Lumen Minecraft module to teach renewable energy to housebound students for Earth Day

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In celebration of Earth Day, EIT InnoEnergy will make Lumen's interactive challenges on sustainable energy free to play via Minecraft: Education Edition

Together with Minecraft and Blockworks, EIT InnoEnergy has made Lumen, a game based learning module that teaches youth about sustainable energy, available via Minecraft: Education Edition to celebrate Earth Day 2020. The announcement comes as more than 1.5 billion students are affected by school closures worldwide due to COVID-19. The need for challenging, engaging digital learning experiences has never been more important.

The module, initially developed for 9 to 15-year-olds by EIT InnoEnergy in partnership with KU Leuven and Minecraft creator Blockworks, teaches children about the fundamental concepts of energy, which can then be applied to build a sustainably powered Minecraft city. The module includes immersive worlds created by the Minecraft master builders at Blockworks, as well as lessons in sustainable energy.

Minecraft recently announced a new Education Collection for the Marketplace to support families during COVID-19-related school closures. This includes Lumen and a selection of Minecraft's favourite lessons, such as marine biology, Greek history and even a tour of the International Space Station. These worlds are free to download for Minecraft players until 30 June 2020.

By bringing the module onto Minecraft's education platform, Lumen supports parents, teachers and students to teach and learn about the energy transition. Now even more learners can explore electricity in a fun way. In fact, more than 35 million educators and students are licensed to use Minecraft: Education Edition in 115 countries, while Minecraft has over 100 million players per month.

Lumen City Challenge and Lumen Power Challenge encourage students to explore different energy sources including wind, solar, hydroelectric, storage, nuclear and coal-fired power. The module also teaches students how to connect and balance supply and demand together to make a grid while also

managing cost, revenue, pollution and the happiness of their citizens. One of the most intricate designs to date is a sustainable microgrid to power an island or a smart city. Mimicking real life, coal-fired generation creates pollution which affects the city's citizen's health, helping to teach children about air quality and what they can do to influence it by reducing their own energy demand.

Ten-year-old Josephine from the Netherlands, who has learned how to generate sustainable energy through Lumen, says: "I really like the game because I want to live in a green and clean world. I like to play with different skins and to place green energy generators around my world.

"I learnt what happens to air pollution when I build fossil fuel stations, like a coal power station. I see that my city rating remains low and I earn less money with taxes when I build with coal power."

EIT InnoEnergy Education Director Prof.Dr.ir. Frank Gielen said: "What better way to engage young citizens in the energy transition, and teach about different types of generation, than through one of their favourite games. We truly believe that the inclusion of Lumen on Minecraft: Education Edition will help shape the next generation of energy engineers."

Minecraft Director of Learning Programs, Adam Tratt said: "The combination of fun in-game energy challenges and relevant learning content makes us especially excited to bring this amazing set of Minecraft worlds to classrooms and homes around the world for Earth Day."

Original game developer Johan Driesen said: "Some years ago, I was looking for a computer game to teach kids about energy and climate. When I saw my daughter building great worlds in Minecraft, I knew this was the creative, open environment I was looking for, we just needed to add energy building blocks. That's how Lumen started."

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About EIT InnoEnergy

EIT InnoEnergy is the innovation engine for sustainable energy across Europe.

We support and invest in innovation at every stage of the journey – from classroom to end-customer. With our network of partners, we build connections across Europe, bringing together inventors and industry, graduates and employers, researchers and entrepreneurs, businesses and markets.

We work in three essential areas of the innovation mix:

- Education to help create an informed and ambitious workforce that understands the demands of sustainability and the needs of industry.

- Innovation Projects to bring together ideas, inventors and industry to create commercially attractive technologies that deliver real results to customers.

- Business Creation Services to support entrepreneurs and start-ups who are expanding Europe's energy ecosystem with their innovative offerings.

Bringing these disciplines together maximises the impact of each, accelerates the development of market-ready solutions, and creates a fertile environment in which we can sell the innovative results of our work. InnoEnergy was established in 2010 and is supported by the European Institute of Innovation and Technology (EIT).