Global Energy Policy Research | GEPR

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????http://agorajp.com/??
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2030?46??????????? ??????????????????????

??????????IEEI? · Sunday, June 27th, 2021

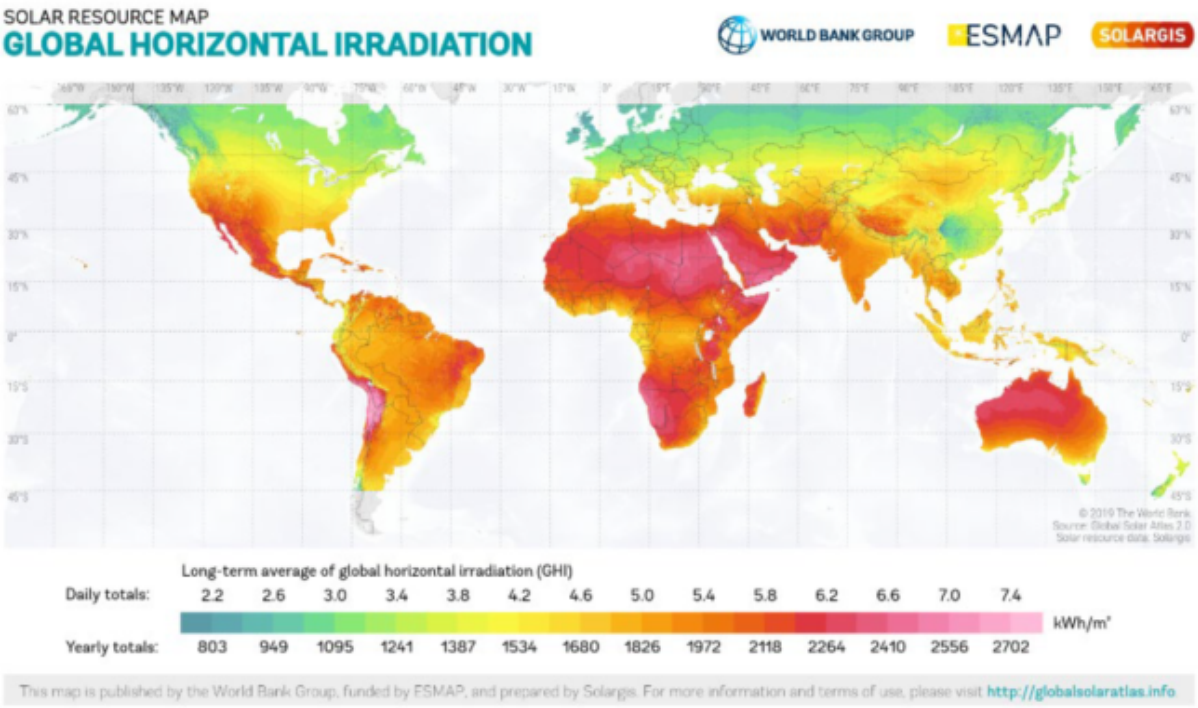
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4?22?????????????????????2050?????????????????????????????2030??????????2013????46????????50?????????????????26????????7??8??????????
??1???2???46???????????46?????????????????????

???2030?46???????????

4????????????????

