Global Energy Policy Research | GEPR

GEPR??http://agorajp.com/??

??????????JA??????????

?? ?? · Monday, June 2nd, 2025

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??JA??

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

?????????3???????????

1. ??????????
2. ????????????????????????????????????
3. JA????????????????

hungryworks/iStock

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??????????????????2016??JA?????????????????????????
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????5?23??????????????????????????????????????2000??5kg??????????

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NHK??

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??5kg?2000????????????????
????????????????1000????????????

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????????7???2024??????????????????

??????????A???2990????????????????????
?????2000????????????????3230?——??????????——2000?????3000???——????????????????????
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??????????????????????30????5kg??6000????????2022????20????2021????10????????????????????
????????????????????2021????????——????????????????????????????

??????1???????4?5kg?????????????5kg?6000????????1??????

??????????????100????????3?????????????????????????????30??
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6350????

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????????????????????????????????????2kg??????5kg????????????????????????????????

?????5880?????5kg?????????????6350?????????4000??????????JA?????????6000????????????????
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6300????????????????????????????????AI?????????????

?????????5880????????
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2????????

??????????????5kg2000???

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????????????????????????10???????1???1000???10????

2????????????

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????????????????????????????5???1????????????????????????????????

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

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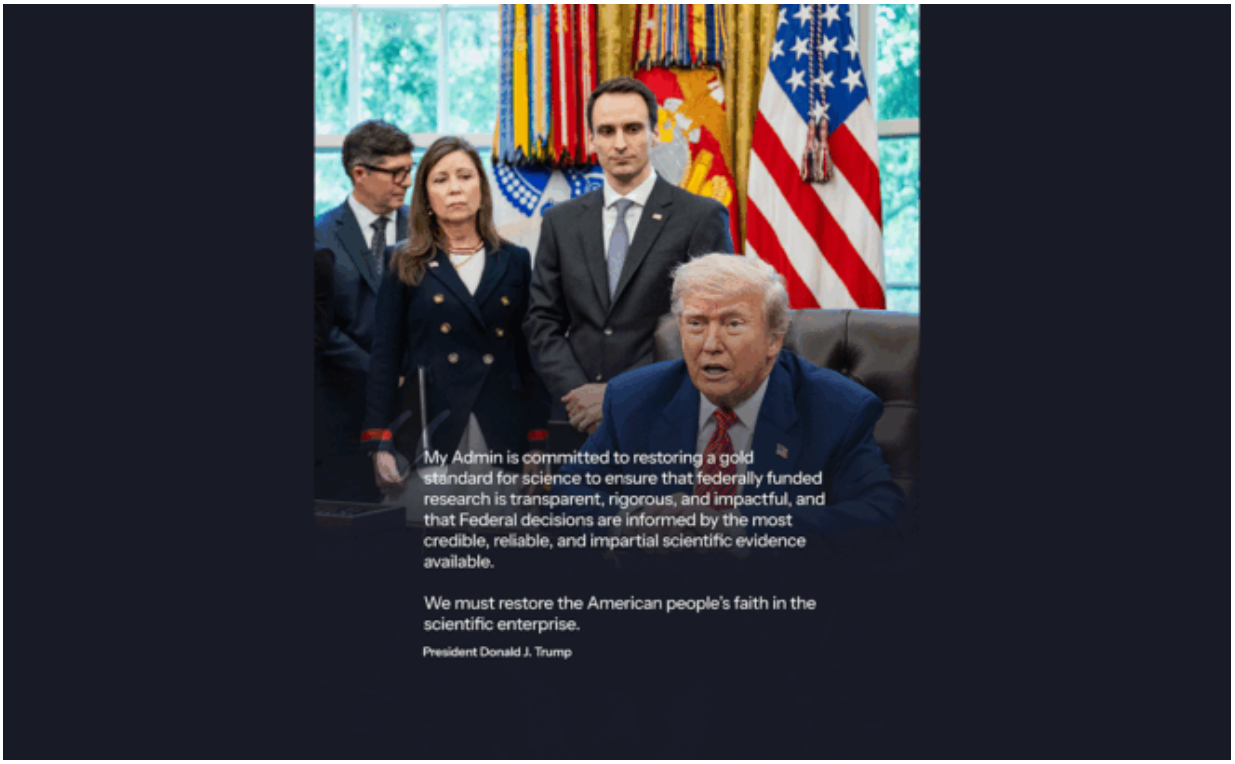
?? ?? · Friday, May 30th, 2025



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???????X??

5?23??????????? “????????????????????????Restoring Gold Standard Science?”?????????????????

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> ? A ?
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blackred/iStock

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2025?4?28??????????????????????????????2??

- ?????30??????????????????????????????2????????????
- ??
- ??????????3??????????2.2GW??????????
- ??????????????????????????????

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- ?????1????????????PV?????????????
- ??????????????????????????????2019???2025?????
- ??????????????????????????

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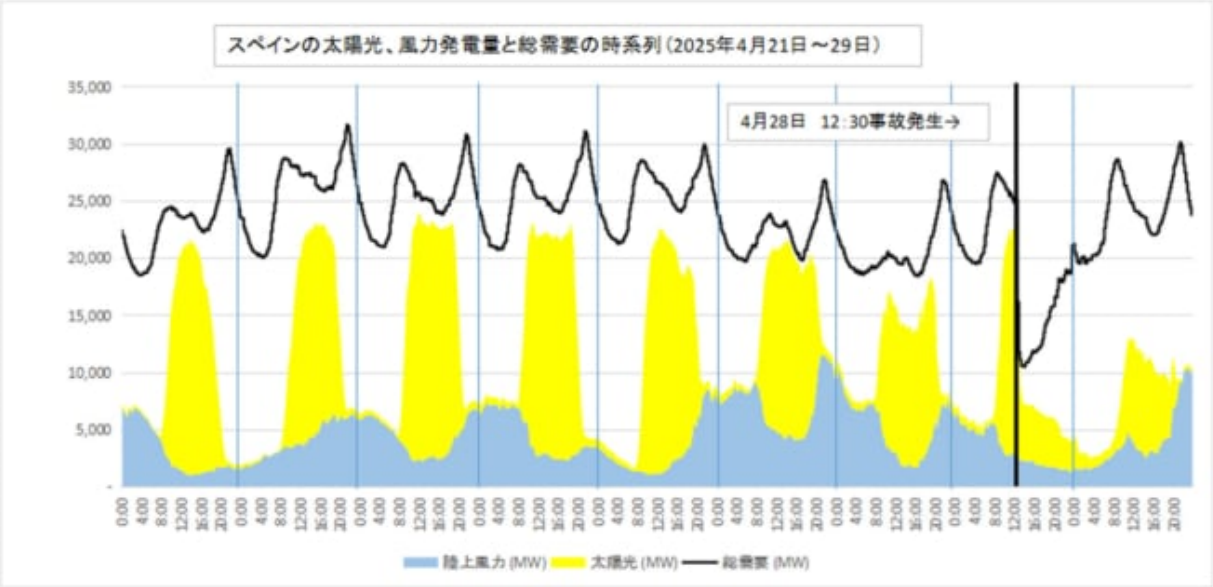
??????????1??????????????????????PV??????????????????????????1?????????PV?????????????8??

??????????4?28??PV???????????22,000MW??



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

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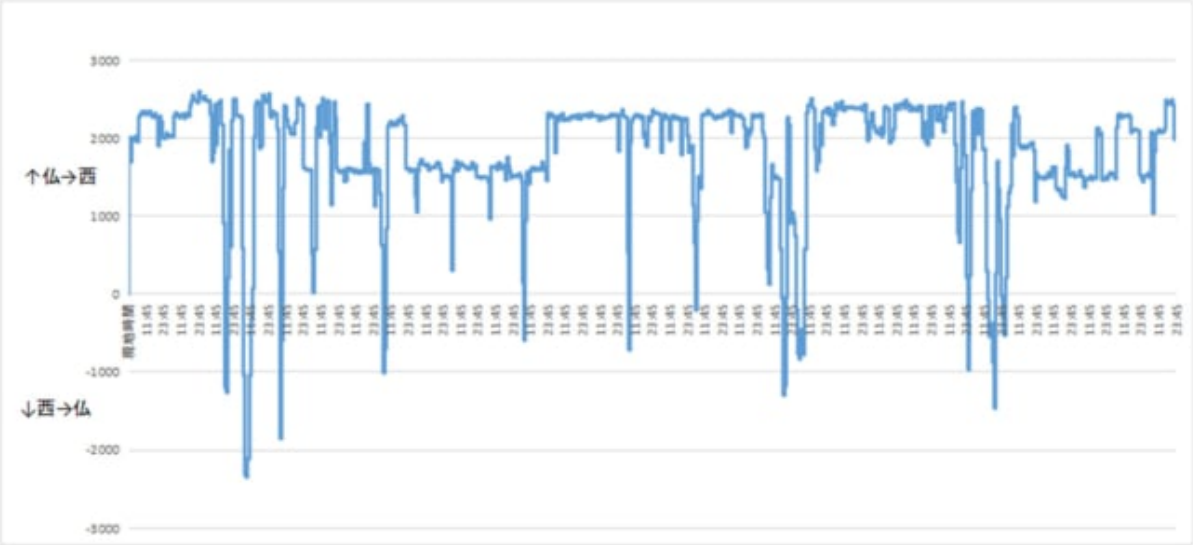
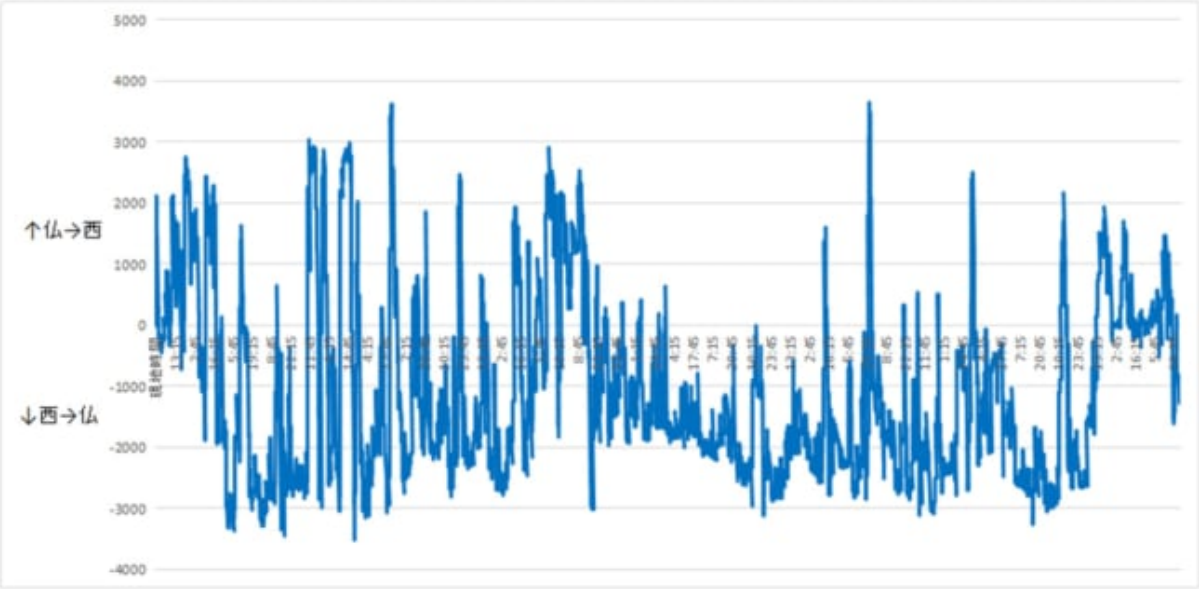
?2?2019?4???



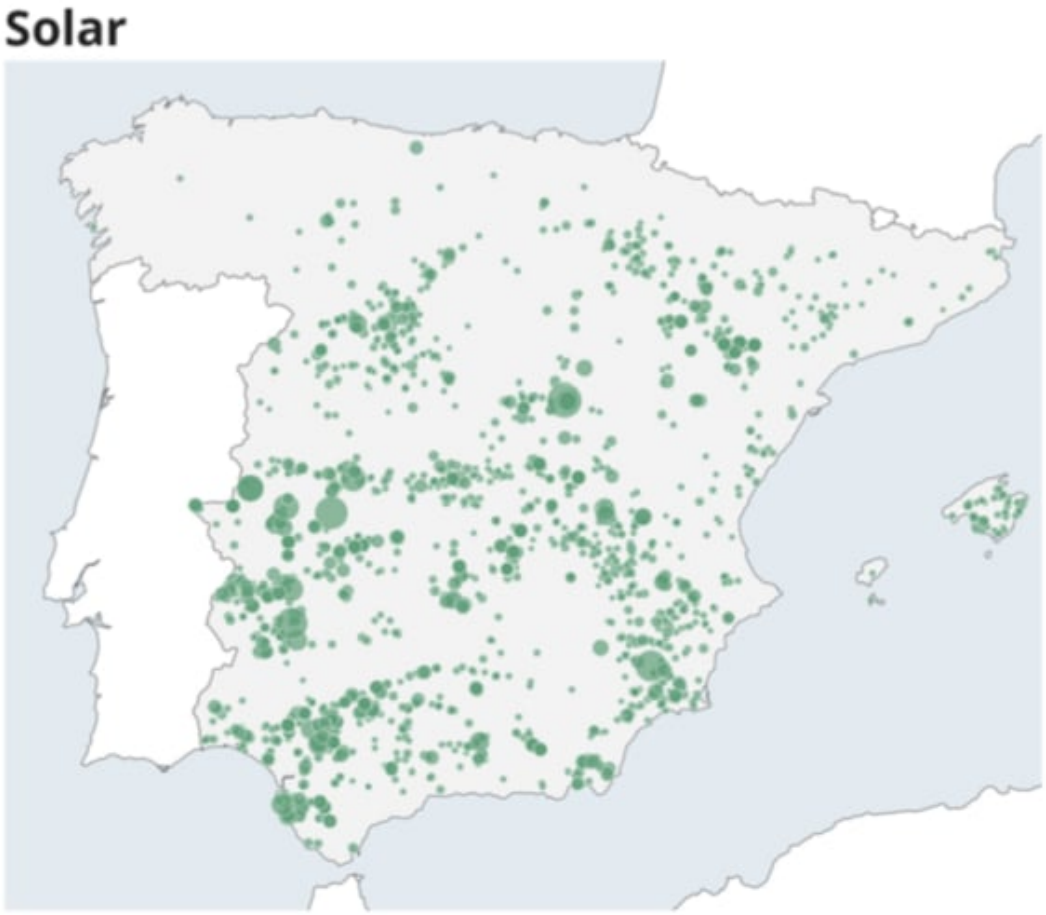
?2??????????????????
2019?4?Energy-chart??

???????3???2025?4?????????????????????????????????????PV???



?3??????????????????
2025?4?Energy-chart??

3?????????4?????????????????PV???PV???



?4????????PV???

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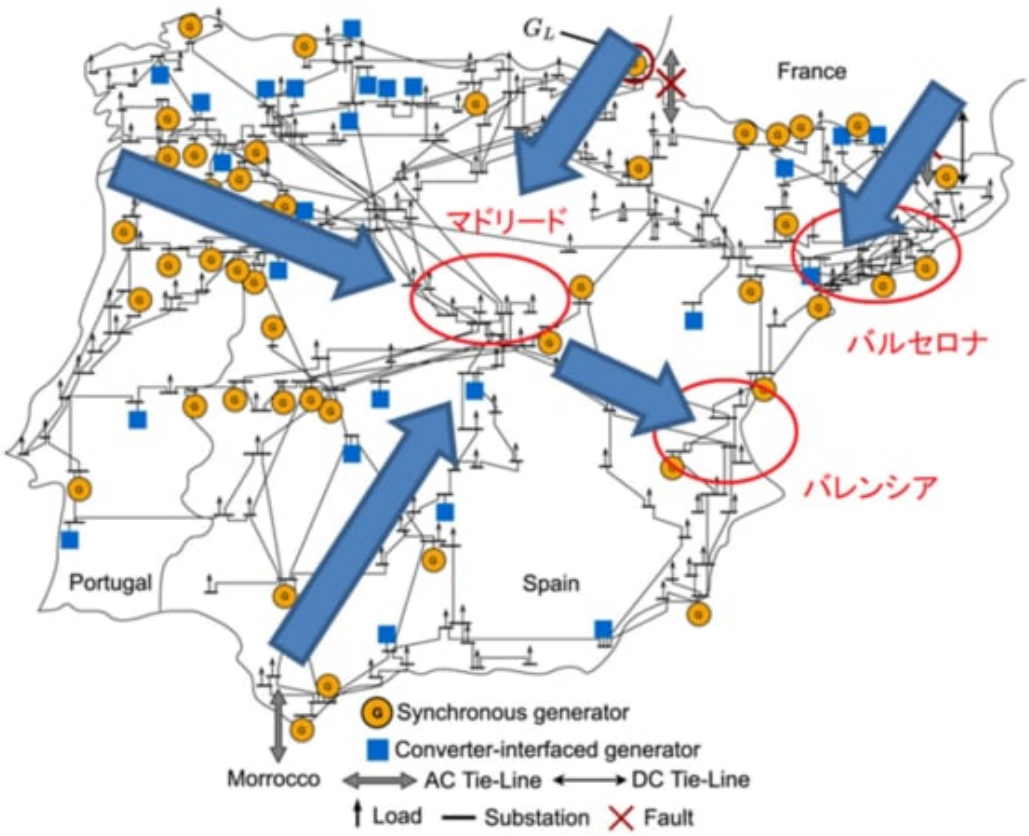
?5??????????2019??????????PV??

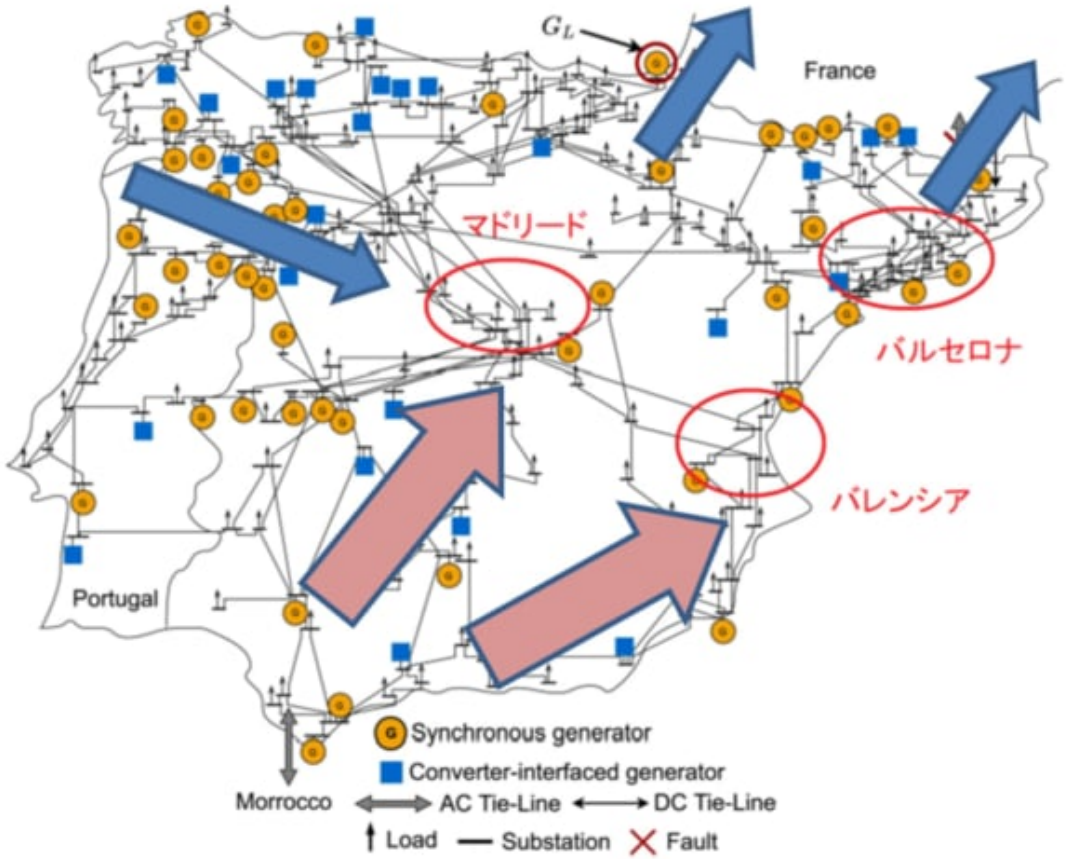


?5?2019????????????????????

