

Fact Sheet

London Array

Status: July 2013

London Array is the world's largest consented offshore wind farm

- London Array is owned by DONG Energy, E.ON and Masdar

Phase One consists of:

- 175 Siemens wind turbines with a capacity of 3.6MW each
- Two offshore substations and an onshore substation
- Four export cables, each over 50km in length to connect the offshore substations to the onshore substation.
- Over 200km on inter-array cabling to connect the turbines to each other and to the offshore substations.
- Rated at 630 MW, Phase One of London Array could generate enough energy to power over 500,000 homes and displace over 900,000 tonnes of CO₂ a year – equivalent to taking nearly 300,000 cars off the road each year.

- Siemens Wind Power supplied the 175 turbines for Phase One. Each is rated at 3.6MW, fitted with the Siemens 120m rotor and has a hub height of around 87m above sea level. Siemens is also providing a warranty and five year turbine servicing contract.
- The two offshore substations' electrical systems and onshore substation work were carried out by Siemens Transmission and Distribution Ltd.

Key Milestones:

- Project start date – onshore construction at Cleve Hill started in July 2009
- Offshore construction started in March 2011 when the first foundation was installed
- First turbine erected – end of January 2012
- First power – October 2012
- Turbine installation was completed in December 2012
- April 6, 2013 – all 175 wind turbines are commissioned and exporting power to the national grid.
- Official inauguration on July 4, 2013

Operations and maintenance base:

- In March 2012 London Array's operations and maintenance base was opened. The new base will be home to some 70 technicians plus up to 20 support staff, who will be responsible for the running of the wind farm over the next 20 or more years.
- The operations and maintenance building includes computerised monitoring and control facilities, a workshop, offices and storage facilities. The complex has been built to tough environmental standards and features sustainable and recyclable building materials, a grass roof, an on-site Combined Heat and Power Plant and a design that makes the best use of natural light.
- In addition to creating jobs directly, the operation will also use a range of local support services. The team has been working with local training providers to ensure that the right skills training is in place. There is an ongoing apprenticeship scheme in place at Swale Skills Centre in Sittingbourne where eight young people, employed by DONG Energy, are currently undertaking a City & Guilds qualification for wind turbine technicians.