WikipediA

List of offshore wind farms

This page **lists the largest** offshore wind farms that are currently operational rated by nameplate capacity. It also lists the largest offshore wind farms currently under construction, the largest proposed offshore wind farms, and offshore wind farms with notability other than size.

As of September 2018 the Walney Extension in the United Kingdom is the largest offshore wind farm in the world at 659 MW.

Gardinal Social London Array Fairs Thereit

Four offshore wind farms are in the Thames Estuary area: Kentish Flats, Gunfleet Sands, Thanet and London Array. The latter was largest in the world.

Contents

Largest operational offshore wind farms
Largest under construction
Largest proposed
Other notable offshore wind farms
See also
References
External links

Largest operational offshore wind farms

This is a list of offshore wind farms with at least 200 MW nameplate capacity that are currently operational.

Wind farm	Capacity (MW)	Location	Site coordinates	Turbines & model	Commissioning date	Refs
Walney Extension	659	United Kingdom	54°5′17″N 3°44′17″W	40 x MHI-Vestas 8.25 MW 47 x Siemens Gamesa 7 MW	2018	[1]
London Array	630	United Kingdom	51°38′38″N 01°33′13″E	175 × Siemens SWT-3.6-120	2013	[2][3][4]
Gemini Wind Farm	600	Netherlands	54°2′10″N 05°57′47″E	150 × Siemens SWT-4.0	2017	[5][6][7][8]
Gode Wind (phases 1+2)	582	Germany	54°04′N 7°02′E	97 x Siemens SWT-6.0-154	2017	[9][10]
Gwynt y Môr	576	United Kingdom	53°27′00″N 03°35′00″W	160 × Siemens SWT-3.6-107	2015	[11]
Race Bank	573	United Kingdom	53°16′N 0°50′E	91 x Siemens SWT-6.0-154	2018	[12][13]
Greater Gabbard	504	United Kingdom	51°52′48″N 1°56′24″E	140 × Siemens SWT-3.6-107	2012	[14][15][16]
Horns Rev 3	407	Denmark	55°49′N 7°42′E	49 x MHI Vestas V164-8.3 MW	2019	[17]
Dudgeon	402	United Kingdom	53°14′56″N 1°23′24″E	67 × Siemens SWT-6.0-154	2017	[18]
Veja Mate	402	Germany	54°19′1″N 5°52′15″E	67 × Siemens SWT-6.0-154	2017	[19][20]
Anholt	400	Denmark	56°36′00″N 11°12′36″E	111 × Siemens SWT-3.6-120	2013	[21][22] [23][24]
BARD Offshore 1	400	Germany	54°22′0″N 5°59′0″E			[25][26][27]
Global Tech I	400	Germany	54°30′00″N 6°21′30″E 80 × Areva Multibrid M5000 5.0MW		2015	[28]
Rampion	400	United Kingdom	50°40′N 0°06′W			[29]
Binhai North	400	China	34°40′04″N 120°21′29″E	100 x Siemens SWT-4.0-120	2018	[30]
West of Duddon Sands	389	United Kingdom	53°59′02″N 3°27′50″W	108 × Siemens SWT-3.6-120	2014	[31][32]
Arkona	385	Germany	54°46′55.200″N 14°7′15.600″E	60 x Siemens SWT-6.0-154	2019	[33][34]
Walney (phases 1&2)	367	United Kingdom	54°02′38″N 3°31′19″W			[35][36]
Galloper	353	United Kingdom	51°52′48″N 1°56′24″E	56 x Siemens SWT-6.0-154	2018	[37][38]
Wikinger	350	Germany	54°50′2″N 14°4′5″E	70 × Adwen AD 5-135	2018	[39]
Nordsee One	332	Germany	53°58′0″N 06°48′00″E	54 × Senvion 6.2M126	2017	[40]
Thorntonbank (phases 1–3)	325	Belgium	51°33′00″N 2°56′00″E	6 × Senvion 5MW 48 × Senvion 6.15MW	2009 (phase 1) 2012 (phase 2) 2013 (phase 3)	[41][42] [43][44]
Sheringham Shoal	315	United Kingdom	53°7′0″N 1°8′0″E	88 × Siemens SWT-3.6-107	2012	[45][46] [47][48]

Wind farm	Capacity (MW)	Location	Site coordinates	Turbines & model	Commissioning date	Refs
Borkum Riffgrund 1	312	Germany	53°58′0″N 06°33′00″E	78 × Siemens SWT-4.0-120	2015	[49]
Rentel	308.7	Belgium	51°35′27.6″N 2°56′38.4″E	42 x Siemens SWT-7.0-154	2019	[50]
SPIC Jiangsu Dafeng	302.4	China	33.514°N 121.105°E	72 × Envision 4.2MW	2018	[51]
Amrumbank West	302	Germany	54°30′0″N 07°48′00″E	80 × Siemens SWT-3.6-120	2015	[52][53]
Thanet	300	United Kingdom	51°26′0″N 01°38′0″E	100 × Vestas V90-3.0MW	2010	[54][55]
Huaneng Rudong	300	<u>China</u>	32.680°N 121.323°E	38 x Siemens 4.0MW 19 x Haizhuang 5MW (H154) 1 x Haizhuang 5MW (H171) 12 x Envision 4.2MW (EN-136)	2017	[56]
Jiangsu Longyuan Chiang Sand	300	China	32.816°N 121.516°E	75 x Envision EN136/4.0 MW	2018	[57]
Nordsee Ost	295	Germany	54°26′00″N 7°41′00″E	48 × Senvion 6.15MW	2015	[58][59]
Butendiek	288	Germany	54°54′0″N 07°45′00″E	80 × Siemens SWT-3.6-120	2015	[60][61]
DanTysk	288	Germany	55°9′00″N 7°10′30″E	80 × Siemens SWT-3.6-120	2015	[62]
Baltic 2	288	Germany	54°58′24″N 13°10′40″E	80 × Siemens SWT-3.6-120	2015	[63][64]
Meerwind Süd / Ost	288	Germany	54°23′00″N 7°42′00″E	80 × Siemens SWT-3.6-120	2015	[65]
Sandbank (Phase 1)	288	Germany	55°11′0″N 06°51′00″E	72 × Siemens SWT-4.0-130	2017	[66][67]
Lincs	270	United Kingdom	53°11′00″N 00°29′00″E	75 × Siemens SWT-3.6-120	2013	[68]
Burbo Bank Extension	258	United Kingdom	53°28′48″N 3°15′36″W	32 × Vestas V164-8.0MW	2017	[69]
Liuheng (Guodian Zhoushan Putuo)	252	China		63 × Siemens SWT-4.0-130	2019	[70][71]
Humber Gateway	219	United Kingdom	53°38′38″N 0°17′35″E	73 × Vestas V112-3.0MW	2015	[72]
Northwind	216	Belgium	51°37′08″N 02°54′03″E	72 × Vestas V112-3.0MW	2014	[73]
Westermost Rough	210	United Kingdom	53°48′0″N 0°9′0″E	35 × Siemens SWT-6.0-154	2015	[74][75]

Wind farm	Capacity (MW)	Location	Site coordinates	Turbines & model	Commissioning date	Refs
Horns Rev 2	209	Denmark	55°36′00″N 7°35′24″E	91 × Siemens SWT-2.3-93	2009	[76]
Rødsand II	207	Denmark	54°33′0″N 11°42′36″E	90 × Siemens SWT-2.3-93	2010	[77][78]
Chenjiagang (Jiangsu) Xiangshui	201	China	34°29′00″N 119°52′00″E	134 × FD77-1500 Dongfang Electric	2010	[79][80]
Trianel Borkum West II (Phase 1)	200	Germany	54°2′30″N 6°28′0″E	40 × Areva Multibrid M5000 5.0MW	2015	[81]
Jiangsu Luneng Dongtai	200	China	32°55′16″N 121°10′55″E	50 × Siemens SWT-4.0-130	2017	[82][83]

Largest under construction

This is a list of wind farms with a nameplate capacity of more than 300MW currently under construction.