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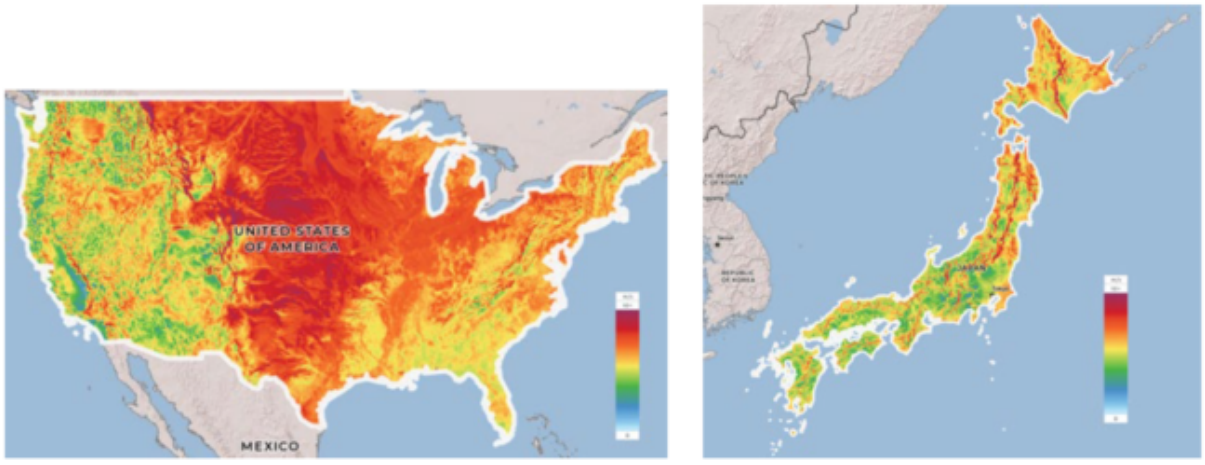


??????????????????????Global Solar Atlas

Global Solar Atlas[?10)] ??Solargis??1??????????????5.00kWh/kWp??????????3.39kWh/kWp???1.5??????????????????????LCOE: Levelised Cost of Electricity?[?11)] ??????

??O&M??

??[?12)] ?

