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??RCP????8.5????????RCP
 8.5??RCP
 8.5??

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4. ????????

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5. ?????????????????????

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Posted in [??????????](#), [???](#), [?????](#) | [No Comments »](#)

?? ?? · Thursday, May 29th, 2025



2025?5?22?????????????One Big Beautiful
 Bill????????????????????????????????????215???214???1???????

??IRA?????????????
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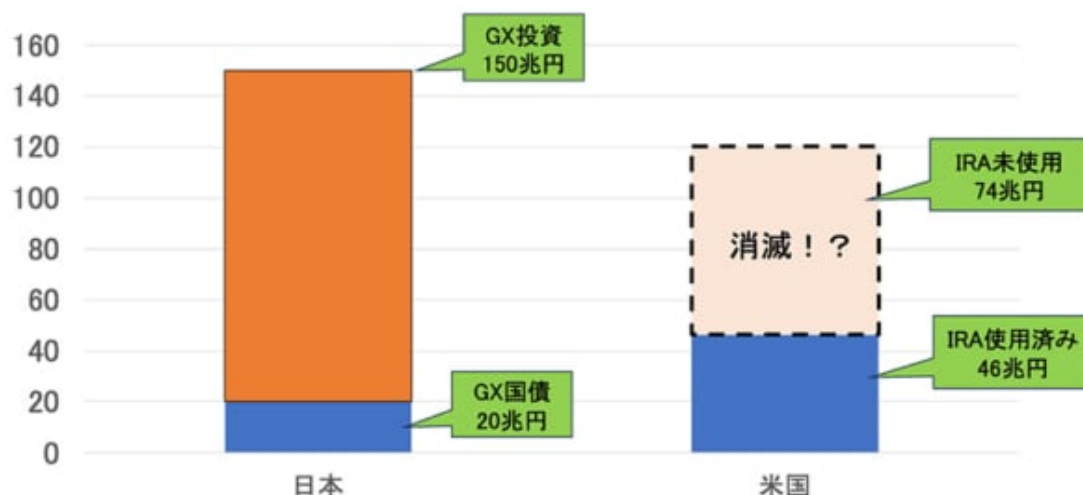
????????????????46????????????????????????74????????????????????

??IRA????????????????????????

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 ?????????????GX????????????20????????10????????????150????????????????????????????

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日本が邁進するグリーントランスフォーメーションと 消滅に瀕する米国グリーンニューディール



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??GX????????????????
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Posted in ??????????, ??? | No Comments »

????2.0????????G7????????

?? ? · Wednesday, May 28th, 2025

2025?6?15?17????????????G7????????????2????????G7????????

??1????????2??IRA?????

??G6????????



gerenme

??2024????????????????????????????56940?????????
 ?????????????6??1????9180????????????????????1.5????2050????????????????????????????????????
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????????2018????????????????????????????????

2017?5??
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31. ???
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32. ???
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???1??6????????????????????????????G7??????????

???????23???6???????24?25???????????26???????????

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23. ?????????????????????????????????

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 ???24?????(COP24)????????????????????
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24. ???

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25. ???

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26. ???

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????????26????????????????NDC????????????????????????????????COP?NDC?????
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NHK??

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???G6?1????????????

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????????G7????????G6????????AI????????
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Posted in [???, ??, ?????](#) | [No Comments »](#)

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?? ?? · Sunday, May 25th, 2025



ilbusca/iStock

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??Kirkeskat= Church
tax??
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??8?9????????
??2023????????65
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??2022????52??23??40????????????????
??8?9??
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??6????????????
1????????????????????????????¹³?

????45,000????????????????????????????????????450????7????6????????????????????????
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EU??2050????????????????????1.5????????
IEA????????2030????????CO2????130????????????????²²????2040??205??20
50??250????

????????UBA??2023????????????????CO2????10????????????????2030
????1,300????????????????????????????????????650????????
????????EV????????????????????????650????????
????????²³??

??650????600????????????????450????????????
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????????²⁴????600????????
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????????NDC????????110????3????2030?
????4????10??5????
????2030????²⁵?

????????CO2????6.5????
????110????6????10????

????2030????

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- ?1????ChatGPT????
- ?2?Net Zero by 2050; A Roadmap for the Global Energy Sector” IEA (2021)
- ?3?EV????
- ?4????
- ?5????

Posted in [??????????, ???](#) | [No Comments »](#)

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??? ?? · Thursday, May 22nd, 2025



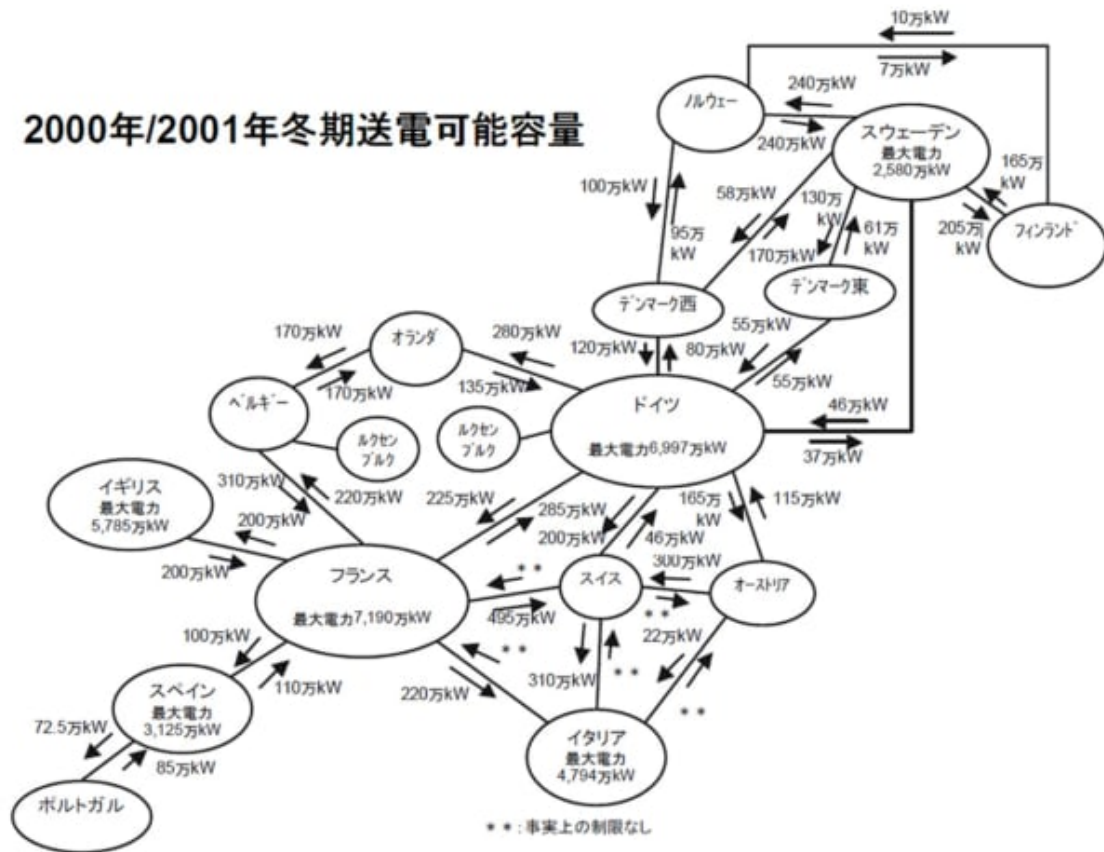
imaginima/iStock

2025?4?28??Energy-
charts????????????????????????????????????

NetZero??70?????????
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2000年/2001年冬期送電可能容量



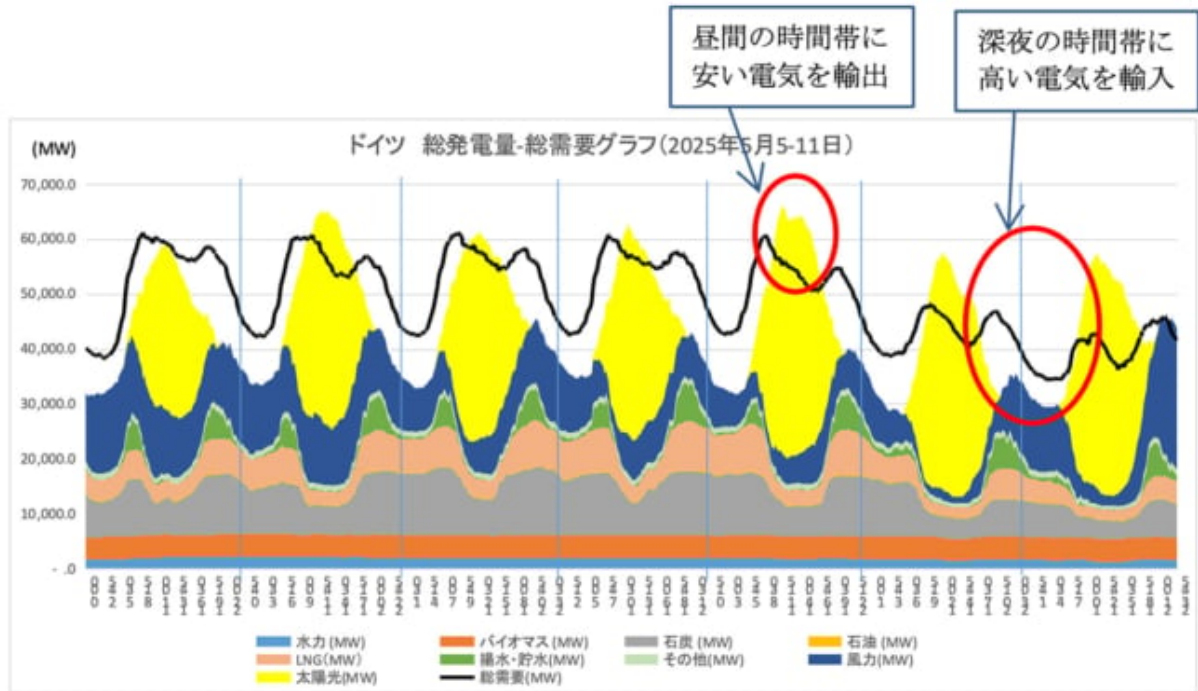
?1??????????????

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EU??????????????????

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?2??????1??



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Energy-chart??

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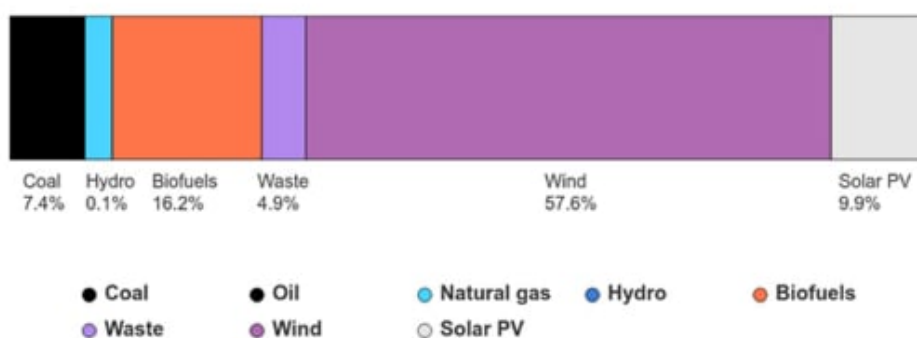
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?3??

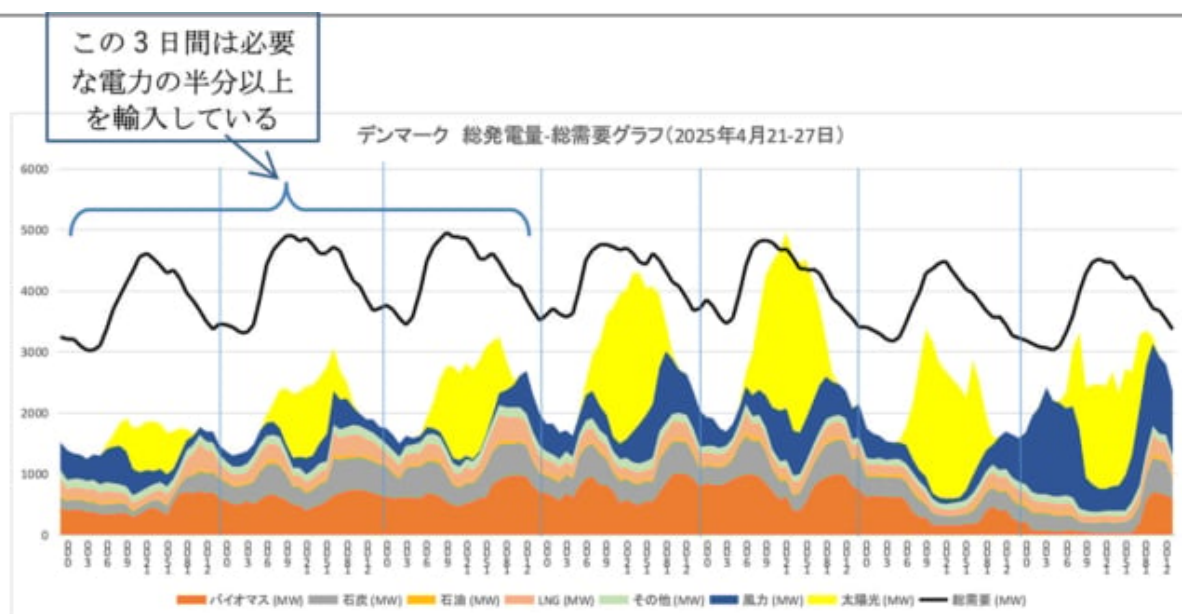
Electricity generation sources, Denmark, 2023



Source: International Energy Agency. Licence: CC BY 4.0

?4????????????2023??

IEA????

[illegible]

?5????????????????

Energy-chart??

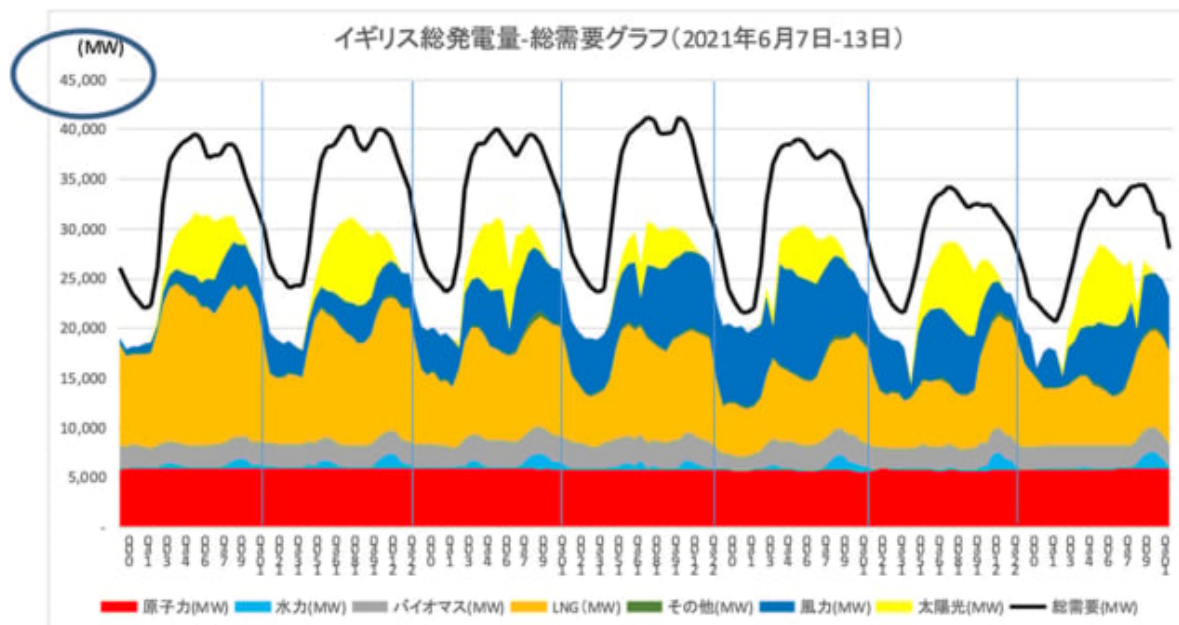
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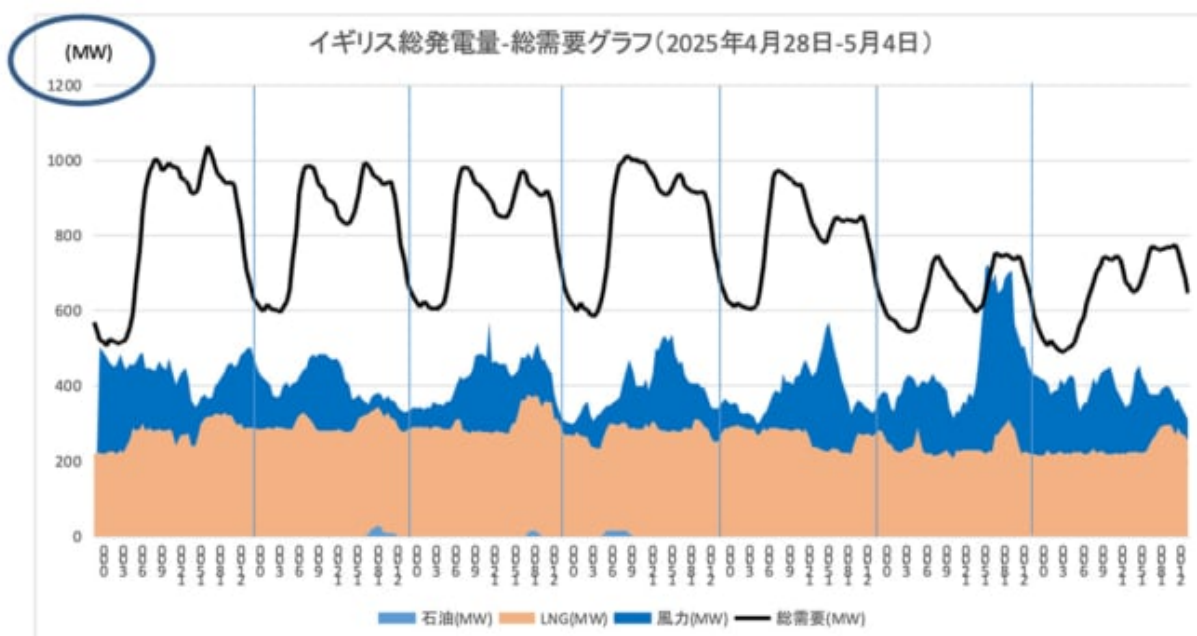
????????????6????????????????????????????????2021?6?7?13????????????