Wind farm	Capacity (MW)	Location	Site coordinates	Turbines & model	Completion	Refs
Hornsea Project One	1,218	United Kingdom		174 x Siemens SWT-7.0-154	2020	[84]
Borssele 1&2	752	Netherlands		94 x Siemens Gamesa 8MW	2020	[85]
East Anglia ONE	714	United Kingdom		102 x Siemens SWT-7.0-154	2020	[86]
Kriegers Flak	605	Denmark	55°01′00″N 12°56′00″E	72 x Siemens SG 8.4MW	2021	[87]
Beatrice	588	United Kingdom	58°7′48″N 3°4′12″W	84 × Siemens SWT-7.0-154	2019	[88]
Hohe See	497	Germany		71 x Siemens SWT-7.0-154	2019	[89]
Borkum Riffgrund 2	450	Germany		56 x MHI Vestas V164-8.0 MW	2019	[90]
CGN Yangjiang Nanpeng Island	400	China		75 x Mingyang MY-5.5 MW	2020	[91]
Merkur	396	Germany		66 x GE Haliade 150-6 MW	2019	[92]
Norther Offshore Wind Farm	370	Belgium		44 × <u>Vestas V164</u> -8.4 MW	2019	
Datang Jiangsu Binhai	316.5	China		1 x Mingyang SCD 3 MW 50 x Goldwind GW-140/3300 45 x Sinovel SL3300/128	2019	[93]
Dongtai Four	302.4	China		63 x Siemens SWT-4.0-130 10 x Envision EN136/4.2 MW	2019	[94]
Laoting Bodhi Island	300	<u>China</u>	38.986°N 118.804°E	75 x Siemens SWT-4.0-130	2019	[95]

Largest proposed

The following table lists largest offshore wind farm areas (by nameplate capacity) that are only at a *proposal* stage, and have achieved at least some of the formal consents required before construction can begin.

Wind farm	Capacity (MW)	Location	Site coordinates	Consents	Refs
Korea Offshore	2,500	South Korea		Korean government approved	[96]
Hornsea Project Three	2,400	United Kingdom		Crown Estate Round 3	[97]
Formosa III	1,900	Taiwan		Undergoing environmental impact assessment and approvals which are expected to be completed by end of 2017	[98]
Borssele Offshore (phases 1-4)	1,400	Netherlands		Phase I and II (2 x 350MW) to be built by Ørsted Phase III (330MW) and IV (350MW) to be built by Blauwwind II c.v. consortium	[99]
Hollandse Kust Zuid Holland (phases 1-4)	1,400	Netherlands		Phase I & II (76 × 10MW Siemens-193m) to be built by Vattenfall/Nuon by 2023 ^[100] Phase III & IV (760MW) to be built by Vattenfall	[101][102]
Hornsea Project Two	1,386	United Kingdom		Pre-Construction	[103]
Moray Firth	1,866	United Kingdom		Moray East (1,116MW), Moray West (750 MW)	[104][105]
Creyke Beck A	1,200	United Kingdom	54°43′28.63″N 2°46′06.80″E	Crown Estate Round 3	[106][107]
Creyke Beck B	1,200	United Kingdom		Crown Estate Round 3	[106][107]
East Anglia (formerly Norfolk Bank)	1,200	United Kingdom		Crown Estate Round 3	[108][109]
Teesside A	1,200	United Kingdom		Crown Estate Round 3	[106][107]
Sofia Offshore (formerly Teesside B)	1,200	United Kingdom		Crown Estate Round 3	[106][107]
Triton Knoll	1,200	United Kingdom		Crown Estate Round 2	[110]

Other notable offshore wind farms

Wind Farm	Country	Coordinates	Year	Notability	Refs
Vindeby	Denmark		1991	First offshore wind farm; 11 × Bonus 450 kW	[111][112][113][114] [115][116][117]
Beatrice	United Kingdom	58°7′48″N 3°4′12″W	2007	2 × Senvion 5MW prototype turbines, deepest fixed-foundation at 45-metre water depth	[118][119][120]
Yttre Stengrund	Sweden			First offshore wind farm to be decommissioned (in November 2015)	
Hywind	Norway		2009	First full-scale, deep-water floating turbine: Siemens 2.3 MW turbine in 220 meter-deep water	[121][122]
WindFloat 1	Portugal		2011	First full-scale, semi-submersible platform with a Vestas V80-2MW turbine installed in a dry-dock	[123]
Hywind Scotland	United Kingdom		2017	First full-scale, deep-water floating wind farm, at 30 MW capacity	[124]

See also

- Jackup rig
- List of largest wind farms in the world
- · Lists of offshore wind farms by country
- Lists of offshore wind farms by water area
- Wind power by country

References

- 1. "Archived copy" (https://walneyextension.co.uk/About-the-project). Archived (https://web.archive.org/web/20180906125000/ht tps://walneyextension.co.uk/About-the-project) from the original on 2018-09-06. Retrieved 2018-09-06.
- 2. "London Array's own website announcement of commencement of offshore works" (http://www.londonarray.com/wp-content/uploads/First-foundation-installed-at-London-Array.pdf) (PDF). *londonarray.com*. Archived (https://web.archive.org/web/201107 22005827/http://www.londonarray.com/wp-content/uploads/First-foundation-installed-at-London-Array.pdf) (PDF) from the original on 2011-07-22. Retrieved 2011-03-08.
- 3. Wittrup, Sanne. First foundation (http://ing.dk/artikel/117142-foerste-fundament-paa-plads-til-dongs-gigant-havmoellepark)

 Archived (https://web.archive.org/web/20110309210850/http://ing.dk/artikel/117142-foerste-fundament-paa-plads-til-dongs-gigant-havmoellepark) 2011-03-09 at the Wayback Machine Ing.dk, 8 March 2011. Accessed: 8 March 2011.
- 4. "London Array The Project" (http://www.londonarray.com/the-project/). londonarray.com. Archived (https://web.archive.org/web/20140221155316/http://www.londonarray.com/the-project/) from the original on 21 February 2014. Retrieved 10 June 2015.
- 5. "Archived copy" (https://web.archive.org/web/20180410165832/http://geminiwindpark.nl/e_facts--figures.html). Archived from the original (http://geminiwindpark.nl/e_facts--figures.html) on 2018-04-10. Retrieved 2017-05-08.
- 6. "The 600-MW Gemini offshore wind farm is successfully up & running" (https://www.windpowerengineering.com/business-ne ws-projects/600-mw-gemini-offshore-wind-farm-successfully-running/). Windpower Engineering & Development. Archived (htt ps://web.archive.org/web/20190121222544/https://www.windpowerengineering.com/business-news-projects/600-mw-gemini-offshore-wind-farm-successfully-running/) from the original on 2019-01-21. Retrieved 2019-02-12.
- 7. "Archived copy" (https://renewablesnow.com/news/gemini-offshore-wind-project-fully-completed-567090/). Archived (https://web.archive.org/web/20190121222525/https://renewablesnow.com/news/gemini-offshore-wind-project-fully-completed-567090/) from the original on 2019-01-21. Retrieved 2017-05-08.
- 8. "Gemini" (http://www.4coffshore.com/windfarms/gemini-netherlands-nl18.html). *4coffshore.com*. Archived (https://web.archive.org/web/20160124081816/http://www.4coffshore.com/windfarms/gemini-netherlands-nl18.html) from the original on 24 January 2016. Retrieved 4 September 2015.