2025????????????????

?????2025??PV????

??????????????2025??


G_L
France
マドリード
バルセロナ
バレンシア
Portugal
Morrocco
Synchronous generator
Converter-interfaced generator
AC Tie-Line
DC Tie-Line
Load
Substation
Fault

?6?2025????????????????????????????

?6???

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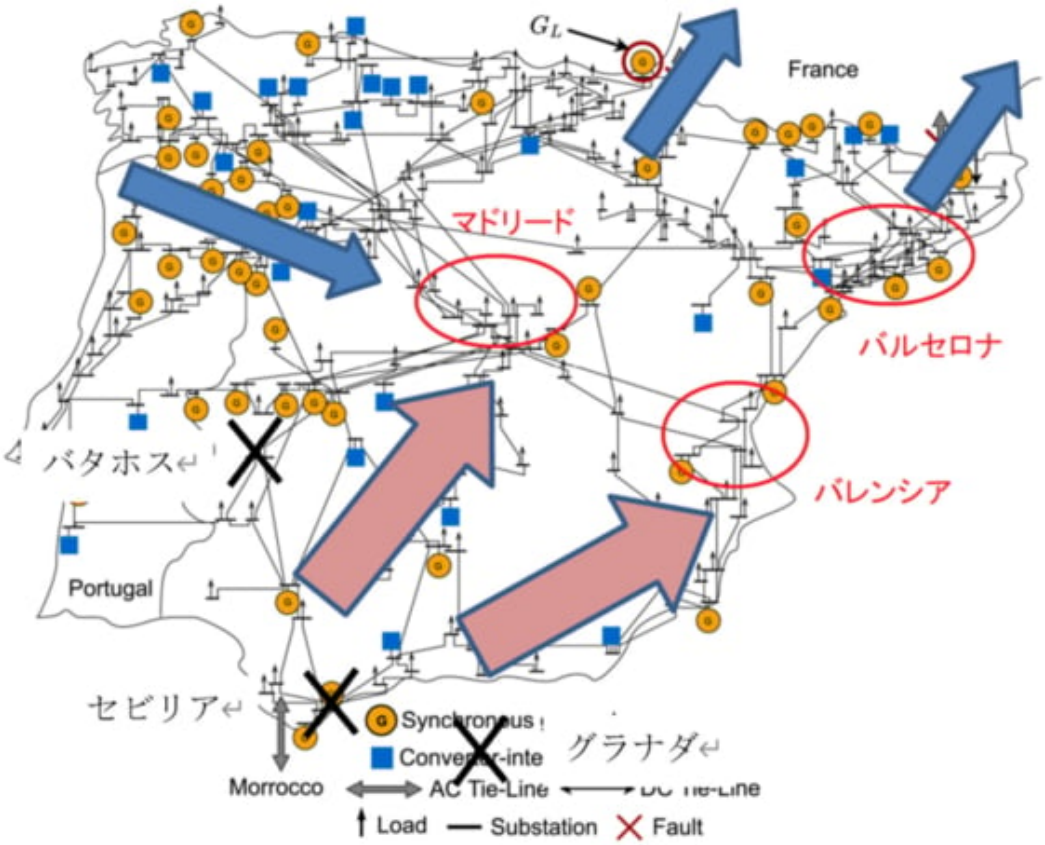
G_L
France
マドリード
バルセロナ
バタホス
バレンシア
Portugal
セビリア
グラナダ
Morrocco
AC Tie-Line
Load
Substation
Fault

?7??????????????3???????×????

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??3???

??3?????????2.2GW???

?8???????????
????web??

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??“???”????????????????????????????????????3??

??PV??

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

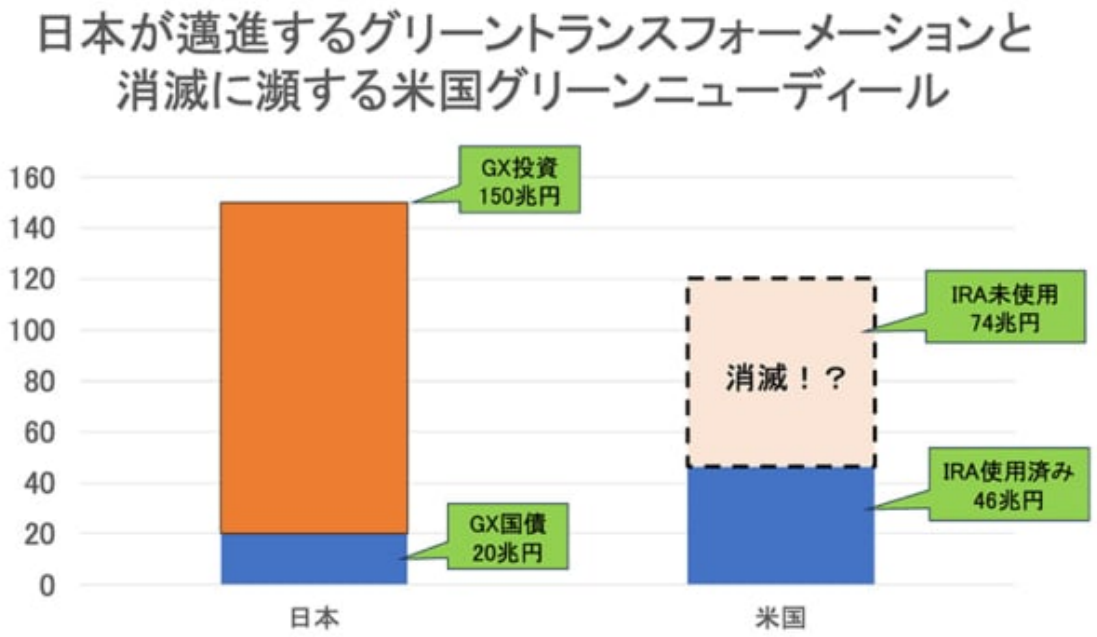
??IRA??

??????????????46??????????????????????74????????????????

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

????????????????????????????GX????????????????GX??6????????????????????GX????????????20???????10??????????150??

????????????????????1???145?????



????????????????????????IRA????????????????????????????????GX????????

??GX??

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

????????????????G6??

???????2018????????????????????????????

2017?5??

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

???G7????????????

????????????????????????
NHK??

??G7?
???G6?1????????????????

??????????G7?????????????????????????????????5?22????????????????G7?????????????????????????????
????????????????????????????????????

?????????????????????2.0??????1.0?????????????????????????????6??G7?????????????????????????????????
??????????G7?????????????????????G6?????????????????????????????????????AI????????????????????????
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????????????????????????G7???
????????????????????????????????????

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

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?? ?? · Sunday, May 25th, 2025

ilbusca/iStock

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?????45,000??????????????????????????????????????450?????7?????6????????????????????????????????????

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

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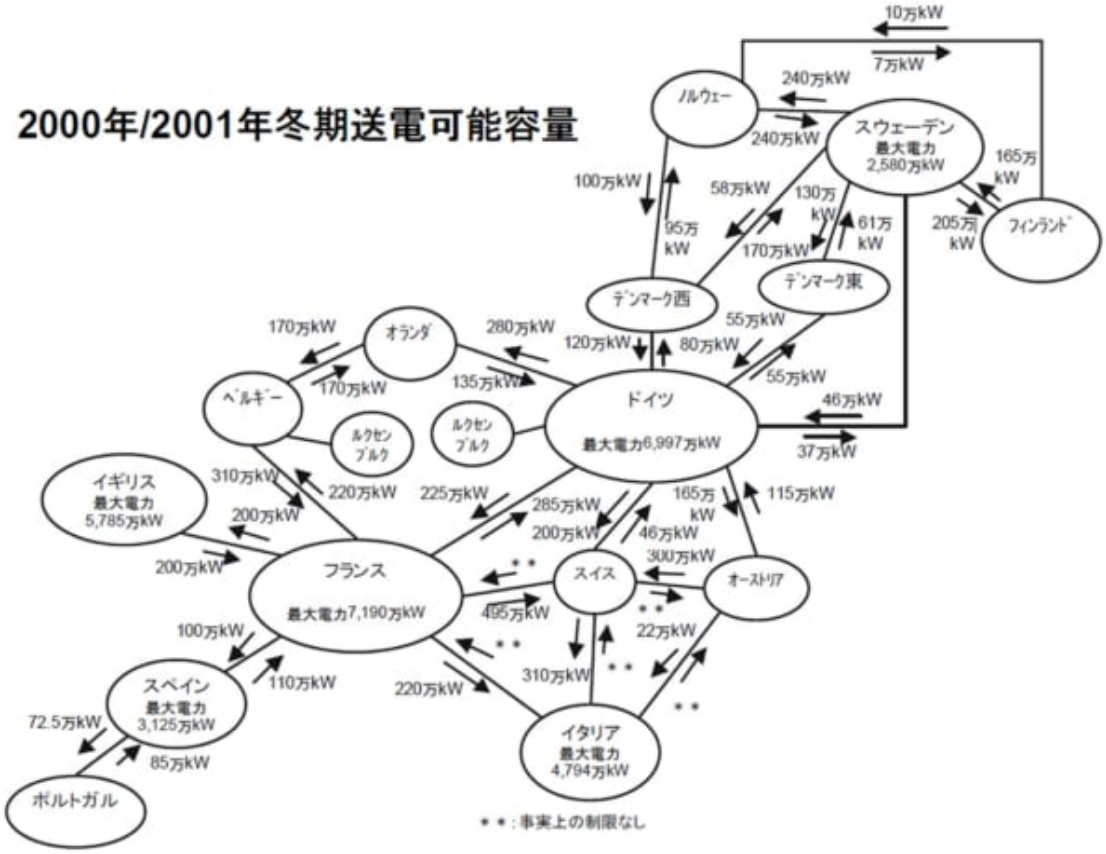
??? ?? · Thursday, May 22nd, 2025

imaginima/iStock

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

NetZero???70???

?????1???


2000年/2001年冬期送電可能容量
10万kW
7万kW
240万kW
ﾉﾙｳｪｰ
240万kW
スウェーデン
最大電力
2,580万kW
165万kW
100万kW
58万kW
130万kW
95万kW
61万kW
170万kW
205万kW
ﾌｨﾝﾗﾝﾄﾞ
ﾃﾞﾝﾏｰｸ西
ﾃﾞﾝﾏｰｸ東
170万kW
ｵﾗﾝﾀﾞ
280万kW
55万kW
120万kW
80万kW
135万kW
55万kW
ﾍﾞﾙｷﾞｰ
170万kW
ﾄﾞｲﾂ
最大電力6,997万kW
46万kW
ﾙｸｾﾝﾌﾞﾙｸ
ﾙｸｾﾝﾌﾞﾙｸ
37万kW
イギリス
最大電力
5,785万kW
310万kW
220万kW
225万kW
165万kW
115万kW
200万kW
285万kW
200万kW
46万kW
200万kW
300万kW
フランス
最大電力7,190万kW
スイス
ｵｰｽﾄﾘｱ
495万kW
22万kW
100万kW
310万kW
110万kW
220万kW
スペイン
最大電力
3,125万kW
72.5万kW
85万kW
イタリア
最大電力
4,794万kW
ポルトガル
＊＊：事実上の制限なし

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

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

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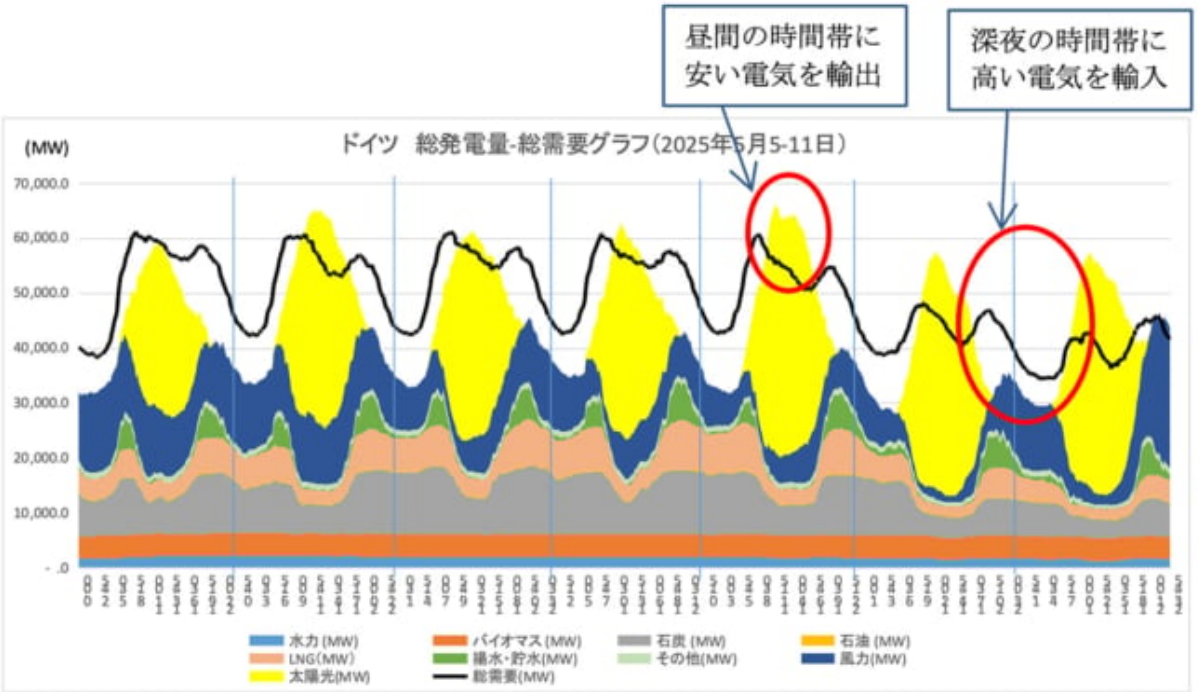
?2???????1???



?2?????????????????
Energy-chart??

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??????????12??
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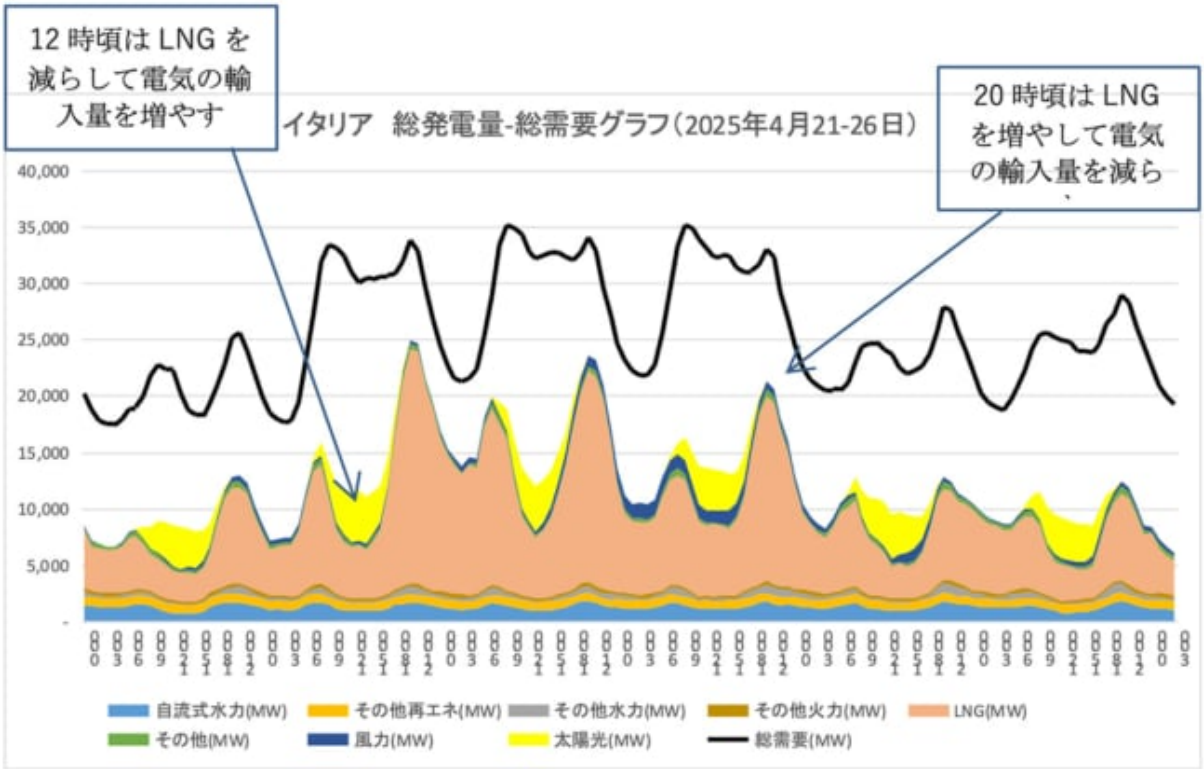
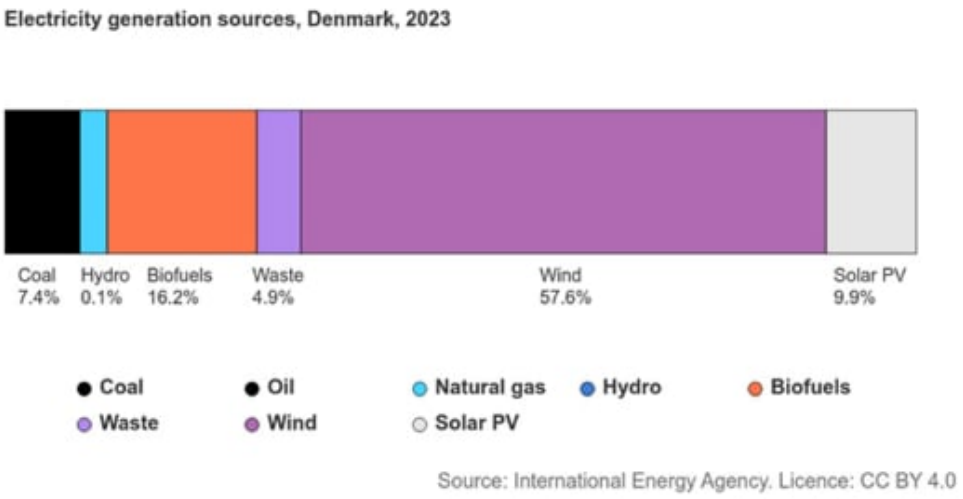
?3??



?3??????????????????
Energy-chart??

??????LNG??????????????12?????????????????????????????????????LNG?????????????????????????
??????????????18??22????????LNG?????????????????????????

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



?4?????????????????2023??
IEA????

?????5???4?21???23??????????????????

