking to benefit from the COELUX system include individuals who work in environments with extreme climates, such as in Canada or the United Arab Emirates, are set to benefit greatly from the technology. The same is true of residents of countries located furthest from the equator, close to the Arctic or Antarctic, who often experience very little natural light for long periods during the year.

**How it works**  
 COELUX combines three key elements:

- The latest energy-saving LED technology to reproduce the sunlight spectrum
- A sophisticated optical system to create a sensation of distance between the "sky" and the "sun"
- Nanomaterials and polymers which are used to recreate the entire Rayleigh scattering process which occurs in the atmosphere

These elements are incorporated into a high-tech window system offering an enormous range of opportunities and design possibilities for indoor architectural spaces. Users can experience the light of Northern Europe, the Mediterranean and the Tropics in the three setting options that COELUX provides.

**Product Development and commercialisation**  
 The COELUX research project received €2.5m in funding from the European Union under the 7th Framework Programme. Dr Trapani added: "The EU funding was essential to allow us to meet all research and development and demonstration costs. It was invaluable in helping to convince other investors to join and support us. We strongly encourage other SMEs to apply for EU funding as it opens windows of opportunity."

The COELUX technology will be ready for market towards the end of 2014 and constitutes an important business opportunity for the project partners and the rest of European industry, which will be invited to participate in the COELUX implementation. The global lighting market is currently worth some €50 billion and this game-changing innovation is well positioned to take a share of that market, boosting European competitiveness and creating jobs, contributing even further to the well-being of European citizens.

Michael Jennings, spokesperson for European Research, Innovation and Science Commissioner Marie-Christine Oomen, said: "Marie Curie of our day – from sharp transportation medicine, health and energy – being enhanced and even revolutionised by nanotechnology. COELUX is a great example of how science can turn a simple idea that is crucial to achieve a – replicating sunlight – into reality. It clearly has huge potential to make a difference in people's lives."

**About COELUX**  
 COELUX is a research project funded by the European Union under the 7th Framework Programme (FP7). The European Commission featured COELUX with a video message at the inauguration ceremony of the 2014 Innovation Convention in Brussels in March. COELUX combines three key elements: the latest LED technology which reproduces the sunlight's spectrum, a sophisticated optical system that creates the sensation of the distance between the sky and the sun, and nanomaterials and polymers which are used to recreate the entire Rayleigh scattering process which occurs in the atmosphere. These elements are incorporated into a "high-tech" window system offering an enormous range of opportunities and design possibilities for indoor architectural spaces. COELUX is the result of the joint efforts of the project partners: Institut für Mikrostrukturtechnik (IMT) Berlin, the developer of the project, and its strategic partners: Institut für Produktion und Logistik (IPL) Berlin, responsible for COELUX large-scale installations worldwide (LT) and research partners: Grifols Software Srl (RS), Eidgenössische Technische Hochschule (ETH) Zürich, and Compton (CSC).

For more information about COELUX visit [coelux-project.com](http://coelux-project.com).

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**Total: €2,770 million for 2014**

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