????????????????????2021?6????????40,000MW????????7?????1,000MW??1/40?????????
 ???6??7??



?6????????????????2021?6?7?11??

Energy-chart??



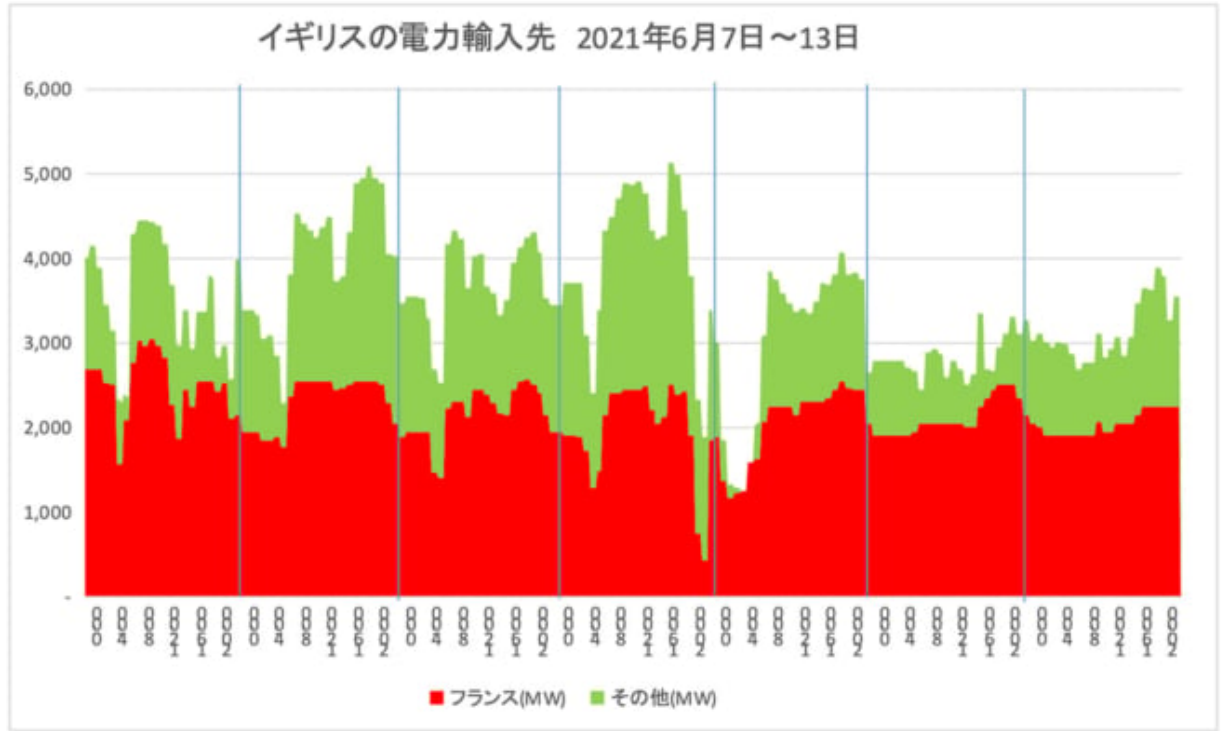
?7??????????????2025?4?28??5?4??

Energy-chart??

[illegible]

Energy-
chartsLNG
?

6
021



8
Energy-chart?

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NetZero
?

LNG
“”

LNG

2002LNG2

20254

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?? ?? · Wednesday, May 21st, 2025

EARTH RADIATION MANAGEMENT

2025?5??SB
56????????????????5????10??

[illegible]

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 ?????SNS??

??SRM????????????????????????????????
 ??????Operation
 Popeye??

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[illegible]

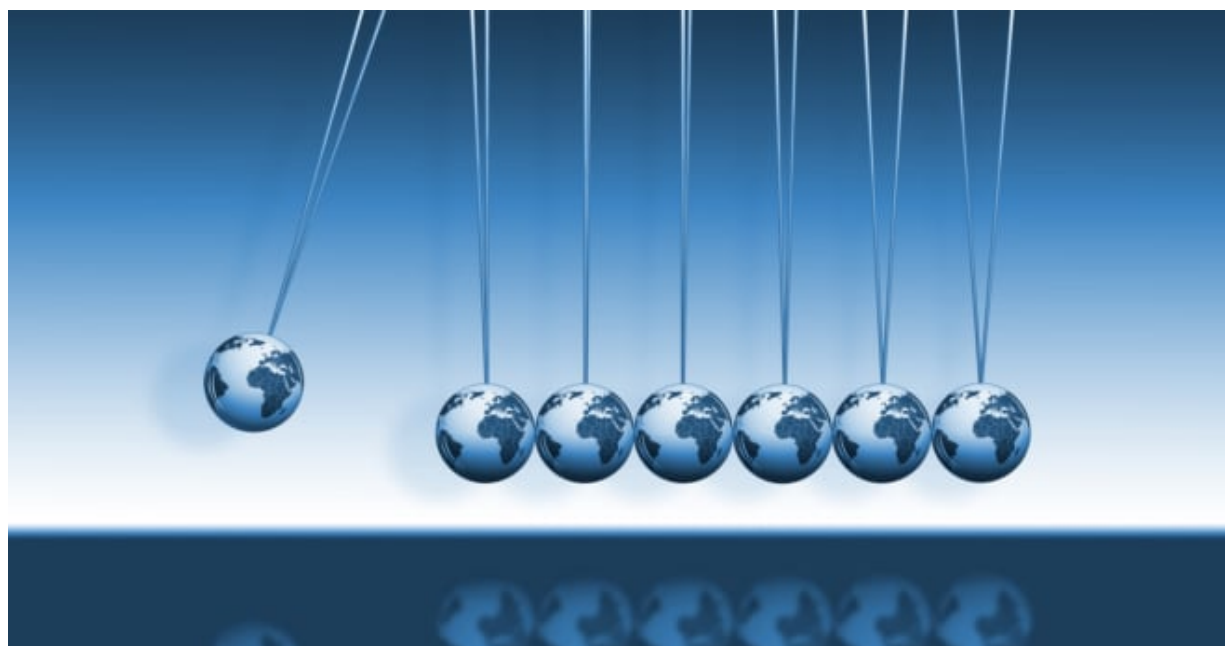
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[illegible]

Posted in [???](#), [?????](#) | [No Comments](#) »

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?? ?? · Thursday, May 15th, 2025



mekcar/iStock

????????????IPCC??
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1. ???????????

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????????GCM?General Circulation Model????????????????????????????

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2. ?????????????

(1) ???????????

??50????????????
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(2) ???????????

???CO????????????????????????????????SSP????????RCP????????????RCP8.5??
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(3) ???????????

????????????????????TSI?Total Solar
Irradiance??²¹????????????

??²²????????????????????????????????20
????????CO????????????????????????????

?1????????1645??1715????????????????????????????
?2??

(4) ?????????????

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(5) ?????????????

???GCM??

[illegible]

??W. Happer?????????????R.
Lindzen?MIT????????????????????EPA????????????????EPA?????????
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[illegible]

**Tropical Mid-Tropospheric Temperature Variations
Models vs. Observations**

5-Year Averages, 1979-2016 Trend line crosses zero at 1979 for all time series

Legend:

- ACCESS1.0
- BCC-CSM1.1
- BNU-ESM
- CCSM4 (6 runs)
- CESM1(CAM5) (3 runs)
- CNRM-CM5
- EC_EARTH
- FIO-ESM
- GFDL-ESM2G (1 run)
- GISS-E2-H (16 runs)
- HadGEM2-ES
- IPSL-CM5A-LR
- IPSL-CM5B-LR
- MIROC-ESM
- MPI-ESM-MR
- NorESM1-M
- ACCESS1.3
- BCC-CSM1.1(m)
- CanESM2
- CESM1(BGC) (1 run)
- CMCC-CM
- CSIRO-Mk3-6-0
- FGOALS-g2
- GFDL-CM3 (1 run)
- GFDL-ESM2M (1 run)
- GISS-E2-R (18 runs)
- INM-CM4
- IPSL-CM5A-MR
- MIROC5
- MPI-ESM-LR
- MRI-CGCM3
- NorESM1-ME
- Avg Sat
- Avg Reanalyses
- 32 Group Mean
- Avg Balloon

Annotations:

- Average of 102 CMIP5 Model Runs in 32 Groupings
- Observations
 - Circles - Avg 4 Balloon datasets
 - Squares - Avg 3 Satellite datasets
 - Diamonds - Avg 3 Reanalyses

JR Christy, Univ. Alabama in Huntsville
Model output: KNMI Climate Explorer

[illegible]

???W. Happer?R.

[illegible]

4. ???????????

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- ?2100?4????????????????
- ?????????????????
- CO?????????????“??”???
- ?????????????????

????????????????????????????????“????????”????????????????????????CO?????????
 ?????????????????????????????????????

5. ???????????

[illegible][illegible]

6. ?????????????????

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観点	プラスの影響	マイナスの影響
政治・外交	環境先進国としての国際的評価向上 国際合意への建前参加（COPなど）	政策の柔軟性喪失／内政の硬直化 世論形成の一元化と異論封じ
経済・産業	一部産業（再エネ、ESG、EV）への 資金集中 新規市場の創出	電力価格の高騰／生産コスト上昇 国内産業の空洞化と停滞
社会・生活	環境意識の向上／エシカル消費の普及	家計負担の増大／格差拡大 若年層の将来不安・消費冷え込み
科学・教育	気候科学への注目／環境教育の進展	気候モデルへの過信／多様な科学的視点の排除
環境そのもの	一部での排出量抑制努力の継続	太陽光・風力による森林破壊や景観損失 EV・再エネ素材採掘による環境破壊（海外）

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[illegible][illegible][illegible]

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7. ????

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- IPCC AR5, AR6 ??????????????????????TSI???
- Svensmark, H. (2007). “Cosmoclimatology: a new theory emerges”. Astronomy & Geophysics, 48(1), 1.18–1.24.
- Soon, W. et al. (2015). “Why Models Run Hot: Results from an Irreducibly Simple Climate Model”. Science Bulletin, 60(1).
- Christy, J. and McNider, R. (2017). “Satellite bulk atmospheric temperatures as a metric for climate sensitivity”. Asia-Pacific J Atmos Sci.
- Happer and R. Lindzen (2023). “A Letter to USEPA on Proposed Fossil Fuel Power Plant Rule”
- Hans Labohm et al. (2024). “Chronicles of Climate Hysteria”

Posted in ??????????, ???, ????? | No Comments »

CO2????????????????

?? ?? · Wednesday, May 14th, 2025



Jian Fan/iStock

????????CO₂????????????????????

??²¹⁾?

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??CO₂????????????????????????????
????CO₂????????????????????CO₂????CO₂????????????????CO₂????????????

??CO₂????????????????????CO₂????????CO₂????????CO₂????????CO₂????????
????N₂O₂????????????CO₂????????????????????????????????CO₂????????????CO₂
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???1????25????1????????????????CO₂????????????????????????????C
O₂????H₂NH₃????????????????????????????

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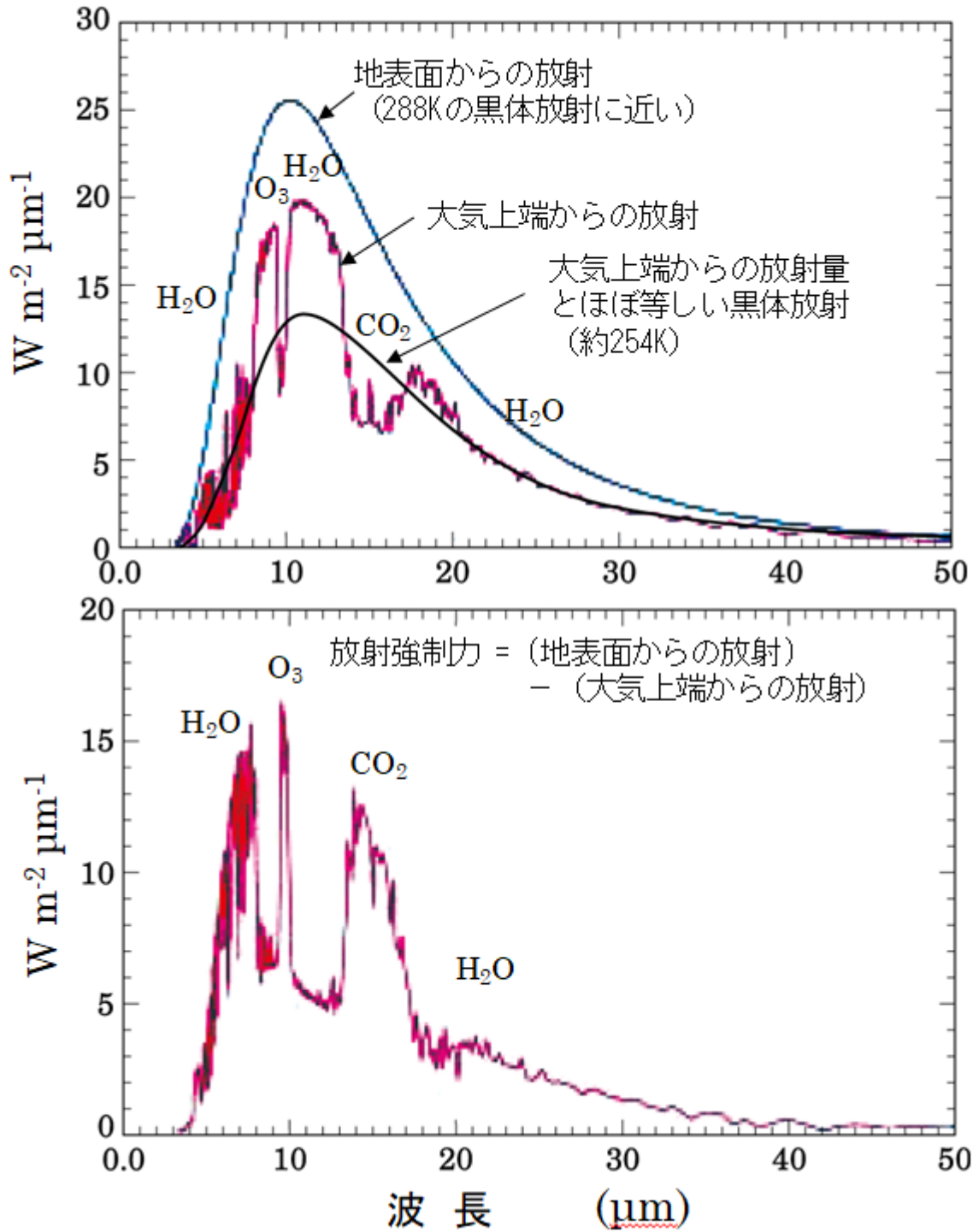
??CO₂????????????????CO₂????????????CO₂????????
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????CO₂????????

CO₂????????????????CO₂????????

IPCC????????????CO₂????????1????????CO₂????
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エネルギーフラックス



1?????????
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CO₂????15m????????Q-

??0.05 m= 2cm⁻¹????

????1?????CO₂????13?17?m?????4?m?= 180
cm⁻¹????CO₂????CO₂?1?1/90=?
2cm⁻¹/180cm⁻¹????

????Q-???P-?R-????Q-???P-?R-
????CO₂????

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????Q&A 181????2024??