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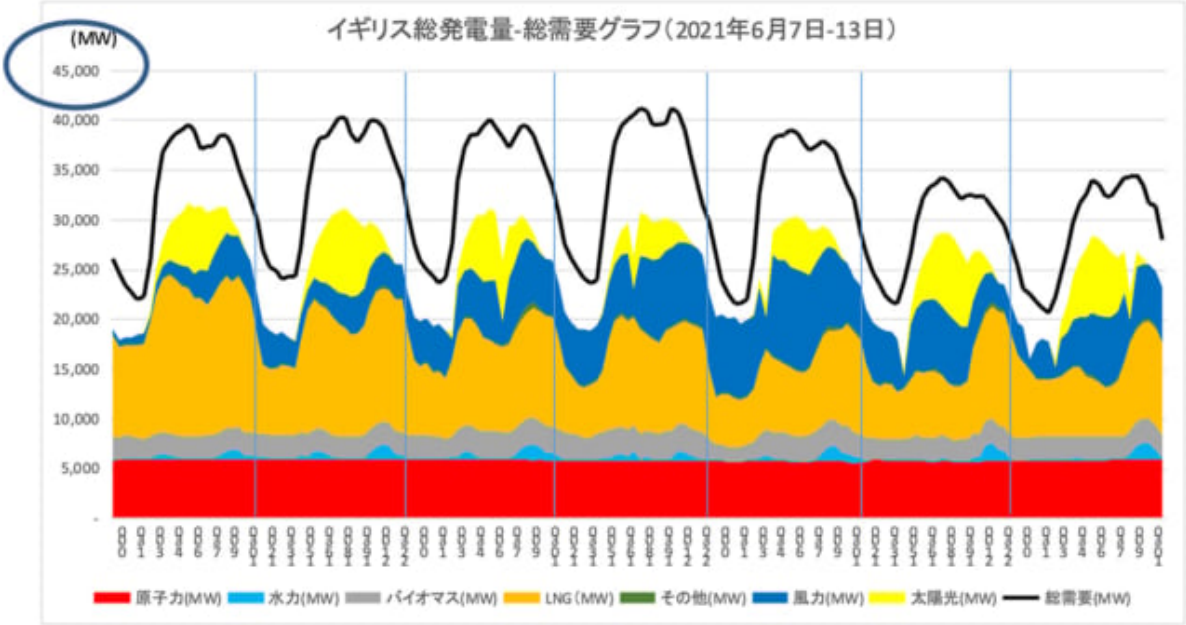
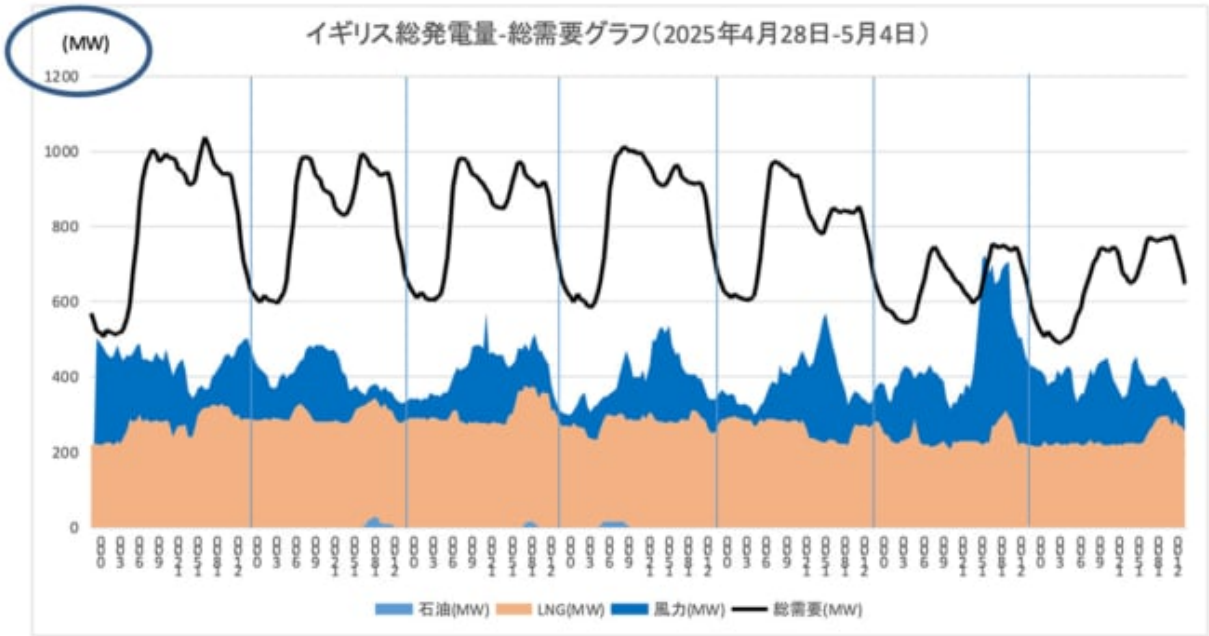
??????????????6??????????????????????????????????????2021?6?7??13?????????????

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



?6?????????????????????2021?6?7?11??
Energy-chart??

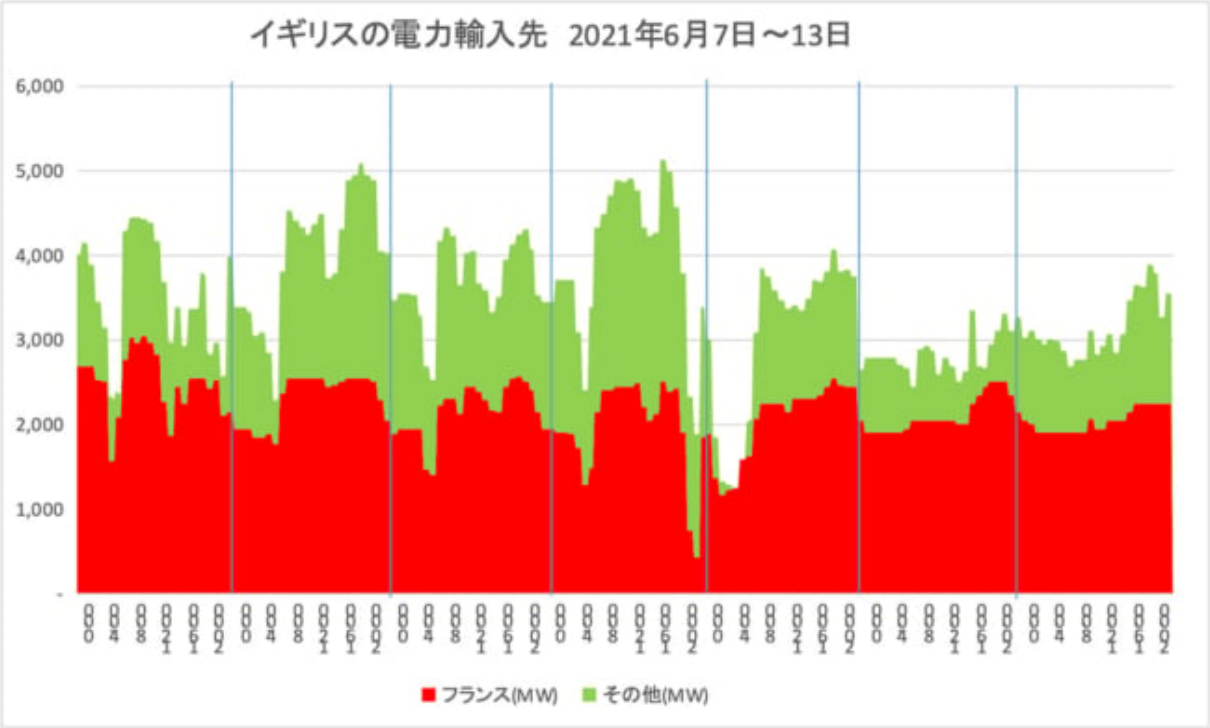


?7?????????????????????2025?4?28??5?4??
Energy-chart??

??2021?7?????????????????????????????????

??????Energy-charts??7???????LNG??

?6??8??????2021??



?8?????????????2021?6?7??13??
Energy-chart??

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NetZero???

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

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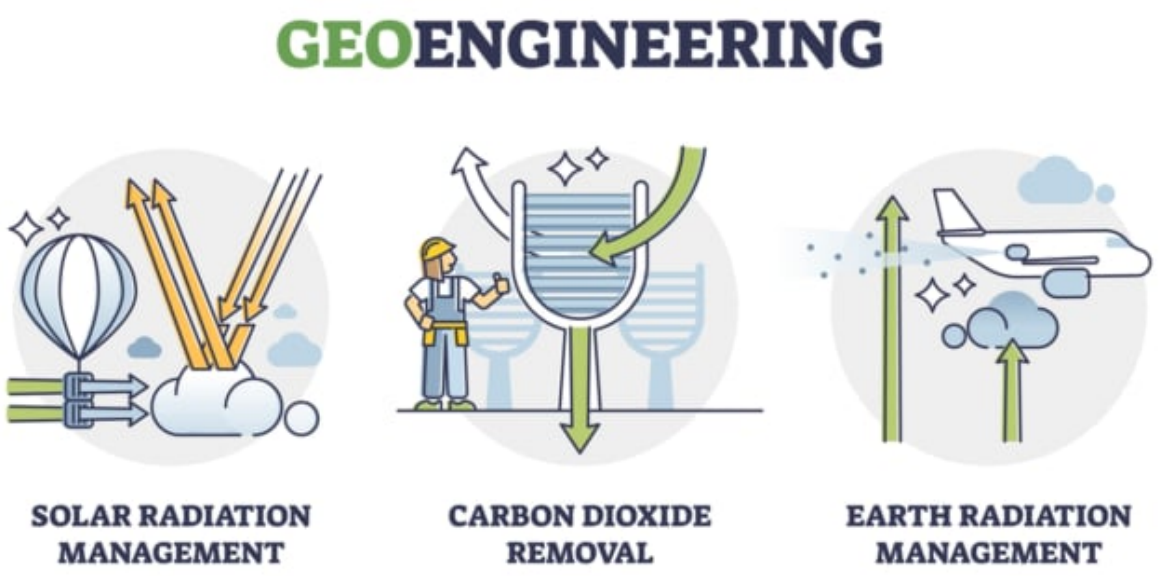
?? ?? · Wednesday, May 21st, 2025



VectorMine/iStock

2025?5???SB56?????????????5?????10???

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??????????2??????

?
???????SRM???

?
????????CDR??????CO?????????????????????????BECCS??????????CCS??DAC?????????????????????

???BECCS??????????CO?????????DAC???????CO???CO???????

?????SRM???CDR???

???IPCC?????????????SRM?CDR??????????Geoengineering???1.5??

CDR??????????????

CDR?????????????????????????

- **??????????**?CDR???CDR???
- **??????????**????CDR???

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理由	内容
政策目的の一貫性	「カーボンニュートラル 2050」達成が最優先で、CDR は“希望の技術”と位置づけられている
技術推進の産官学体制	NEDO や JST が支援するプロジェクトにおいて、開発主体と評価主体が近接しており、リスク評価が独立していない
市民社会の知識ギャップ	気候工学の全体像が紹介されておらず、CDR の「負の側面」への関心が広がっていない
メディアの沈黙	再エネ推進や脱炭素と並び、CDR も“正義”とされ、慎重論が取り上げにくい雰囲気

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CDR??????????????????????

mekcar/iStock

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

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

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

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(6) ????????

??“????”??????????

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

???W. Happer?????????????????????R. Lindzen?MIT??????????????????????????????????EPA?????????????????????????EPA??????????????????????????????

Happer-Lindzen-EPA-Power-Plants-2023-07-19

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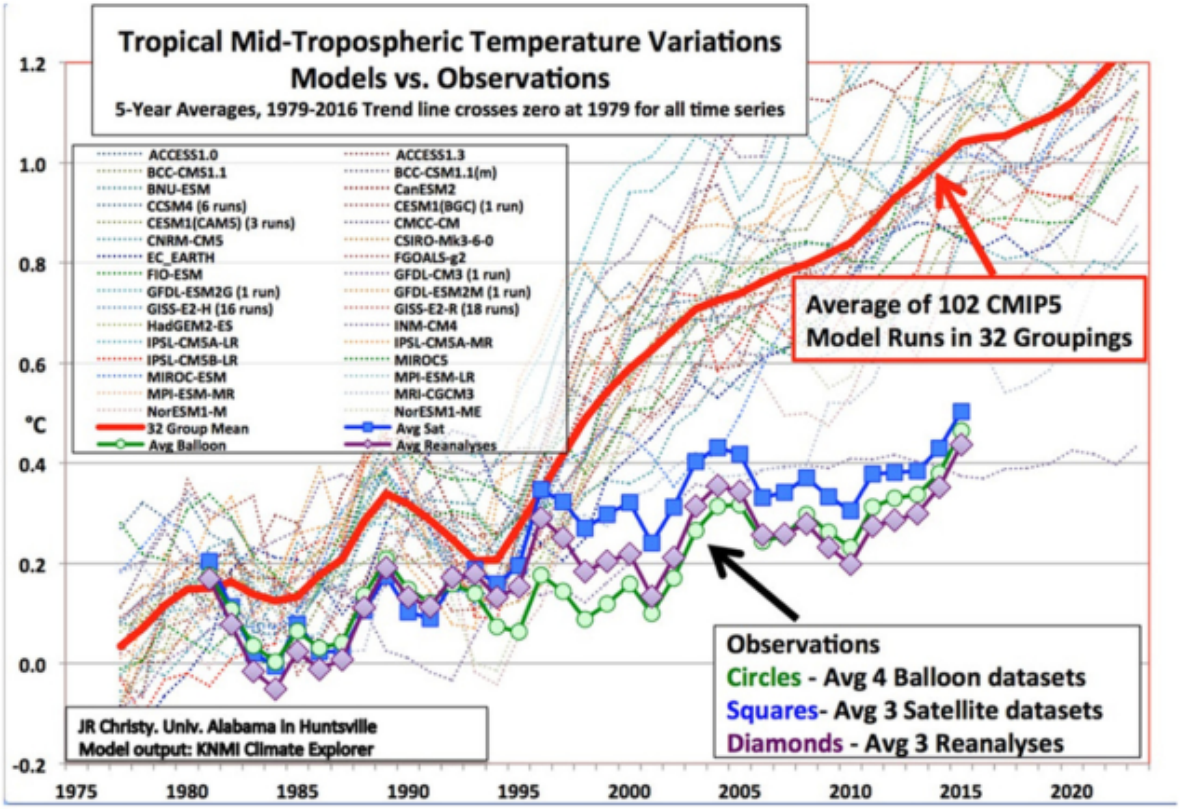
????????????????????EPA?????????????CMIP5??????????????40?????????????????????????1??????????????????????????????????????



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

??????32????????102???2?3??????????????????

????????????????????????INM-CM???IPCC??????????????????????????????????

????????????????????EPA????????????????“???????????”??????????????????

???W. Happer?R.

Lindzen???“??”????????????“??”?????????
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4. ????????????

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

????????????????????????????????????“??????????”??CO??????????
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5. ????????????

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

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??GX??

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7. ????

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????????????CO_2??????????????????????????

??[?1)]?

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??CO_2????????????????????????????????????CO_2????????????????????CO_2??????CO_2????????????????CO_2????????????????

???CO_2????????????????????????????CO_2??????????CO_2????????????CO_2??????????CO_2??????????????????N_2?O_2????????????????CO_2????????????????????????????????????CO_2????????????????????CO_2????????????????????????????

????1????????25?????1????1????????????????????CO_2??CO_2??????H_2?NH_3??

?????????????????CO_2????????????????

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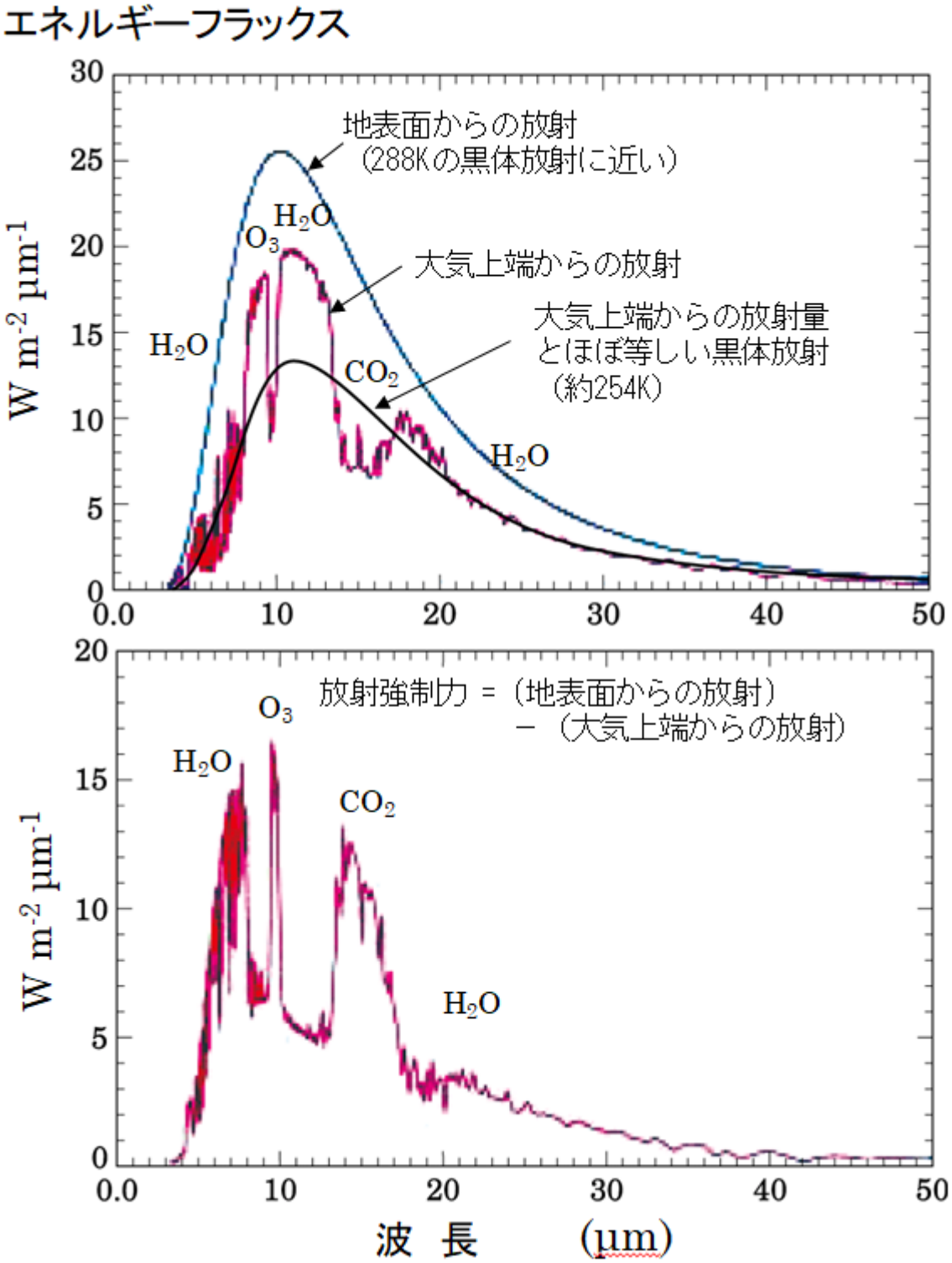
???CO_2????????????????????????????????????CO_2??CO_2??CO_2??CO_2????????????????

????CO_2????????????????????

CO_2??CO_2????????????????????

IPCC??CO_2??


エネルギーフラックス
地表面からの放射
(288Kの黒体放射に近い)
大気上端からの放射
大気上端からの放射量
とほぼ等しい黒体放射
(約254K)
H2O
O3
CO2
W m-2 μm-1
放射強制力 = (地表面からの放射)
− (大気上端からの放射)
波 長 (μm)

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

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?????1????????CO_2????13?17?m??????????????4?m?= 180 cm^{-1}?????????????CO_2???CO_2??1?1/90?= 2cm^{-1}/180cm^{-1}??

????????????????????????????Q-?????P-??R-????????????????????????Q-??????????????P-??R-????????????????????????????????????CO_2????????????????????????