- 9. "Gode Wind foundation installed successfully" (http://www.4coffshore.com/windfarms/gode-wind-foundation-installed-successfully-nid1669.html). *4coffshore.com*. Archived (https://web.archive.org/web/20160124081815/http://www.4coffshore.com/windfarms/gode-wind-foundation-installed-successfully-nid1669.html) from the original on 24 January 2016. Retrieved 4 September 2015.
- 10. "DONG Energy Inaugurates 582 Megawatt Gode Wind I & 2 Offshore Wind Farms" (https://cleantechnica.com/2017/06/27/dong-energy-inaugurates-582-mw-gode-wind-2-offshore-wind-farms/). *CleanTechnica*. Archived (https://web.archive.org/web/20 170916202944/https://cleantechnica.com/2017/06/27/dong-energy-inaugurates-582-mw-gode-wind-2-offshore-wind-farms/) from the original on 16 September 2017. Retrieved 3 July 2017.
- 11. "World's second largest offshore wind farm opens off coast of Wales" (https://web.archive.org/web/20150619014734/http://www.walesonline.co.uk/business/business-news/worlds-second-largest-offshore-wind-9476670). Wales Online. Archived from the original (http://www.walesonline.co.uk/business/business-news/worlds-second-largest-offshore-wind-9476670) on 19 June 2015. Retrieved 18 June 2015.
- 12. "Full power at Race Bank Offshore Wind Farm" (https://orsted.com/en/Media/Newsroom/News/2018/02/Full-power-at-Race-Bank-Offshore-Wind-Farm). orsted.com. Archived (https://web.archive.org/web/20181012214613/https://orsted.com/en/Media/Newsroom/News/2018/02/Full-power-at-Race-Bank-Offshore-Wind-Farm) from the original on 2018-10-12. Retrieved 2018-02-02.
- 13. "Innovation Installs First Foundation at Race Bank" (http://www.offshorewind.biz/2016/06/30/innovation-installs-first-foundation-at-race-bank/). offshorewind.biz/. Archived (https://web.archive.org/web/20160702102629/http://www.offshorewind.biz/2016/06/30/innovation-installs-first-foundation-at-race-bank/) from the original on 2 July 2016. Retrieved 2 July 2016.
- 14. "UK: Greater Gabbard Offshore Wind Farm Generates Power" (http://www.offshorewind.biz/2012/09/07/uk-greater-gabbard-of fshore-wind-farm-generates-power/). Archived (https://web.archive.org/web/20121011065051/http://www.offshorewind.biz/2012/09/07/uk-greater-gabbard-offshore-wind-farm-generates-power/) from the original on 2012-10-11. Retrieved 2012-09-07.
- 15. "Offshore Wind Farms 2008" (http://www.ewea.org/fileadmin/ewea_documents/documents/statistics/Offshore_Wind_Farms_2 008.pdf) (PDF). EWEA. 2009-02-02. Archived (https://web.archive.org/web/20090419062441/http://www.ewea.org/fileadmin/e wea_documents/documents/statistics/Offshore_Wind_Farms_2008.pdf) (PDF) from the original on 2009-04-19. Retrieved 2009-02-04.
- 16. "SSE plc The UK's broadest-based energy company" (http://www.scottish-southern.co.uk/SSEInternet/index.aspx?rightCoIH eader=30&id=15836). scottish-southern.co.uk. Archived (https://web.archive.org/web/20110111084304/http://www.scottish-southern.co.uk/SSEInternet/index.aspx?rightColHeader=30&id=15836) from the original on 11 January 2011. Retrieved 10 June 2015.
- 17. "Horns Rev 3 offshore wind farm (https://corporate.vattenfall.com/about-energy/renewable-energy-sources/wind_power/wind-power-at-vattenfall/horns-rev-3-offshore-wind-farm/) Archived (https://web.archive.org/web/20161022222554/https://corporate.vattenfall.com/about-energy/renewable-energy-sources/wind_power/wind-power-at-vattenfall/horns-rev-3-offshore-wind-farm/) 2016-10-22 at the Wayback Machine" Vattenfall, 27 June 2016. Accessed: 29 October 2016.
- 18. Ltd, Renews (4 October 2017). "Dudgeon hits CfD milestone" (https://renews.biz/35185/dudgeon-hits-cfd-milestone/). reNEWS Renewable Energy News.
- 19. "World's Largest OW Jack-Up Vessel Installs World's Heaviest Monopile at Veja Mate OWF" (http://www.offshorewind.biz/201 6/04/06/worlds-largest-ow-jack-up-vessel-installs-worlds-heaviest-monopile-at-veja-mate-owf/). Archived (https://web.archive.org/web/20160617235532/http://www.offshorewind.biz/2016/04/06/worlds-largest-ow-jack-up-vessel-installs-worlds-heaviest-monopile-at-veja-mate-owf/) from the original on 17 June 2016. Retrieved 6 June 2016.
- 20. "Construction complete for 402-MW Veja Mate offshore wind park" (https://renewablesnow.com/news/construction-complete-for-402-mw-veja-mate-offshore-wind-park-570637/). Renewables Now. Archived (https://web.archive.org/web/2019012122222 3/https://renewablesnow.com/news/construction-complete-for-402-mw-veja-mate-offshore-wind-park-570637/) from the original on 21 January 2019. Retrieved 31 May 2017.
- 21. "VIPs cut ribbon at 400MW Anholt (http://www.rechargenews.com/wind/article1336397.ece) Archived (https://web.archive.org/web/20130907022321/http://www.rechargenews.com/wind/article1336397.ece) 2013-09-07 at the Wayback Machine"

 Recharge News, 4 September 2013. Accessed: 4 September 2013.
- 22. Jan Bjerre Lauridsen & Søren Andersen. "Queen says Good Wind to giant turbines (http://www.b.dk/nationalt/dronning-oensk ede-god-vind-til-kaempemoeller-i-kattegat) Archived (https://web.archive.org/web/20130913112224/http://www.b.dk/nationalt/dronning-oenskede-god-vind-til-kaempemoeller-i-kattegat) 2013-09-13 at the Wayback Machine" Berlingske, 4 September 2013. Accessed: 4 September 2013.