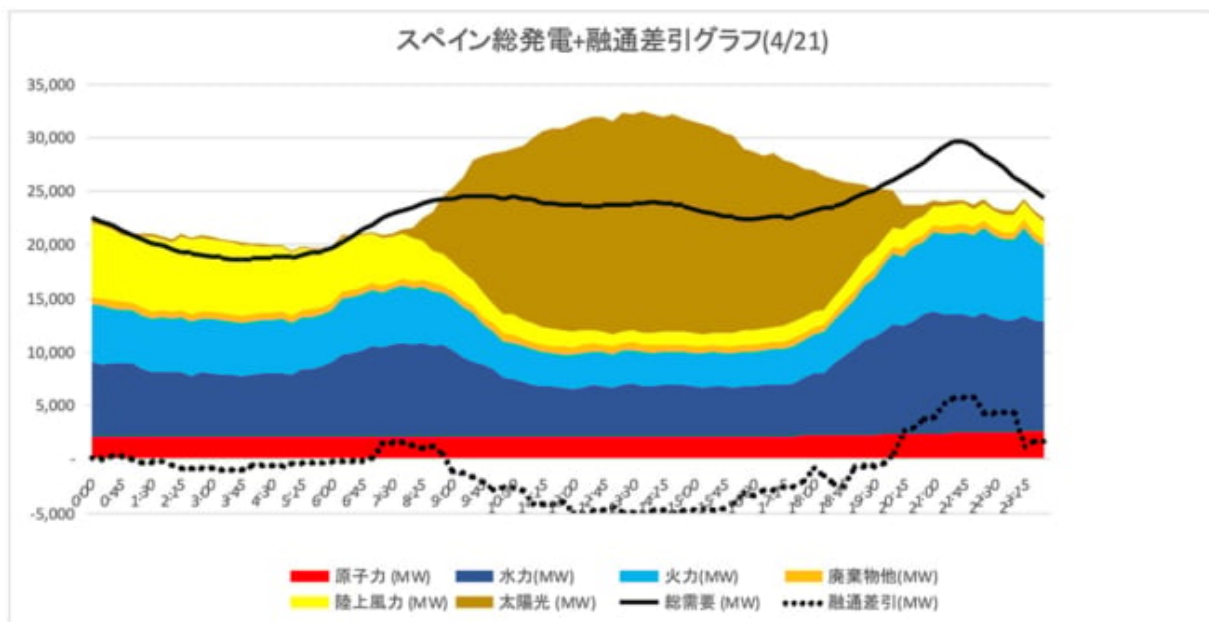
Posted in ???, ????? | [No Comments »](#)

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??? ?? · Monday, May 12th, 2025

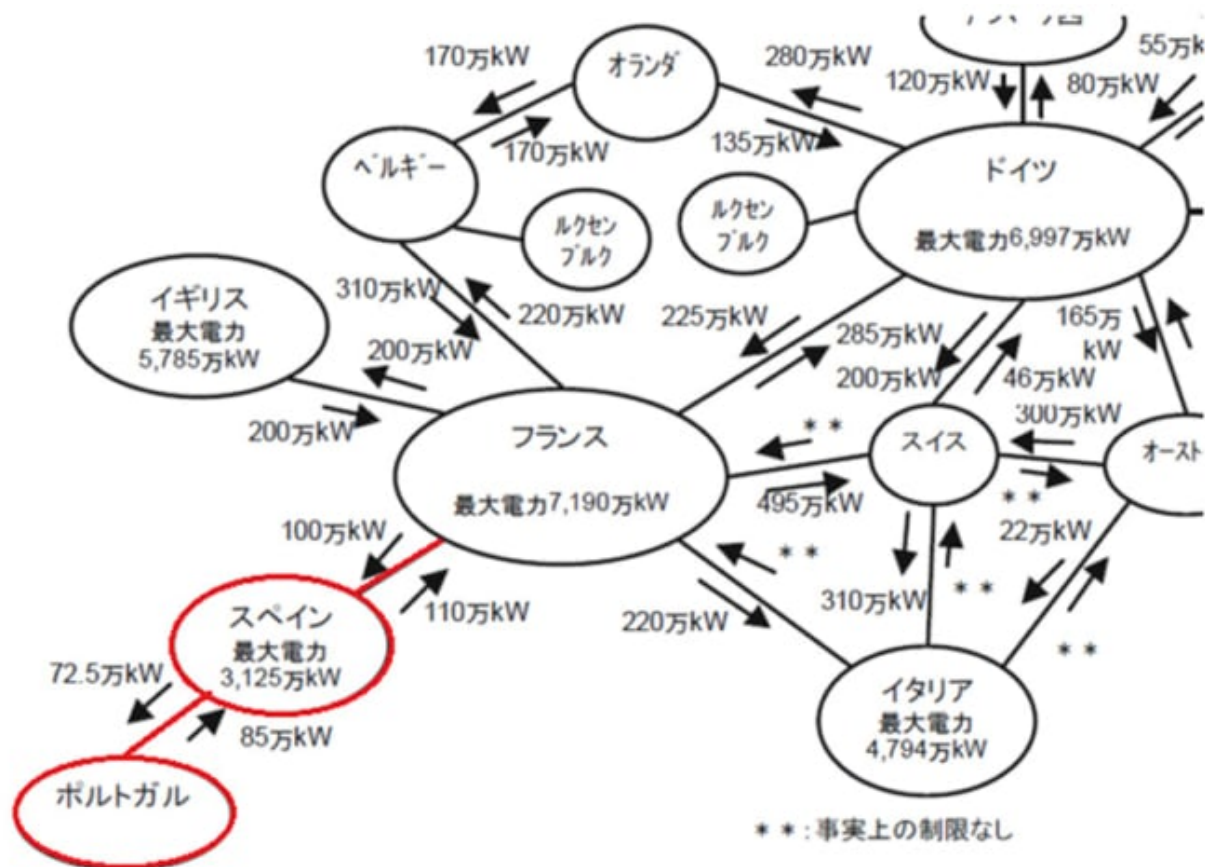
1. ???????????

[illegible][illegible]



?1?????1????????????2025?4?21??

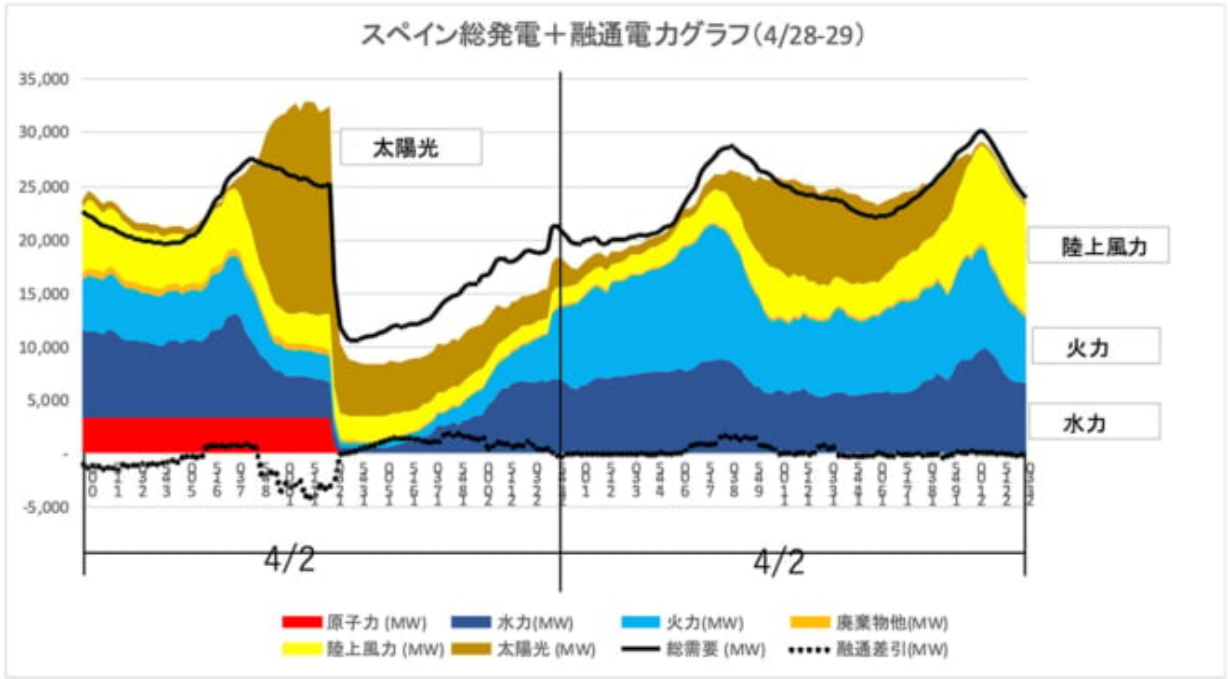
?2??
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[illegible]

2025-04-21

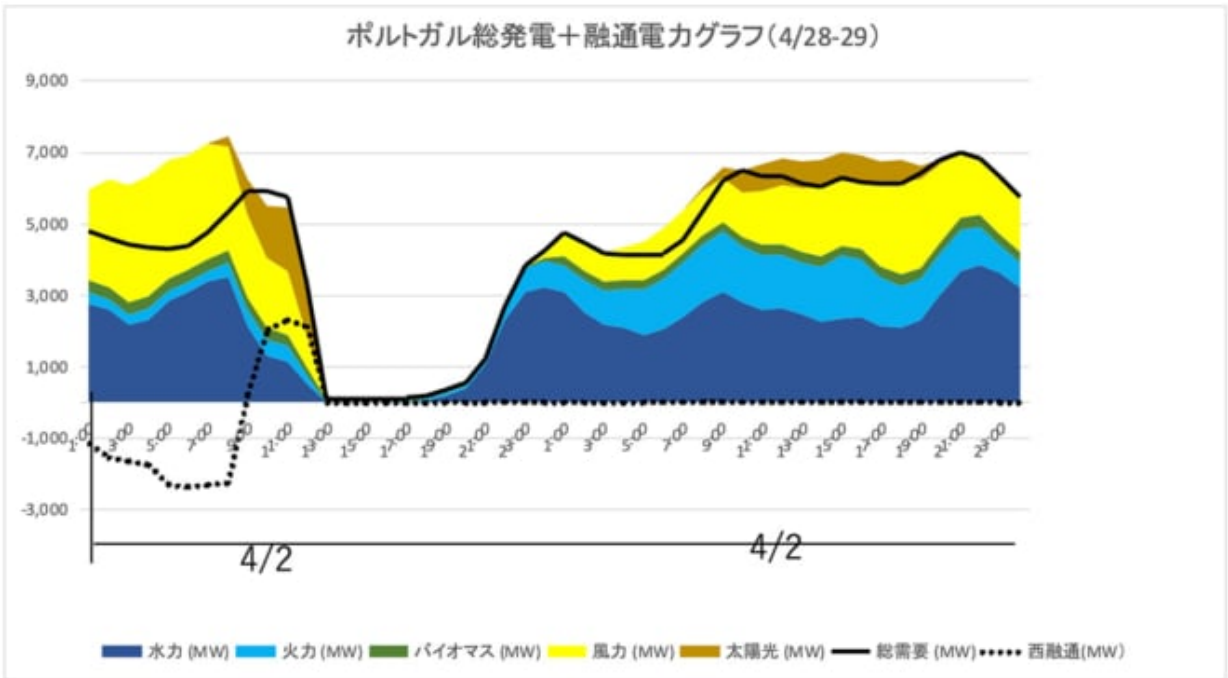
2. ?????????????????

?3??



?3????????????????????2025?4?28-29??

????4??15????????????????1????????????????????????????????



?4????????????????????2025?4?28-29??

?5??
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????????2????????12:00????12:30????????????????????



?5????????2025?4?28??

??3????????

?3????????

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- 1. ??????
12:30?14:30????????32,368MW??8,336MW???74??????
- 2. ?????
12:30?14:00????????25,172MW??10,632MW???58??????
- 3. ?????????
10:00????????-1,600MW?-300MW????13:00??0MW????????1,000MW
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- 4. ?????????
11:45?13:00????????19,696MW??6,472MW????????21:00???3,800MW??
????????592MW???
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?4????????

? ?????1????

- 1. ??????
12:00??5,440MW??3,020MW????13:00??95MW????
- 2. ?????
12:00?5,747MW??3,285MW??13:00??94MW????

3. ?????????

12:00????????????????0????????????????

?5????????????

1. ???????

12:00:30??12:01:35?49.96Hz???????30???????

2. 2????

12:33:00?49.97Hz????12:33:40?????49.84Hz???

3. ??

12:43:46?50.00Hz????

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12:00????????????5,380MW????????????????0.04Hz???????30??12:32?????????
24,000MW????????????0.16Hz????????10????????????

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3. ?????????????????

??3???????

1. ?????2????????????15V?????

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2. ??????induced atmospheric vibration????????????

????????????REN????????????????????????????????????

3. ?????????????????

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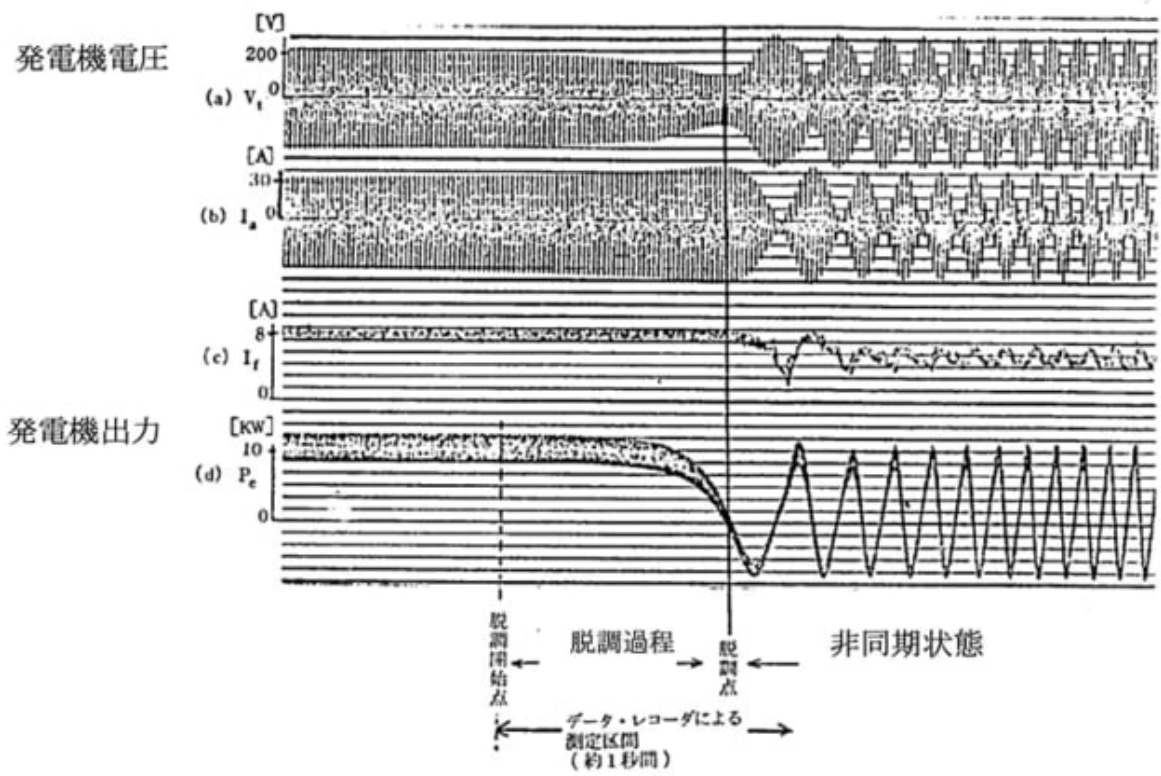
4. ???????

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??2????????15V????????????????????????
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???2????????????**????????induced atmospheric
vibration??6????????????????????????
**????????????????????? “atmospheric” ?????????????????????????

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400kV????????????????

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Solar



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Global Energy Monitor

1970

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6. ?????????????

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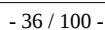
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Posted in ??????????, ??? | [No Comments »](#)

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?? ?? · Sunday, May 11th, 2025



29.05.2025

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[illegible]

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[illegible]

1??

[illegible]

72??IPCC????????2021????????????????????IPCC?Table12.12????????????????????
????????????????????

発現時期	2020年以前	2020～2050年	2050～2100年	2100年以降
暑さと寒さ	平均気温			
	猛暑			
	寒波			
				霜
湿りと乾燥		平均雨量		
				河川の洪水
			大雨と内水氾濫	
				地滑り
				干ばつ(全種類)
				水文学的干ばつ
				農業及び生態系の干ばつ
				山火事をもたらす気象
風				平均風速
				暴風
				熱帯低気圧
				砂嵐と砂塵嵐

??IPCC??????????????

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??2020????????????????????????????????
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????????????????2100??RCP8.5????????????????????????????????????

??IPCC????????????????????????????

????????????2020????????????IPCC??

????????????????100???1????????34????100???35????????????????????????????????????

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 ???2100????????IPCC?2????????

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Posted in ??????????, ???, ????? | No Comments »

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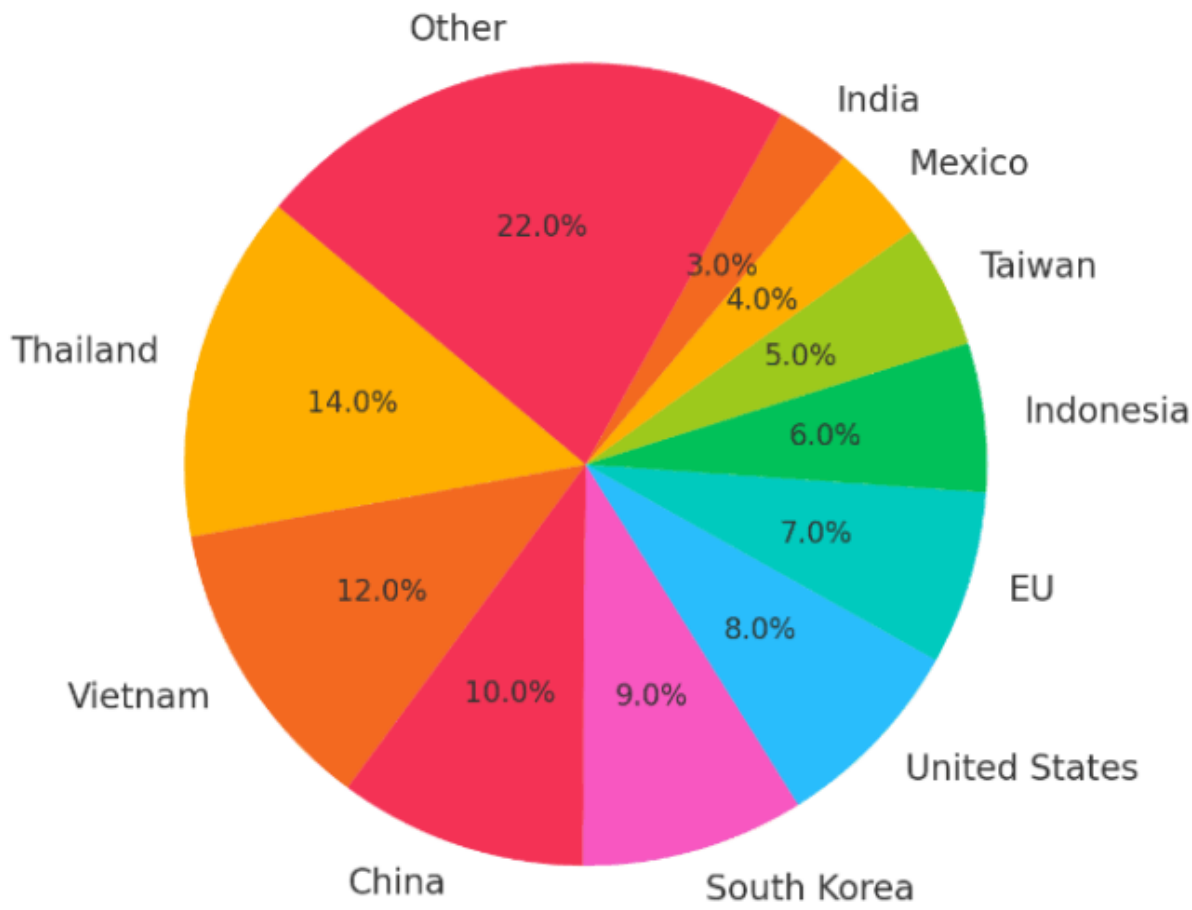
?? ?? · Saturday, May 10th, 2025