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

Posted in ???, ????? | No Comments »

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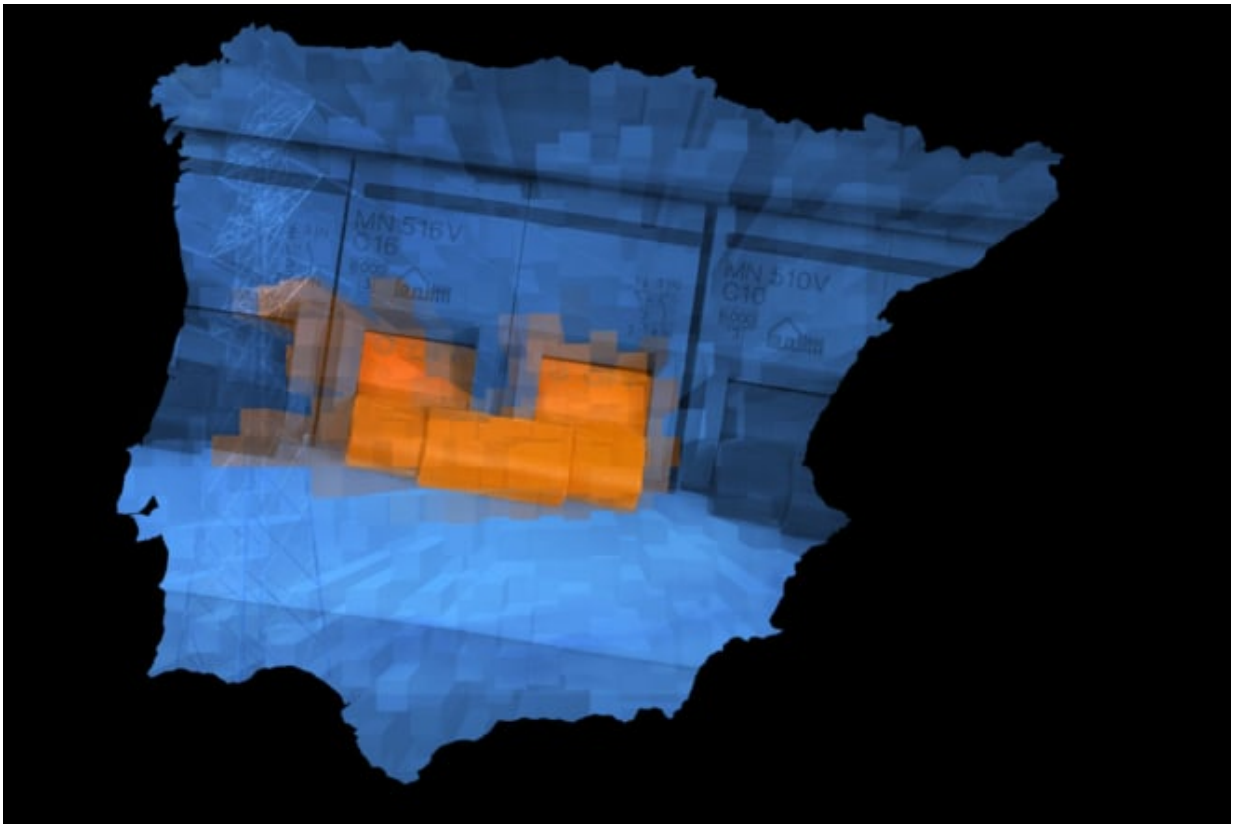
??? ?? · Monday, May 12th, 2025

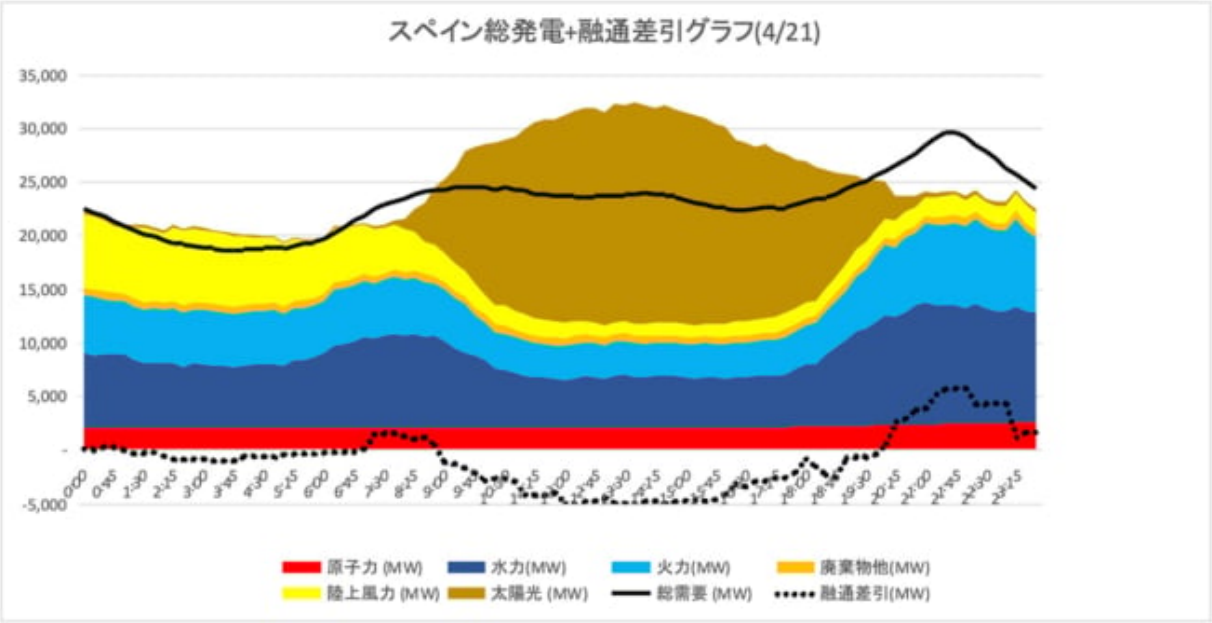


Jose Gonzalez Buenaposada/iStock

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

2025?4?28?12:30??ENTSO-E??????????????????????????????????????

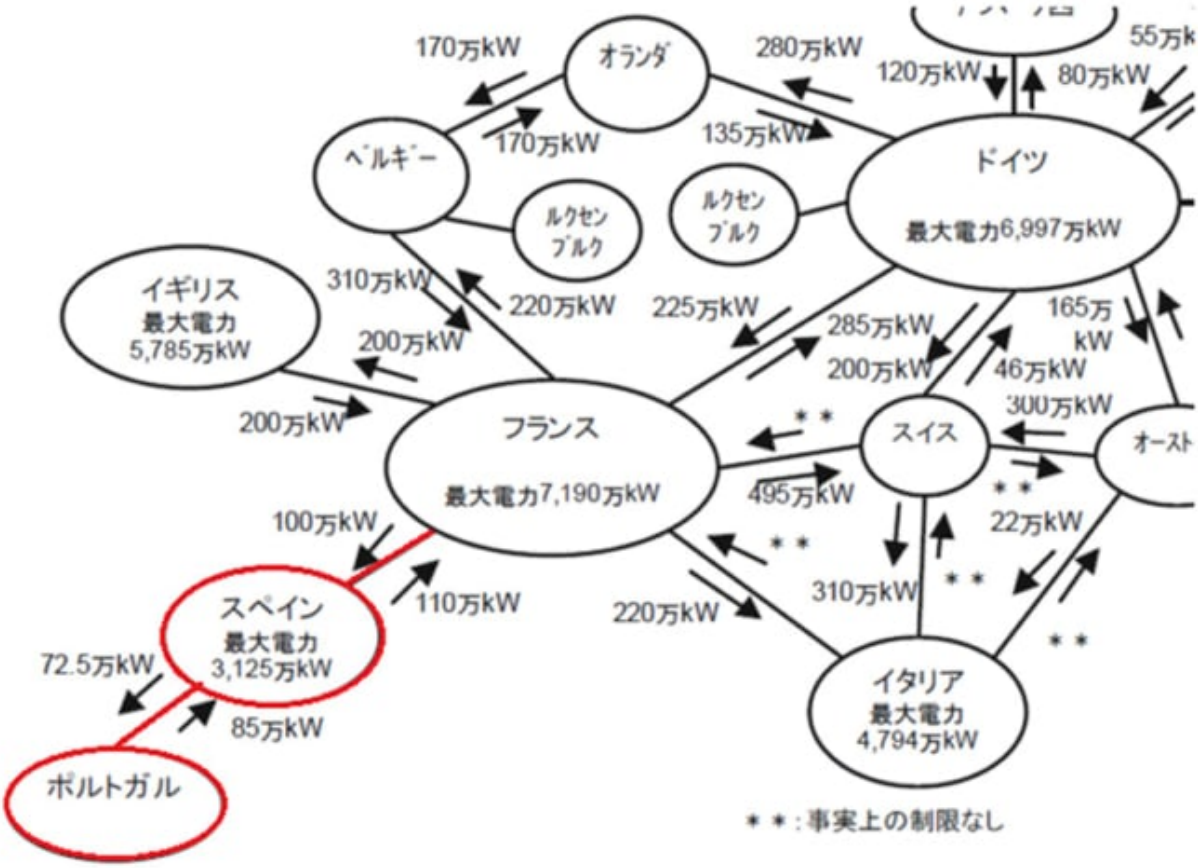
?1?????????1????4?21???



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

?2??

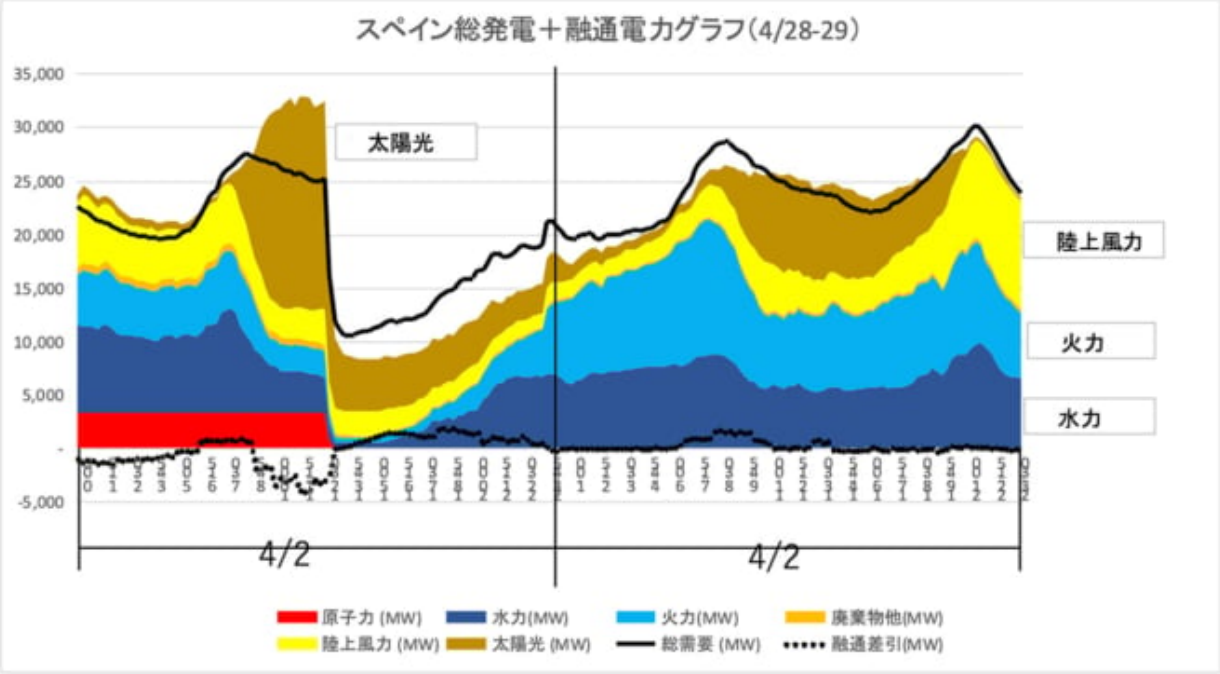
??2???



?2????????1?????????????2025?4?21??

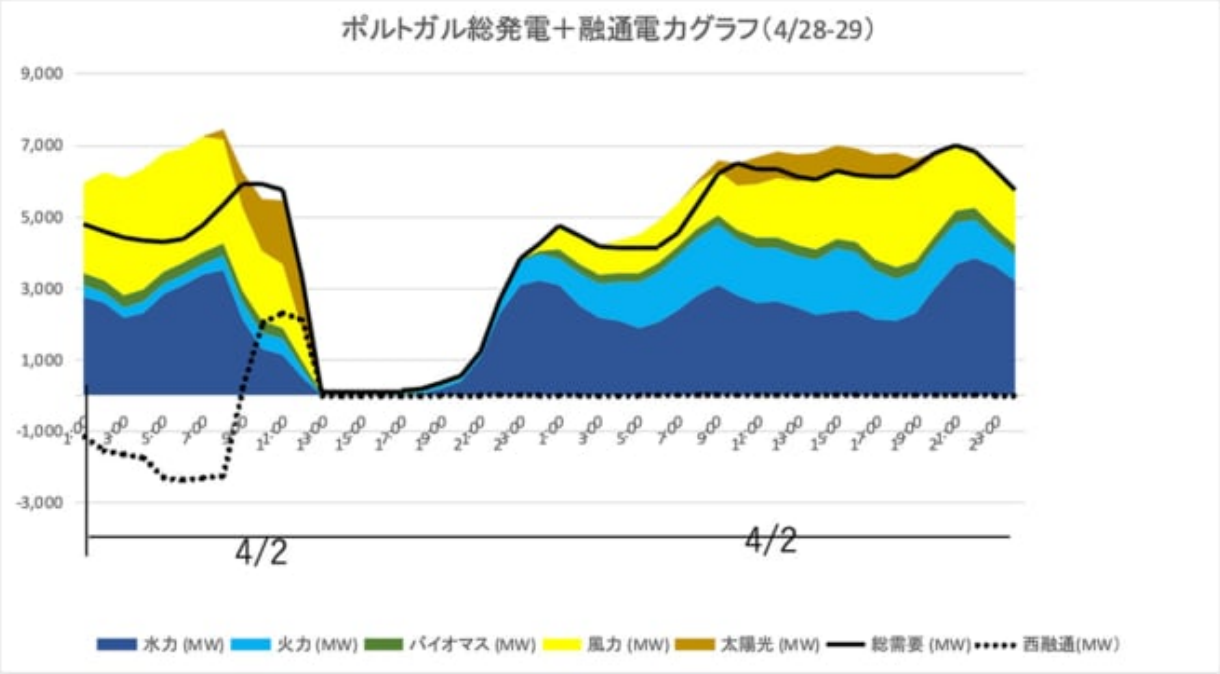
2. ?????????????????

?3??



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

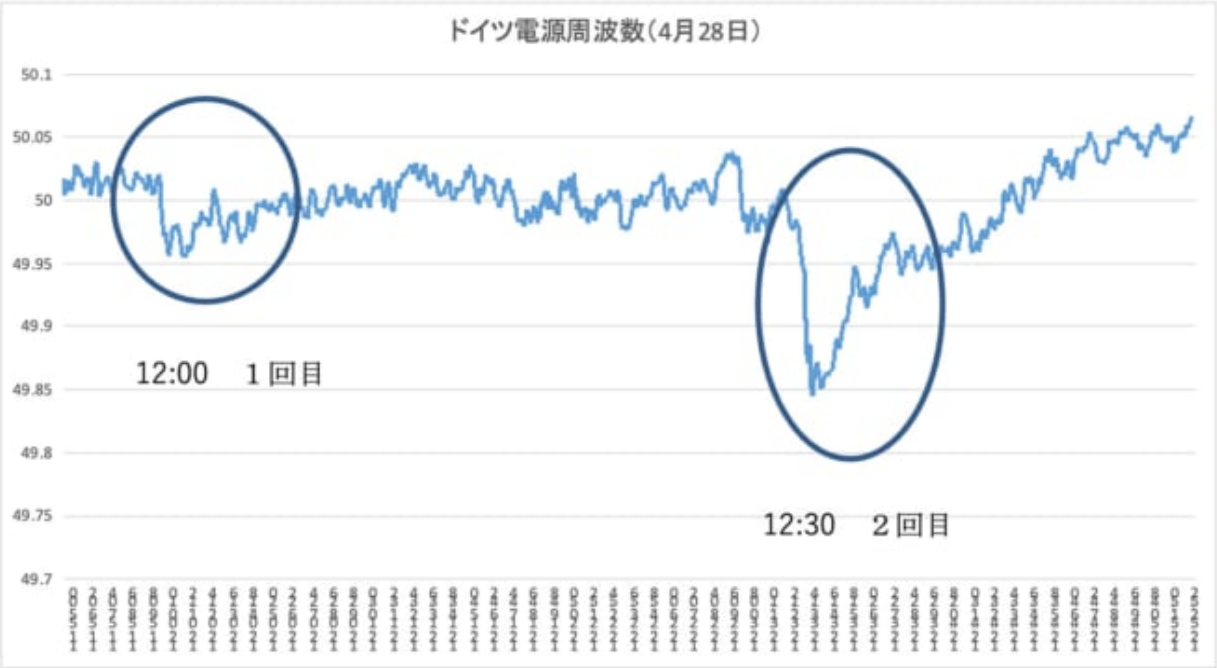
????4???15??????????????1?????????????????????????????????



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

?5???

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



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

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?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
   ??????????????
4. **???????????**
   11:45?13:00????????????19,696MW??6,472MW?????????????????????????21:00???3,800MW???
   ??592MW????
   ??

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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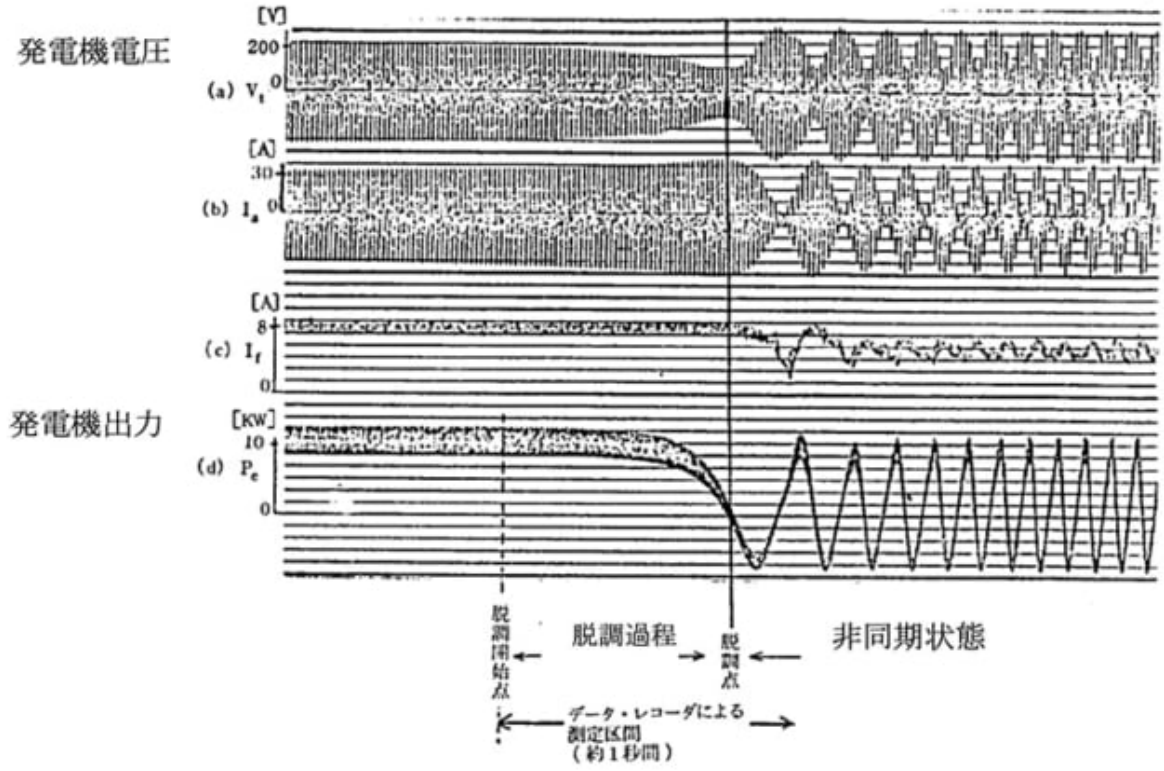

????????????????V?????W?????
??????????????????????????????????1980?5?23??

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

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

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y-studio/iStock

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?1??GX????????????????

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??IPCC???????

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

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?????????????2025??218?????????	???	p.1-2??????	?…??????????????1.55 ?????**????????????**??**????????????????????**??…?
??6?? ????????????????2024?5?31??????	???	?1?1?1?	?…??

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

?2?IPCC??????????????