- 23. "All turbines at Anholt Offshore wind farm now operational" (https://web.archive.org/web/20131006224732/http://www.dongenergy.com/anholt/EN/News/anholt_nyheder/News/Pages/AllturbinesatAnholtoffshorewindfarmnowoperational.aspx) (Press release). DONG Energy. 20 June 2013. Archived from the original (http://www.dongenergy.com/anholt/EN/News/anholt_nyheder/News/Pages/AllturbinesatAnholtoffshorewindfarmnowoperational.aspx) on 6 October 2013. Retrieved 27 August 2013.
- 24. Anholf Offshore wind farm in 4C Offshore (http://www.4coffshore.com/windfarms/anholt-denmark-dk13.html) Archived (https://web.archive.org/web/20120627225646/http://www.4coffshore.com/windfarms/anholt-denmark-dk13.html) 2012-06-27 at the Wayback Machine Retrieved 2013-08-27
- 25. "BARD 1 (4c)" (http://www.4coffshore.com/windfarms/bard-offshore-i-germany-de23.html). *4coffshore.com*. Archived (https://web.archive.org/web/20160124081815/http://www.4coffshore.com/windfarms/bard-offshore-i-germany-de23.html) from the original on 24 January 2016. Retrieved 10 June 2015.
- 26. Rösler eröffnet Offshore-Windpark Bard 1 (http://www.ndr.de/regional/niedersachsen/oldenburg/offshore389.html) Archived (https://web.archive.org/web/20130828045202/http://www.ndr.de/regional/niedersachsen/oldenburg/offshore389.html) 2013-08-28 at the Wayback Machine Retrieved 2013-08-26
- 27. German Federal Minister Inaugurates BARD Offshore 1 (https://www.offshorewind.biz/2013/08/26/german-federal-minister-in augurates-bard-offshore-1/) Archived (https://web.archive.org/web/20130830092633/http://www.offshorewind.biz/2013/08/26/german-federal-minister-inaugurates-bard-offshore-1/) 2013-08-30 at the Wayback Machine Retrieved 2013-08-26
- 28. "Global Tech I officially inaugurated" (http://www.sunwindenergy.com/offshore-wind-energy/global-tech-officially-inaugurated). sunwindenergy.com/. Archived (https://web.archive.org/web/20150911225021/http://www.sunwindenergy.com/offshore-wind-energy/global-tech-officially-inaugurated) from the original on 11 September 2015. Retrieved 4 September 2015.
- 29. "Rampion Offshore Wind Farm Hits Full Stride" (https://www.offshorewind.biz/2018/04/17/rampion-offshore-wind-farm-hits-full -stride/). Offshore Wind. Archived (https://web.archive.org/web/20180418165036/https://www.offshorewind.biz/2018/04/17/rampion-offshore-wind-farm-hits-full-stride/) from the original on 2018-04-18. Retrieved 2018-05-03.
- 30. "SPIC Binhai North H2 400MW" (http://www.4coffshore.com/windfarms/spic-binhai-north-h2-400mw-china-cn4c.html). www.4coffshore.com. Archived (https://web.archive.org/web/20180730170821/https://www.4coffshore.com/windfarms/spic-binhai-north-h2-400mw-china-cn4c.html) from the original on 2018-07-30. Retrieved 2018-11-26.
- 31. "West of Duddon Sands reaches foundation installation halfway point" (https://web.archive.org/web/20141112022212/http://www.dongenergy.com/west_of_duddon_sands/News/data/Pages/WestofDuddonSandsoffshorewindfarmreachesfoundationinst allationhalfwaypoint.aspx). Archived from the original (http://www.dongenergy.com/west_of_duddon_sands/News/data/Pages/WestofDuddonSandsoffshorewindfarmreachesfoundationinstallationhalfwaypoint.aspx) on 2014-11-12. Retrieved 2013-08-27.
- 32. "West of Duddon Sands" (http://www.4coffshore.com/windfarms/west-of-duddon-sands-united-kingdom-uk33.html). Archived (https://web.archive.org/web/20120523185221/http://www.4coffshore.com/windfarms/west-of-duddon-sands-united-kingdom-uk33.html) from the original on 2012-05-23. Retrieved 2013-08-27.
- 33. "All Monopiles Installed at Arkona Offshore Wind Farm, TPs Next" (https://www.offshorewind.biz/2017/11/09/all-monopiles-installed-at-arkona-offshore-wind-farm-tps-next/). *Offshore Wind*. Archived (https://web.archive.org/web/20180717190805/https://www.offshorewind.biz/2017/11/09/all-monopiles-installed-at-arkona-offshore-wind-farm-tps-next/) from the original on 2018-07-17. Retrieved 2018-04-20.
- 34. Welle (www.dw.com), Deutsche. "Baltic Sea's largest wind farm officially opened I DW I 16.04.2019" (https://www.dw.com/en/baltic-seas-largest-wind-farm-officially-opened/a-48352482). DW.COM. Archived (https://web.archive.org/web/201905011520 34/https://www.dw.com/en/baltic-seas-largest-wind-farm-officially-opened/a-48352482) from the original on 1 May 2019. Retrieved 1 May 2019.
- 35. Datasheet for site: Walney 1 Offshore wind farm (http://www.lorc.dk/Knowledge/Offshore-renewables-map/Offshore-site-datas heet/Walney-1-Offshore-Wind-Farm/000050) Archived (https://web.archive.org/web/20110326084053/http://www.lorc.dk/Knowledge/Offshore-renewables-map/Offshore-site-datasheet/Walney-1-Offshore-Wind-Farm/000050) 2011-03-26 at the Wayback Machine. LORC Knowledge, 2011
- 36. "UK: Walney Offshore Wind Farm Fully Operational" (http://www.offshorewind.biz/2012/06/14/uk-walney-offshore-wind-farm-fully-operational/). 2012-06-14. Archived (https://web.archive.org/web/20160304053035/http://www.offshorewind.biz/2012/06/14/uk-walney-offshore-wind-farm-fully-operational/) from the original on 2016-03-04. Retrieved 2012-06-15.
- 37. "24 Turbines Up at Galloper Offshore Wind Farm" (http://www.offshorewind.biz/2017/09/27/24-turbines-up-at-galloper-offshore-o
- 38. Shields, Mark. "Blow me! Galloper wind farm off East Anglian coast hits full throttle 18 months after building started" (http://www.eadt.co.uk/business/galloper-offshore-wind-farm-project-fully-operational-1-5458217). East Anglian Daily Times. Archived (https://web.archive.org/web/20180502142229/http://www.eadt.co.uk/business/galloper-offshore-wind-farm-project-fully-operational-1-5458217) from the original on 2 May 2018. Retrieved 2 May 2018.

- 39. "Construction is starting on the offshore wind farm Wikinger" (http://www.sunwindenergy.com/wind-energy/construction-starting-offshore-wind-farm-wikinger). Archived (https://web.archive.org/web/20160404102416/http://www.sunwindenergy.com/windenergy/construction-starting-offshore-wind-farm-wikinger) from the original on 4 April 2016. Retrieved 23 March 2016.
- 40. http://www.offshorewindindustry.com/news/first-foundation-nordsee-one-successfully Archived (https://web.archive.org/web/2 0160309175604/http://www.offshorewindindustry.com/news/first-foundation-nordsee-one-successfully) 2016-03-09 at the Wayback Machine First foundation for Nordsee One successfully installed
- 41. C-Power: General Informations (http://www.c-power.be/English/welcome/algemene_info.html) Archived (https://web.archive.org/web/20120423030705/http://www.c-power.be/English/welcome/algemene_info.html) 2012-04-23 at the Wayback Machine
- 42. "RWE Innogy Press release 09 July 2013 Export cables in at Gwynt y Môr Offshore Wind Farm" (https://web.archive.org/web/20130921054229/http://www.rwe.com/web/cms/en/86182/rwe-innogy/news-press/press/?pmid=4006424). rwe.com.

 Archived from the original (http://www.rwe.com/web/cms/en/86182/rwe-innogy/news-press/press/?pmid=4006424) on 21 September 2013. Retrieved 10 June 2015.
- 43. Phase 2 completed (http://www.repower.de/press/press-releases/detail-press/?tx_ttnews%5Btt_news%5D=8109&cHash=071 ef77c45bd3f13dc55372ca3c95111) Archived (https://web.archive.org/web/20120730111220/http://www.repower.de/press/press-releases/detail-press/?tx_ttnews%5Btt_news%5D=8109&cHash=071ef77c45bd3f13dc55372ca3c95111) 2012-07-30 at the Wayback Machine
- 44. "Belgium: Thornton Bank Offshore Wind Farm Officially Inaugurated" (http://www.offshorewind.biz/2013/09/18/belgium-thornto n-bank-offshore-wind-farm-officially-inaugurated/). *Offshore Wind*. Archived (https://web.archive.org/web/20150705181548/htt p://www.offshorewind.biz/2013/09/18/belgium-thornton-bank-offshore-wind-farm-officially-inaugurated/) from the original on 5 July 2015. Retrieved 10 June 2015.
- 45. "SWT-3.6-107 Wind Turbine" (https://web.archive.org/web/20080725000136/http://www.powergeneration.siemens.com/products-solutions-services/products-packages/wind-turbines/products/swt-3-6-107/). Siemens. Archived from the original (http://www.powergeneration.siemens.com/products-solutions-services/products-packages/wind-turbines/products/swt-3-6-107/) on 2008-07-25. Retrieved 2009-07-19.
- 46. "Sheringham Shoal Offshore Wind Farm" (http://www.statoilhydro.com/en/TechnologyInnovation/NewEnergy/RenewablePowerProduction/Offshore/SheringhamShoel/Downloads/Fact%20sheet.pdf) (PDF). StatoilHydro. Retrieved 2009-07-19.
- 47. Trickyweb. "Sheringham Shoal Operated by Statkraft" (http://www.scira.co.uk/). scira.co.uk. Archived (https://web.archive.org/web/20150425061049/http://www.scira.co.uk/) from the original on 25 April 2015. Retrieved 10 June 2015.
- 48. "Norway's Crown Prince Opens Sheringham Shoal Offshore Wind Farm (UK)" (http://www.offshorewind.biz/2012/09/27/norways-crown-prince-opens-sheringham-shoal-offshore-wind-farm-uk/). *Offshore Wind*. Archived (https://web.archive.org/web/20150714194510/http://www.offshorewind.biz/2012/09/27/norways-crown-prince-opens-sheringham-shoal-offshore-wind-farm-uk/) from the original on 14 July 2015. Retrieved 10 June 2015.
- 49. "Borkum Riffgrund I" (http://www.4coffshore.com/windfarms/borkum-riffgrund-i-germany-de04.html). 4coffshore.com. Archived (https://web.archive.org/web/20160124081815/http://www.4coffshore.com/windfarms/borkum-riffgrund-i-germany-de04.html) from the original on 24 January 2016. Retrieved 4 September 2015.
- 50. "Rentel Offshore Wind Farm, North Sea Power Technology" (https://www.power-technology.com/projects/rentel-offshore-wind-farm-north-sea/). *Power Technology*. Archived (https://web.archive.org/web/20180420135659/https://www.power-technology.y.com/projects/rentel-offshore-wind-farm-north-sea/) from the original on 2018-04-20. Retrieved 2018-04-20.
- 51. "SPIC Jiangsu Dafeng H3 300MW 4C Offshore" (https://www.4coffshore.com/windfarms/spic-jiangsu-dafeng-h3-300mw-chin a-cn3n.html). www.4coffshore.com. Archived (https://web.archive.org/web/20190323234624/https://www.4coffshore.com/windfarms/spic-jiangsu-dafeng-h3-300mw-china-cn3n.html) from the original on 2019-03-23. Retrieved 2019-03-23.
- 52. "Amrumbank West Offshore Wind Farm" (http://www.4coffshore.com/windfarms/amrumbank-west-germany-de05.html). 4coffshore.com. Archived (https://web.archive.org/web/20160124081815/http://www.4coffshore.com/windfarms/amrumbank-west-germany-de05.html) from the original on 24 January 2016. Retrieved 10 June 2015.
- 53. "E.ON's Amrumbank West offshore wind farm is fully operational" (http://www.yourrenewablenews.com/e.on%E2%80%99s+a mrumbank+west+offshore+wind+farm+is+fully+operational_122889.html). www.yourrenewablenews.com. 22 October 2015. Archived (https://web.archive.org/web/20151025125824/http://www.yourrenewablenews.com/e.on%E2%80%99s+amrumban k+west+offshore+wind+farm+is+fully+operational_122889.html) from the original on 25 October 2015. Retrieved 22 October 2015.
- 54. "Thanet" (https://archive.is/20120527011623/http://www.theengineer.co.uk/news/wind-farm-project/308825.article). The Engineer Online. 2008-07-25. Archived from the original (http://www.theengineer.co.uk/Articles/308825/Wind+farm+project.htm) on 2012-05-27. Retrieved 2008-11-26.