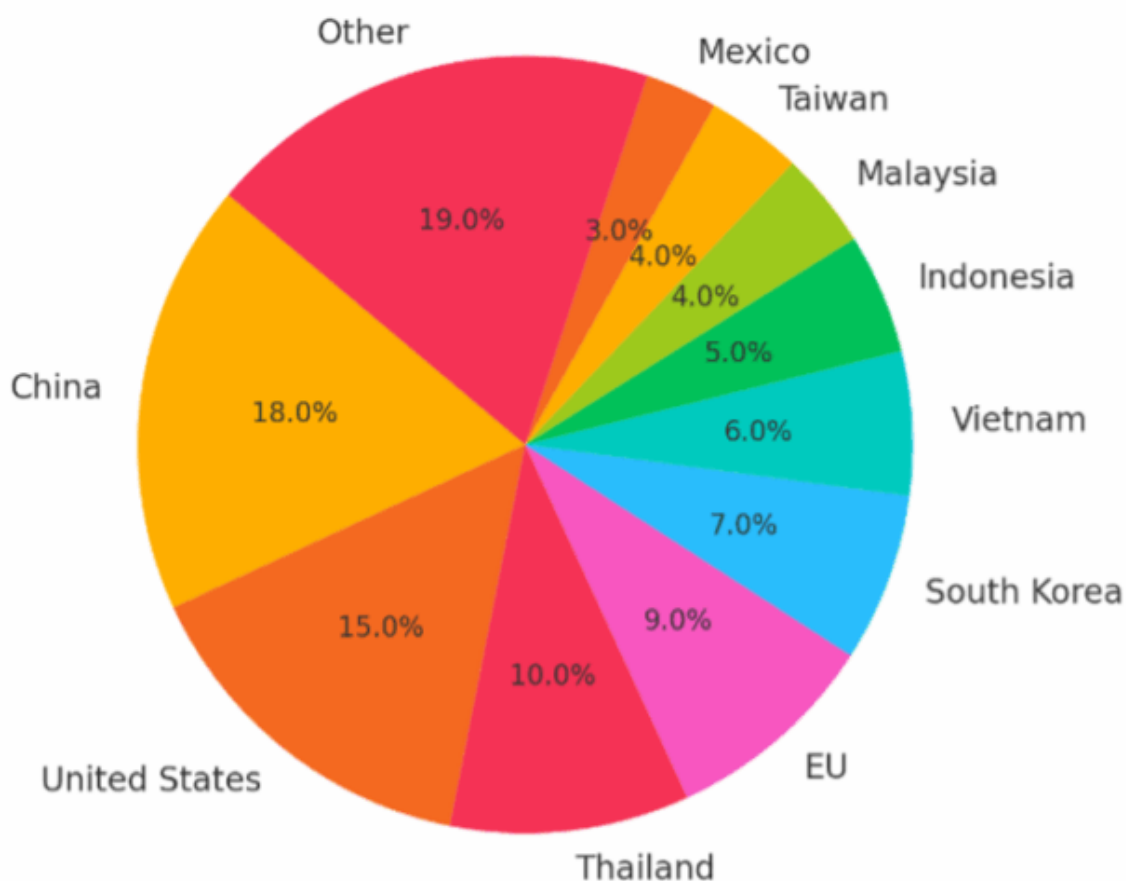
rkankaro/iStock

EU CBAM
CBAM
EU BRICS
EU
GX
CBAM HS72 HS76
HS72 2023 EU 24.43 7% HS76
2023 EU 2.36 9%

Japan HS72 (Steel) Exports by Destination 2023



Japan HS76 (Aluminium) Exports by Destination 2023



CBAM????????????????????????????????EU????????????????????????????

[illegible][illegible]

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Posted in ?????????, ??? | No Comments »

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?? ??? ?? · Friday, May 9th, 2025



David Ziegler/iStock

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????CDU/CSU(??????/????)????????????????????????Afd????????????????
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Afd????????

5?2????????????????AfD??
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??UK?????

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??18?????????
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EU????????????????????

EU??EU??
????????????????????

EU????????????????????5?EU??
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Posted in [??, ??](#) | [No Comments »](#)

????????????????????????????????

?? ?? · Thursday, May 8th, 2025



??2024?1??^{21?}

2022??
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??2040????C?
????????????????????36.9??kWh????????^{22?}

??????2025????????????????????LNG12.7??/MMBtu??154??/t??80??/bbl????????6.8??kW
h????^{23?}

??????1GW?100?kW????????????????????18.3?^{24?}????????16?kWh???

????????????????6.8×16?kWh?110????????????????36.9????590????????480?
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????????????????10.8??kW^{25?}??
????????????????????70????????????????720????110????????6.5????????
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- ?1????????????????????????????2024?1? ????????
- ?2????????????????? ???2024?2?
- ?3?JOGMEC LNG Monthly Report?2025/3??IEEJ Coal Outlook 2025???? JCC ??
- ?4??WG ?????????????18.3???
- ?5??WG ?????10.8??/kW

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- ?????????????????2024-08-14
????????????10kW????????22.6??/kW????8.6??38%????2.7??12%?
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- ?????????????90%??WSJ “The Solar Breakthrough...”, 2024-09-03??
- ????????? JEMA ?????2024 ??? 40%?
- ?????????
8.6×0.90?2.7×0.40=8.82??/kW ? (8.82) ÷ (8.6?2.7)=0.67?70%?
- 1GW?100?kW????????7.6??/kW × 100?kW=760???

? ???3.1??/kW????????8.2??/kW????????????????

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Posted in ???????????, ??? | No Comments »

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?? ?? · Monday, May 5th, 2025

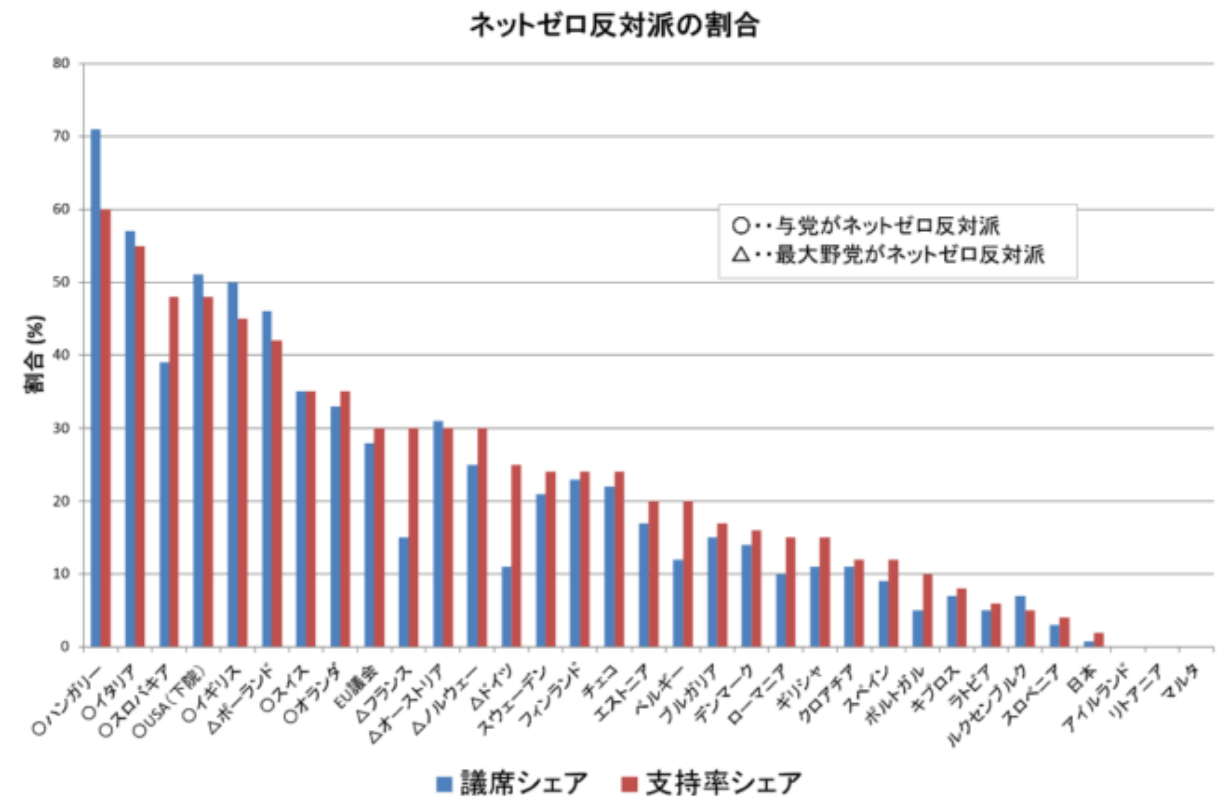


Leontura/iStock

???????2050?????CO2??
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?? 2????????????????
3????5????????0.7????????????????????2????????

??2030????30????
??GX????????????????????

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Posted in ??????????, ??? | No Comments »

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?? ?? · Monday, May 5th, 2025

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[illegible]



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NHK??

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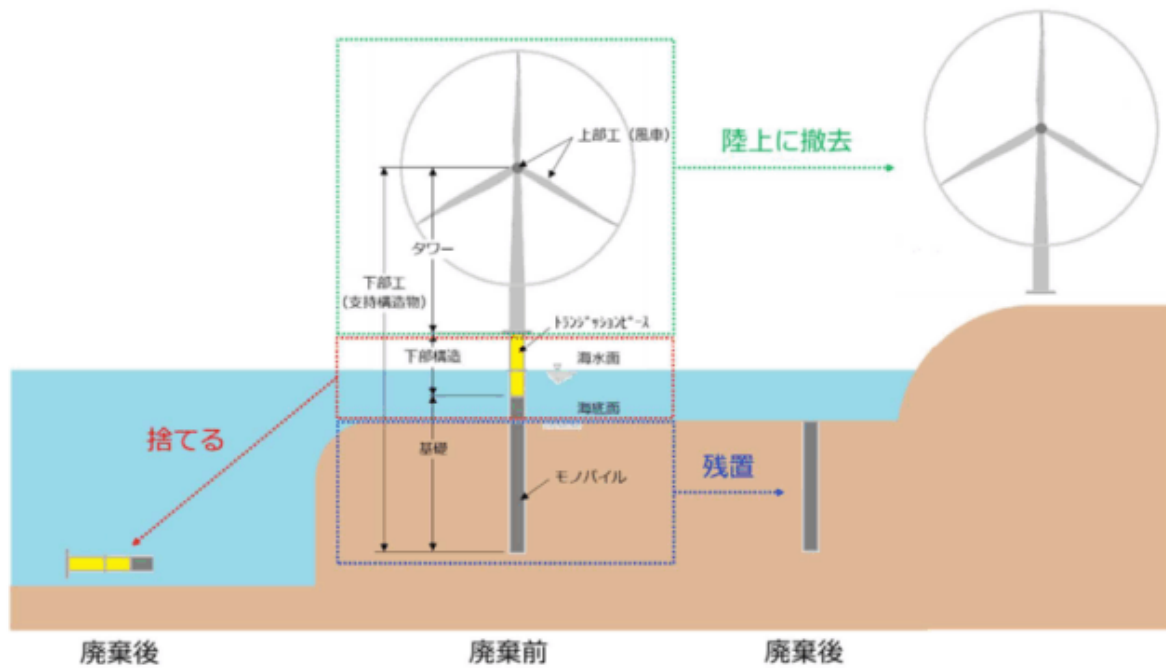


図 5 告示における「残置」と「捨てる」の違い

(着床式洋上風力発電設備の図の出典：洋上風力発電設備に関する技術基準の統一的解説より
編集して使用)

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??10??...??

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2024??166????832??2035?????
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SDGs

SDGs

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SDGs

Posted in , , | No Comments »

100??Drill Baby Drill????

?? ? · Sunday, May 4th, 2025



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4?29????????????100??100????????????????????????????
??100????????????????100?
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??ANWR?????rill Baby Drill ?????????????

??100?????PR????????????????????????????????????

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- ???7%????????????????????????????????
- ?????????????????????1????10????????????????????????????????????

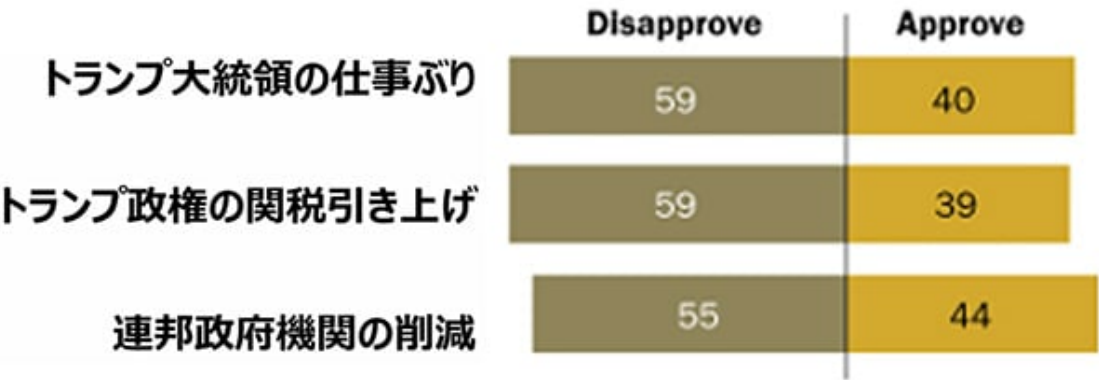
????????????100??
??6?4?28????10????????????1??



支持率インデックス（強く支持マイナス強く不支持）は政権発足当時の+6から4月28日には▲10に。

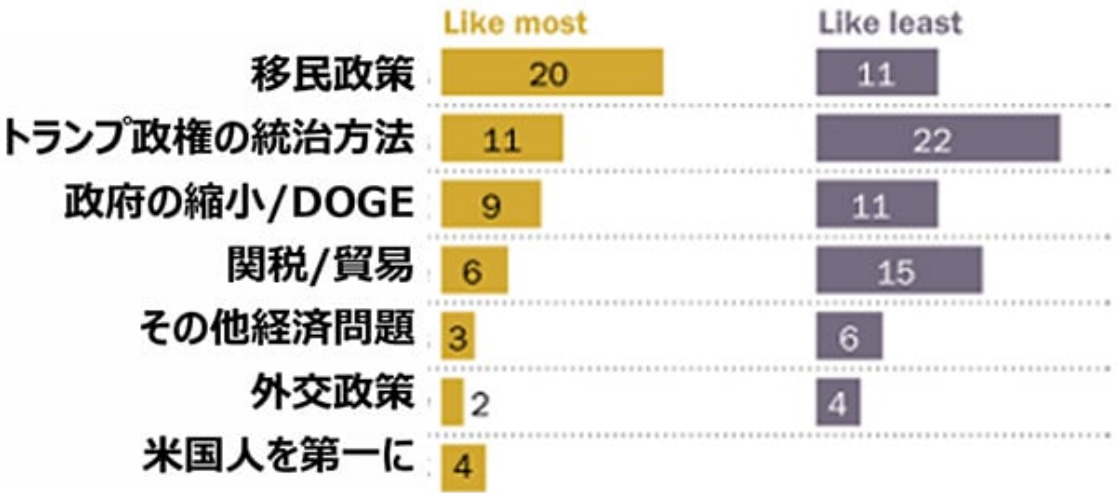
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???Rasmussen

?????Pew Research Centre
????100??2??



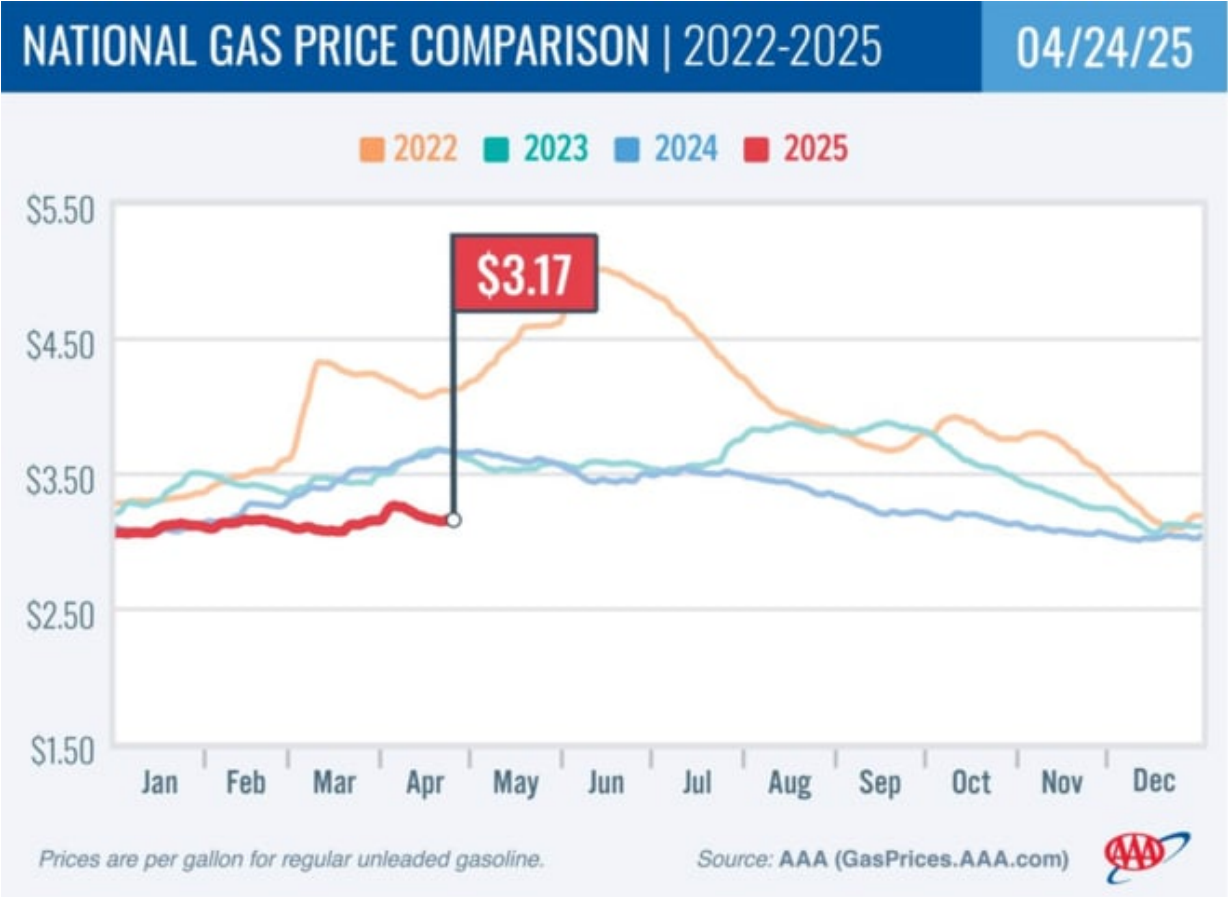
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???Pew Research Centre

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430????GDP??1????0.3%?????
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420222025?????