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

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

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

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

????????????????????????????30??
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Posted in ??????????, ???, ????? | No Comments »

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

?? ?? · Saturday, May 10th, 2025

rkankaro/iStock

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

CBAM??????????????CBAM?????????????????????????CBAM???3??????????

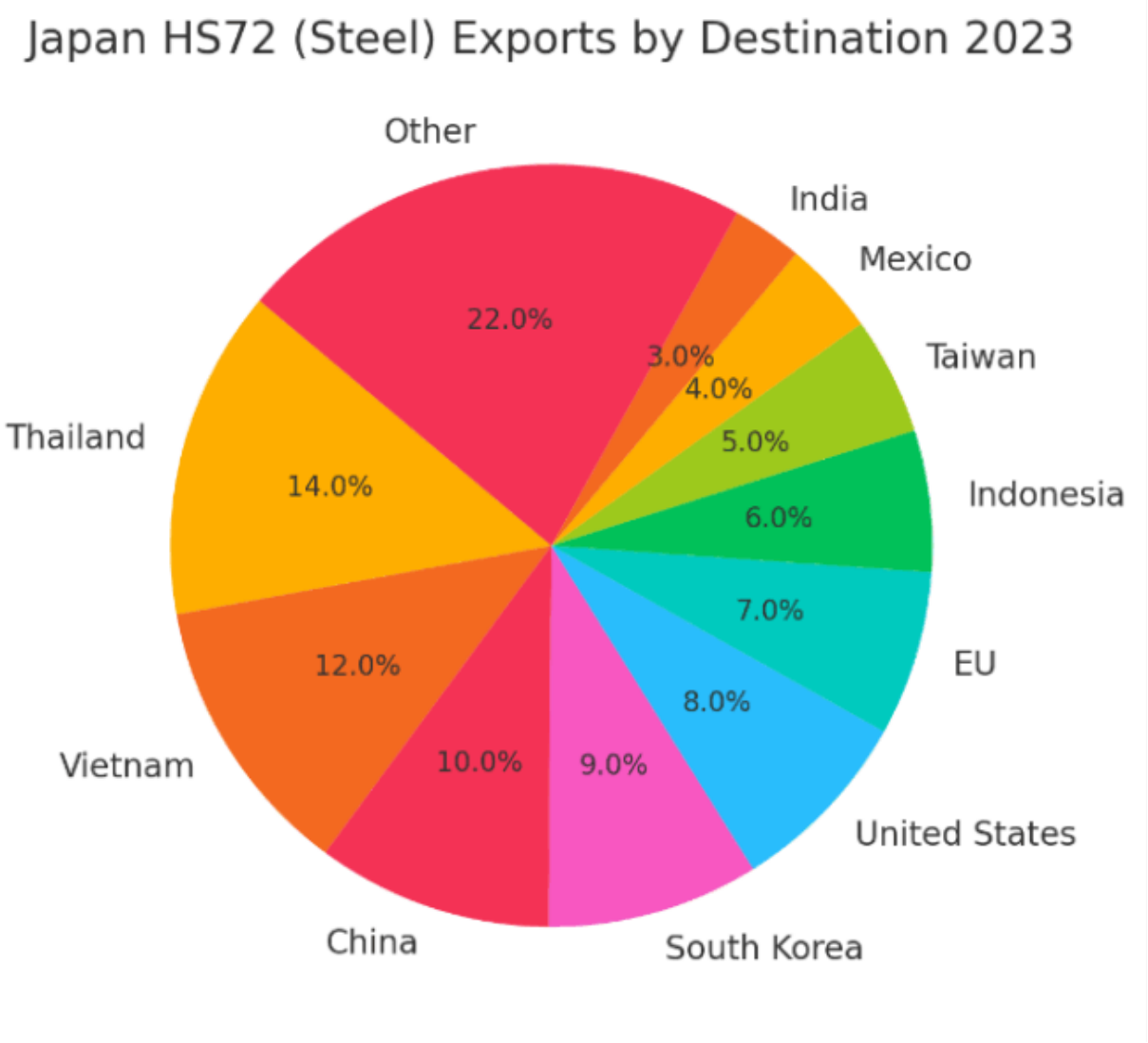
EU??????BRICS?????????????????????

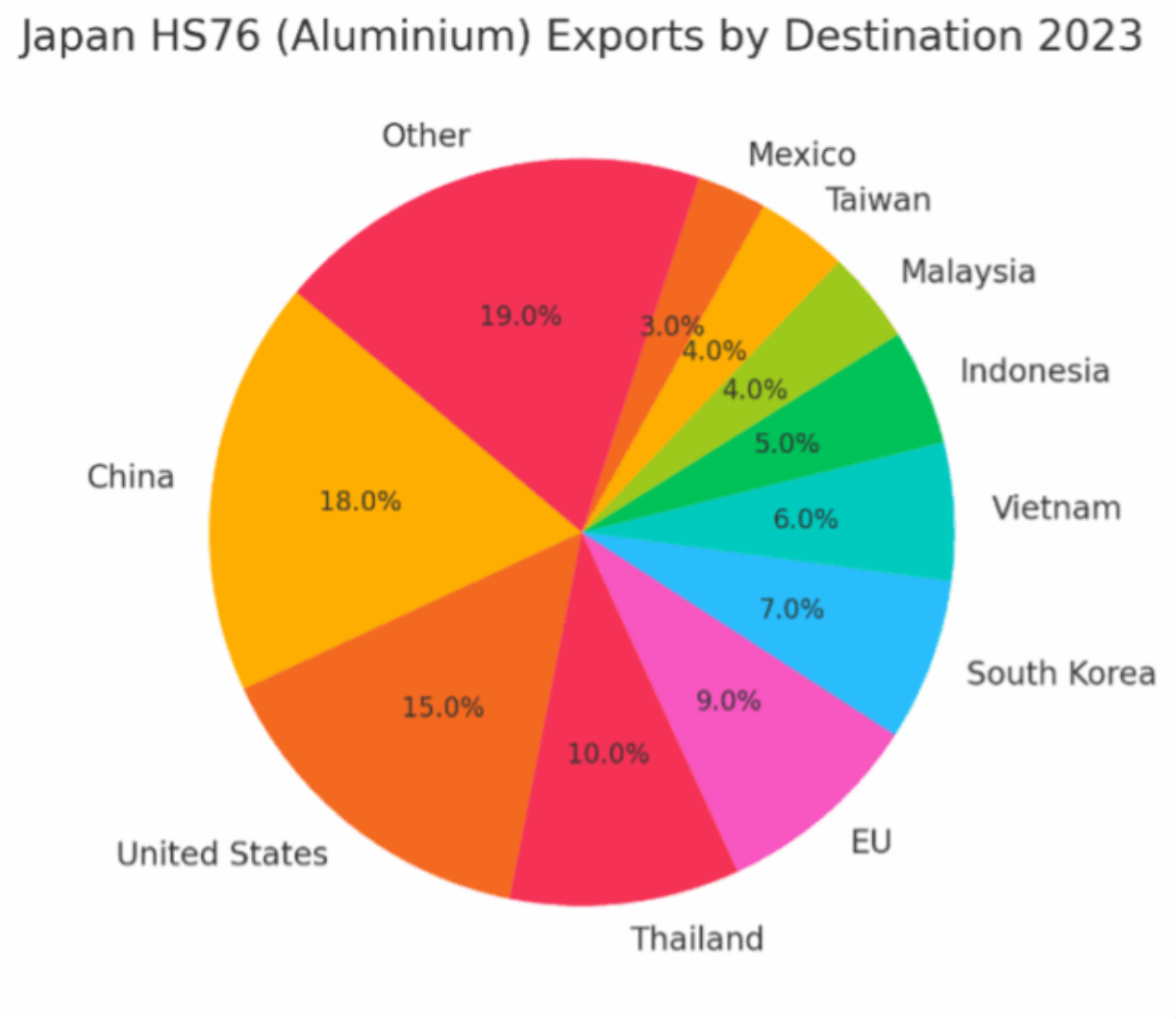
EU??????????????????????????

GX??????????????????????????????????

????CBAM?????????HS72??????HS76???

????????HS72????????2023??????????????????EU27????24.43??????????7%????????????????????HS76?????????????2023???EU27????2.36?????????9%??????





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

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

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

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?? ??? ?? · Friday, May 9th, 2025

David Ziegler/iStock

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

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??UK?????

??????11???5?4?????????
??18??????????
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EU?????????????????

EU?????????????????????????????????????EU???
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EU?????????????????????????5??EU???
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Posted in ???, ?? | No Comments »

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?? ?? · Thursday, May 8th, 2025

William_Potter/iStock

??2024?1????????????????????????????[21?]?

2022??

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

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

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

?? ?? · Monday, May 5th, 2025

Leontura/iStock

????????2050???????CO2???

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

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?? ?? · Monday, May 5th, 2025

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> 2???10?15?????????????????????????????????????

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NHK??

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??????5??200???????30?…????????????????????

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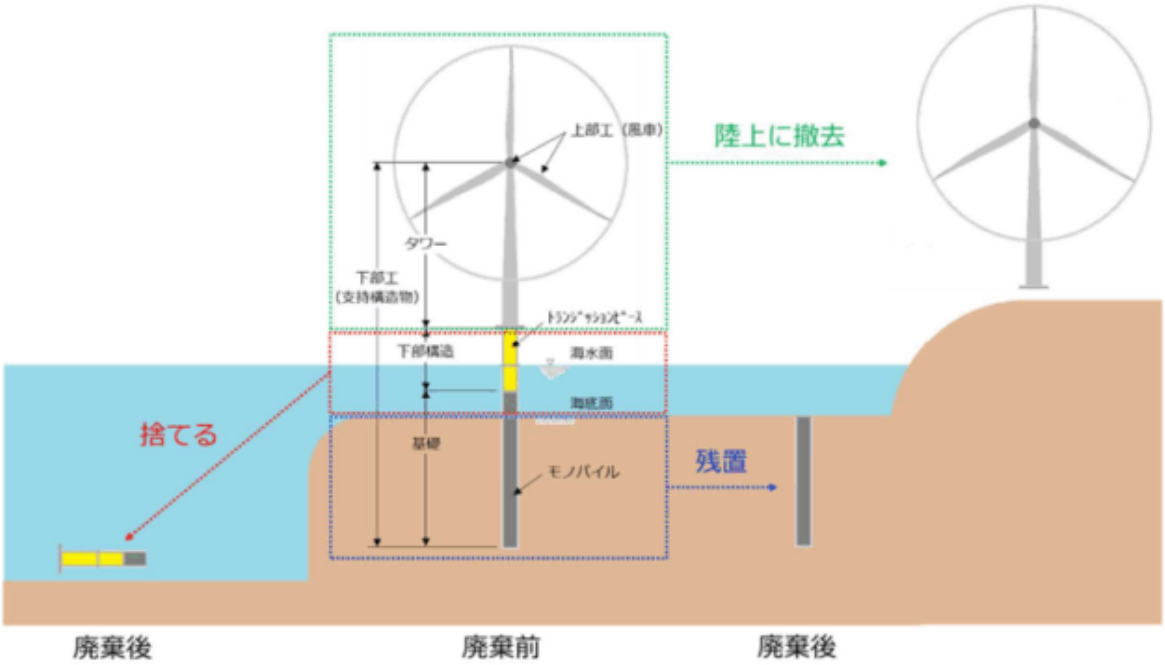

図 5　告示における「残置」と「捨てる」の違い

（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）

??10???…??

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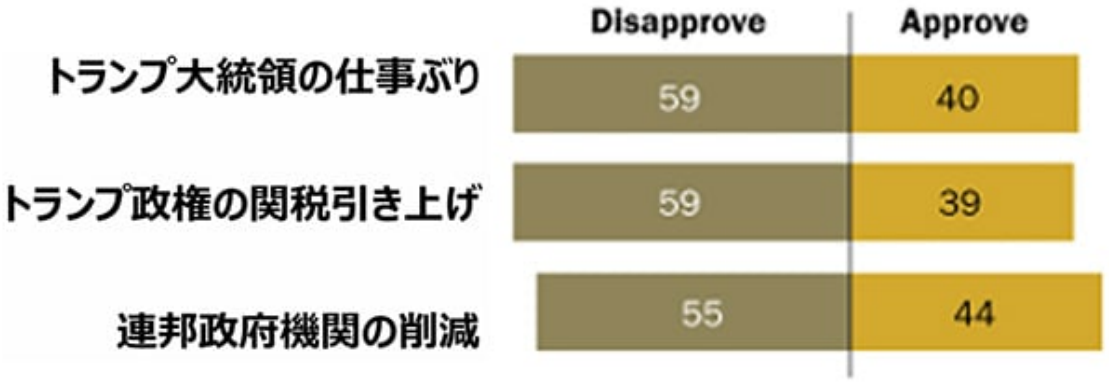
4?29????????????100???100???

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。

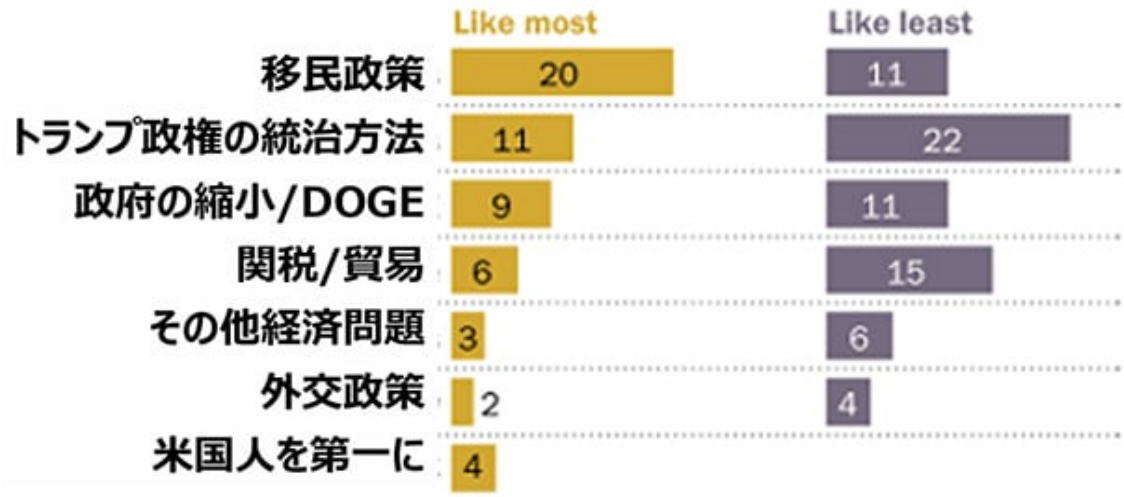
?1??????????????????
???Rasmussen

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



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

??3??

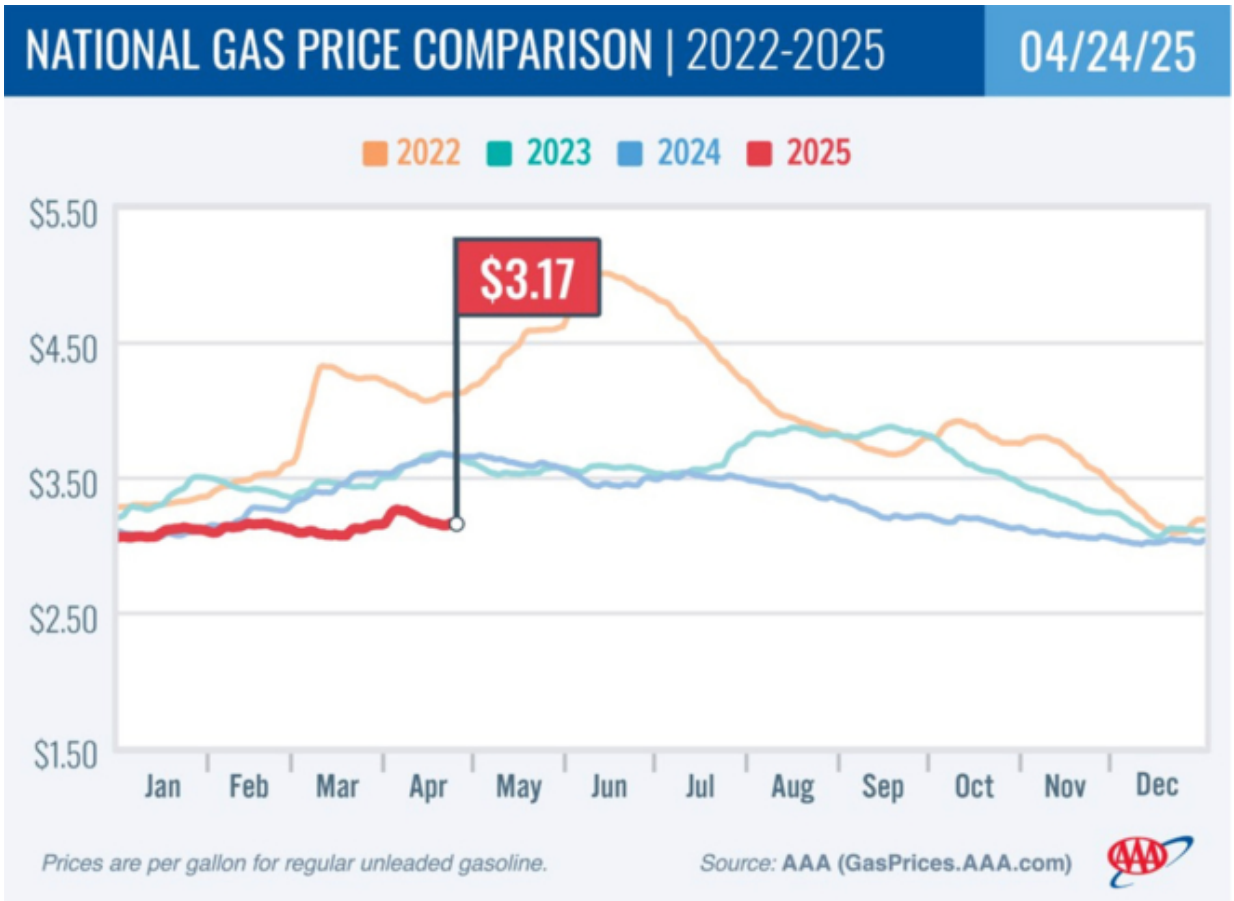


?3??????????????????

???Pew Research Centre

4?30???????GDP??1?????????????0.3%??

??4??



?4?2022?2025???????

????????????????????Drill Baby Drill ??

????????????????????????????WTI?????????13??????????????????2021?11??COVID????????????????????S&P 500 ?????????????????????????15%??S&P ????????????????????2020??

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????????????????WTI??????$65?????????????????$60?????????6?????????????????????????????????????WTI??????2025?12????$58???????$51???????

??2???2025?3?????????????????????????????????700????????????????????????????????2024?3??376??2025?3???290?????

????????????????CEO????????????????2025??1???????2022??1??40???12?????????????????????21????????????

????????????????????????OPEC+??Drill, Baby, Drill ????????????????