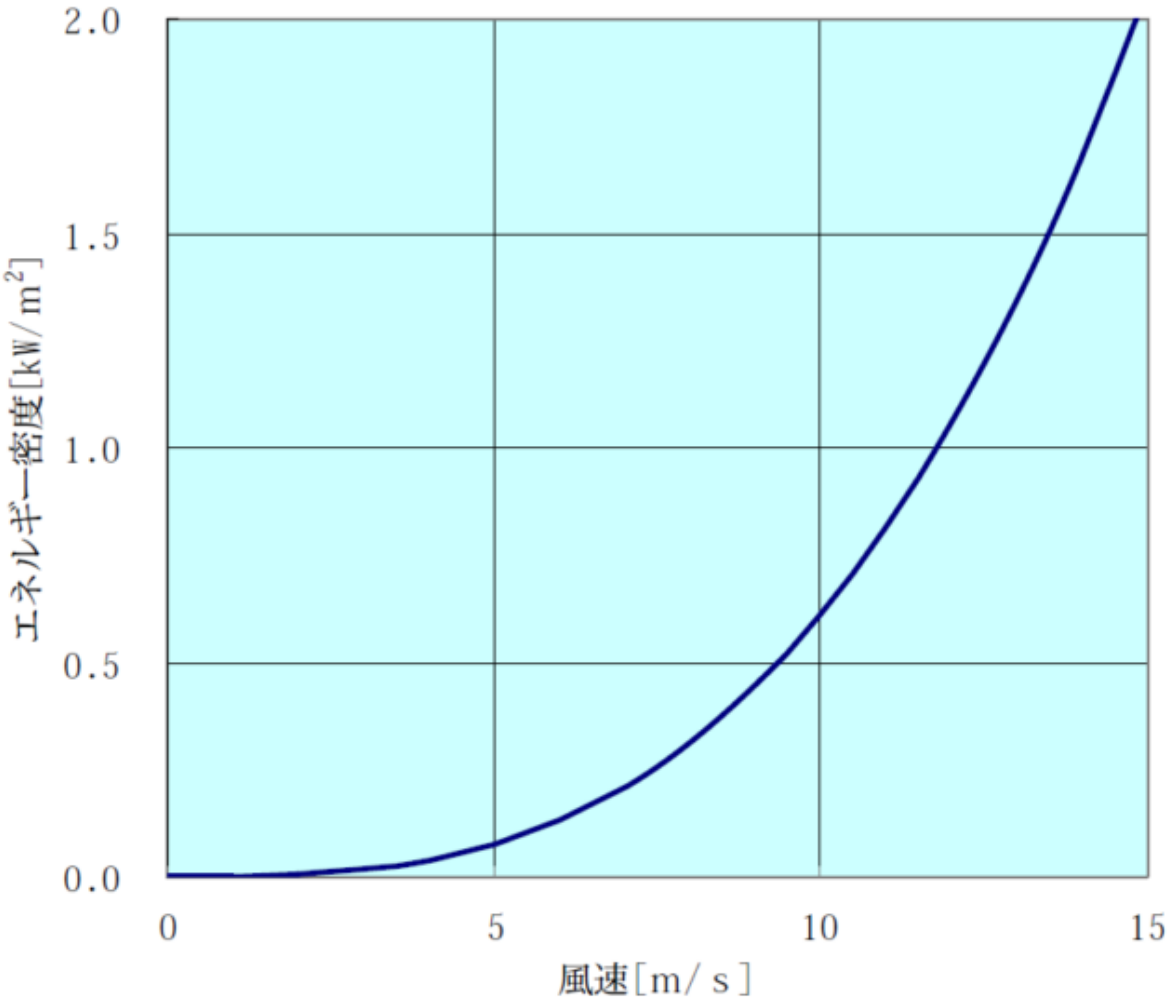


??????????????????Global Wind Atlas

??7m/s??????????????????7m/s????????????
????????????3??????????????????????2??????????????8???????? ??????????????????

$$P = \frac{1}{2}mV^2 = \frac{1}{2}(\rho AV)V^2 = \frac{1}{2}\rho AV^3$$

P: 風力エネルギー(W)、m: 質量、V: 風速、ρ: 空気密度(kg/m^3)、A: 受風面積(m^2)、



?????????????NEDO

????OECD/NEA?IEA[?13)] ???????????LCOE??

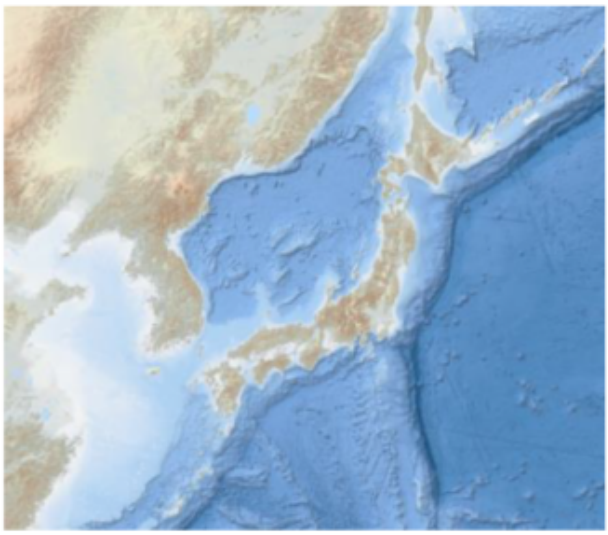
	容量(AC) (MW)	設備稼働率 (%)	資本費 (USD/MWh)	撤去費 (USD/MWh)	O&M費 (USD/MWh)	LCOE (USD/MWh)
日本	20	20	111.76	0.93	27.48	140.17
米国	100	53	26.26	0.13	8.71	35.10
	100	49	27.00	0.12	9.57	36.70
	100	47	27.66	0.12	9.92	37.71
	100	45	28.52	0.12	10.26	38.90
	100	43	30.23	0.13	10.69	41.05
	100	41	36.46	0.17	11.36	47.99
	100	37	42.62	0.20	12.53	55.35
	100	33	58.66	0.31	14.15	73.11
	100	28	75.76	0.42	16.49	92.66
	100	18	127.99	0.72	26.07	154.78
Ave.	100	39	48.12	0.24	12.98	61.34

??????????????????????LCOE?????OECD/NEA?IEA??????

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??????????2??3????????????????????????????????2????????????????????4??9??





??????????????European Atlas of the Seas

??10?20m??
????????????????????????60m??????????????????????????????????????

???2021?[?14)]
??????????????????????????????????????7.7m/????????10m/?????????????????????????35??????????
??????????55????????????????????????20????????????????????????????????????7?8?/kWh??????????
????????????????????????