????????????????Drill Baby Drill
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????????????WTI????13????202111COVID????
S&P 500 ?????15%????S&P
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Marrion Oil and Gas????Drill Baby Drill
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????2%3%????
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????????????WTI????\$65????????\$60????6????
????????WTI????2025?12???\$58????\$51????

????????????2????????????2025?3?
????????700????????2024?3?376?2025?3?290?
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????????CEO????2025?1????2022?1????
40????12????21????

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Posted in ?????????, ???, ?? | [No Comments »](#)

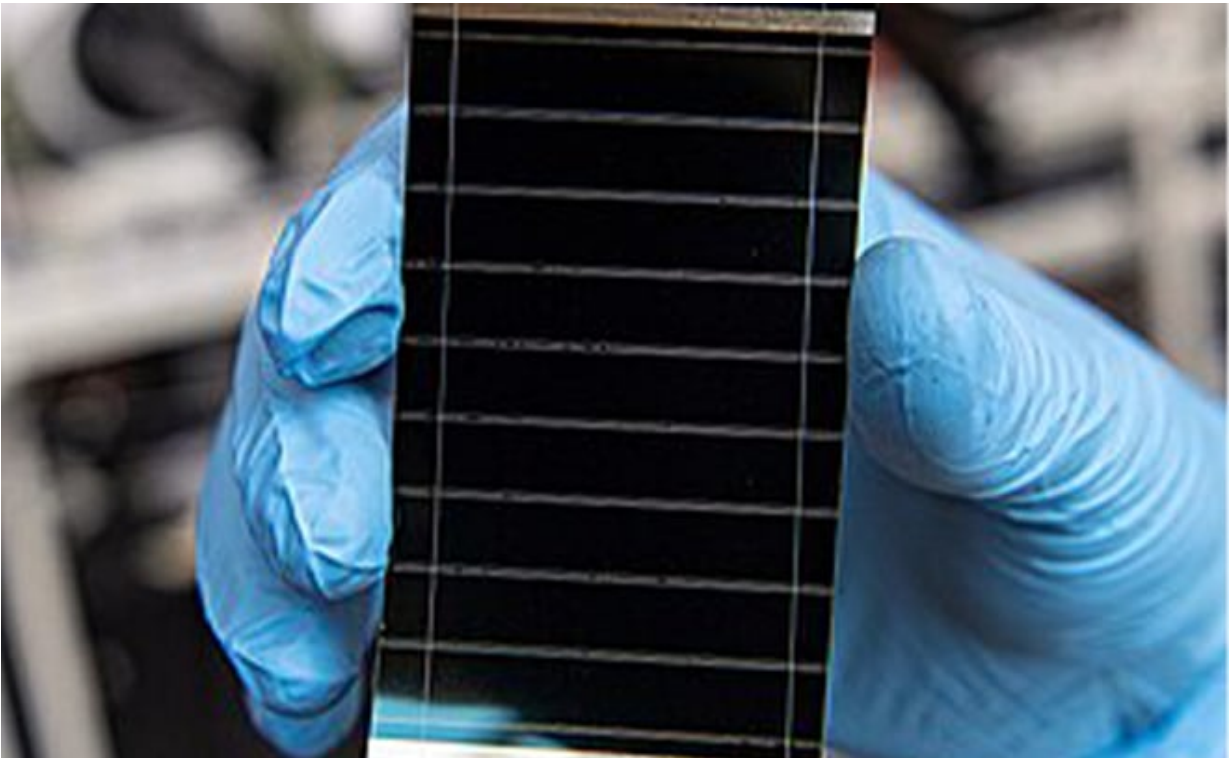
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?? ?? · Sunday, May 4th, 2025



Elena Merkulova/iStock

??26.7????????????????????
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??2040????????????14\$/kWh????20GW????2000?
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Wikipedia??

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Posted in ??????????, ???, ?????????? | [No Comments »](#)

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?? ?? · Friday, May 2nd, 2025



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2023????CO2????????37.4Gt????????10????????1????????33????????2????13??
3?????7??4?????5?5????3????????????2.6????????2????????5????????60???
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[illegible]

????????????????????????????????2024??1?3????????????????217????????????????
 ???330?????3??2????????????190??
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????????????????????2023?1????????47.4GW?=4,740?kW????????????94.5GW
 ?????????????²¹²?

??????????????35?GW???????????????????????????????^{22?}?????????????14?????????????????
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????????2023??86?????????????3?

???60???????5?????????????????—???2.6?????5??????????

21?Global Energy Monitor “Boom & Bust Coal 2024” China section

Global Energy Monitor “Boom & Bust Coal 2024” India section

International Energy Agency “Coal 2024 – Analysis and forecast to 2026”

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Posted in ???, ????? | No Comments »

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?? ?? · Friday, May 2nd, 2025



??SNS??????????

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warming????????????????????????????????????CO????????????????????????????????IPCC??
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IPCC????????????

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change????????????
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yamasan/iStock

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??4?2????????????????????????NANO Nuclear
Energy????????????????????????????????KRONOS MMR????????????????????



© Nano Nuclear Energy, inc.

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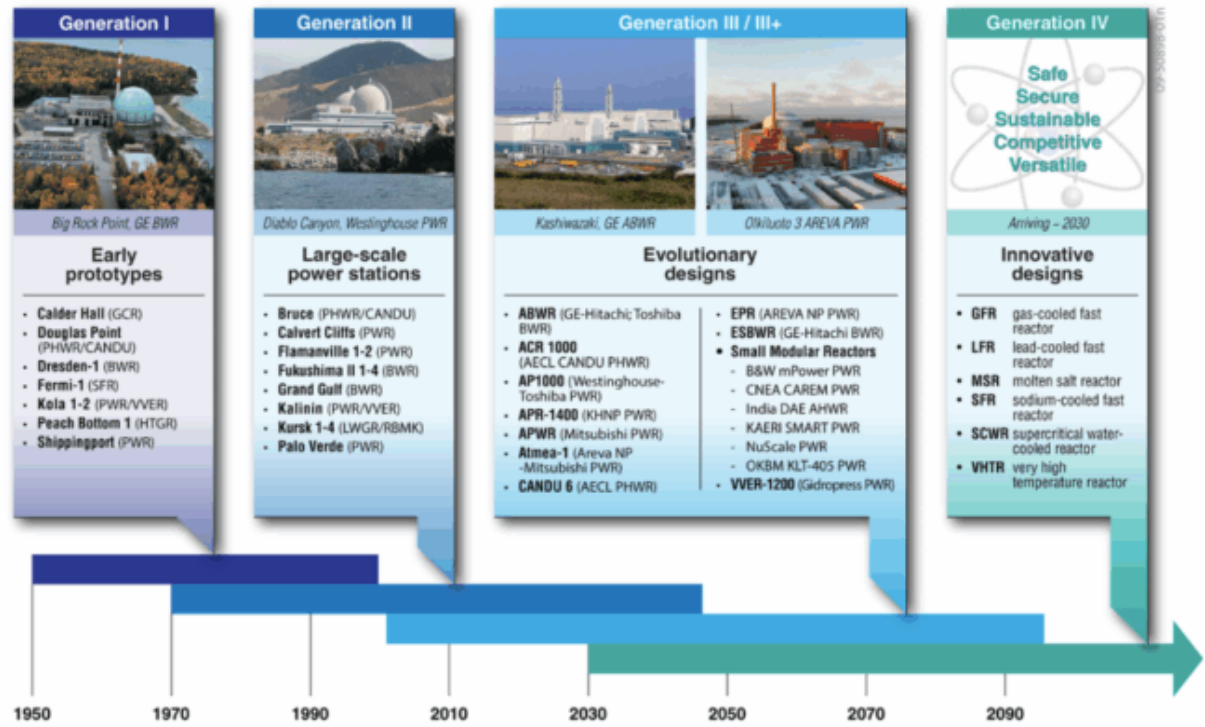
?4??5????????????????????
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??Self-Consistent
Nuclear Energy System?SCNES????4????????????????????Generation IV International
Forum?GIF????????SCNES????????????³¹?

???KRONOS

MMR™????????45MWt????????????????100?1????????????????
????5????????11????????

????LEU????????HALEU????????????????????
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74????????????

©? Generation-IV International Forum

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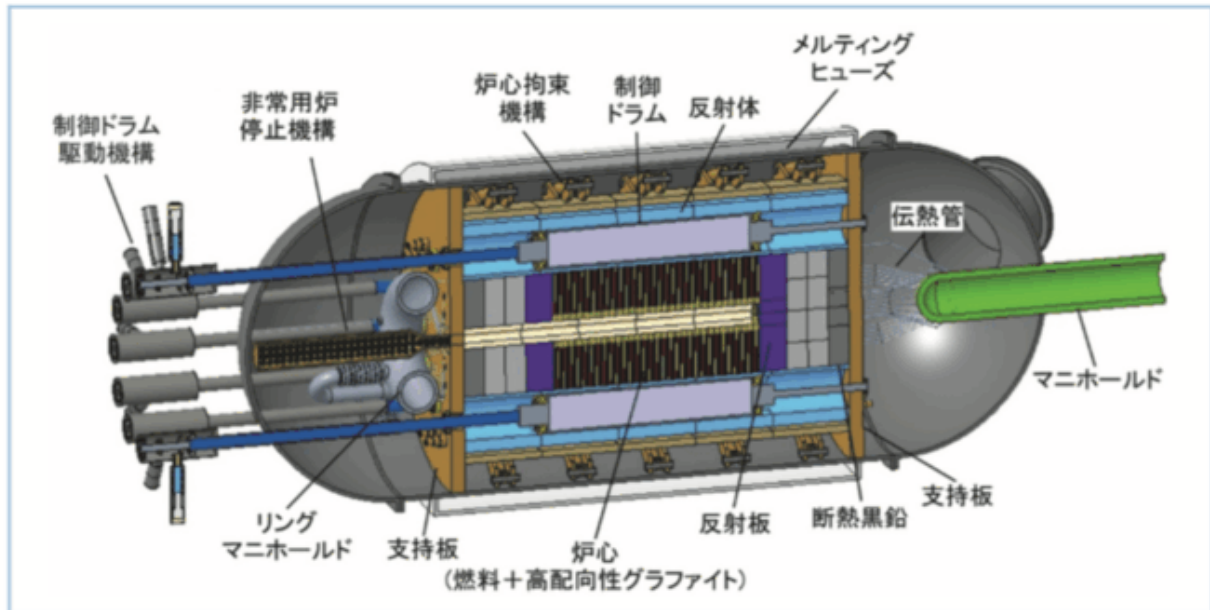
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Posted in ?????????, ???, ????????? | No Comments »

EU????????????????????

?? ?? · Thursday, May 1st, 2025



Yastaj/iStock

EU ETS? $\text{€}80/\text{t-CO}_2$ $\times$ EUETS $\div$ CBAM $1\text{€} = \text{US}\$1.10$

EU ETS? $\text{€}80/\text{t-CO}_2$ $\times$ EUETS $\div$ CBAM $1\text{€} = \text{US}\$1.10$

EU ETS? $\text{€}80/\text{t-CO}_2$ $\times$ EUETS $\div$ CBAM $1\text{€} = \text{US}\$1.10$

1. CBAM

EU ETS? $\text{€}80/\text{t-CO}_2$ $\times$ EUETS $\div$ CBAM $1\text{€} = \text{US}\$1.10$

20% 79% $\text{€}80/\text{t-CO}_2$ $\times$ EUETS $\div$ CBAM $1\text{€} = \text{US}\$1.10$

CBAM対象品目 (HS4/HS6)	A 典型的埋込排出量 (t-CO ₂ /t-製品)	B 代表的国際価格 (US\$/t)	C CBAMコスト (US\$/t)	D CBAM税率 (%) = C/A	補足 排出が少ない場合の税率
鉄鋼 (HS 72)	2.0 t/t (高炉材)	900	176	20%	電炉材なら 0.9 t → 9%
アルミニウム (HS 76)	12 t/t (石炭火力電解)	2500	1056	42%	ノルウェー水電解 = 4 t → 14%
セメント/クリンカ (HS 2523)	0.9 t/t	100	79.2	79%	副産石灰石混入で 0.7 t → 62%
窒素肥料 (HS 3102)	1.6 t/t	500	141	28%	省エネ改修で 1.3 t → 23%
水素 (HS 2804) (グレー)	10 t/t-H ₂	1400	880	63%	ブルー(CCS) 4 t → 25% グリーン 0 t → 0%
電力 (HS 271600)	0.4 t/MWh (ガス機平均)	110	35.2	32%	水力 0 t → 0% 石炭 0.9 t → 72%

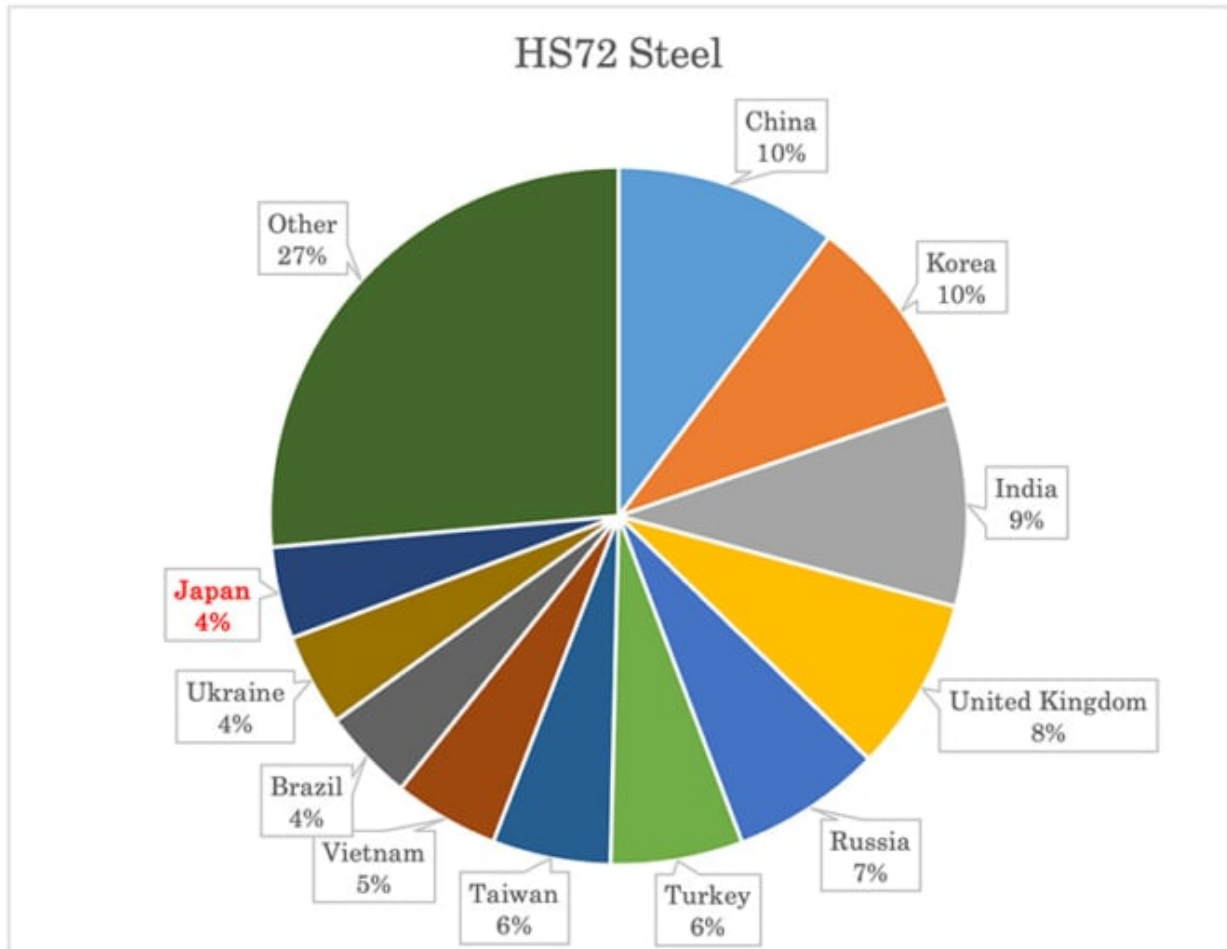
EU ETS? $\text{€}80/\text{t-CO}_2$ $\times$ EUETS $\div$ CBAM $1\text{€} = \text{US}\$1.10$

EU ETS? $\text{€}80/\text{t-CO}_2$ $\times$ EUETS $\div$ CBAM $1\text{€} = \text{US}\$1.10$