- 55. "Thanet offshore wind farm starts electricity production" (https://www.bbc.co.uk/news/technology-11395824). BBC News. 2010-09-23. Archived (https://web.archive.org/web/20100930054906/http://www.bbc.co.uk/news/technology-11395824) from the original on 2010-09-30. Retrieved 2010-09-30.
- 56. "China's Largest Offshore Wind Farm Goes Online" (https://www.offshorewind.biz/2017/10/04/chinas-largest-offshore-wind-far m-goes-online/). Offshore Wind. Archived (https://web.archive.org/web/20180116200026/https://www.offshorewind.biz/2017/1 0/04/chinas-largest-offshore-wind-farm-goes-online/) from the original on 16 January 2018. Retrieved 16 January 2018.
- 57. "Jiangsu Longyuan Chiang Sand H1 300MW 4C Offshore" (http://www.4coffshore.com/windfarms/jiangsu-longyuan-chiang-sand-h1-300mw-china-cn2f.html). www.4coffshore.com. Archived (https://web.archive.org/web/20180730202610/https://www.4coffshore.com/windfarms/jiangsu-longyuan-chiang-sand-h1-300mw-china-cn2f.html) from the original on 2018-07-30. Retrieved 2018-11-26.
- 58. "Cable-laying begins at Nordsee Ost" (http://www.rechargenews.com/wind/offshore/article1334317.ece). Archived (https://web.archive.org/web/20130923041409/http://www.rechargenews.com/wind/offshore/article1334317.ece) from the original on 2013-09-23. Retrieved 2013-08-13.
- 59. "Offshore wind farm Nordsee Ost" (https://web.archive.org/web/20130828000050/http://www.rwe.com/web/cms/en/961656/offshore-wind-farm-nordsee-ost/). Archived from the original (http://www.rwe.com/web/cms/en/961656/offshore-wind-farm-nordsee-ost/) on 2013-08-28. Retrieved 2013-08-13.
- 60. "Butendiek Offshore Wind Farm" (http://www.4coffshore.com/windfarms/butendiek-germany-de08.html). 4coffshore.com.

 Archived (https://web.archive.org/web/20160124081815/http://www.4coffshore.com/windfarms/butendiek-germany-de08.html) from the original on 24 January 2016. Retrieved 10 June 2015.
- 61. "Butendiek Fully Operational" (http://www.gwec.net/the-288mw-butendiek-offshore-wind-farm-fully-operational/). Archived (htt ps://web.archive.org/web/20150811070352/http://www.gwec.net/the-288mw-butendiek-offshore-wind-farm-fully-operational/) from the original on 2015-08-11. Retrieved 2015-08-07.
- 62. "DanTysk" (http://www.dantysk.com/press-info/press-releases/details/archive/2014/december/article/offshore-windpark-dantys k-speist-ersten-strom-ein.html?tx_ttnews%5Bday%5D=04&cHash=7dc177173f09f5a3119f83f4a21e282a). Retrieved 2015-01-10.
- 63. "EnBW lines up Hohe See deals as Baltic 2 opens" (http://www.rechargenews.com/wind/1411753/enbw-lines-up-hohe-see-de als-as-baltic-2-opens). Archived (https://web.archive.org/web/20150926151111/http://www.rechargenews.com/wind/1411753/enbw-lines-up-hohe-see-deals-as-baltic-2-opens) from the original on 2015-09-26. Retrieved 2015-09-21.
- 64. "4C Offshore Baltic 2 Wind Farm" (http://www.4coffshore.com/windfarms/enbw-baltic-2-germany-de52.html). Archived (http s://web.archive.org/web/20120723194146/http://www.4coffshore.com/windfarms/enbw-baltic-2-germany-de52.html) from the original on 2012-07-23. Retrieved 2013-08-27.
- 65. "Germany's 288MW Meerwind inaugurated in North Sea" (http://www.rechargenews.com/wind/offshore/1383111/Germanys-2 88MW-Meerwind-inaugurated-in-North-Sea). Archived (https://web.archive.org/web/20141115101711/http://www.rechargenews.com/wind/offshore/1383111/Germanys-288MW-Meerwind-inaugurated-in-North-Sea) from the original on 2014-11-15. Retrieved 2014-11-14.
- 66. http://www.offshorewind.biz/2015/07/08/sandbank-owf-construction-kicks-off/ Archived (https://web.archive.org/web/20150714

 182641/http://www.offshorewind.biz/2015/07/08/sandbank-owf-construction-kicks-off/) 2015-07-14 at the Wayback Machine Sandbank OWF Construction Kicks Off
- 67. "Sandbank fully commissioned" (http://www.4coffshore.com/windfarms/sandbank-fully-commissioned-nid5235.html). *4c*Offshore. 27 January 2017. Archived (https://web.archive.org/web/20170224211937/http://www.4coffshore.com/windfarms/sandbank-fully-commissioned-nid5235.html) from the original on 24 February 2017. Retrieved 23 February 2017.
- 68. "Lincs Wind Farm Now Fully Operational" (http://www.smartmeters.com/the-news/renewable-energy-news/4169-lincs-wind-farm-now-fully-operational.html). Archived (https://web.archive.org/web/20130906131519/http://www.smartmeters.com/the-news/renewable-energy-news/4169-lincs-wind-farm-now-fully-operational.html) from the original on 2013-09-06. Retrieved 2013-08-27.
- 69. "Showtime at Burbo 2" (http://renews.biz/106837/showtime-at-burbo-2/). reNEWS Renewable Energy News. 27 April 2017.

 Archived (https://web.archive.org/web/20171104074820/http://renews.biz/106837/showtime-at-burbo-2/) from the original on 4 November 2017. Retrieved 7 November 2017.
- 70. "China's Liuheng Offshore Wind Farm Goes Into Operation" (https://www.offshorewind.biz/2019/04/19/chinas-liuheng-offshore -wind-farm-goes-operation/). Archived (https://web.archive.org/web/20190426010418/https://www.offshorewind.biz/2019/04/1 9/chinas-liuheng-offshore-wind-farm-goes-operation/) from the original on 26 April 2019. Retrieved 1 May 2019.