??1??[?15)]
??????????????2030????10GW?2040????30?45GW????????????????????????????2030?2035????8?9
?/kWh????????2040????60?????????????

??Siemens
Gamesa??????Vestas???????[?16)] ????Envision????3???85?????[?17)] ?

Table 2 ▷ Leading manufacturers of offshore wind turbines, 2018

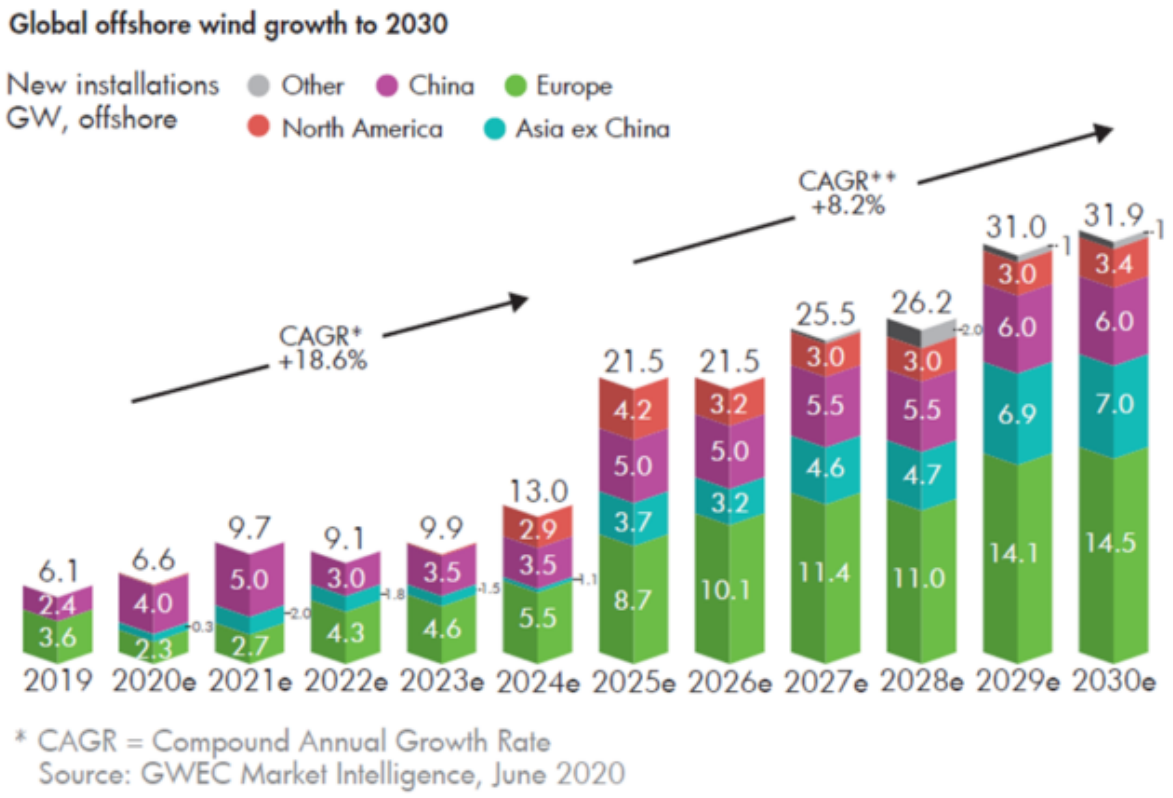
Rank	Company	Offshore wind market share, 2018	Offshore wind market share, 1995-2018	Offshore wind capacity sold, 1995-2018 (MW)
1	Siemens Gamesa	41%	63%	13 881
2	MHI Vestas	30%	18%	3 882
3	Envision	15%	4%	804
4	Goldwind	8%	3%	574
5	Ming Yang	2%	1%	113
6	Sewind	2%	1%	306
7	GE Renewable Energy	0.4%	1%	177
8	Taiyuan	0.2%	0%	10
9	Senvion	-	6%	1 253
10	Bard	-	2%	405

Source: IEA analysis based on BNEF (2019).

