Global Energy Policy Research | GEPR

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

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??? ?? · Thursday, June 12th, 2025

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2025?1?22??1????????????????????????????????????6??7??

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??6?3,154???5?1,786???1?1,368????????????????????????

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

?? ?? · Friday, June 6th, 2025

Evgeny Gromov/iStock

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?????EU???Fit for 55???

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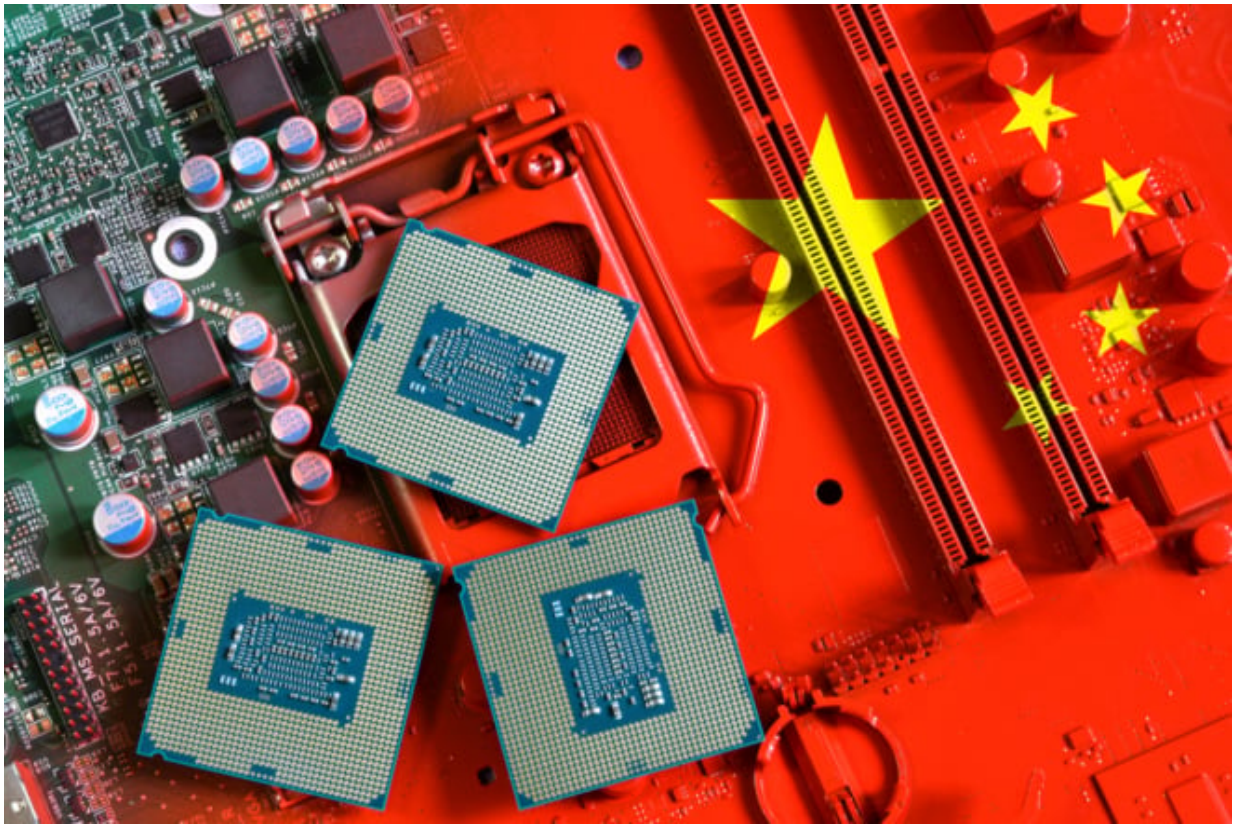
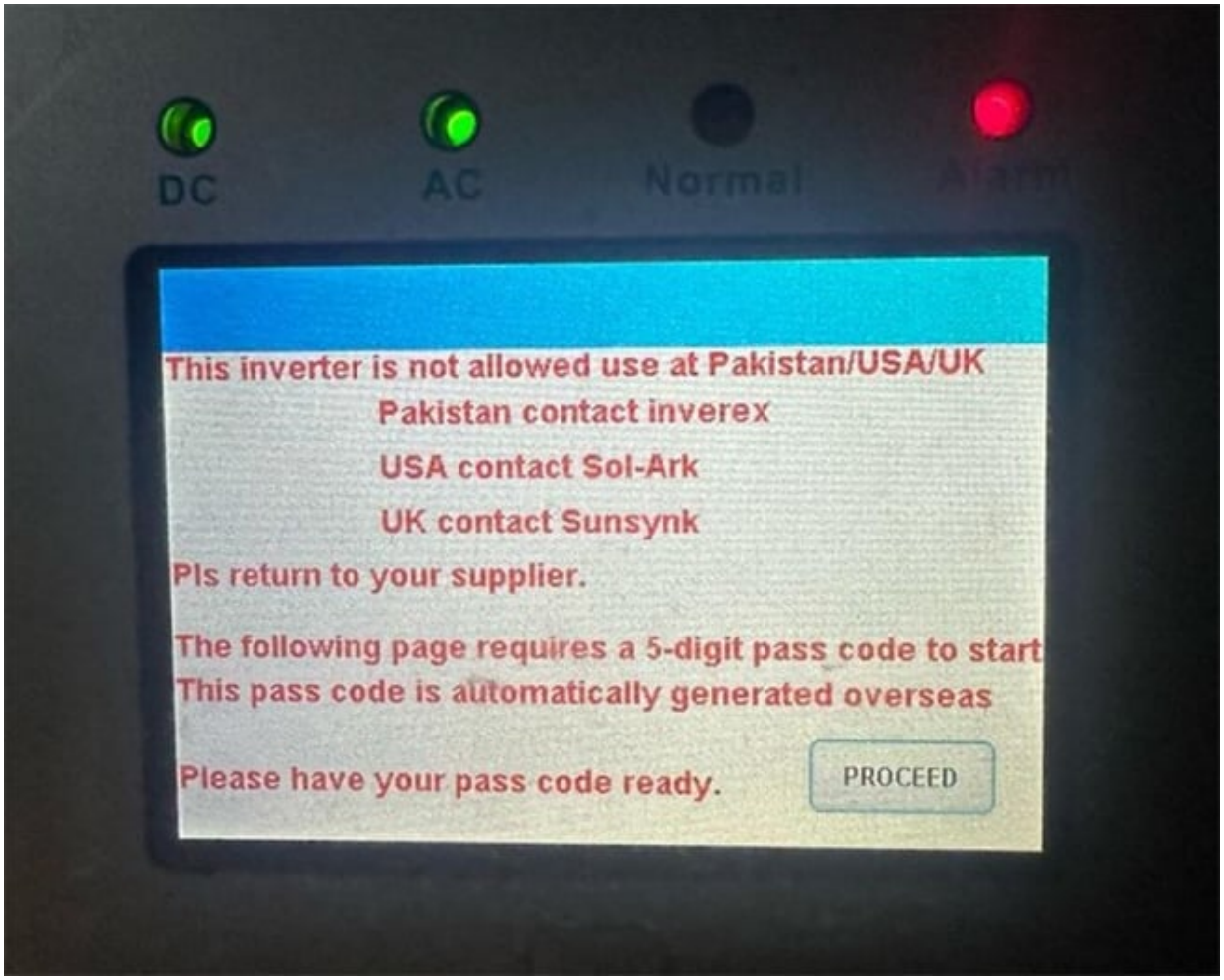


undefined undefined/iStock

2025?5?15??????????????



?1?2024?11?15?deye??????????????????
bluesky??????

