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Veolia Increases Solar Power Capacity by 59MW

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Marking another significant step towards achieving a net zero carbon future

Global resource management company, Veolia, are now providing an additional 59MWp of renewable electricity capacity following the start of operations at the UK's largest solar array on a restored landfill area. Capable of generating electricity equivalent to the demand of over 15,000 homes, the site at Ockendon, in Essex, has been developed with technology provider REG Power Management, using the latest PV modules. This additional renewable capacity adds to Veolia's existing solar energy facilities Ling Hall, Warwickshire, and Netley in Hampshire, and other solar power installations covering hospitals, offices, water treatment works and recycling centres.

To enable optimum generation and give a valuable use to this previously landfilled area, the Ockendon site is using around 107,000 bi-facial solar modules, each rated at either 540Wp or 545Wp. These modules absorb light on both sides to maximise the power density and are linked to inverters that convert DC to AC electricity. This is then fed to the grid via an on-site 132,000 Volt transformer that is connected to the nearby Warley substation. It also provides the potential added benefit of embedded power use on site.

The "Powering Up Britain: Energy Security Plan", published by the Department for Energy Security and Net Zero in March 2023, commits to a five-fold increase of solar capacity in the UK from 14GW to 70GW by 2035. This implies a project on the scale of Ockendon being installed roughly every five days from now until the end of 2035.

Veolia already generates 800GWh of electricity using a combination of solar, biomass, biogas, and Energy

Recovery facilities (ERF), that qualify under the Renewable Energy Guarantees of Origin (REGO) scheme, and supplies a secure baseload equivalent to powering 240,000 homes.

Commenting on the project, Donald Macphail, Chief Operating Officer – Treatment said: This latest renewable energy development is a further step towards achieving a net zero carbon future for the UK, and a demonstration of how we can transform this restored landfill to give it a new life. Through harnessing the power of the sun to deliver renewable electricity we are advancing our aim to achieve ecological transformation, and countering climate change. The project also has greater significance as the solar arrays have minimal ground level impact, so the wildlife that has repopulated the restored land can continue to coexist with the technology.

Matt Partridge, Development Director at REG Power management added: “We’re delighted to have worked with Veolia to help deliver another significant clean energy development. Projects like this are essential if we are to meet our targets for low cost, zero emission electricity generation using the UK’s abundant renewable energy resources”

In becoming the benchmark company for ecological transformation, Veolia is committed to tackling climate change, resource depletion, biodiversity collapse, and pollution. By expanding the use of existing and new innovative solutions, the company is accelerating the process to radically change patterns of production and consumption and placing ecology at the heart of every process.