- 71. "Key project dates for Guodian Zhoushan Putuo District 6 Zone 2 4C Offshore" (https://www.4coffshore.com/windfarms/project-dates-for-guodian-zhoushan-putuo-district-6-zone-2-cn41.html). www.4coffshore.com. Archived (https://web.archive.org/web/20190509030540/https://www.4coffshore.com/windfarms/project-dates-for-guodian-zhoushan-putuo-district-6-zone-2-cn41.html) from the original on 2019-05-09. Retrieved 2019-05-09.
- 72. "Eon energy project sees every turbine generating Grimsby Telegraph" (https://web.archive.org/web/20150619001701/http://www.grimsbytelegraph.co.uk/power-hit-Humber-Gateway/story-26656844-detail/story.html). *Grimsby Telegraph*. Archived from the original (http://www.grimsbytelegraph.co.uk/power-hit-Humber-Gateway/story-26656844-detail/story.html) on 19 June 2015. Retrieved 15 June 2015.
- 73. "4C Offshore Northwind Offshore wind farm" (http://www.4coffshore.com/windfarms/northwind-belgium-be02.html). Archived (https://web.archive.org/web/20140707033434/http://www.4coffshore.com/windfarms/northwind-belgium-be02.html) from the original on 2014-07-07. Retrieved 2013-08-27.
- 74. "Westermost Rough Offshore Wind Farm" (http://www.4coffshore.com/windfarms/westermost-rough-united-kingdom-uk34.htm l). 4coffshore.com. Archived (https://web.archive.org/web/20160124081816/http://www.4coffshore.com/windfarms/westermost-rough-united-kingdom-uk34.html) from the original on 24 January 2016. Retrieved 10 June 2015.
- 75. "Westermost Rough hits full power" (https://web.archive.org/web/20150530170100/http://renews.biz/89061/uk-wind-farm-hits-full-power/). reNEWS Renewable Energy News. Archived from the original (http://renews.biz/89061/uk-wind-farm-hits-full-power/) on 30 May 2015. Retrieved 9 June 2015.
- 76. Horns Rev 2 turbines (http://www.dongenergy.com/hornsrev2/en/about_horns_rev_2/about_the_project/pages/turbines.aspx)

 Archived (https://archive.is/20120527011624/http://www.dongenergy.com/hornsrev2/en/about_horns_rev_2/about_the_project
 /pages/turbines.aspx) 2012-05-27 at Archive.today
- 77. E.ON finishes Rødsand II (http://www.businessweek.com/news/2010-07-14/e-on-finishes-danish-offshore-wind-park-installation.html) Archived (https://archive.is/20120527011635/http://www.businessweek.com/news/2010-07-14/e-on-finishes-danish-offshore-wind-park-installation.html) 2012-05-27 at Archive.today Business Week, 14 July 2010. Retrieved: 11 September 2010.
- 78. Datasheet for site: Roedsand 2 offshore wind farm (http://www.lorc.dk/Knowledge/Offshore-renewables-map/Offshore-site-dat asheet/Roedsand-2-Offshore-Wind-Farm/000046) Archived (https://web.archive.org/web/20120324203638/http://www.lorc.dk/Knowledge/Offshore-renewables-map/Offshore-site-datasheet/Roedsand-2-Offshore-Wind-Farm/000046) 2012-03-24 at the Wayback Machine. LORC Knowledge, 2011
- 79. "Jiangsu Xiangshui 201MW wind farm all turbines connected to the grid (Modern Han Chinese language publication)" (https://web.archive.org/web/20120522220209/http://www.cnwpem.com/22/8/8299.html). Archived from the original (http://www.cnwpem.com/22/8/8299.html) on 2012-05-22. Retrieved 2012-08-26.
- 80. "Chenjiagang Xiangshui Project Offshore Wind Farm" (https://archive.today/20130116024638/http://www.4coffshore.com/wind farms/chenjiagang-xiangshui-project-china-cn50.html). archive.is. 16 January 2013. Archived from the original (http://www.4coffshore.com/windfarms/chenjiagang-xiangshui-project-china-cn50.html) on 16 January 2013.
- 81. "Borkum West II Commissioned" (http://www.enerdata.net/enerdatauk/press-and-publication/energy-news-001/200-mw-borkum-offshore-wind-park-comes-stream-germany_33419.html). Enerdata. Archived (https://web.archive.org/web/2015092400052 3/http://www.enerdata.net/enerdatauk/press-and-publication/energy-news-001/200-mw-borkum-offshore-wind-park-comes-stream-germany_33419.html) from the original on 24 September 2015. Retrieved 20 July 2015.
- 82. "Jiangsu Luneng Dongtai 200MW Concession 4C Offshore" (http://www.4coffshore.com/windfarms/jiangsu-luneng-dongtai-2 00mw-concession-china-cn32.html). www.4coffshore.com. Archived (https://web.archive.org/web/20171019003404/http://www.4coffshore.com/windfarms/jiangsu-luneng-dongtai-200mw-concession-china-cn32.html) from the original on 2017-10-19. Retrieved 2017-10-18.
- 83. "Key project dates for Jiangsu Luneng Dongtai 200MW Concession 4C Offshore" (http://www.4coffshore.com/windfarms/project-dates-for-jiangsu-luneng-dongtai-200mw-concession-cn32.html). www.4coffshore.com. Archived (https://web.archive.org/web/20180213195703/http://www.4coffshore.com/windfarms/project-dates-for-jiangsu-luneng-dongtai-200mw-concession-cn32.html) from the original on 13 February 2018. Retrieved 13 February 2018.
- 84. "DONG Tables Hornsea Project One Offshore Construction Schedule" (https://www.offshorewind.biz/2017/08/24/dong-tables-hornsea-project-one-offshore-construction-schedule/). *Offshore Wind*. Archived (https://web.archive.org/web/2018042014045 0/https://www.offshorewind.biz/2017/08/24/dong-tables-hornsea-project-one-offshore-construction-schedule/) from the original on 2018-04-20. Retrieved 2018-04-20.
- 85. "Borssele 1&2" (https://orsted.nl/nl/Onze-windparken/Borssele-1-and-2-EN). Ørsted. Archived (https://web.archive.org/web/20 181119091900/https://orsted.nl/nl/Onze-windparken/Borssele-1-and-2-EN) from the original on 2018-11-19. Retrieved 2018-11-19.