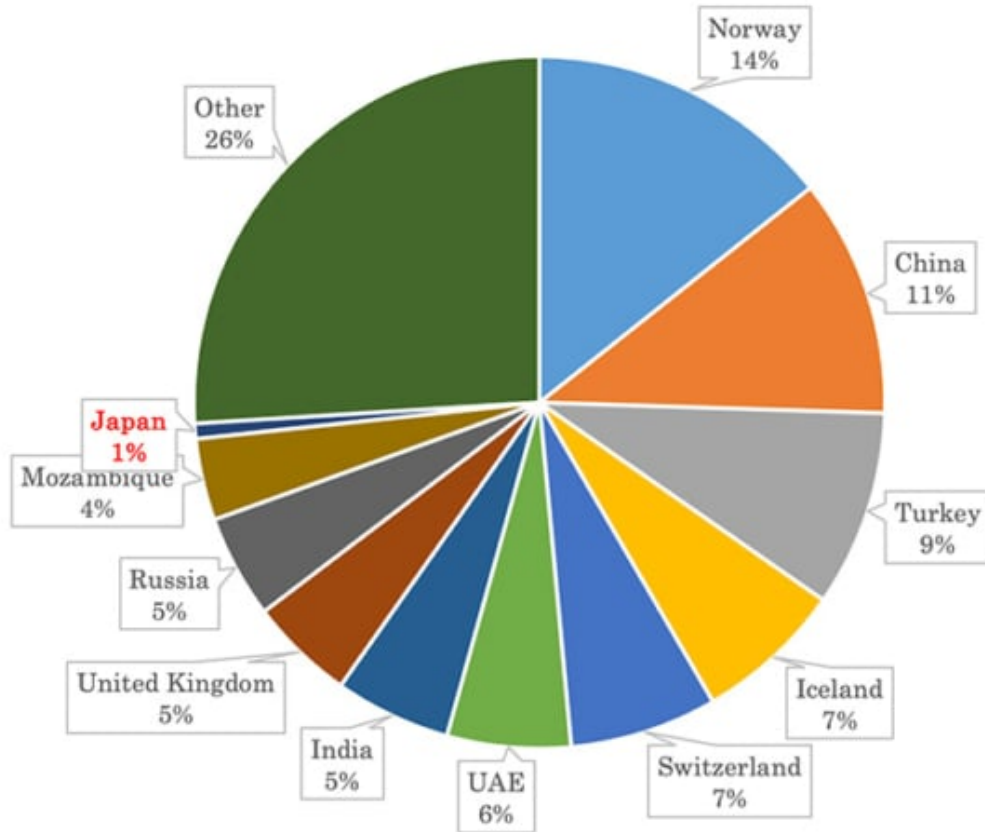
- EU? $\text{€}80/\text{t-CO}_2$ $\times$ EUETS $\div$ CBAM $1\text{€} = \text{US}\$1.10$
- EU ETS? $\text{€}80/\text{t-CO}_2$ $\times$ EUETS $\div$ CBAM $1\text{€} = \text{US}\$1.10$
- ETS? $\text{€}100/\text{t}$ $\times$ 1.25

2. CBAM????????????????????

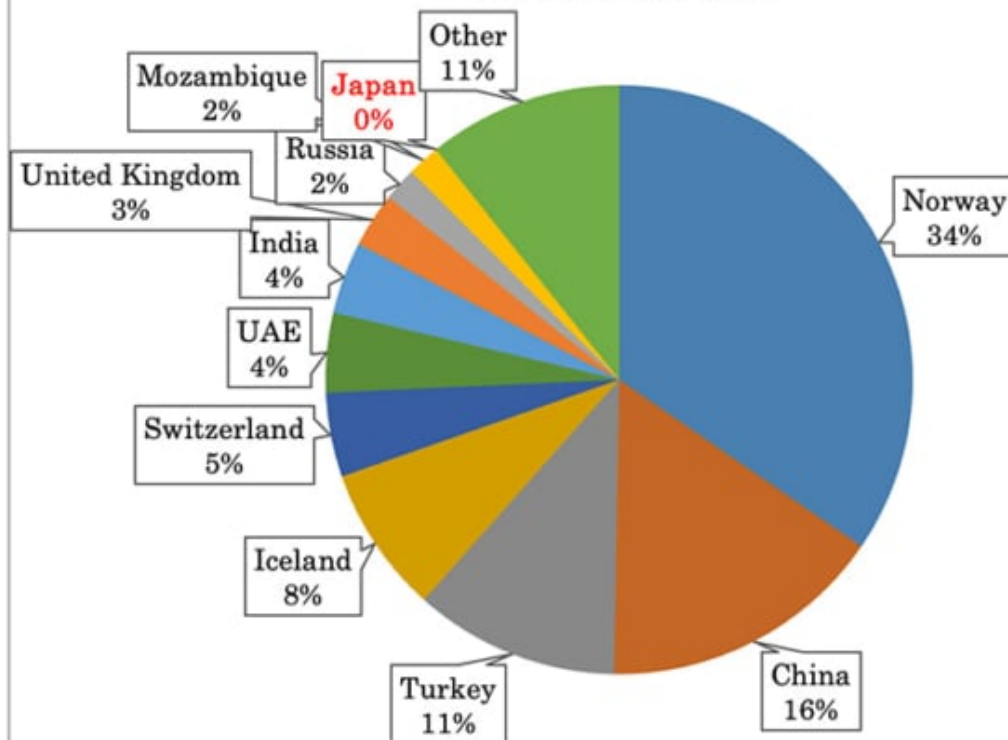
????????????????????EU????????100????????????????????6????????????????????
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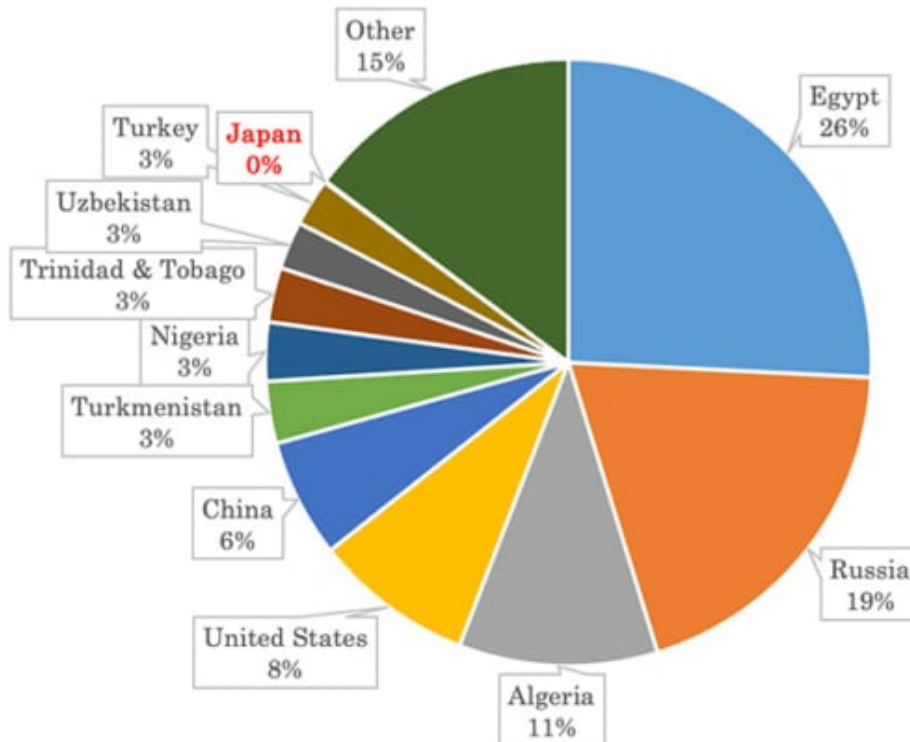
US76 Aluminum



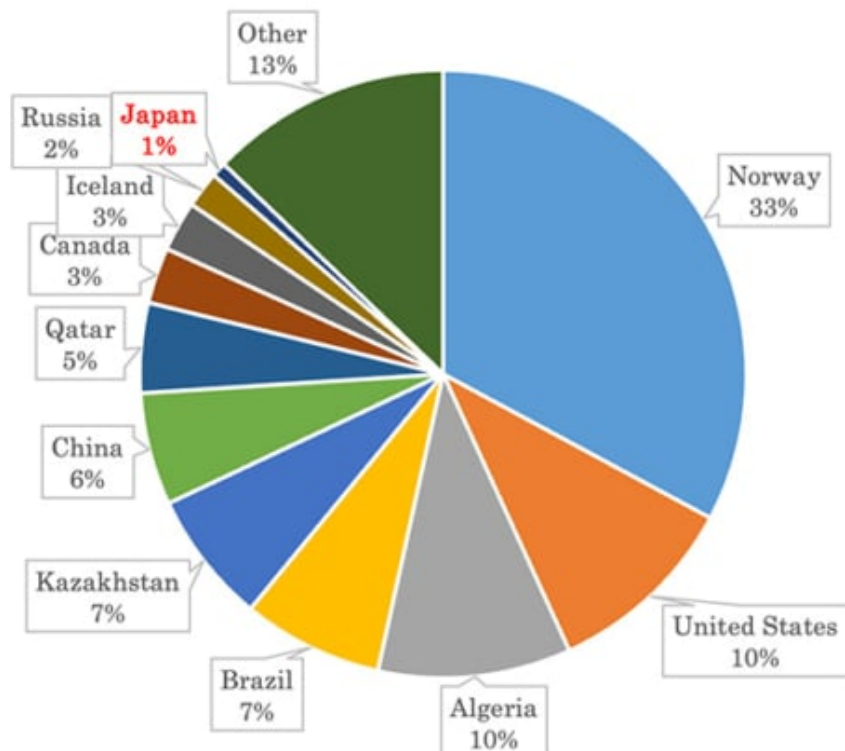
HS2523 Cement

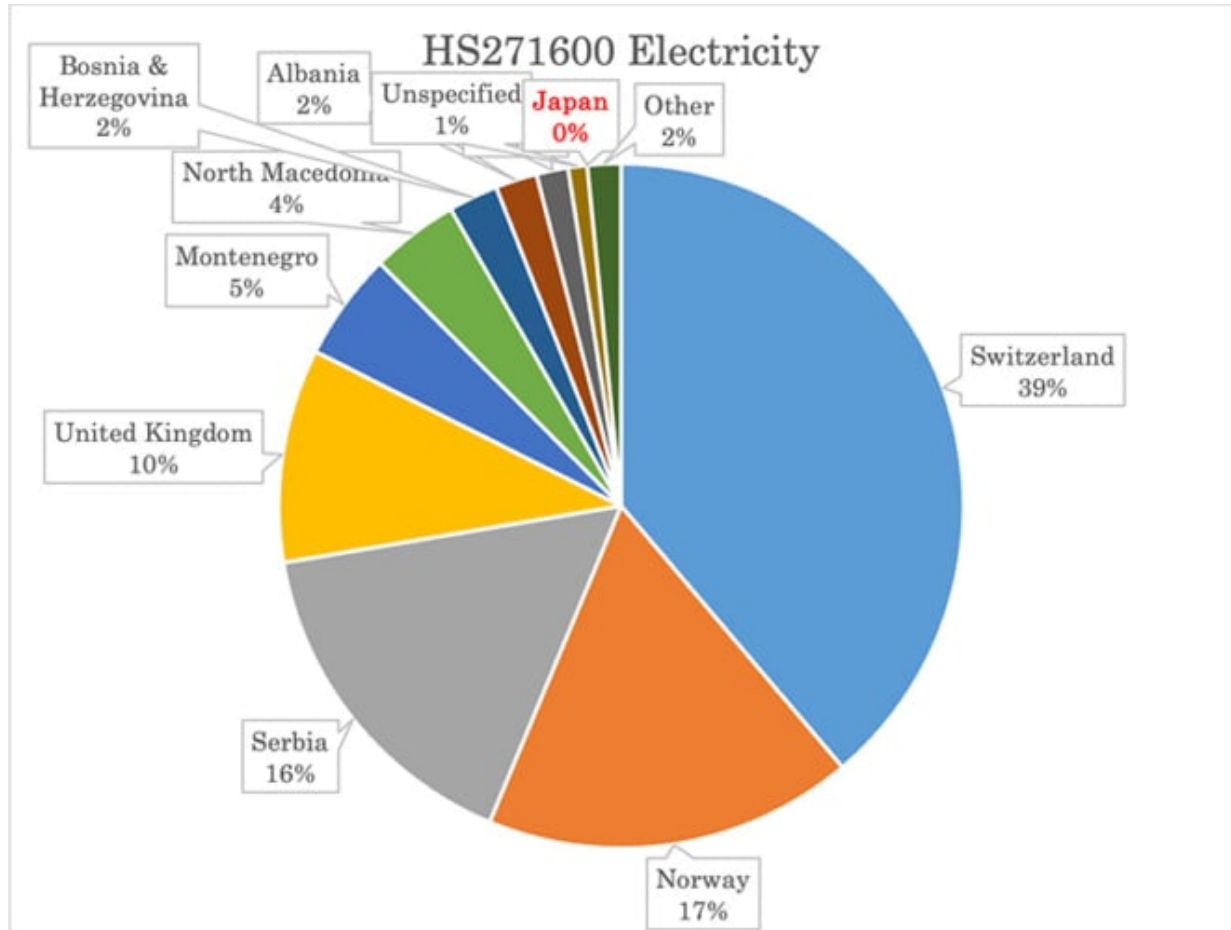


HS3201 Nitrogen Fertilizers



HS2804 H2 & Rare Gases





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Posted in ???????????, ???, ????? | No Comments »

EU?????BRICS????????????????

?? ?? · Wednesday, April 30th, 2025



Nina Borisova/iStock

?????GX????????????????2026????????????????GX-
ETS????????????5?15????????????
????????????????EU????????????CBAM????????????CBAM???EU????????????
CO2????????EU????????4???82????????????????????????????????
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EU?CBAM?“?????”????????????ETS????????????????GX
????ETS????????????
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??CBAM????????BRICS????????EU????????C
BAM????????

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??????2023??EU??????47??????43??????43??????19????11??????

????????2.3??????0.7????????????????????

??CBAM????????EU
ETS??80????????????????????20????42????79????28????63????
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????????????????????56????

India aims to safeguard steel trade interests from EU carbon levy

????????EBRD????????83????

CBAM TRAINING. CASE STUDY – CEMENT INDUSTRY. EGYPT. December 6, 2023.

????CBAM????????BRICS????????2024?10????????BRICS????
????????CBAM????

BRICS???? ?

????????2026????20???35????

India will take up carbon tax issue ‘very strongly’ with the EU, says Piyush Goyal

????????EU????

BRICS???40????6????BRICS????EU????CBA
M????

????????10????400????CO2???60???CO2????
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????2050????2013???2030???46???2035???60???2040???73????
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????CO2????

2030???46????RITE????30????

GX????

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AM????

??EU????????????????GX????????????????????
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Posted in ??????????, ???, ????? | No Comments »

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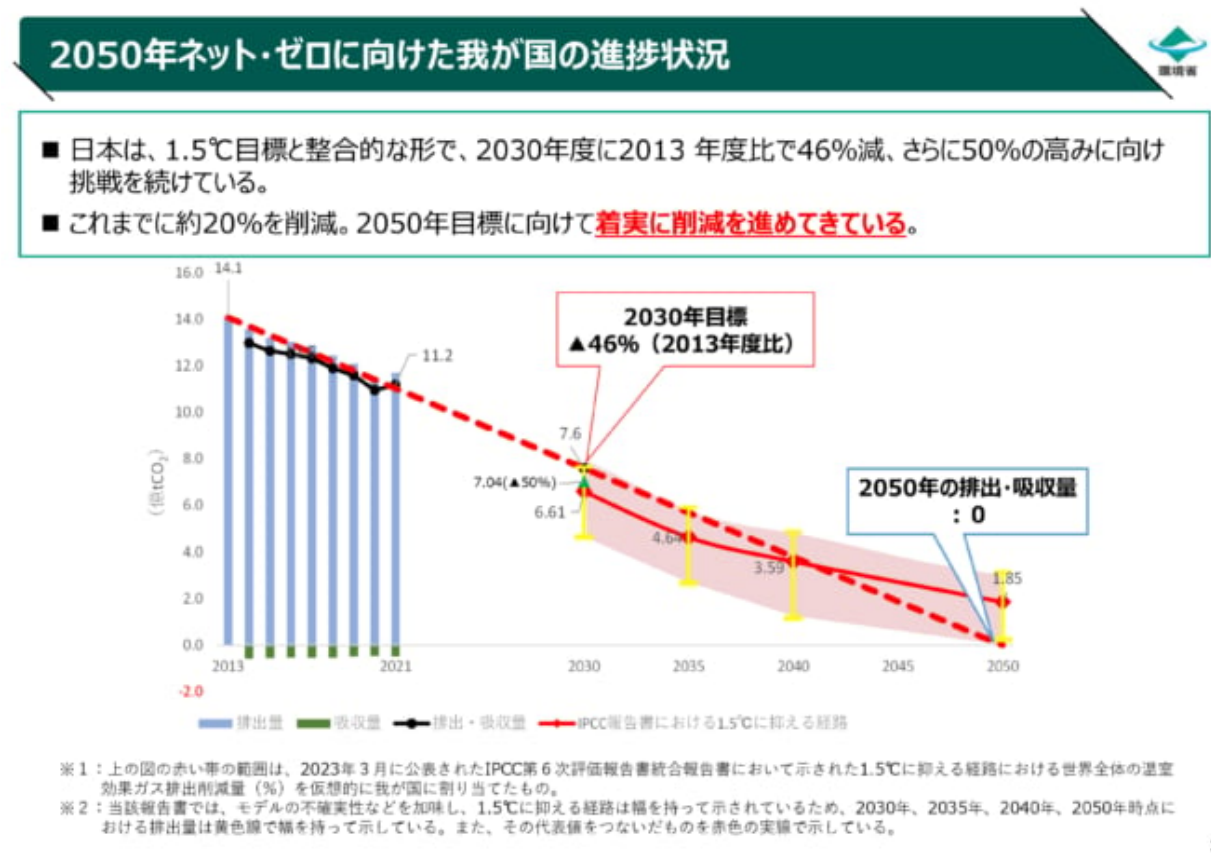
?? ?? · Monday, April 28th, 2025