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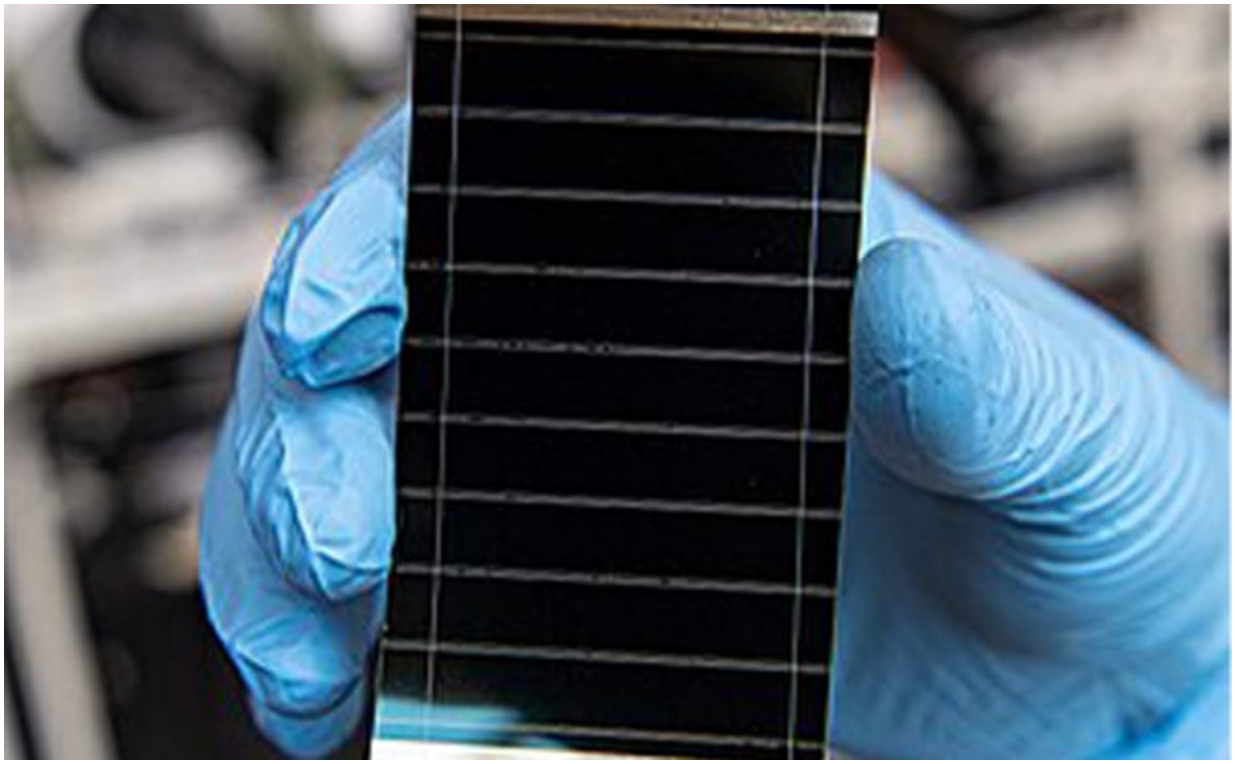
??26.?????????????????????????????????28.6????????????

??2040??????????14?/kWh??????20GW????2000?????????????????????



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Wikipedia??

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??——??GX??????????????????2050?CO2????????????????

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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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????????????????????????????2024??????????????11.1???????1,080????????????????????3??1??

?2?Global Energy Monitor “Boom & Bust Coal 2024” India section
?3?International Energy Agency “Coal 2024 – Analysis and forecast to 2026”

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Posted in ???, ????? | No Comments »

????????????????“????”??????????

?? ?? · Friday, May 2nd, 2025

EyeEm Mobile GmbH/iStock

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

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

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??weather?????????????climate??????????????

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yamasan/iStock

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? ? 4 ? 2 ? N A N O N u c l e a r Energy??KRONOS MMR??????????????????????????????

©? Nano Nuclear Energy, inc.

??????????????????????????4???3??????????

?4???5????????????????????????????
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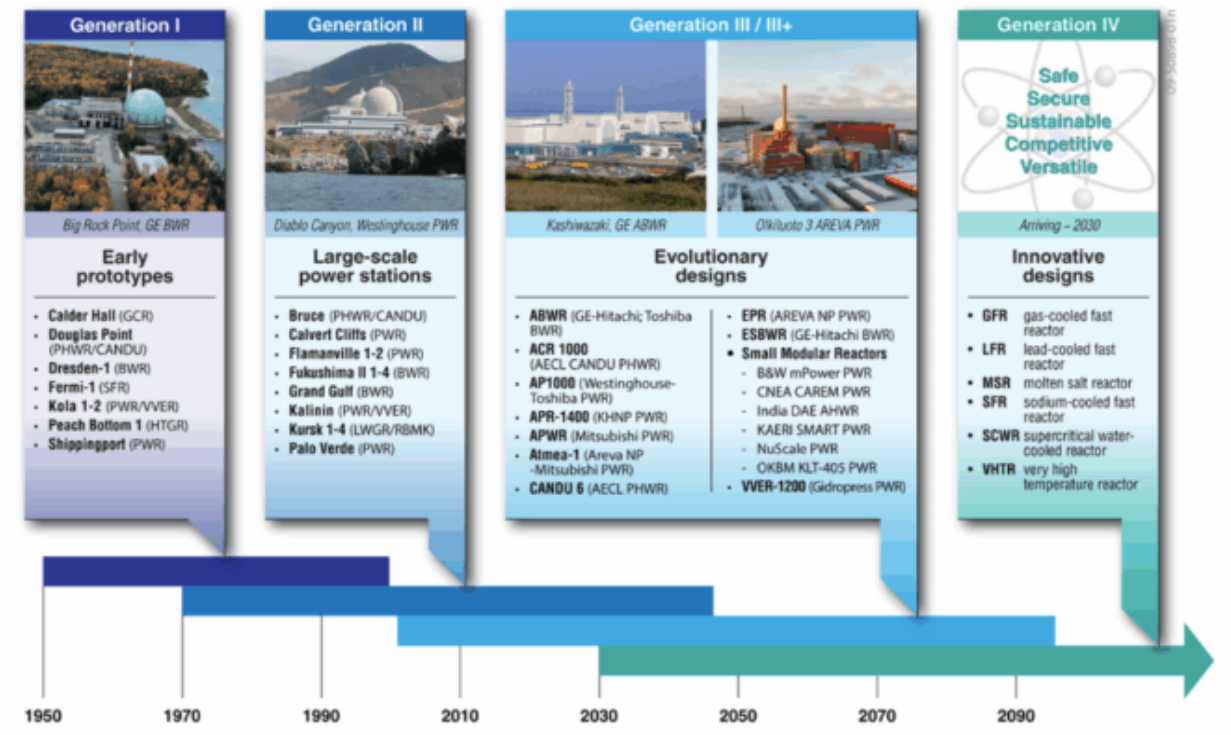
??Self-Consistent Nuclear Energy System?SCNES??????4?????????????????????Generation IV International Forum?GIF??????????SCNES?????????????????????[21?]?

? ? ? K R O N O S MMR™?????????????????45MWt?????????????????????????100??1???5?????????????????????11?????????????????????

???????LEU?????????????????HALEU???



?4??????????????
©? Generation-IV International Forum

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??JAEA??????????????????????

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Yastaj/iStock

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

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

????CBAM??????????????????????????

1. CBAM??????????????????????

EU ETS???€80/t-CO?????????????????????????CO2????????? × EUETS????????????????????? ÷ ?????????????CBAM??????????1??????? 1€ = US$1.10?????

???20%??79%??

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鋼 (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%

??CBAM???????????

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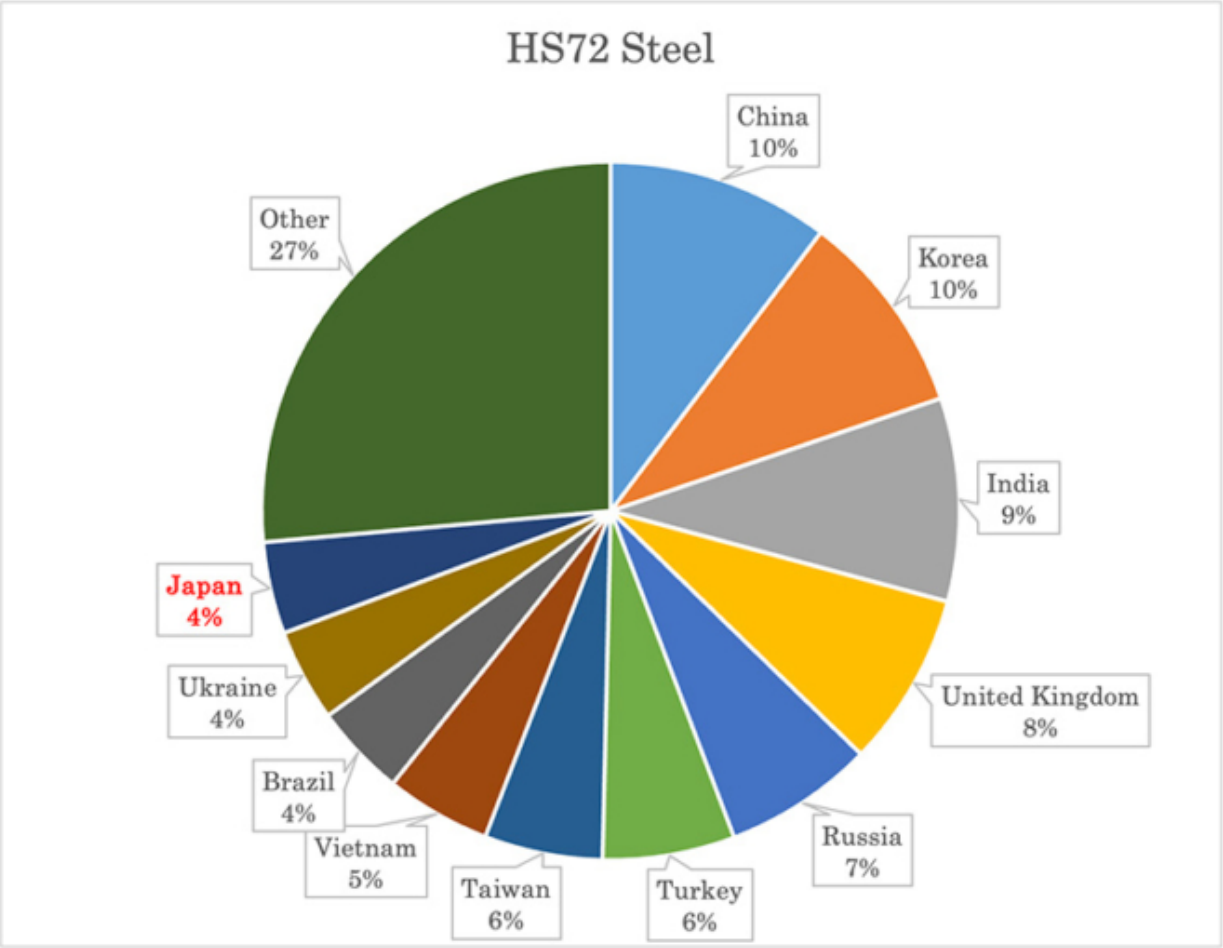
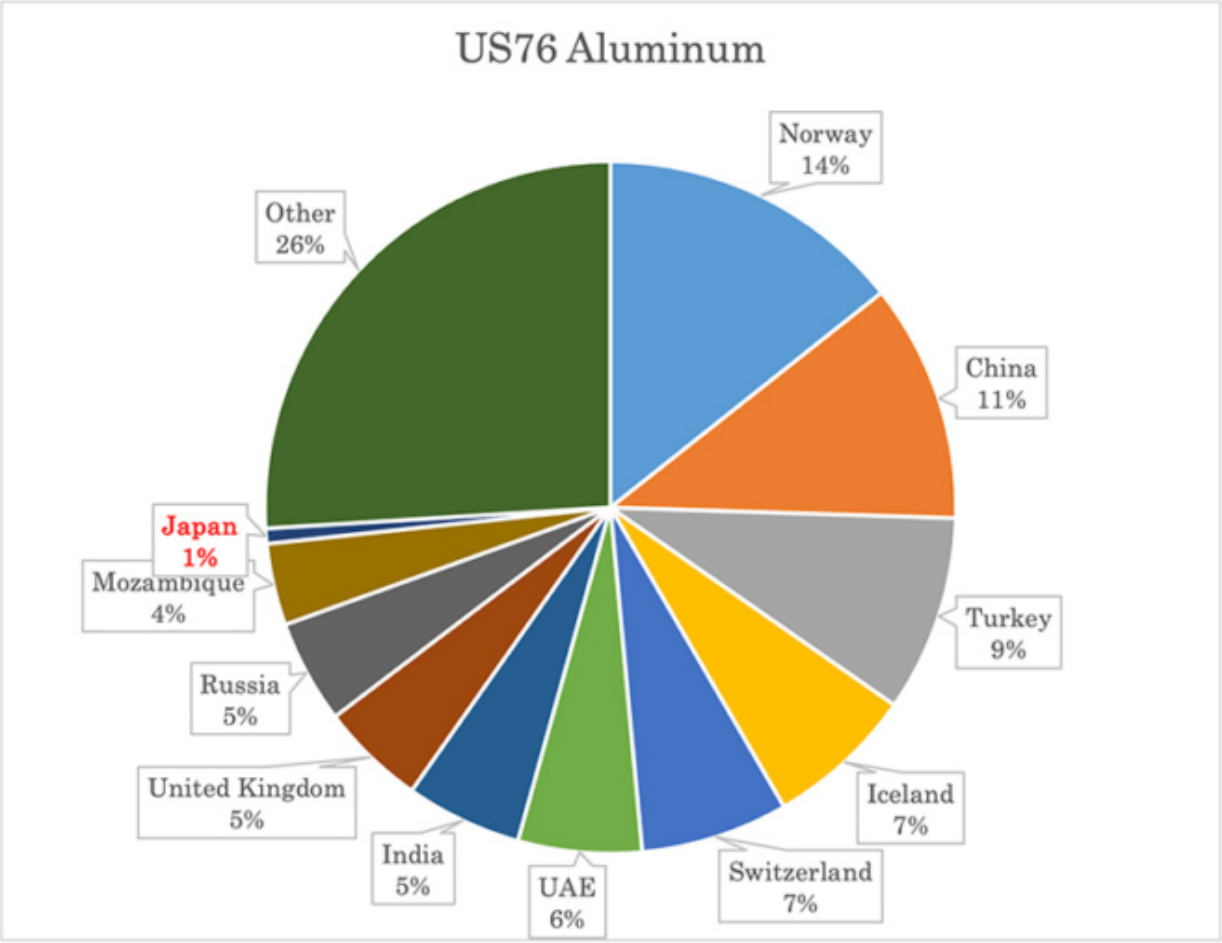
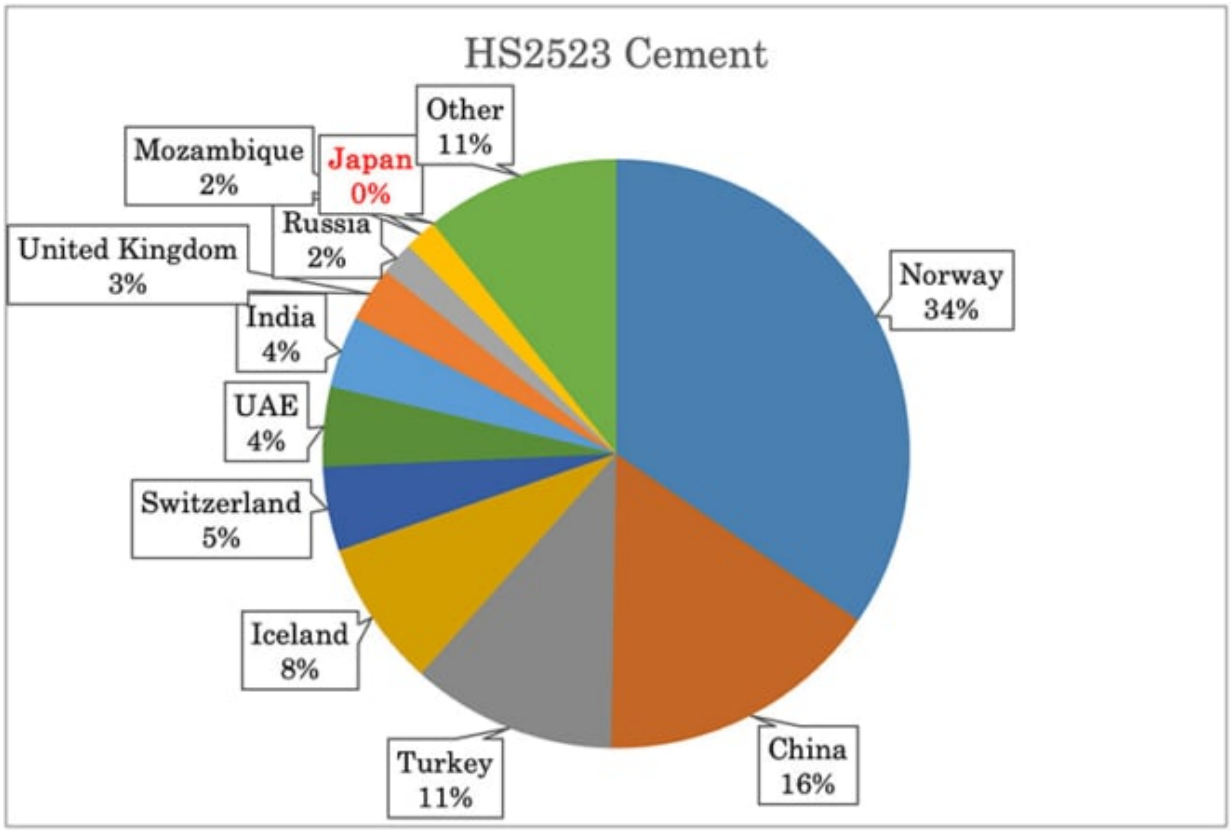
- EU? ??EU????????
- ???LCA?????????????????????????
- ETS??? €100/t ???????????????? **1.25?**????

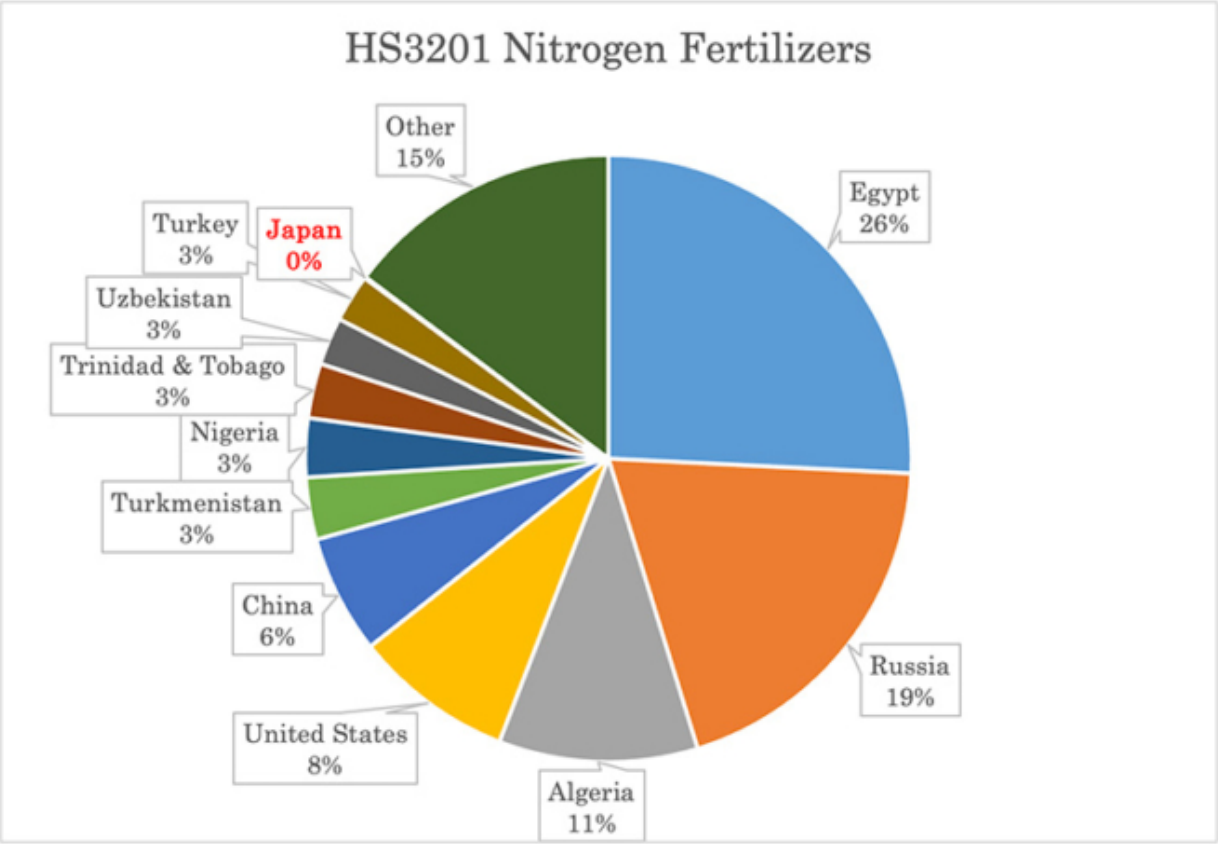
2. CBAM??????????????????