- 86. "Seajacks, Van Oord to Install East Anglia ONE Foundations" (https://www.offshorewind.biz/2017/01/17/seajacks-van-oord-to-install-east-anglia-one-foundations/). *Offshore Wind*. Archived (https://web.archive.org/web/20180420141324/https://www.offshorewind.biz/2017/01/17/seajacks-van-oord-to-install-east-anglia-one-foundations/) from the original on 2018-04-20. Retrieved 2018-04-20.
- 87. "Kriegers Flak Offshore Wind Farm Power Technology" (https://www.power-technology.com/projects/kriegers-flak-offshore-wind-farm/). Power Technology. Archived (https://web.archive.org/web/20180420135702/https://www.power-technology.com/projects/kriegers-flak-offshore-wind-farm/) from the original on 2018-04-20. Retrieved 2018-04-20.
- 88. "Oleg Strashnov Installs First Beatrice Jacket Foundation" (http://www.offshorewind.biz/2017/08/14/oleg-strashnov-installs-firs t-beatrice-jacket-foundation/). *Offshore Wind.* Archived (https://web.archive.org/web/20171007225004/http://www.offshorewind.biz/2017/08/14/oleg-strashnov-installs-first-beatrice-jacket-foundation/) from the original on 2017-10-07. Retrieved 2017-10-18.
- 89. "Foundation first at Hohe See" (http://renews.biz/110822/foundation-first-at-hohe-see/). reNEWS Renewable Energy News. 2018-04-17. Archived (https://web.archive.org/web/20180419232744/http://renews.biz/110822/foundation-first-at-hohe-see/) from the original on 2018-04-19. Retrieved 2018-04-20.
- 90. "MHI Vestas Sets Up Borkum Riffgrund 2 Base in Emden" (https://www.offshorewind.biz/2018/03/16/mhi-vestas-sets-up-bork um-riffgrund-2-base-in-emden/). *Offshore Wind*. Archived (https://web.archive.org/web/20180420140909/https://www.offshore wind.biz/2018/03/16/mhi-vestas-sets-up-borkum-riffgrund-2-base-in-emden/) from the original on 2018-04-20. Retrieved 2018-04-20.
- 91. "Construction under way at China's largest offshore wind farm" (https://www.4coffshore.com/news/construction-under-way-at-china's-largest-offshore-wind-farm-nid8695.html). *4c Offshore*. Archived (https://web.archive.org/web/20190509034117/https://www.4coffshore.com/news/construction-under-way-at-china%27s-largest-offshore-wind-farm-nid8695.html) from the original on 2019-05-09. Retrieved 2019-05-09.
- 92. "Global Wind Service to Install Merkur Wind Turbines" (https://www.offshorewind.biz/2017/12/20/global-wind-service-to-install-merkur-wind-turbines/). *Offshore Wind*. Archived (https://web.archive.org/web/20180420141048/https://www.offshorewind.biz/2017/12/20/global-wind-service-to-install-merkur-wind-turbines/) from the original on 2018-04-20. Retrieved 2018-04-20.
- 93. "Datang Jiangsu Binhai 300MW offshore wind farm 4C Offshore" (https://www.4coffshore.com/windfarms/datang-jiangsu-binhai-300mw-offshore-wind-farm--china-cn23.html). www.4coffshore.com. Archived (https://web.archive.org/web/201903232352 21/https://www.4coffshore.com/windfarms/datang-jiangsu-binhai-300mw-offshore-wind-farm--china-cn23.html) from the original on 2019-03-23. Retrieved 2019-05-09.
- 94. "Dongtai Four (H2) 300MW 4C Offshore" (https://www.4coffshore.com/windfarms/dongtai-four-(h2)-300mw--china-cn06.htm

 I). www.4coffshore.com. Archived (https://web.archive.org/web/20190509030631/https://www.4coffshore.com/windfarms/dongtai-four-(h2)-300mw--china-cn06.html) from the original on 2019-05-09. Retrieved 2019-05-09.
- 95. "Laoting Bodhi Island 300MW Demonstration 4C Offshore" (http://www.4coffshore.com/windfarms/laoting-bodhi-island-300m w-demonstration-china-cn70.html). www.4coffshore.com. Archived (https://web.archive.org/web/20190323235018/https://www.4coffshore.com/windfarms/laoting-bodhi-island-300mw-demonstration-china-cn70.html) from the original on 2019-03-23. Retrieved 2018-11-26.
- 96. Deo Maglaya. "South Korea to build \$9 billion offshore wind farm by 2019" (https://web.archive.org/web/20150227102750/htt p://www.ecoseed.org/business/asia/article/130-asia/11823-south-korea-to-build-\$9-billion-offshore-wind-farm-by-2019).

 ecoseed.org. Archived from the original (http://www.ecoseed.org/business/asia/article/130-asia/11823-south-korea-to-build-\$9-billion-offshore-wind-farm-by-2019) on 2015-02-27. Retrieved 10 June 2015.
- 97. "Hornsea Project Three 4C Offshore" (http://www.4coffshore.com/windfarms/windfarms.aspx?windfarmId=UK1K).

 www.4coffshore.com. Archived (https://web.archive.org/web/20180421030530/http://www.4coffshore.com/windfarms/windfarms.aspx?windfarmId=UK1K) from the original on 2018-04-21. Retrieved 2018-04-20.
- 98. "Taiwan's 1st offshore wind farm to boost capacity 1,500% by 2019" (http://focustaiwan.tw/news/aeco/201708060010.aspx).

 Archived (https://web.archive.org/web/20170912010135/http://focustaiwan.tw/news/aeco/201708060010.aspx) from the original on 2017-09-12. Retrieved 2017-09-13.
- 99. "Dutch consortium to construct second Borssele offshore wind farm" (http://english.rvo.nl/news/dutch-consortium-construct-se cond-borssele-offshore-wind-farm). *rvo.nl*. Retrieved 2017-05-08.
- 100. "Newest and largest turbines for Vattenfall's Hollandse Kust Zuid wind farm" (https://www.windtech-international.com/projects-and-contracts/newest-and-largest-turbines-for-vattenfalls-hollandse-kust-zuid-wind-farm). www.windtech-international.com. 15 April 2019. Archived (https://web.archive.org/web/20190415111656/https://www.windtech-international.com/projects-and-contracts/newest-and-largest-turbines-for-vattenfalls-hollandse-kust-zuid-wind-farm) from the original on 15 April 2019. Retrieved 15 April 2019.

- 101. "Hollandse Kust Zuid Holland I and II Chinook (Tender 2017) 4C Offshore" (http://www.4coffshore.com/windfarms/hollandse-kust-zuid-holland-i-and-ii---chinook---(tender-2017)-netherlands-nl0d.html). www.4coffshore.com. Archived (https://web.archive.org/web/20180421030457/http://www.4coffshore.com/windfarms/hollandse-kust-zuid-holland-i-and-ii---chinook---(tender-2017)-netherlands-nl0d.html) from the original on 2018-04-21. Retrieved 2018-04-20.
- 102. "Hollandse Kust Zuid Holland III and IV (Tender 2018) 4C Offshore" (http://www.4coffshore.com/windfarms/hollandse-kust-zuid-holland-iii-and-iv-(tender-2018)-netherlands-nl0e.html). www.4coffshore.com. Archived (https://web.archive.org/web/2018 0421030524/http://www.4coffshore.com/windfarms/hollandse-kust-zuid-holland-iii-and-iv-(tender-2018)-netherlands-nl0e.html) from the original on 2018-04-21. Retrieved 2018-04-20.
- 103. "Hornsea Project Two 4C Offshore" (http://www.4coffshore.com/windfarms/hornsea-project-two-united-kingdom-uk1u.html). www.4coffshore.com. Archived (https://web.archive.org/web/20180421030533/http://www.4coffshore.com/windfarms/hornsea-project-two-united-kingdom-uk1u.html) from the original on 2018-04-21. Retrieved 2018-04-20.
- 104. "Moray East 4C Offshore" (http://www.4coffshore.com/windfarms/windfarms.aspx?windfarmId=UK40). www.4coffshore.com. Archived (https://web.archive.org/web/20180421030554/http://www.4coffshore.com/windfarms/windfarms.aspx?windfarmId=UK40) from the original on 2018-04-21. Retrieved 2018-04-20.
- 105. "Moray West 4C Offshore" (http://www.4coffshore.com/windfarms/windfarms.aspx?windfarmId=UK77). www.4coffshore.com.

 Archived (https://web.archive.org/web/20180421030527/http://www.4coffshore.com/windfarms/windfarms.aspx?windfarmId=UK77) from the original on 2018-04-21. Retrieved 2018-04-20.
- 106. "Forewind finalises first four Dogger Bank boundaries" (http://www.rechargenews.com/energy/wind/article327744.ece). rechargenews.com. Archived (https://web.archive.org/web/20121119024452/http://www.rechargenews.com/energy/wind/article327744.ece) from the original on 19 November 2012. Retrieved 10 June 2015.
- 107. "Region's MPs lobbied over Dogger Bank wind farm" (https://www.bbc.co.uk/news/uk-england-15274152) Archived (https://www.bbc.co.uk/news/uk-england-15274152) 2017-05-28 at the BBC, 12 October 2011. Retrieved 30 March 2012. Quote: "proposed offshore wind farm"
- 108. New UK offshore wind farm licences are announced (http://news.bbc.co.uk/2/hi/business/8448203.stm) Archived (https://web.archive.org/web/20110320202536/http://news.bbc.co.uk/2/hi/business/8448203.stm) 2011-03-20 at the Wayback Machine, BBC News, 2010-01-08
- 109. "East Anglia ONE" (https://www.scottishpowerrenewables.com/pages/east_anglia_one.aspx). ScottishPower Renewables.