??????????????????????2018?????IEA

??1991??????????????????????????
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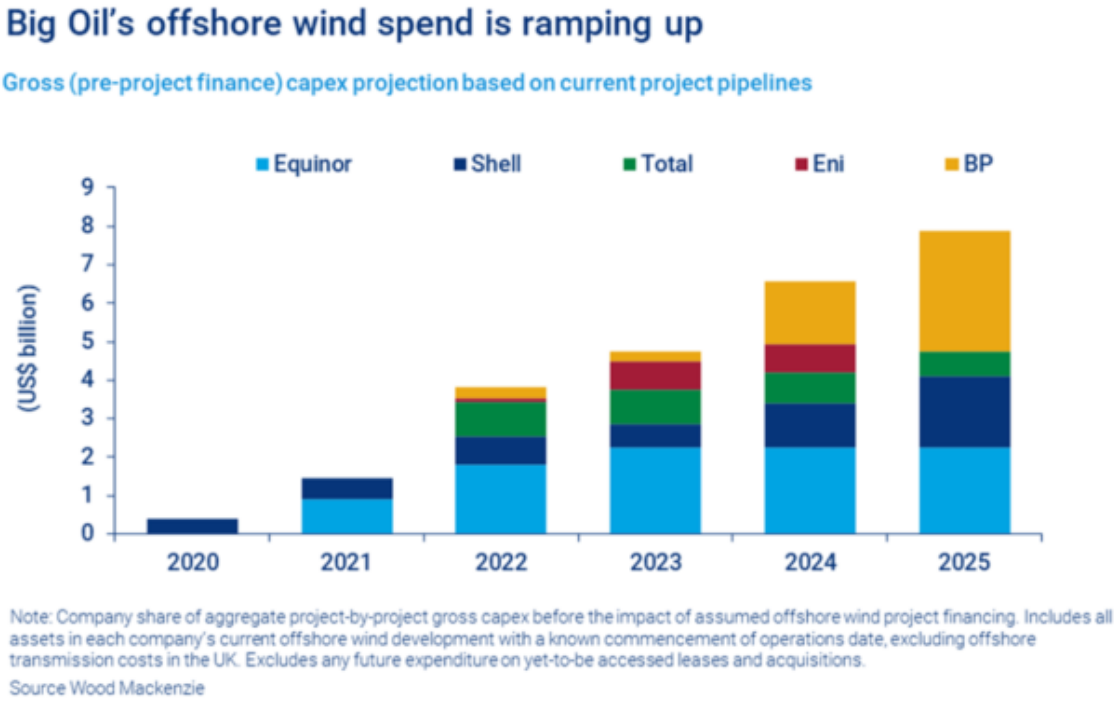
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??????????????????Global Wind Energy Council

??60m??

???Wood Mackenzie????[?18)] ?????????2020????????????????????????FIDs: Final Investment Decisions???3??1??2025??????80??????2020????????18??????????????



??????????????????????????????Wood Mackenzie

??M&A ??????????????????????Equinor???2???19??? Equinor?2009????????????????????????????????

??????????????????????11??????????????????600??2020?12????????????????????????[?19)] ??????????????????47.8?57.3?/kWh???????28.3?35.4?/kWh??? ??

?10?https://globalsolaratlas.info/map
?11??kWh????????????
?12?NEDO?2008???????????????
?13?OECD/NEA?IEA, 2020, “Projected Costs of Generating Elevtricity 2020 Edition”
?14???????????2021???
?15?https://www.meti.go.jp/shingikai/energy_environment/yojo_furyoku/pdf/002_02_01_01.pdf
?16?MHI?2020?12??Vestas??https://www.mhi.com/jp/notice/notice_201214.html
?17?https://iea.blob.core.windows.net/assets/495ab264-4ddf-4b68-b9c0-514295ff40a7/Offshore_Wind_Outlook_2019.pdf
?18?https://www.woodmac.com/news/opinion/how-big-oil-is-set-to-transform-the-offshore-wind-sector/
?19?http://www.fukushima-forward.jp/reference/pdf/study016.pdf

????2030?46????????????????

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