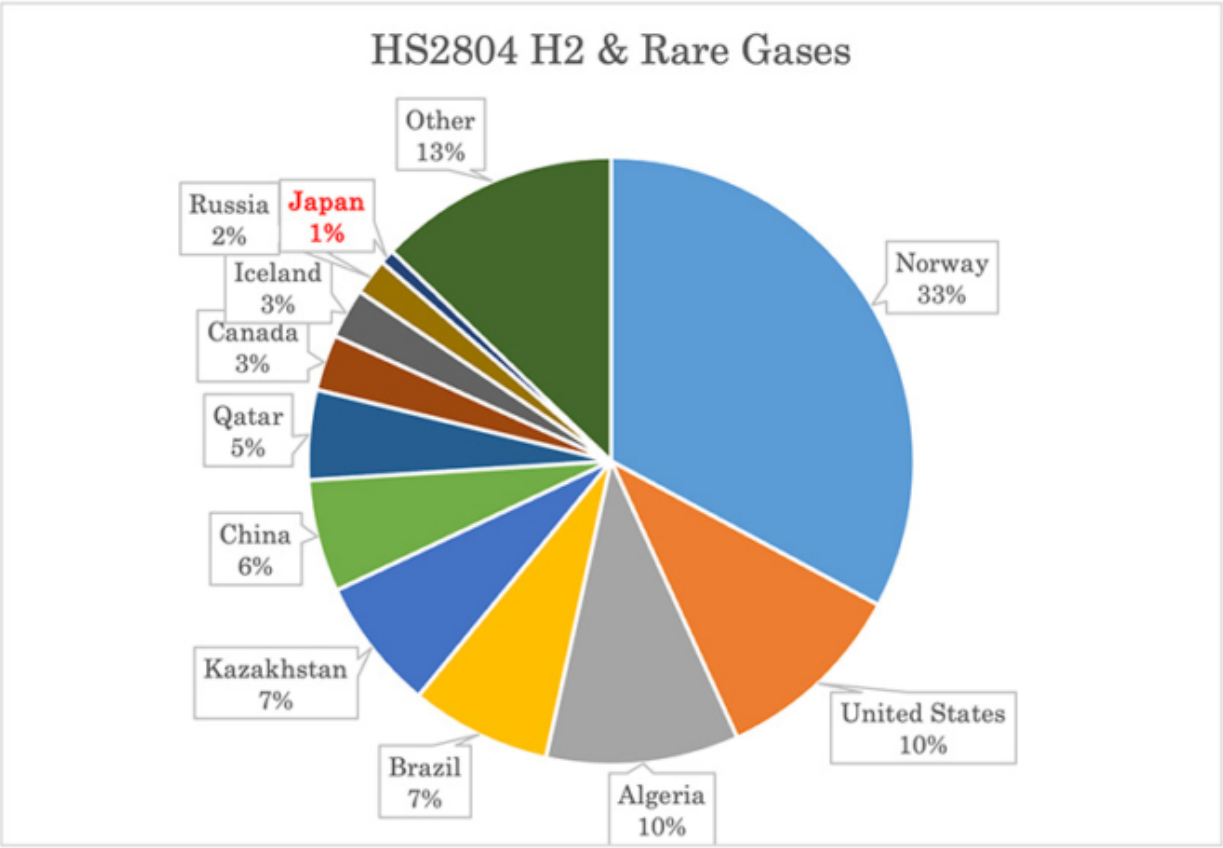
????????????????????????EU???????100?????????????????????????6???

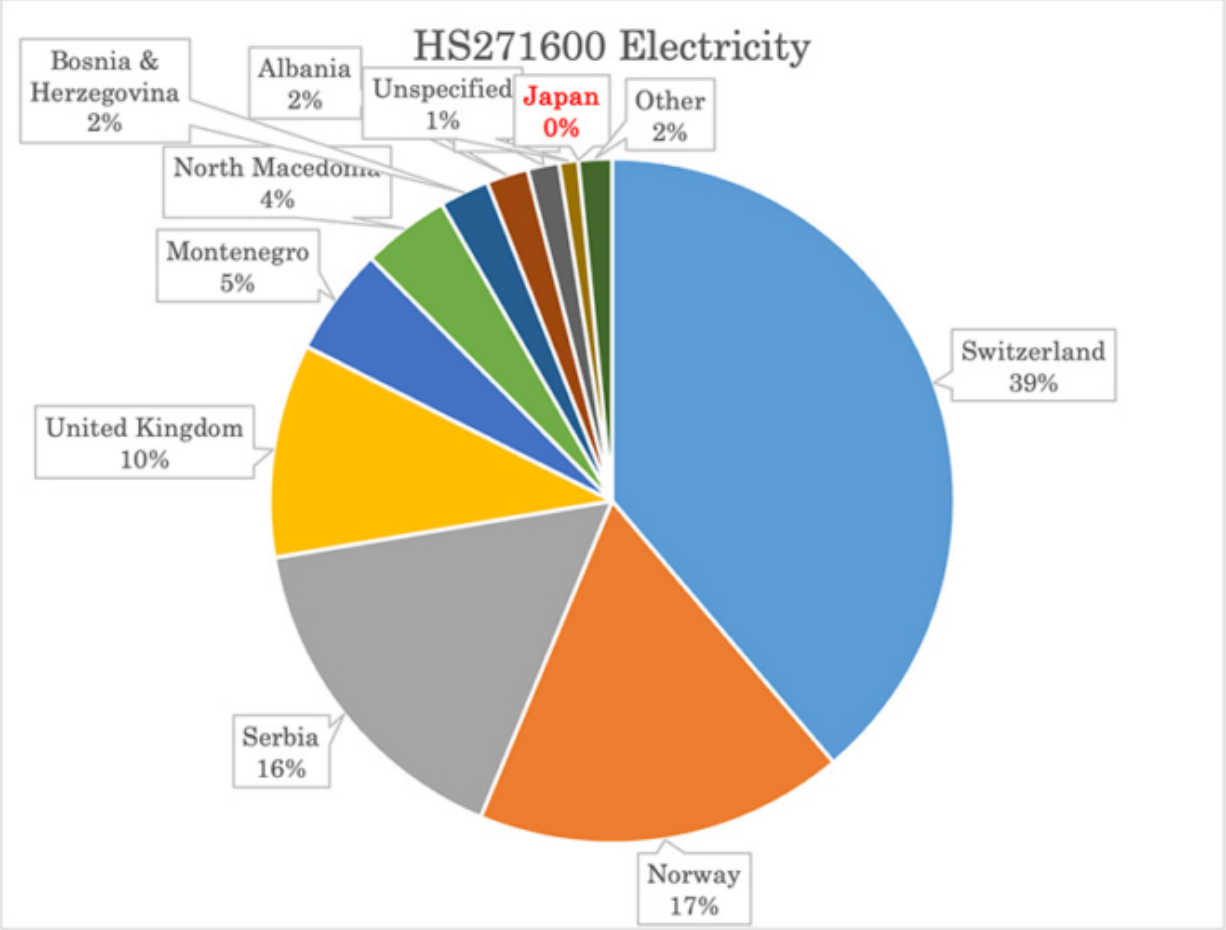



US76 Aluminum
Norway 14%
China 11%
Turkey 9%
Iceland 7%
Switzerland 7%
UAE 6%
India 5%
United Kingdom 5%
Russia 5%
Mozambique 4%
Japan 1%
Other 26%


HS2523 Cement
Other 11%
Mozambique 2%
Japan 0%
Russia 2%
United Kingdom 3%
India 4%
UAE 4%
Switzerland 5%
Iceland 8%
Turkey 11%
China 16%
Norway 34%


HS3201 Nitrogen Fertilizers
Other 15%
Egypt 26%
Turkey 3%
Japan 0%
Uzbekistan 3%
Trinidad & Tobago 3%
Nigeria 3%
Turkmenistan 3%
China 6%
Russia 19%
United States 8%
Algeria 11%


HS2804 H2 & Rare Gases
Other 13%
Russia 2%
Japan 1%
Iceland 3%
Canada 3%
Qatar 5%
China 6%
Kazakhstan 7%
Brazil 7%
Algeria 10%
United States 10%
Norway 33%



????????????????????4?????????????????????????11?????????????????????????????????????EU????????
??????????CBAM??????????????????????????????????????

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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?????????????????????????????CBAM???????????????

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

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

? ? ? ? C B A M ? E U ETS???80???20?????42??????79??????28???????63????

??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?????????CBAM?????????????????????

??10??????????400????????????????????????CO2????60???CO2????????????????????????

????????2050????????????????????2013???2030???46??2035???60??2040???73??

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

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

GX?????????????????????????????????????

??CBAM??

??EU????????????????GX??????????????????????????????????

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

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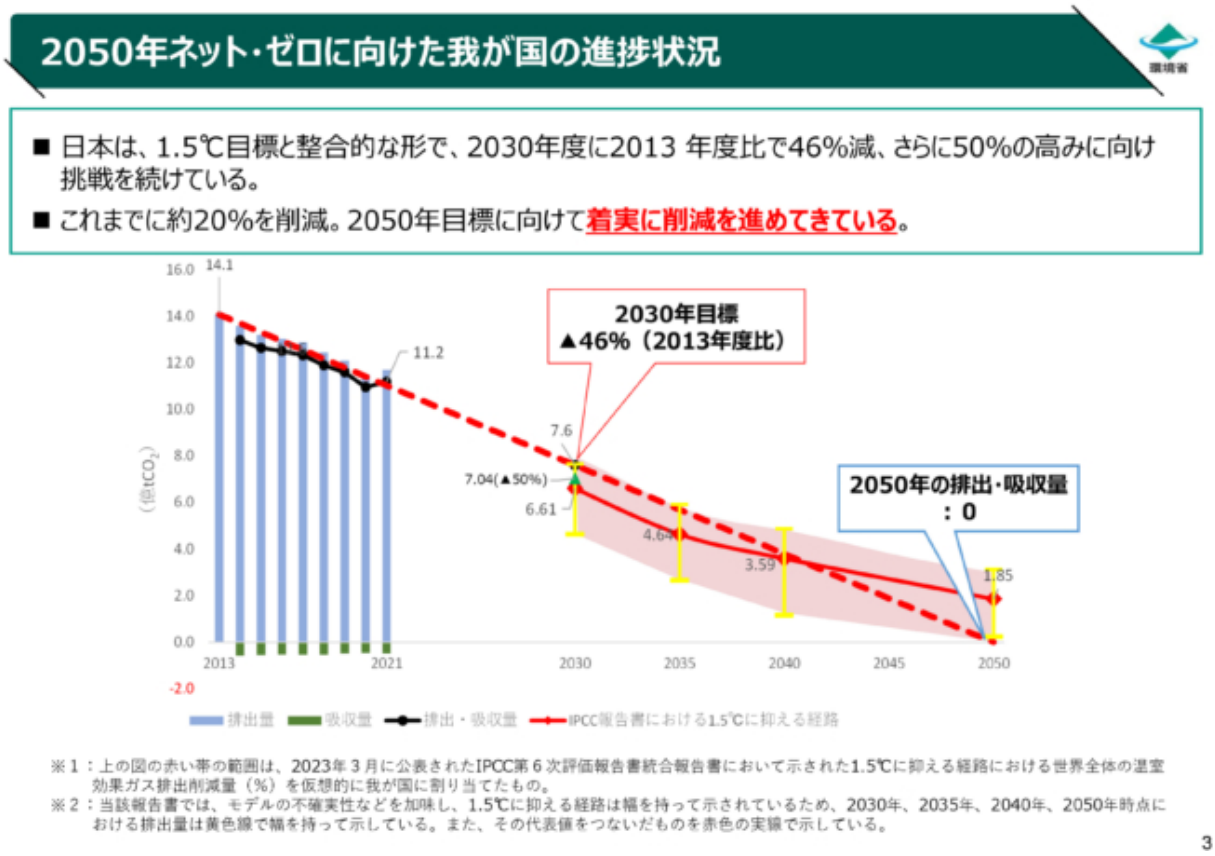
?? ?? · Monday, April 28th, 2025

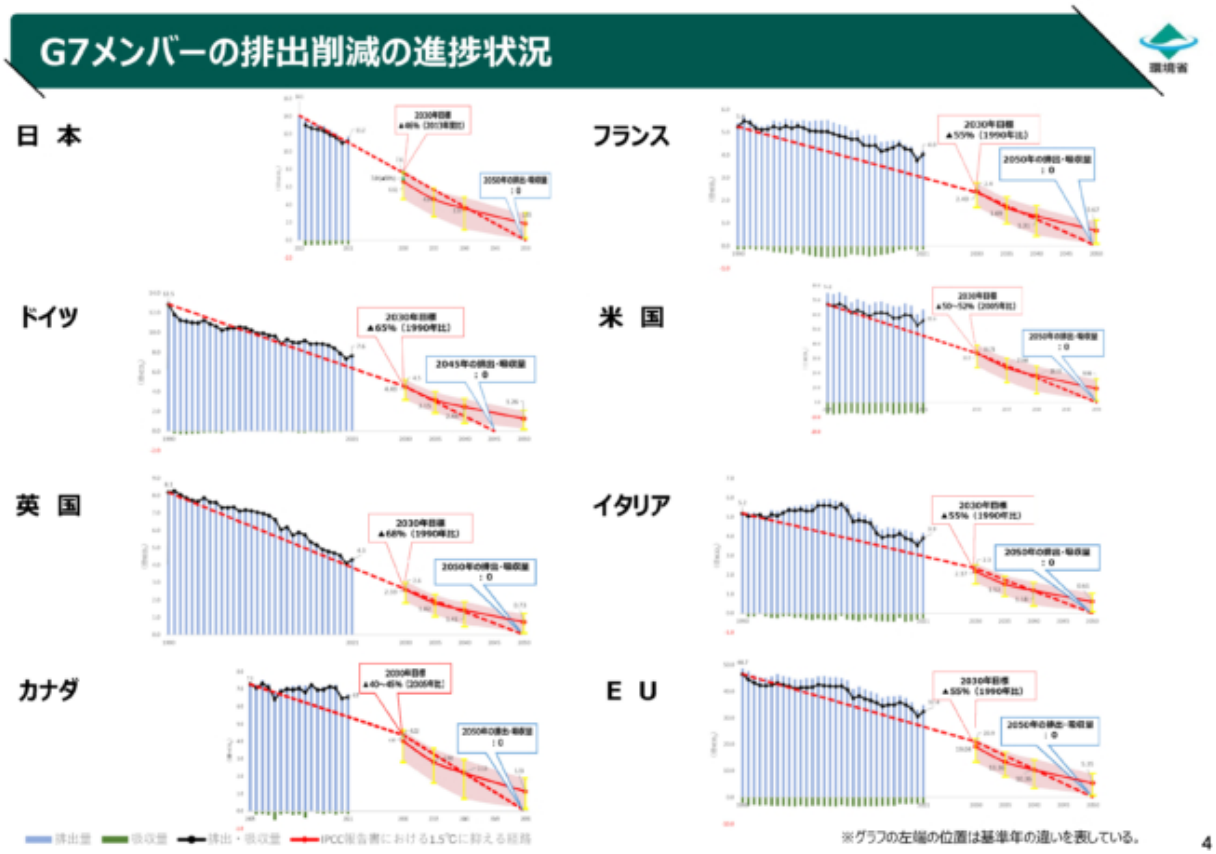
Floriana/iStock

???2050??????????????2013????????CO2???1??



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

??????????????G7???????????2?????????????????????????2050?????????CO2???



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

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

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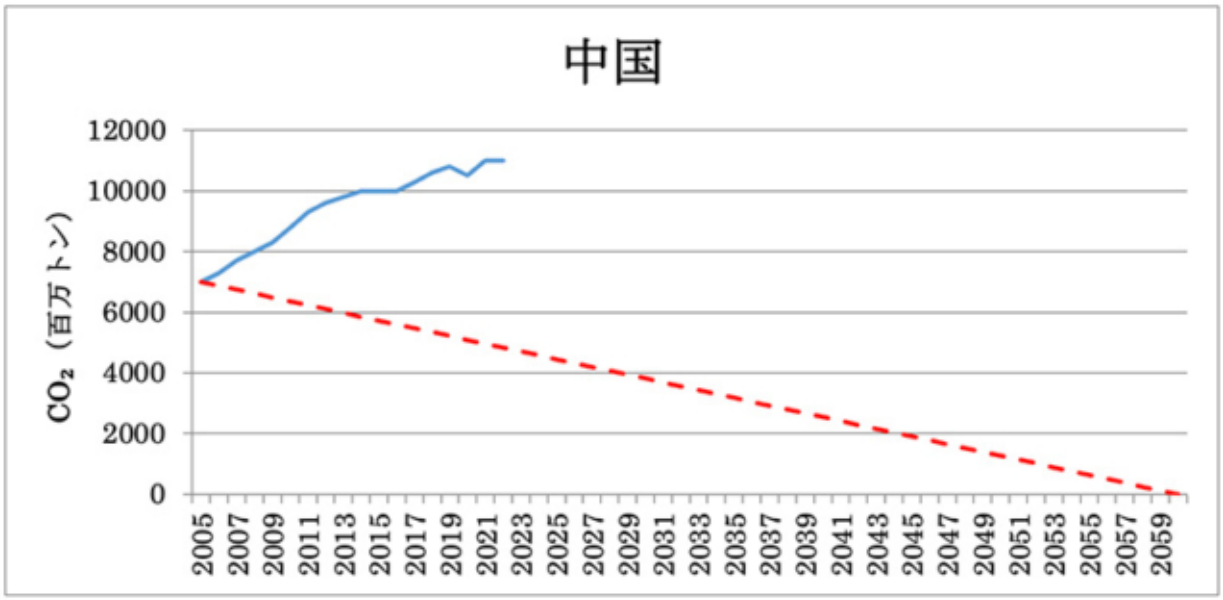
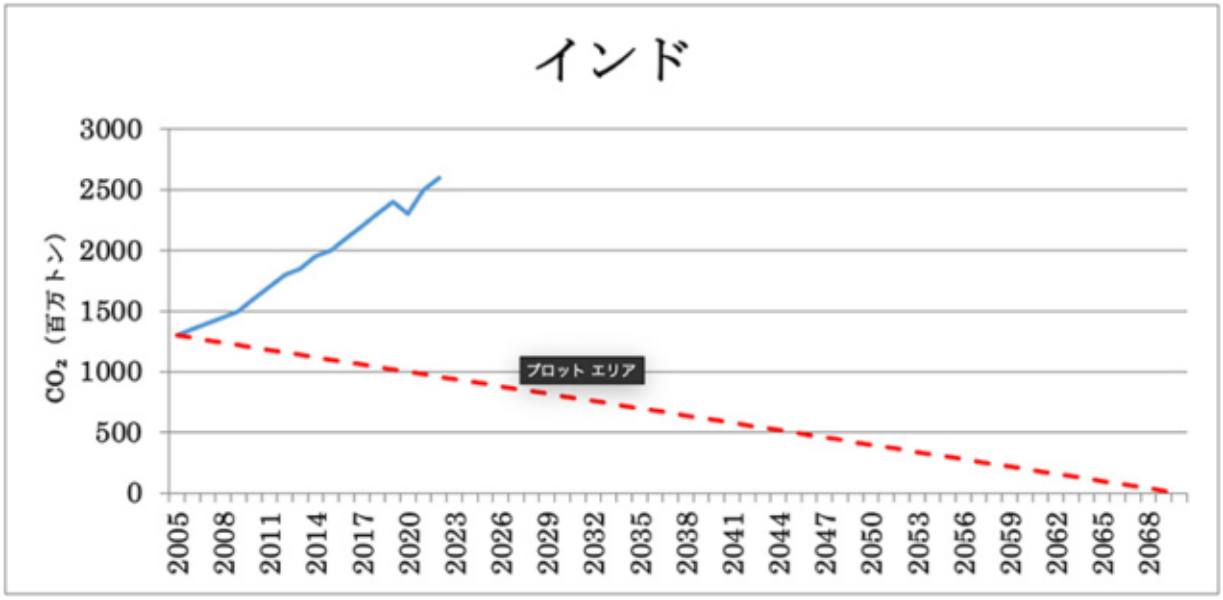
??2060??????2070????CO2????????????????????????????????????