 Archived (https://web.archive.org/web/20190217080529/https://www.scottishpowerrenewables.com/pages/east_anglia_one.aspx) from the original on 2019-02-17. Retrieved 2019-02-12.
- 110. "pmworldtoday.net" (http://www.pmworldtoday.net/fascinating_projects/2009/feb/Design%20f%20Triton%20Knoll%20Offshor e%20Wind%20Farm%20Project%20off%20UK%20coast%20kicks%20off.htm). pmworldtoday.net. Archived (https://web.archive.org/web/20150227104843/http://www.pmworldtoday.net/fascinating_projects/2009/feb/Design%20of%20Triton%20Knoll%20Offshore%20Wind%20Farm%20Project%20off%20UK%20coast%20kicks%20off.htm) from the original on 27 February 2015. Retrieved 10 June 2015.
- 111. Operational offshore wind farms in Europe, end 2009 (http://www.ewea.org/fileadmin/ewea_documents/documents/statistics/ OperationalOffshoreFarms2009.pdf) Archived (https://web.archive.org/web/20101121184017/http://ewea.org/fileadmin/ewea_documents/documents/statistics/OperationalOffshoreFarms2009.pdf) 2010-11-21 at the Wayback Machine EWEA. Retrieved: 23 October 2010.
- 112. Christensen, Allan S. & Madsen, Morten. Supply Chain study on the Danish offshore wind industry (http://www.offshore-power.net/Files/Filer/danish_supply_chain_study.pdf) Archived (http://arquivo.pt/wayback/20160515045800/http://www.offshore-power.net/Files/Filer/danish_supply_chain_study.pdf) 2016-05-15 at the Portuguese Web Archive page 33-42 Offshore Center Denmark, 29. August 2005. Retrieved: 23 October 2010.
- 113. "Introduction to the (Nysted offshore) park" (https://archive.is/20120730164047/http://www.dongenergy.com/Nysted/EN/About_the_park/Introduction/Pages/Introduction.aspx). Archived from the original (http://www.dongenergy.com/Nysted/EN/About_the_park/Introduction/Pages/Introduction.aspx) on 2012-07-30. Retrieved 2010-08-19.
- 114. "Data on operating and decommissioned wind turbines (as at end of June 2010)" (https://web.archive.org/web/201107191226 21/http://www.ens.dk/da-DK/Info/TalOgKort/Statistik_og_noegletal/Oversigt_over_energisektoren/Stamdataregister_vindmoell er/Documents/AnlaegProdTilNettet.xls). ENS. 2010-07-16. Archived from the original (http://www.ens.dk/da-DK/Info/TalOgKort/Statistik_og_noegletal/Oversigt_over_energisektoren/Stamdataregister_vindmoeller/Documents/AnlaegProdTilNettet.xls) on 2011-07-19. Retrieved 2010-08-09.
- 115. "4cOffshore listing for Vindeby" (http://www.4coffshore.com/windfarms/ravnsborg-denmark-dk06.html). 4coffshore.com.

 Archived (https://web.archive.org/web/20110127225851/http://www.4coffshore.com/windfarms/ravnsborg-denmark-dk06.html) from the original on 2011-01-27. Retrieved 2010-09-01.

- 116. Stenstrop, Georg. Vindeby (http://www.kulturarv.dk/1001fortaellinger/en_GB/vindeby-offshore-windmill-park) Archived (https://wwb.archive.org/web/20160423113338/http://www.kulturarv.dk/1001fortaellinger/en_GB/vindeby-offshore-windmill-park) 2016-04-23 at the Wayback Machine *Kulturarv*. Retrieved: 1 September 2010.
- 117. Prinds, Karsten. "Where offshore wind was invented" (http://flipflashpages.uniflip.com/2/1112/87730/pub/#page42) Archived (https://web.archive.org/web/20120311190248/http://flipflashpages.uniflip.com/2/1112/87730/pub/#page42) 2012-03-11 at the Wayback Machine. OceanWise, 2011
- 118. Sharp, Stephen. Scotland shares excellence in renewable energy at World Investment Congress (http://www.scottish-enterpri se.com/your-sector/energy/news-se-energy/News%20Details.aspx?itemId=%7B76BBD32A-4741-4052-8F95-642F2D6E1C1 6%7D) Scottish Enterprise, 15 June 2007. Retrieved: 18 October 2010. "subsea jacket structure which enables the turbines to sit in 45m of water" .. "deepest water depth"
- 119. Kempton et al. Supporting Information (http://www.pnas.org/content/suppl/2010/03/31/0909075107.DCSupplemental/pnas.09 09075107_Sl.pdf) Archived (https://web.archive.org/web/20150924181757/http://www.pnas.org/content/suppl/2010/03/31/090 9075107.DCSupplemental/pnas.0909075107_Sl.pdf) 2015-09-24 at the Wayback Machine page 3 Proceedings of the National Academy of Sciences, 14 August 2009. Retrieved: 17 October 2010.
- 120. "beatricewind.co.uk" (http://www.beatricewind.co.uk/home/default.asp). beatricewind.co.uk. Archived (https://web.archive.org/web/20150722231330/http://www.beatricewind.co.uk/home/default.asp) from the original on 22 July 2015. Retrieved 10 June 2015.
- 121. Patel, Prachi (2009-06-22). "Floating Wind Turbines to Be Tested" (https://web.archive.org/web/20090628200828/http://www.s pectrum.ieee.org/green-tech/wind/floating-wind-turbines-to-be-tested). IEEE Spectrum. Archived from the original (http://www.spectrum.ieee.org/green-tech/wind/floating-wind-turbines-to-be-tested) on 2009-06-28. Retrieved 2009-06-25. "will test how the 2.3-megawatt turbine holds up in 220-meter-deep water."
- 122. Madslien, Jorn (8 September 2009). "Floating challenge for offshore wind turbine" (http://news.bbc.co.uk/2/hi/8235456.stm?l s). BBC News. BBC. Archived (https://web.archive.org/web/20090911111533/http://news.bbc.co.uk/2/hi/8235456.stm?ls) from the original on 11 September 2009. Retrieved 2009-09-16. "world's first full-scale floating wind turbine"
- 123. "WindFloat®" (http://principlepowerinc.com/en/windfloat). PPI. 19 June 2019. Archived (https://web.archive.org/web/2019061 9160748/http://principlepowerinc.com/en/windfloat) from the original on 19 June 2019. Retrieved 19 June 2019.
- 124. "Floating turbines deliver first electricity" (https://www.bbc.com/news/uk-scotland-41652707). BBC. 18 October 2017.

 Archived (https://web.archive.org/web/20190329061001/https://www.bbc.com/news/uk-scotland-41652707) from the original on 29 March 2019. Retrieved 5 March 2019.

External links

- 4C Offshore's Global Offshore Wind Farm Map and Database (http://www.4coffshore.com/offshorewind)
- North American Offshore Wind Project List (http://www.offshorewind.net)
- The Crown Estate's interactive UK marine estates map (https://web.archive.org/web/20080704025514/http://www.thecrownes tate.co.uk/70_interactive_maps_marine.htm)
- LORC Knowledge Offshore Renewables Map (http://www.lorc.dk/Knowledge/Offshore-renewables-map)
- Offshore Center List of offshore wind farms (http://www.offshorecenter.dk/offshorewindfarms.asp)
- Renewable UK offshore wind page (https://web.archive.org/web/20081225110353/http://www.bwea.com/offshore/worldwide.html)
- Tethys Map Viewer (https://tethys.pnnl.gov/map-viewer) A compilation of documents, U.S. permitting sites, and international Annex IV project sites and research studies on offshore wind developments that are associated with a geographic location.

Retrieved from "https://en.wikipedia.org/w/index.php?title=List_of_offshore_wind_farms&oldid=916844310"

This page was last edited on 20 September 2019, at 22:53 (UTC).

Text is available under the Creative Commons Attribution-ShareAlike License; additional terms may apply. By using this site, you agree to the Terms of Use and Privacy Policy. Wikipedia® is a registered trademark of the Wikimedia Foundation, Inc., a non-profit organization.