Floriana/iStock

2050年CO2排出削減率2013年度比で46%減、さらに50%の高みに向け挑戦を続けている。

これまでに約20%を削減。2050年目標に向けて着実に削減を進めてきている。



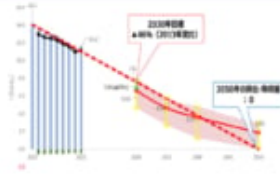
COP28 GX9

G72050CO2

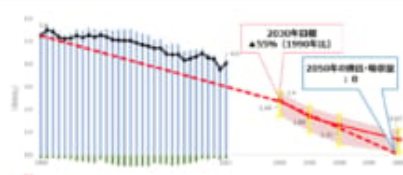
G7メンバーの排出削減の進捗状況



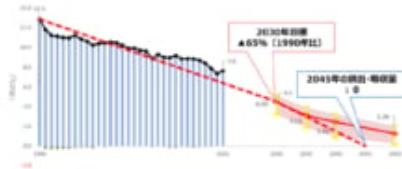
日本



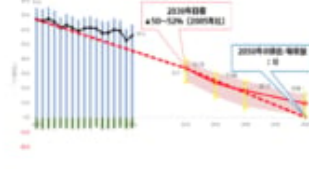
フランス



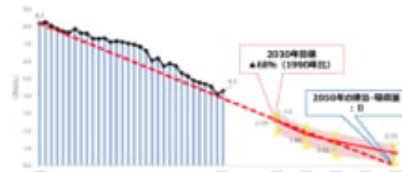
ドイツ



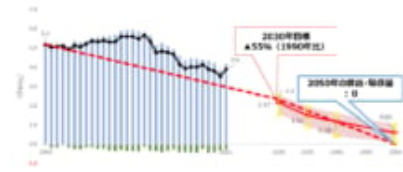
米国



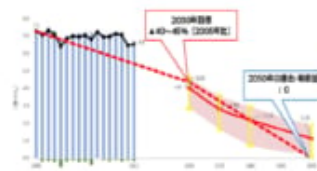
英国



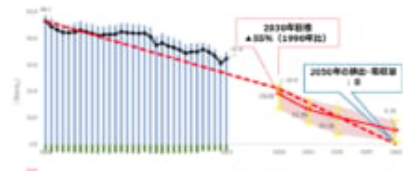
イタリア



カナダ



E U



● 排出量 ● 削減量 ● 排出・削減量 ● IPCC報告書における1.5℃に對する経路

※グラフの左端の位置は基準年の違いを表している。

4

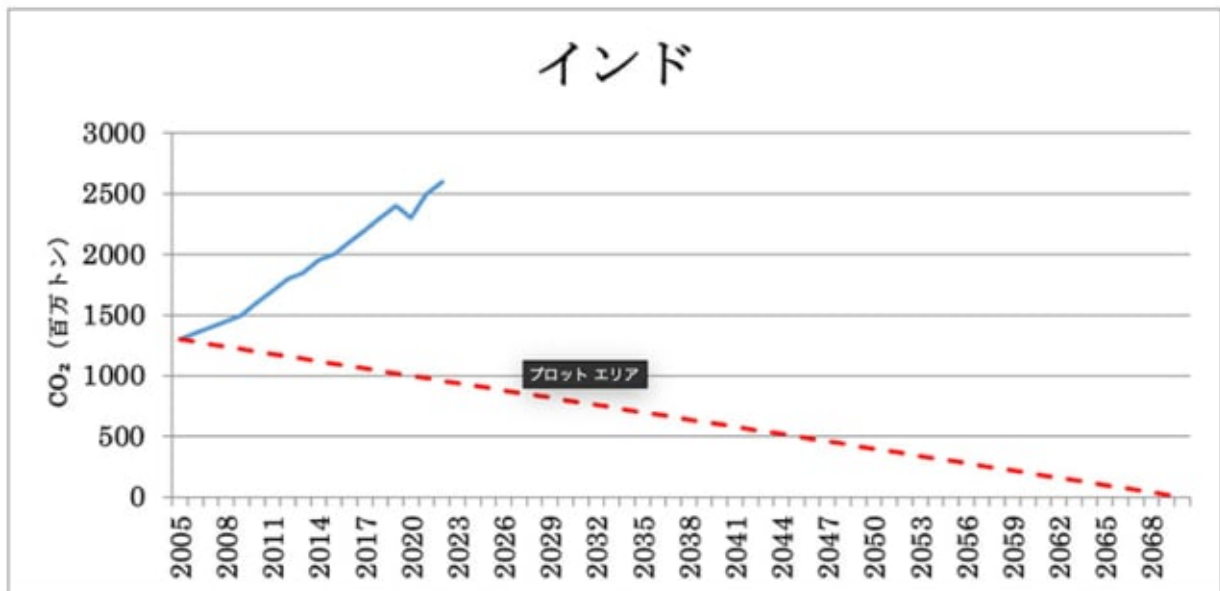
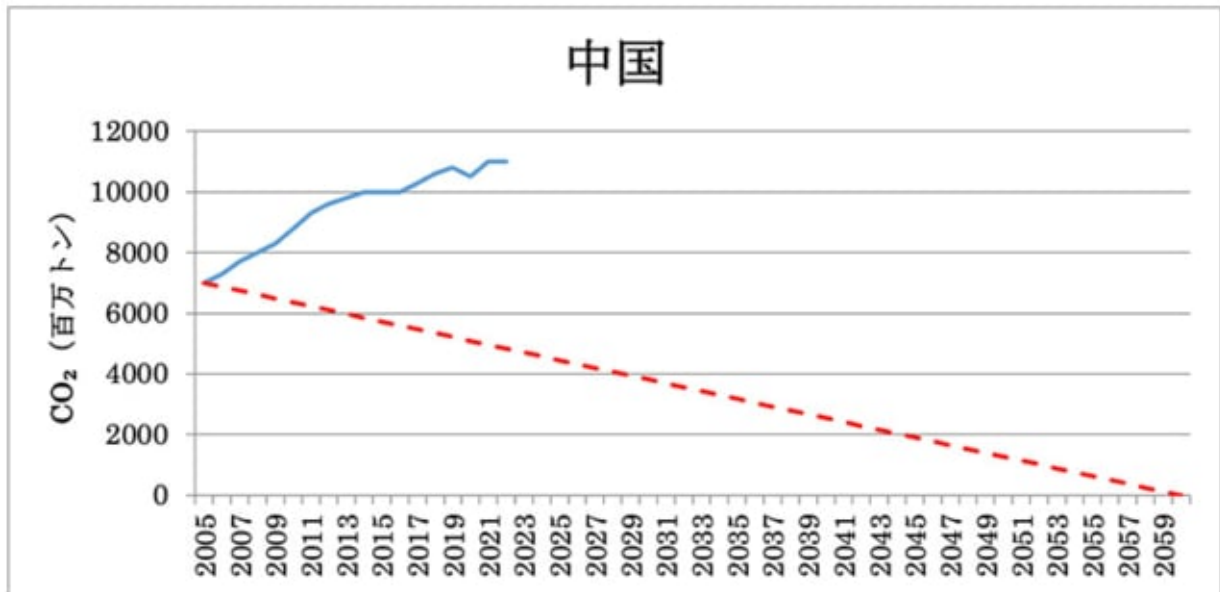
???????COP28??? GX?????9???

??CO2????????????????????????????????

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??2060?????2070????CO2????????????????????

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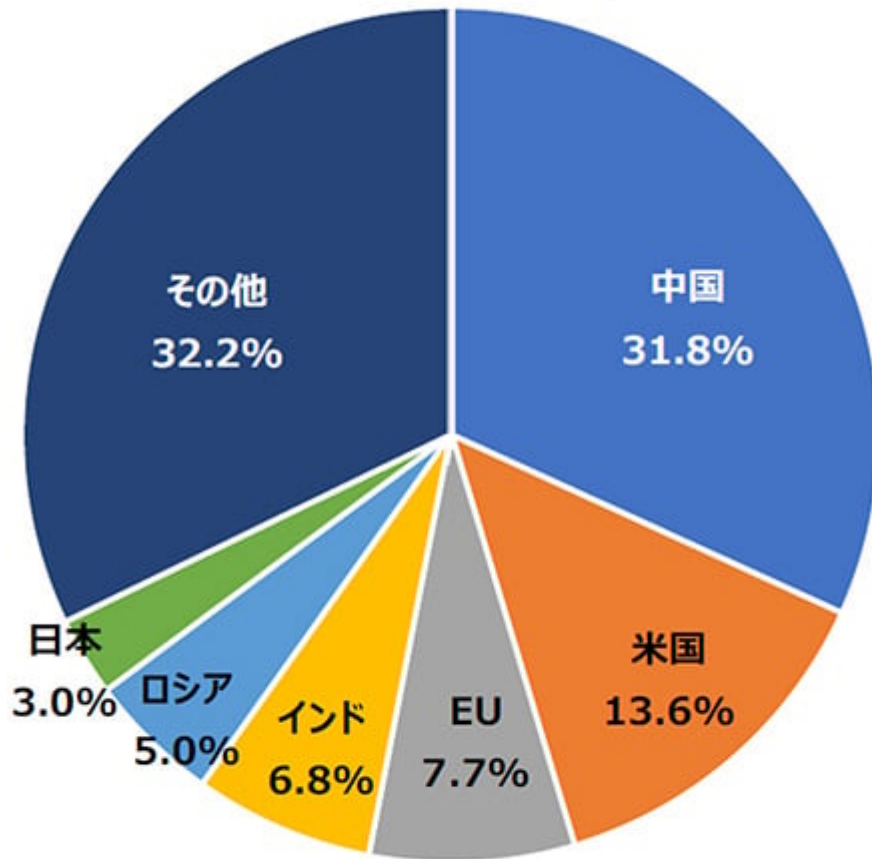
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【第131-1-4】2021年のエネルギー起源CO₂排出量(国別)



資料：IEA「CO₂ Emissions from Fuel Combustion」を基に経済産業省作成

4????????????????5???

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Posted in ???, ????? | No Comments »

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?? ?? · Monday, April 28th, 2025



menonsstocks

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#####539 -#####- #####



#####/#####Aspiration
Partners?Inc.#####



#####1?4500#####



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|#####1?4,500##### |#####



#####45???2#####
#####1?4500#####

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??10#####Verra#####

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#####10#####
??DOJ#####FBI#####SEC#####CFTC#####

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#####2021?8???CQC???
??2#####2#####CQC#####

A high-contrast, black and white satellite photograph of a powerful cyclone. The storm is characterized by a well-defined, bright white eye at its center, surrounded by dense, swirling cloud bands that spiral outwards in a clockwise direction. The surrounding ocean surface is visible as a dark, textured area, contrasting sharply with the bright white clouds of the storm. The overall image conveys the immense scale and power of the weather system.A black and white satellite image of a large, swirling cyclone or hurricane over the ocean. The image shows a well-defined eye in the center, surrounded by dense, spiraling cloud bands. The surrounding ocean surface is visible with some smaller-scale wave patterns. The overall image has a high-contrast, grainy texture typical of satellite photography.[illegible]

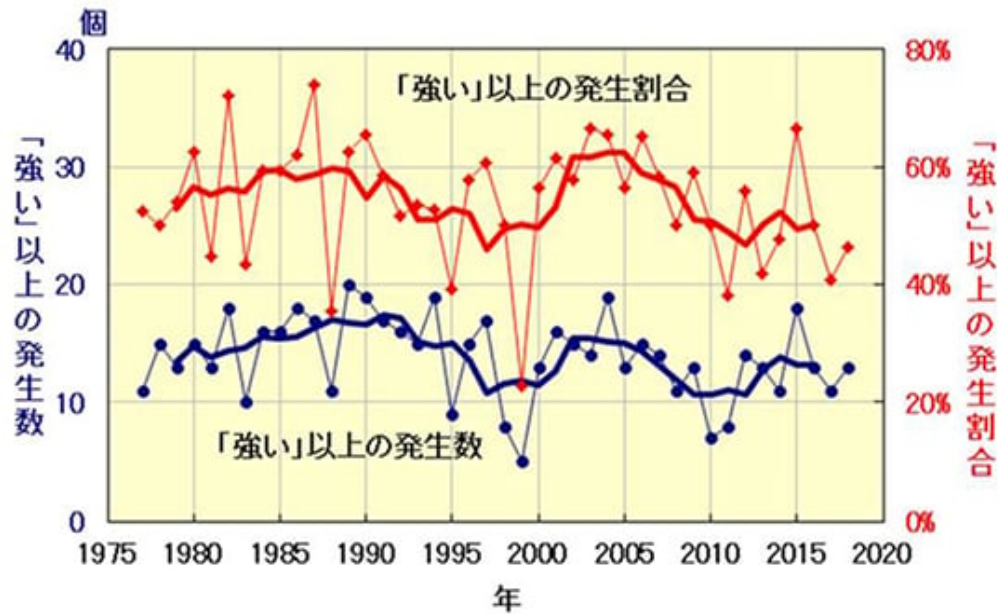


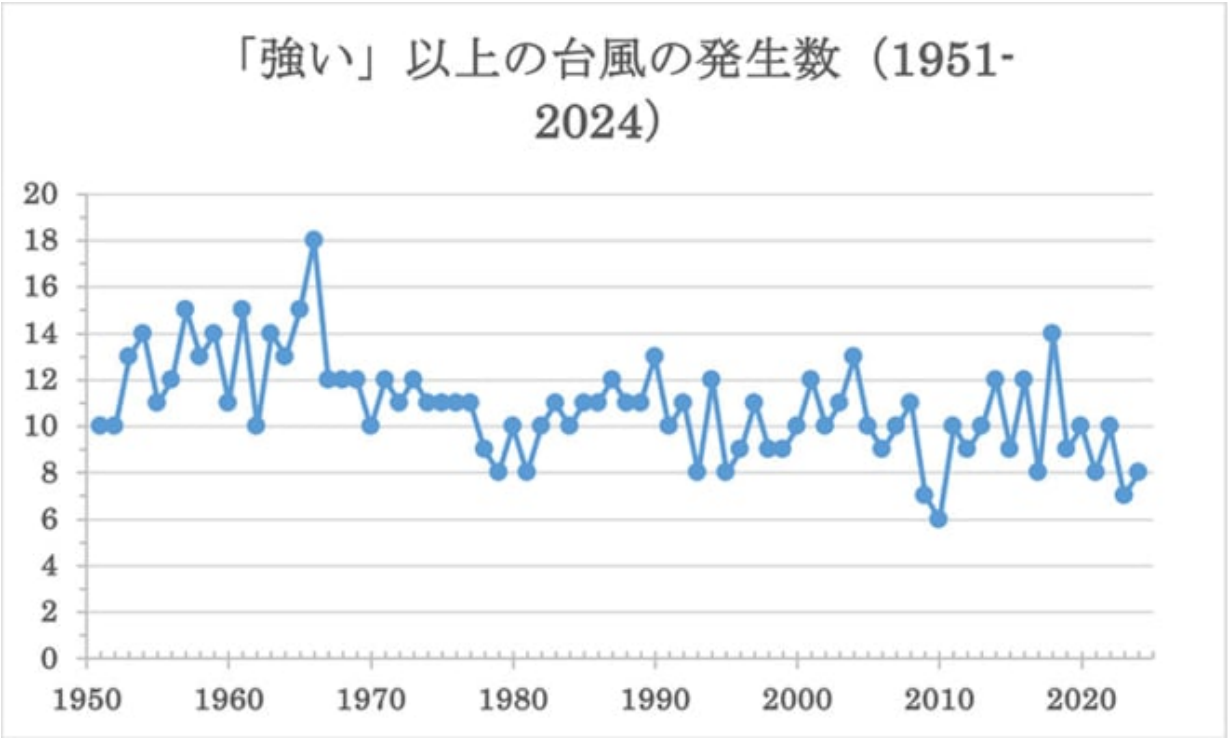
図 2.4-3 「強い」以上の勢力となった台風の発生数と全発生数に対する割合の経年変化

細い実線は、「強い」以上の勢力となった台風の発生数（青）と全台風に対する割合（赤）の経年変化。太い実線は、それぞれの 5 年移動平均。

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?1??10????????????17m/s????????????
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?2????????

?APressure-Based Analysis of the Historical Western North Pacific Tropical Cyclone Intensity Record
 ?Reliability Analysis of Climate Change of Tropical Cyclone Activity over the Western North Pacific
 ?Trend discrepancies among three best track data sets of western North Pacific tropical cyclones

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Posted in ???, ????? | No Comments »

???????CO2????????????????

?? ?? · Sunday, April 27th, 2025



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CO₂????????????????

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CO₂????????????????????????????????10cm????

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????100km????????CO₂????
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Posted in ???, ????? | No Comments »

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?? ?? · Saturday, April 26th, 2025



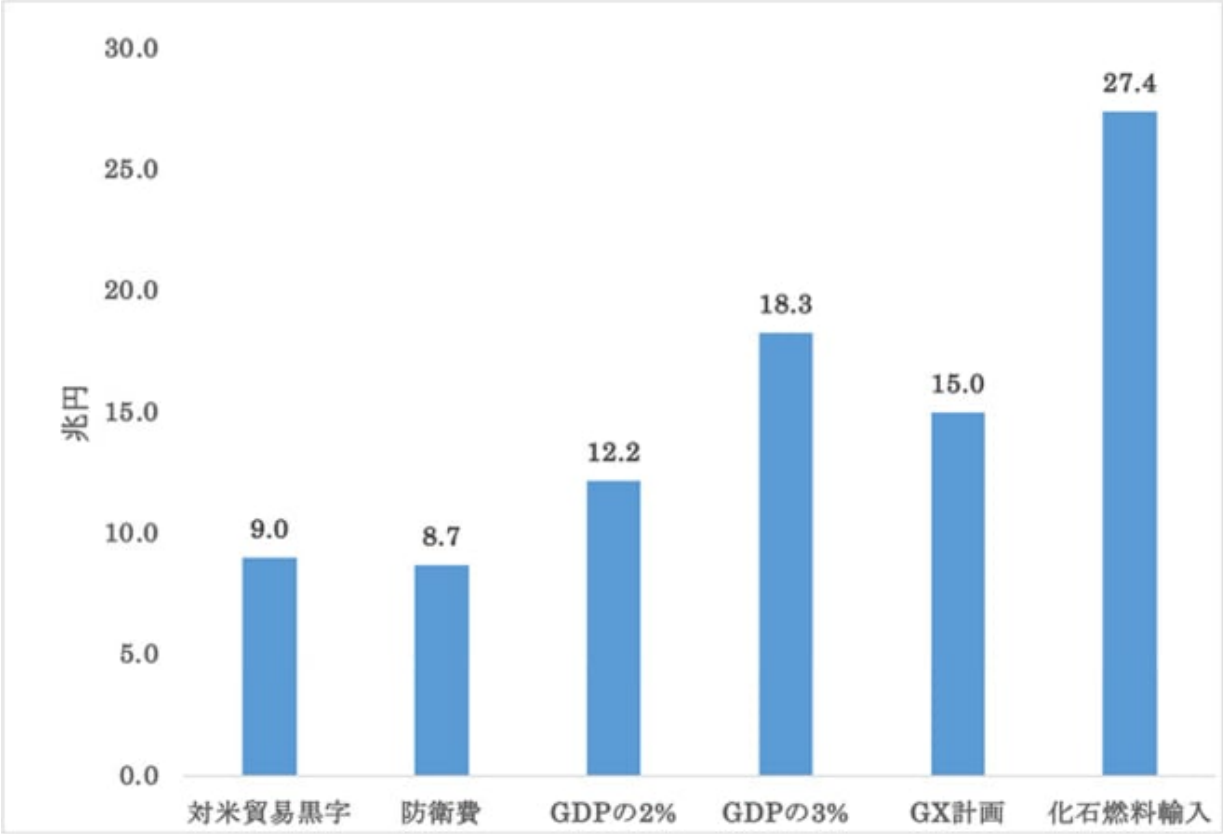
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????????8.7????²²????GDP?2????12.2????????????????????3????18.3????
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品目	輸入額（兆円）	主な特徴
LNG	0.78	シェール由来
原油・石油製品	0.42	メキシコ湾軽質油中心、約14-16万bbl/日
LPG	0.11	エチレン原料・家庭用の調達元として定着
石炭ほか	0.02	コークス用が主体

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Posted in ??????????, ???, ?? | No Comments »

??????“???97%”????