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Golden Sikorka/iStock

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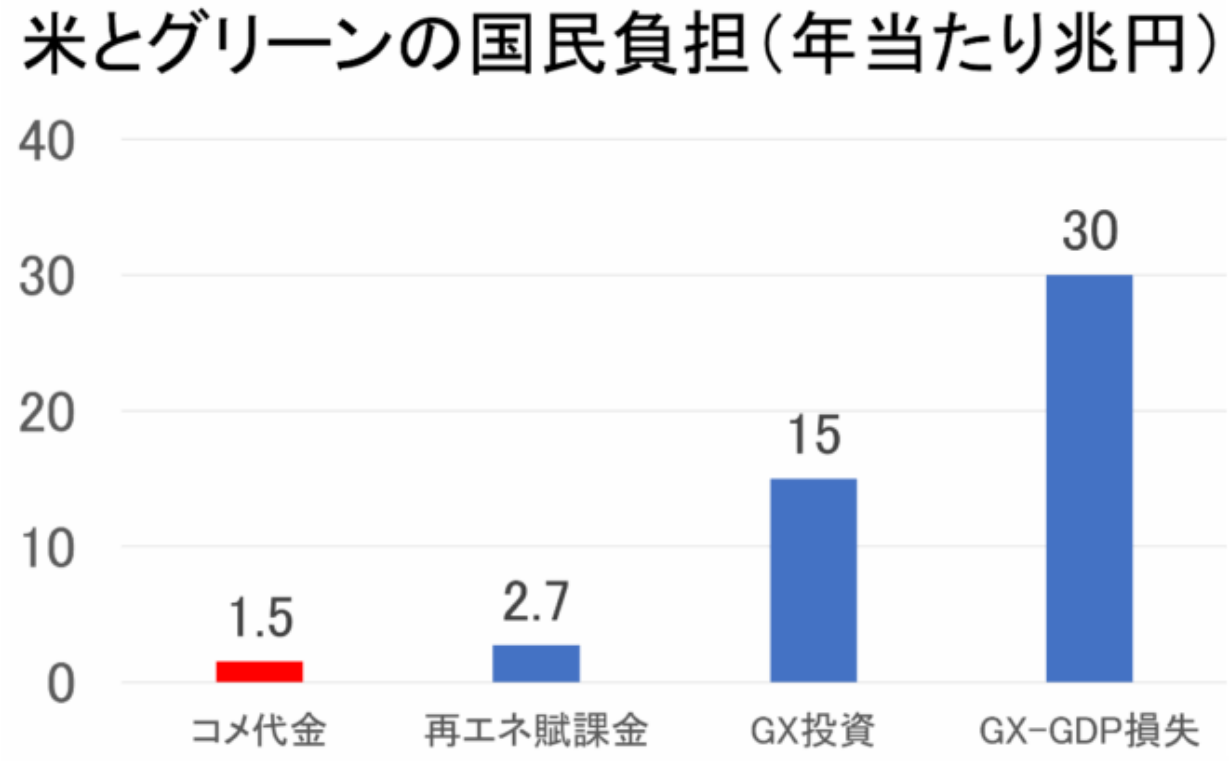

??2.7??

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??5??????????????????????????????????GX???

????????????10???150????????15??????GX???

?????????2030???2013????CO2????46??????????????????????????30???GDP????????????????????RITE????????????p8??GDP??

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

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?? ?? · Monday, June 2nd, 2025

RapidEye/iStock

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https://www.data.jma.go.jp/cpdinfo/monitor/index.html

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日本における大雨の発生頻度と強度、降水日数

◇ 1時間降水量80mm以上、3時間降水量150mm以上、日降水量300mm以上など強度の強い雨は、1980年頃と比較して、おおむね2倍程度に頻度が増加している。
◇ 年最大日降水量の基準値との比には増加傾向が現れている。
◇ 日降水量100mm以上及び日降水量200mm以上の日数はともに増加している。
◇ 日降水量1.0mm以上の日数は減少している。

