

Europe's largest floating solar panel project is being installed on Thames Water's QEII reservoir in Greater London

Europe's largest ever floating solar panel array is being installed on the Queen Elizabeth II reservoir as part of Thames Water's ambitious bid to self-generate a third of its own energy by 2020.

Following an agreement between Thames Water, Ennoviga Solar and Lightsource Renewable Energy, just over 23,000 solar photovoltaic (PV) panels will be floated on the reservoir near Walton-on-Thames, utilising a normally unusable suburban space on the surface of the reservoir. The innovative floating pontoon is due to cover approximately 9% of the reservoir, which is the equivalent to 1.1 Wembley football pitches.

The low carbon, renewable energy produced by the floating solar generator will be used to help power Thames Water's nearby water treatment works, which supplies water to customers. It will have a total installed peak capacity of 6.3 megawatts and is expected to generate 5.8 million kilowatt hours in its first year – equivalent to the annual consumption of around 1,800 homes¹.

Lightsource, Europe's leading solar energy company, is managing the installation of the project, which will make it the first UK solar company to install 1GW of solar capacity.

Thames Water's energy manager, Angus Berry said: "Becoming a more sustainable business is integral to our long term strategy and this innovative new project brings us one step closer to achieving our goal – this is the right thing for our customers, the right thing for our stakeholders and most importantly the right thing for the environment."

Ennoviga Solar's co-founder Stefano Gambro added: "We're delighted to have delivered another successful project for Thames Water that generates cost-effective electricity right where it's used. Thankfully Lightsource has the skills, courage and persistence to understand this innovative technology and invest in Europe's largest floating solar project."

Nick Boyle, CEO at Lightsource, said: "The floating solar project is another excellent example of the flexibility of solar energy and how unutilised space can become a source of clean, renewable energy. There is a great need from energy intensive industries to reduce their carbon footprint, as well as the amount they are spending on electricity and solar can be the perfect solution."

Eva Pauly, International Business Development Director at Ciel et Terre International, the manufacturer of the floating mounting system, said: "This is our largest project outside of Japan and the first one with European bank financing, proving that our technology has been recognised as bankable in Europe as well as Asia."

As well as setting a target of generating 33% of its own renewable energy by 2020, Thames Water is striving to become more energy efficient to reduce its reliance on energy from the grid. It generated a total of 12.5% of its electricity requirements from renewable sources in 2014/2015, which is a 4% increase on the year before. In 2015, Thames Water pledged to support the objectives of the Paris Agreement to limit the global temperature rise to less than 2 degrees Celsius and this project will contribute to achieving this goal.

¹ Calculated using the Ofgem Typical Domestic Consumption Values for the "Medium" Electricity Profile Class 1 user (see: www.ofgem.gov.uk)

The Queen Elizabeth II reservoir was commissioned in 1962 and has a capacity of 23.6 Megalitres of water with a surface area of 128.3 hectares and a perimeter of 4.3km. Thames Water currently has solar panels on 41 of its sites.

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About Thames Water

Britain's biggest water and sewerage company: Our service area stretches from the eastern fringes of Gloucestershire and Wiltshire in the west, through London and the Thames Valley, to the western edges of Essex and Kent in the east.

Recycling water back to the environment: We recycle safely back to the environment 15 million people's wastewater. That's 4,300m litres of sewage a day – 24 hours a day, 365 days a year.

Drinking water quality: Our tap water quality is among the best of the 10 major suppliers in the UK, according to the standards watchdog the Drinking Water Inspectorate. We supply 9 million customers with 2,600m litres a day, on average, and carry out half a million quality tests every year.

Bills: The average household bill in the Thames Water region is £367 a year – the third-lowest in the country.

Record investment: Thames Water spent a record £1.4bn on network and customer service improvements last year, demonstrating our strong commitment to long term improvements.

Ownership: Thames Water Utilities Ltd's holding company, Kemble Water, is owned by a group of pension and infrastructure funds from around the world, including Macquarie-managed funds, which have a 26% stake. The second-largest shareholder is the BT Pension fund at 13%.

Renewable energy: We are the biggest non-commercial producer of electricity inside the M25. We burn methane derived from sewage to create heat from which we generate our own renewable electricity to help power our works. Along with solar and wind self-generation, this saves us on average £15m a year in grid energy bills.

Regulators: All water firms in England and Wales are privately-owned and answerable to our regulators, who monitor all activities.

- Ofwat is the economic regulator for the water industry: www.ofwat.gov.uk/

- The Environment Agency is the environmental regulator: www.environment-agency.gov.uk/

- The Drinking Water Inspectorate regulates the quality of water companies' supply: www.dwi.gov.uk/

About Lightsource

Lightsource Renewable Energy was founded in 2010 and has achieved an unrivalled track record in the installation of both ground mount and rooftop solar projects.

Currently the leading solar photovoltaic (PV) energy generator in the UK and Europe, and one of the top ten largest solar PV energy generators globally, Lightsource has deployed more than £1.7 billion of solar assets and manages an operational portfolio of more than 1.1 Gigawatts (GW) – enough to power more than 350,000 households each year.

Its in-house team of experts create bespoke photovoltaic (PV) solutions for business and domestic use, offering full service capability from initial design and planning through to ongoing operations and maintenance.

A British domiciled company, it has more than 320 staff based at offices in London, Bath, Livingston, Belfast and Dublin. To find out more, visit www.lightsource-re.co.uk.

About Ennoviga Solar

Ennoviga Solar is a solar project developer and consulting business specialising in creating renewable energy solutions tailored to the needs of large corporate clients.

Initially focused on the UK, our team is now serving multinational clients around the world. We help clients assess the applicability of photovoltaics across their asset portfolios, educate internal stakeholders, prepare and secure internal investment approvals, develop and then deploy the most beneficial projects. We also identify investors willing to help clients benefit from solar without the client having to invest their own capital.

Visit us at www.ennovigasolar.com to find out more.

About Ciel et Terre International

Ciel et Terre International are the manufacturer of the patented Hydrelion™ floating photovoltaic mounting system. While floating PV systems are relatively novel, the Hydrelion™ system is currently the most deployed floating mounting system worldwide, not least due to the extensive technical assurance work undertaken on its design.

Learn more by visiting: www.ciel-et-terre.net