?? ?? · Tuesday, April 22nd, 2025



EvgeniyShkolenko/iStock

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????????????CO2????????????????????????????97????????????????????20????????????????????
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??97%????????????????????
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97????????????

97%??2013????????????????????????????????11,94
4????????????abstract????????????97.1%????????????????????????????

Consensus on consensus: a synthesis of consensus estimates on human-caused global warming

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????97????????????????????????????????????CLINTEL?Climate Intelligence
Foundation????CLINTEL????????????????WCD????????????

WCD?World Climate Declaration There is no climate emergency

CLINTEL???????WCD????????????????????????????????2025????????1983????????????????????
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????CLINTEL??97????????????
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1. ?????????

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2. ?????????97%????

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3. ?????????

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項目	真正科学（Real Science）	疑似科学（Pseudo-science）
仮説と検証	データや観察に基づく仮説を立て、繰り返し検証・反証を試みる	結論ありきで仮説を立て、反証を避けて理論を維持しようとする
反証可能性	「間違っているかもしれない」という前提に立ち、柔軟に見直す	自説を絶対視し、反証を無視または封じる
データの透明性	使用データや分析手法を公開し、再検証を歓迎する	モデル前提やデータ処理がブラックボックス化しやすい
モデルと現実の関係	モデルは現実の仮説的近似として位置づけられる	モデル結果を現実と同一視し、予測を絶対視する
議論と批判への態度	批判や異論を歓迎し、建設的議論を進める	批判者を「否認論者」「反科学」として排除しがち
科学者の姿勢	実名・専門領域を開示し、根拠に基づく主張を行う	「科学者の多数」として曖昧な合意を強調し、実名が乏しい
社会との関係	科学と政策を区別し、判断材料として提供する	科学を政策正当化の道具とし、「従うべき真理」とする
主な具体例	- CLINTEL の声明 - Lindzen, Happer, Curry らの主張	- 「97%科学者合意」説 - IPCC の RCP・SSP モデルによる悲観的予測の断定

?1????????

???RCP????????SSP : ?????????

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Posted in [???, ?????](#) | [No Comments »](#)

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??? ?? · Friday, April 18th, 2025



mammuth/iStock

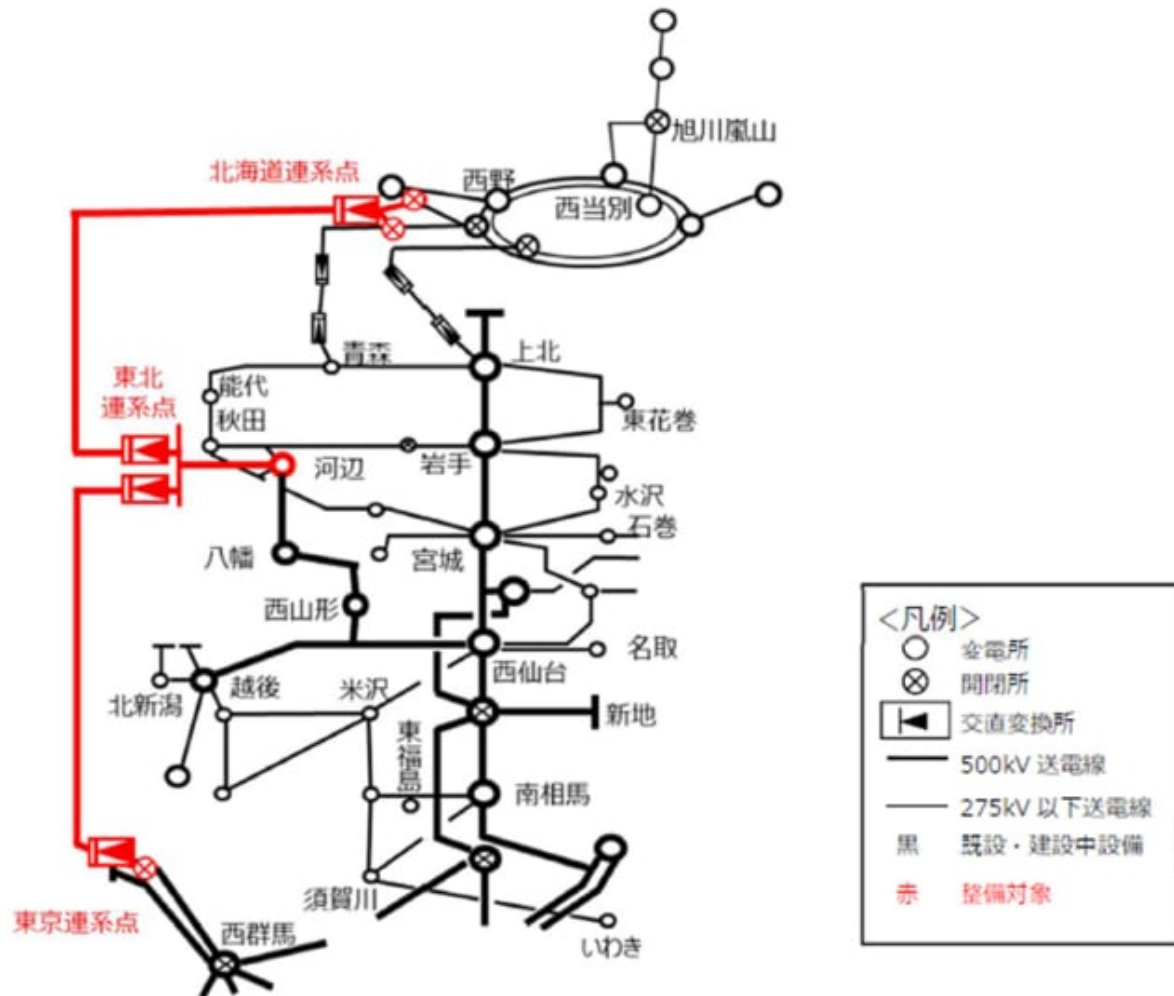
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2024?4????????????OCCT??1????????????????
??800km????200?KW????????

?1????????????????2??500KV????????????
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(2) 概略ルート



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工事内訳	概算費用
海域工事	8,700億円～1兆1,000億円
陸上工事	4,700億円～5,100億円
開閉所工事ほか	1,700億円
合計	1兆5,000億円～1兆8,000億円
参考	
約800km275KV送電線建設コスト (鉄塔間300mとして、鉄塔2,700基と想定)	4,000億円

1) OCCT

275KV 800km 300 2,700 4,000
1/2 1/3

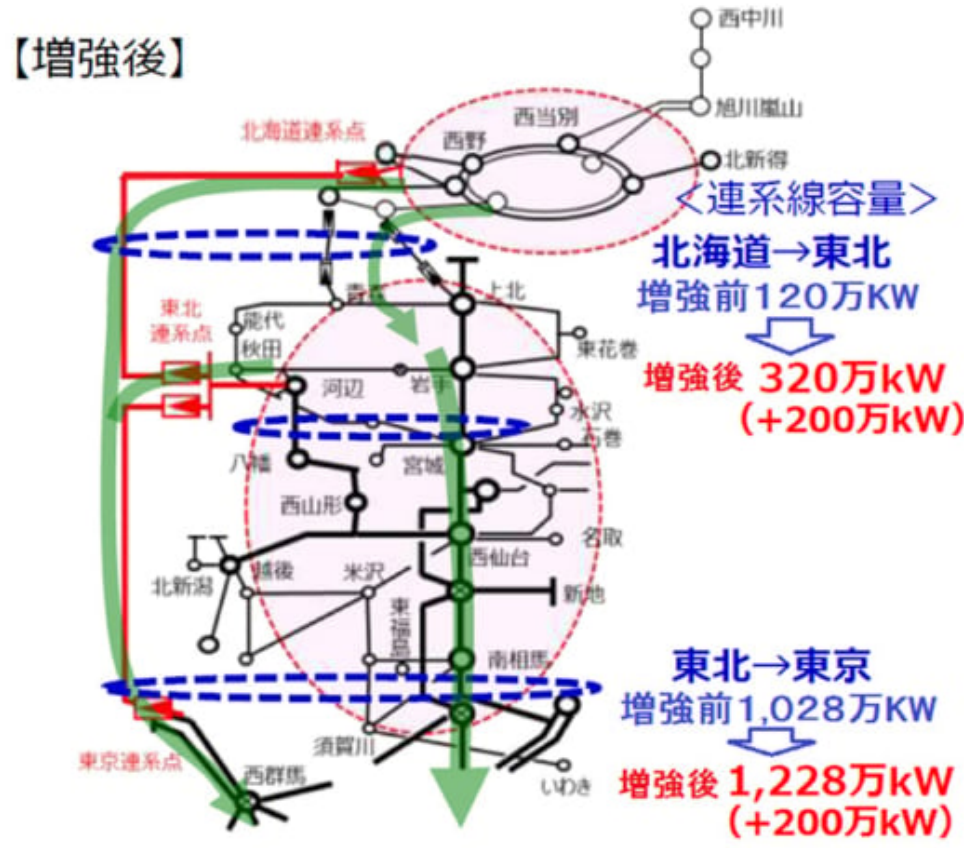
1 2

200KW 200KW

2

1. OCCT
2. OCCT

?KW????????????????????????????????????2?1,228?KW????????????200?KW????????????
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KW????????????????????????????????



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OCCT???

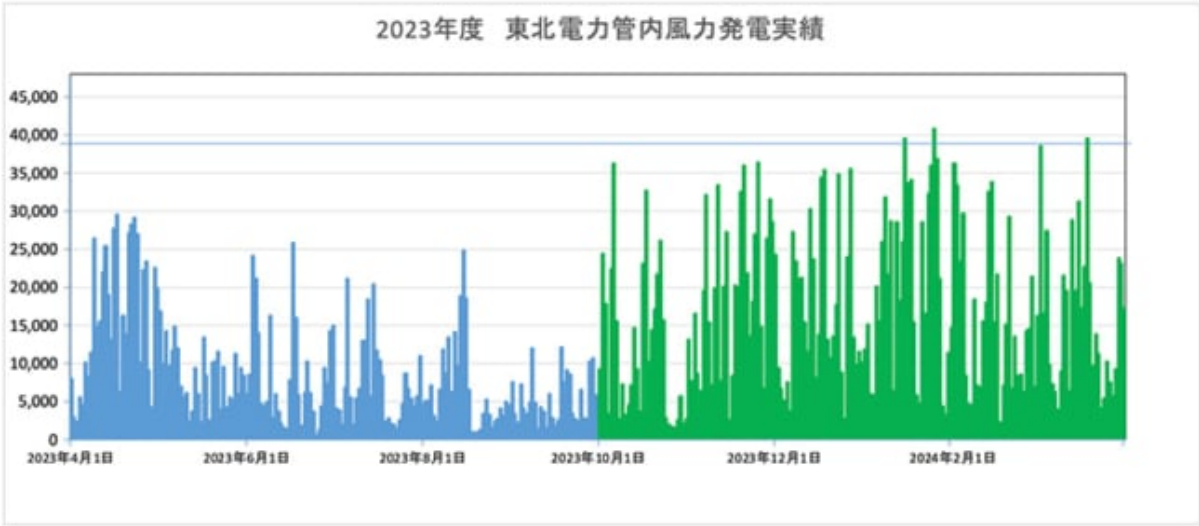
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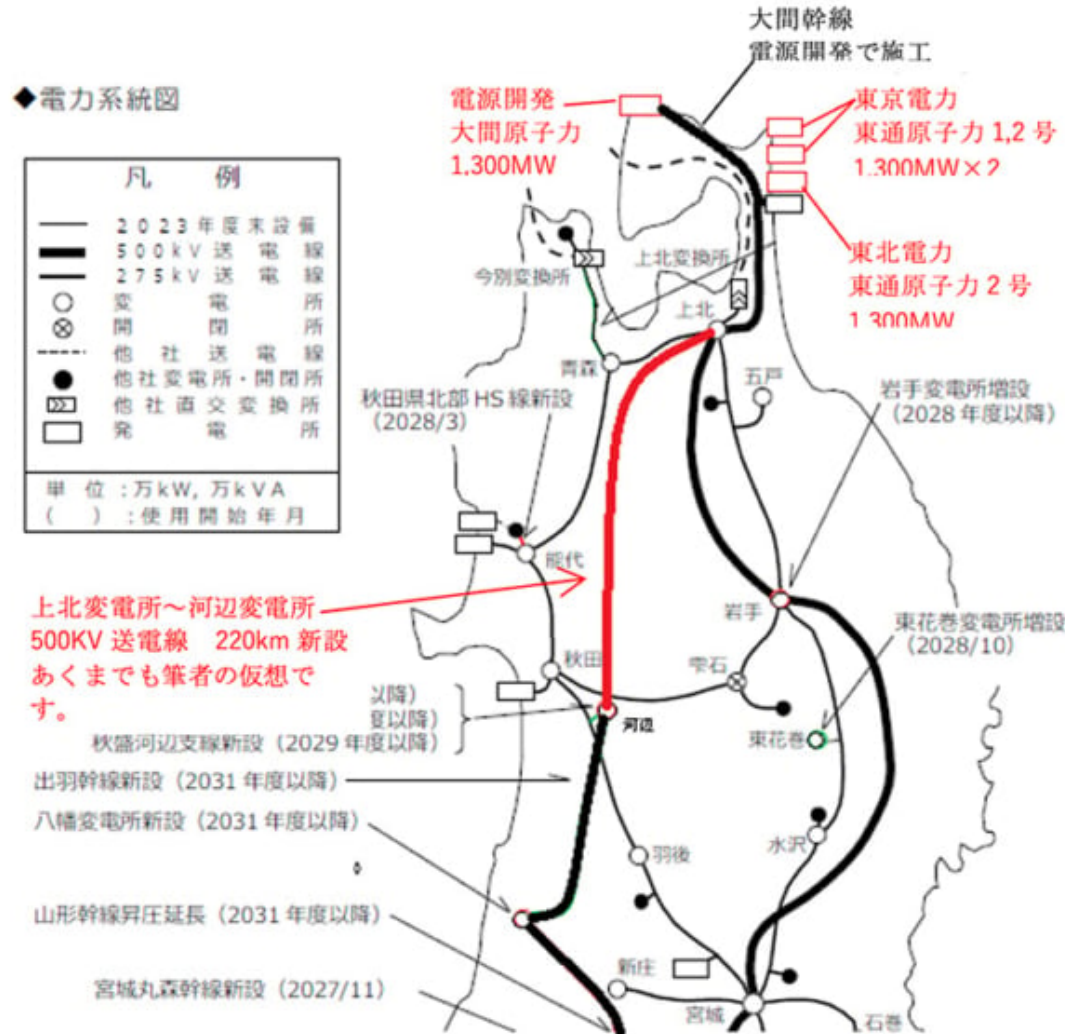
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4????????2024????????????????????????????????

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2011??

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220km??

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2,000????550?KW????????????????????????????????????

????????550?KW????????????????????????????2????????????????????????????

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Posted in ?????????, ??? | No Comments »

????e-fuel????????????

?? ?? · Thursday, April 17th, 2025



istock-tonko/iStock

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??e-fuel??

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e-fuel????

e - fuel????H????????????CO??CO????????????????????????

EU???

EU??2050????????????????????????????????2035????????????CO??

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????????2020????????????2050????????????????????????????????2035????????????100????

EV?FCEV?

e-fuel

e-fuel

e-fuel 700?/L 4?

1Nm³ 100 e-fuel 700?/L 30?/Nm³ NEDO 2030 e-fuel 255?/L 1.5

e-fuel

e-fuel

e-fuel 2035 100 e-fuel

2035 e-fuel

年度	e-fuel 製造コスト (円/L)	水素価格 (円/Nm ³)	備考
2025 年	約 700 円	約 100 円	現在の技術水準。国内製造時のコスト
2030 年	約 300 円	約 50 円	再生可能エネルギーの普及により水素価格が低下
2035 年	約 200 円	約 30 円	技術革新と量産効果によりさらなるコスト低減
2050 年	約 170 円	約 20 円	大規模な生産と技術進歩により安定

e-fuel

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- 168?/L
- e-fuel:
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SAF

SAF Sustainable Aviation Fuel e-fuel CO

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???2030????????????10%?SAF????????????170?kL????????200?kL????????????????????
????????????????100?120?/L????SAF?300?500?/L????????????????????

????????????????????50%SAF????????1????????????2????????1????????????????
2035????????????1?2????????2050????????????????????

年度	SAF 製造コストの目標	航空運賃への影響（目安）
2025	300～400 円/L	現行より数千円高くなる可能性
2030	200～250 円/L	運賃への影響は 1 割前後に収束の可能性
2050	100～150 円/L	運賃への影響は最小限、従来と同等もあり得る

???NEDO????SAF???????IATA???

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e -
fuel?SAF????????????????????????2035????????2050????????
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Posted in ??????????, ???, ?????????? | No Comments »