?3????????????????????????
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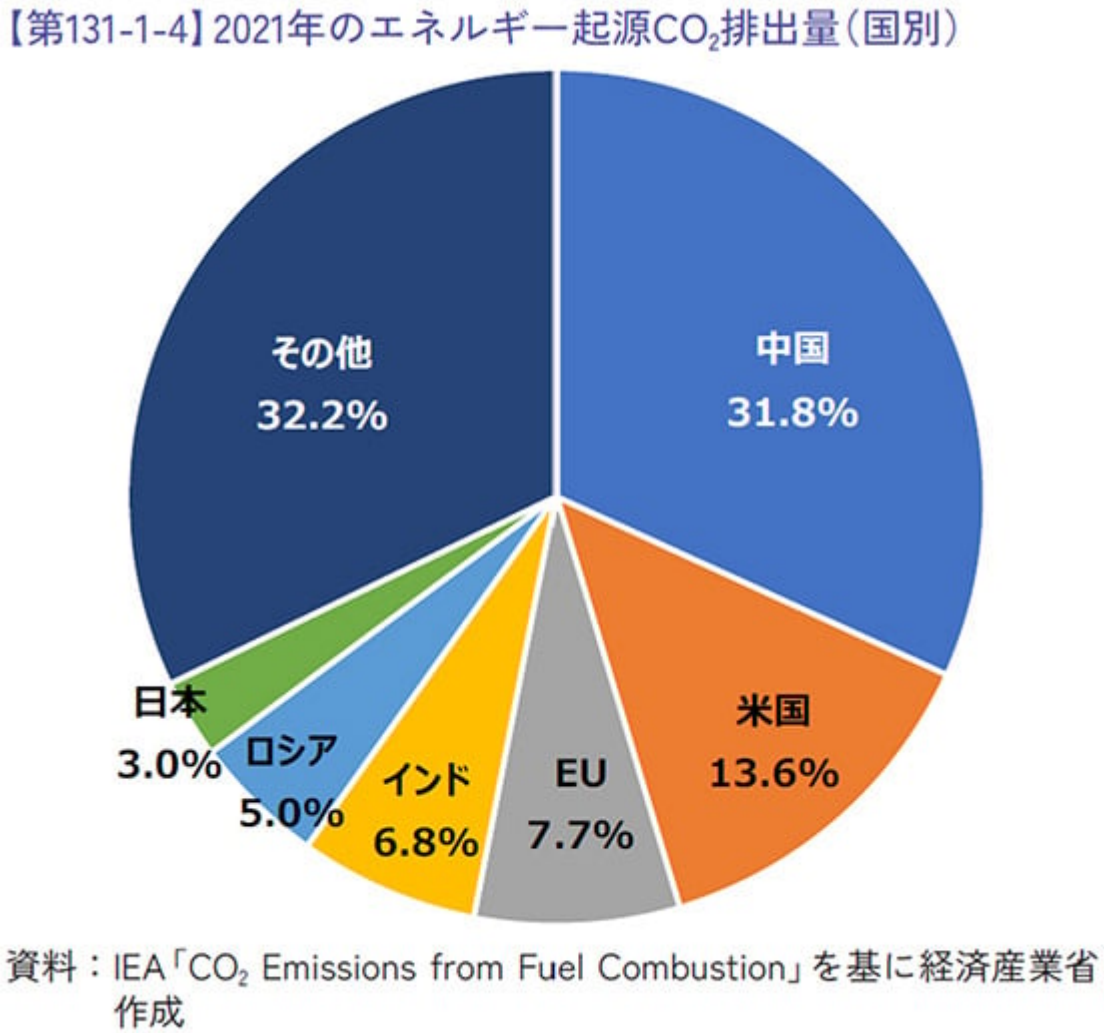
【第131-1-4】2021年のエネルギー起源CO2排出量（国別）
その他
32.2%
中国
31.8%
米国
13.6%
EU
7.7%
インド
6.8%
ロシア
5.0%
日本
3.0%
資料：IEA「CO2 Emissions from Fuel Combustion」を基に経済産業省作成

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

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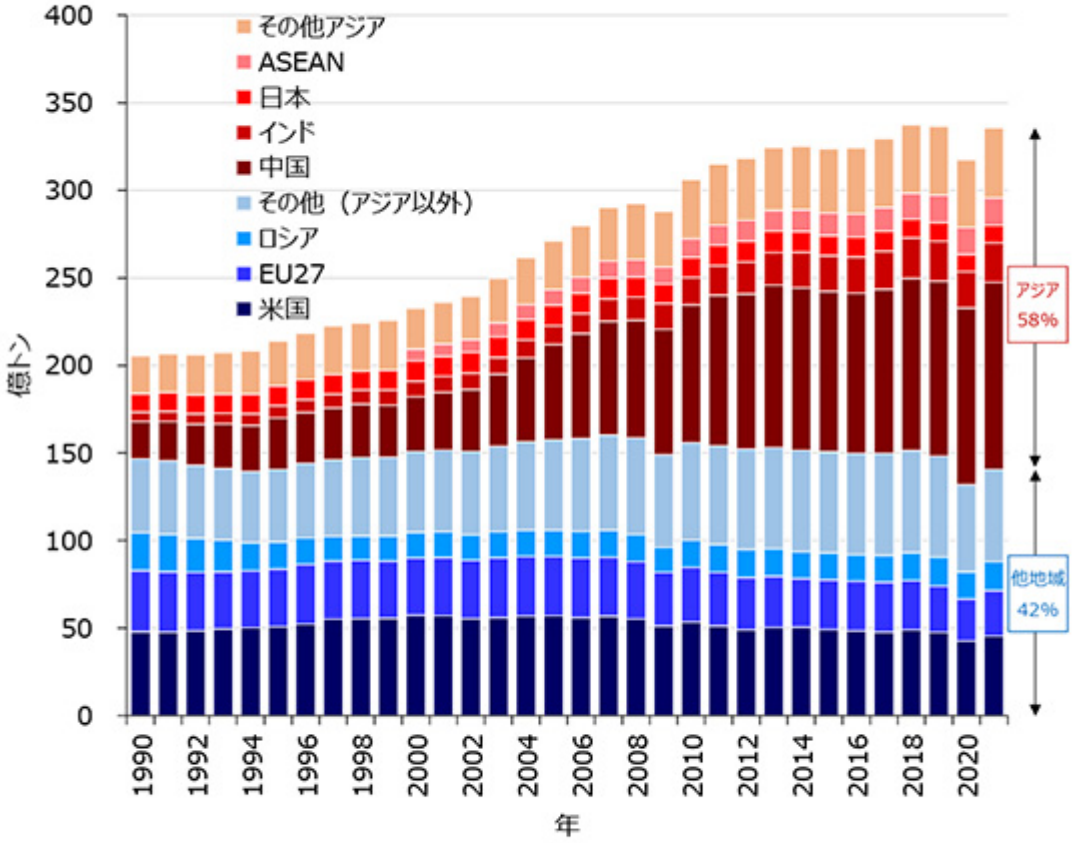
【第132-4-1】エネルギー起源CO_2排出量の推移（主要国・エリア別）



（注）1999年以前の「その他アジア」には、「ASEAN」を含む。
資料：IEA「CO_2 Emissions from Fuel Combustion」を基に経済産業省作成

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Posted in ???, ????? | No Comments »

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?? ?? · Monday, April 28th, 2025

menonsstocks

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

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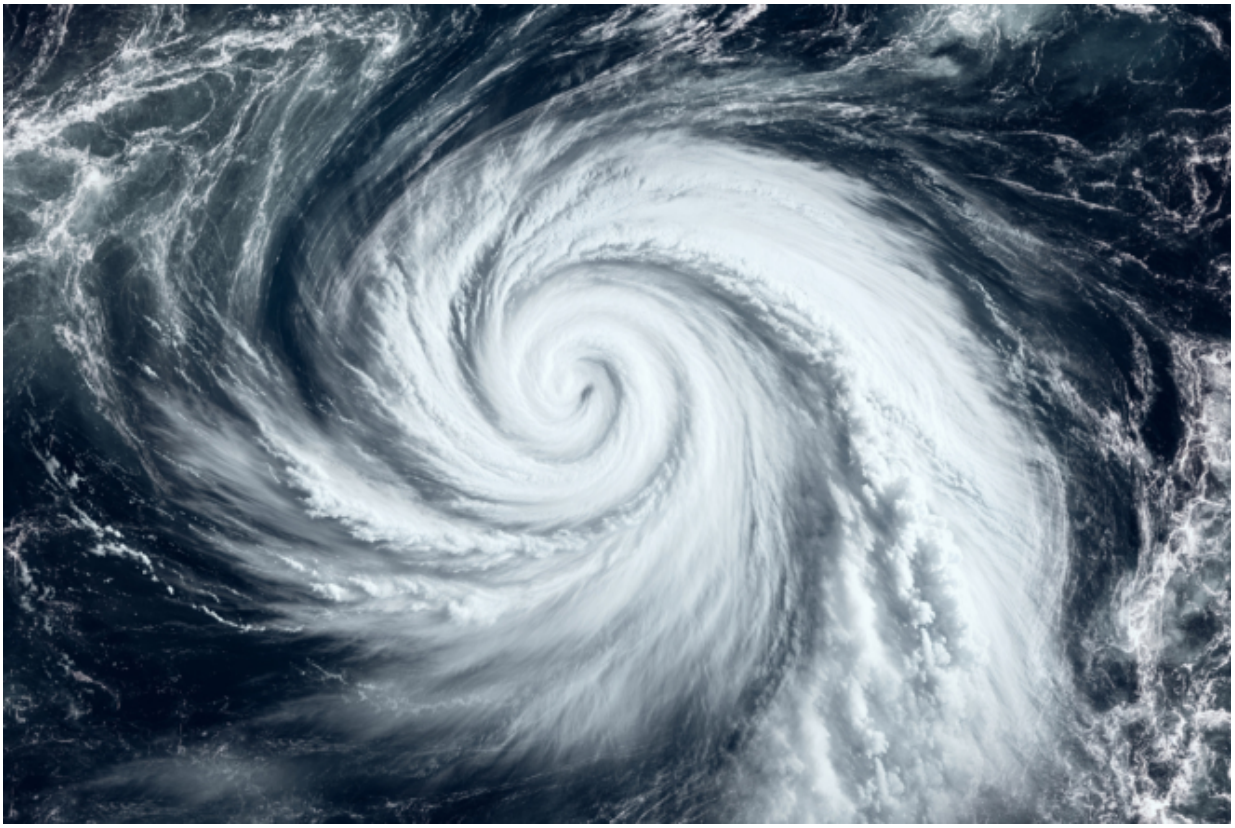
?? ?? · Sunday, April 27th, 2025



bymuratdeniz/iStock

??????33??????????????????????????[?1?]?

??2018????????????????????

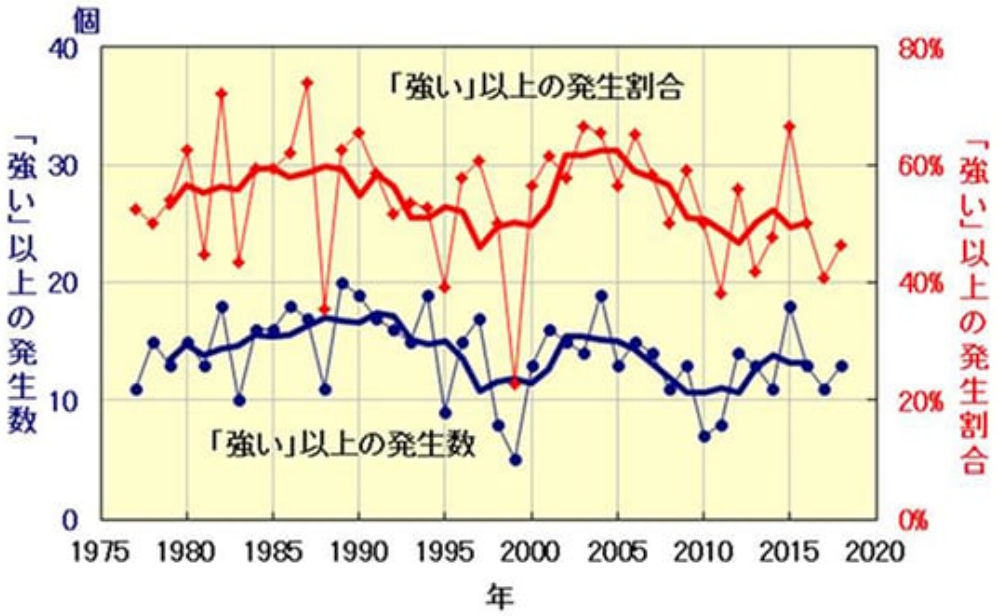


図 2.4-3　「強い」以上の勢力となった台風の発生数と全発生数に対する割合の経年変化

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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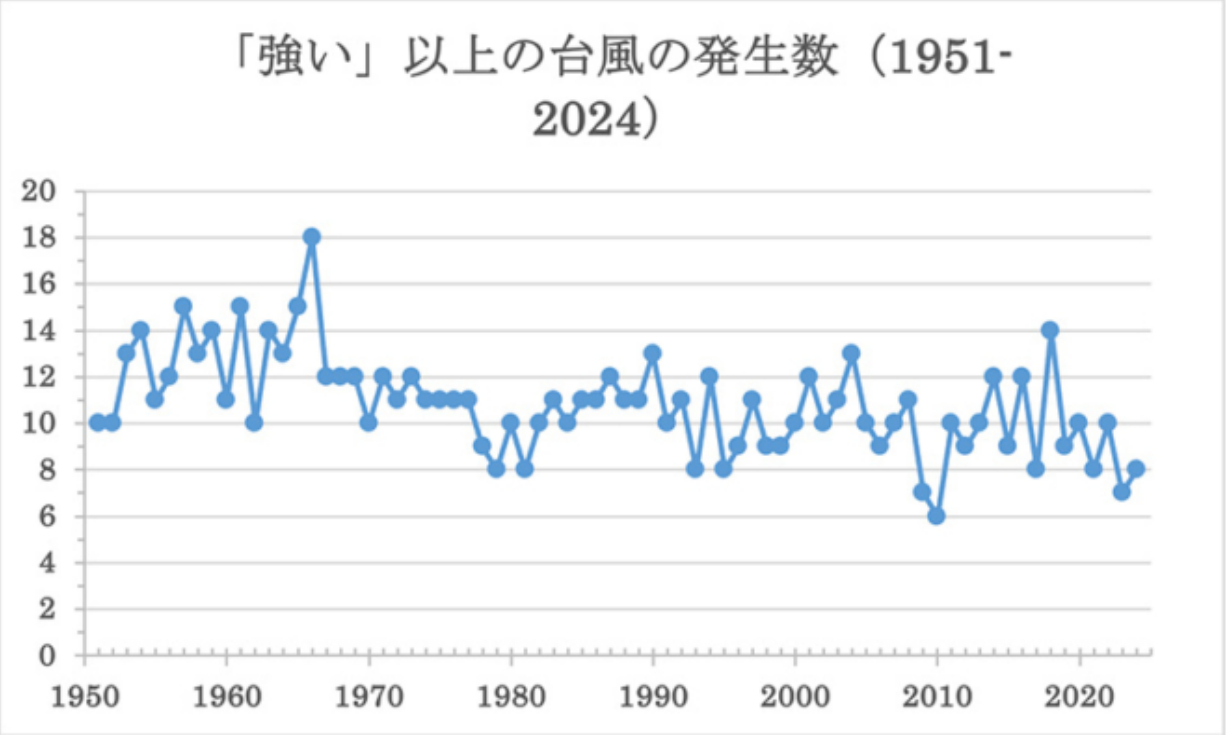

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?APressure-Based Analysis of the Historical Western North Pacific Tropical Cyclone Intensity Record
?Reliability Analysis of Climate Change of Tropical Cyclone Activity over the Western North Pacific
?Trend discrepancies among three best track data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

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Posted in ???, ????? | No Comments »

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

?? ?? · Sunday, April 27th, 2025

Sansert Sangsakawrat/iStock

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Posted in ???, ????? | No Comments »

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?? ?? · Saturday, April 26th, 2025

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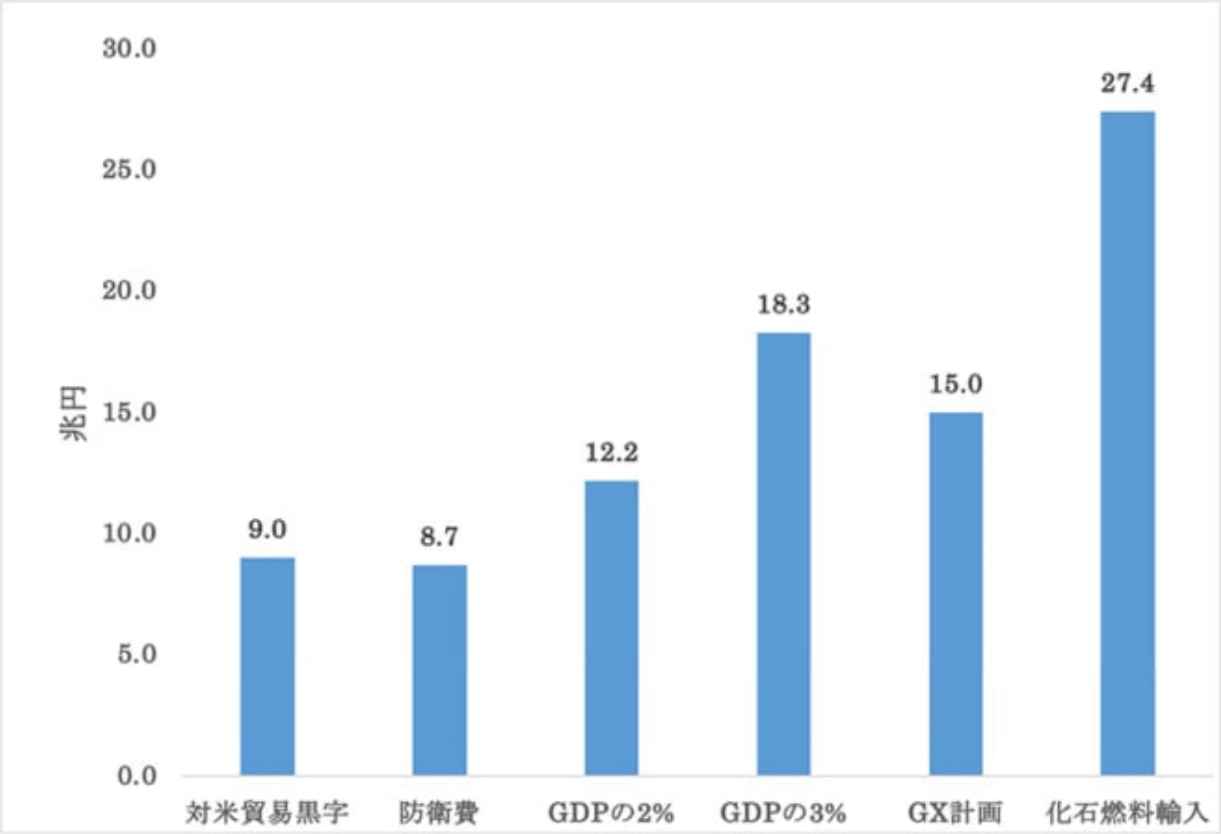

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??GX?????????????????EV?????????????????????????????????9?????????????????????????6???8??????EV?????????????????????

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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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??97%????????????????????????????????

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97???????????

?97%??2013???11,944?????????abstract???????????97.1%??

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

??CO2??

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CLINTEL????????WCD??????????????????????????????????2025????????1983??

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