時間単位の降水量で見た大雨の頻度

全国（アメダス）の1時間降水量80mm以上等の年間発生回数 詳細はクリック

▶図　全国（アメダス）の1時間降水量80mm以上の年間発生回数

全国（アメダス）の3時間降水量150mm以上等の年間発生回数 詳細はクリック

▶図　全国（アメダス）の3時間降水量150mm以上の年間発生回数

日単位の降水量で見た大雨の頻度と強度

全国（アメダス）の日降水量300mm以上等の年間日数 詳細はクリック

▶図　全国（アメダス）の日降水量300mm以上の年間日数

全国（アメダス）の年最大日降水量の基準値との比 詳細はクリック

▶図　全国（アメダス）の年最大日降水量の基準値との比

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- これらの変化には地球温暖化が影響している可能性があります。
- なお、アメダスの観測期間は約50年程度と比較的短いことから、地球温暖化との関連性をより確実に評価するためには今後のさらなるデータの蓄積が必要です。また、1時間降水量100mm以上など特に強度の強い大雨の回数は現象の発生が稀なことから、各年の値の換算が適切でない場合があります。

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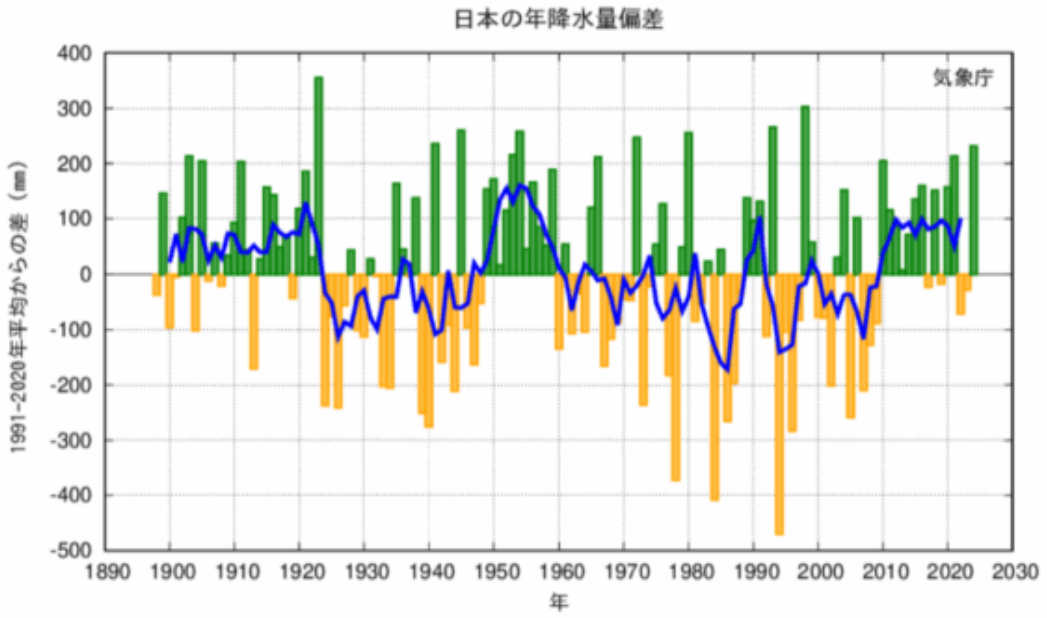
日本の年降水量偏差の経年変化（1898～2024年）

2024年の日本の降水量の基準値（1991～2020年の30年平均値）からの偏差は+231.6mmでした。日本の年降水量には長期変化傾向は見られませんが、1898年の統計開始から1920年代半ばまでと1950年代、2010年代以降に多雨期が見られます。また、1970年代から2000年代までは年ごとの変動が比較的大きくなっていました。

› よくある質問（実際の日本の年降水量は何mm？、長期変化傾向とは？など）



棒グラフ：各年の降水量の基準値からの偏差、折れ線（青）：偏差の5年移動平均値。
基準値は1991～2020年の30年平均値。

1980??1950??

??1????6????????1980??

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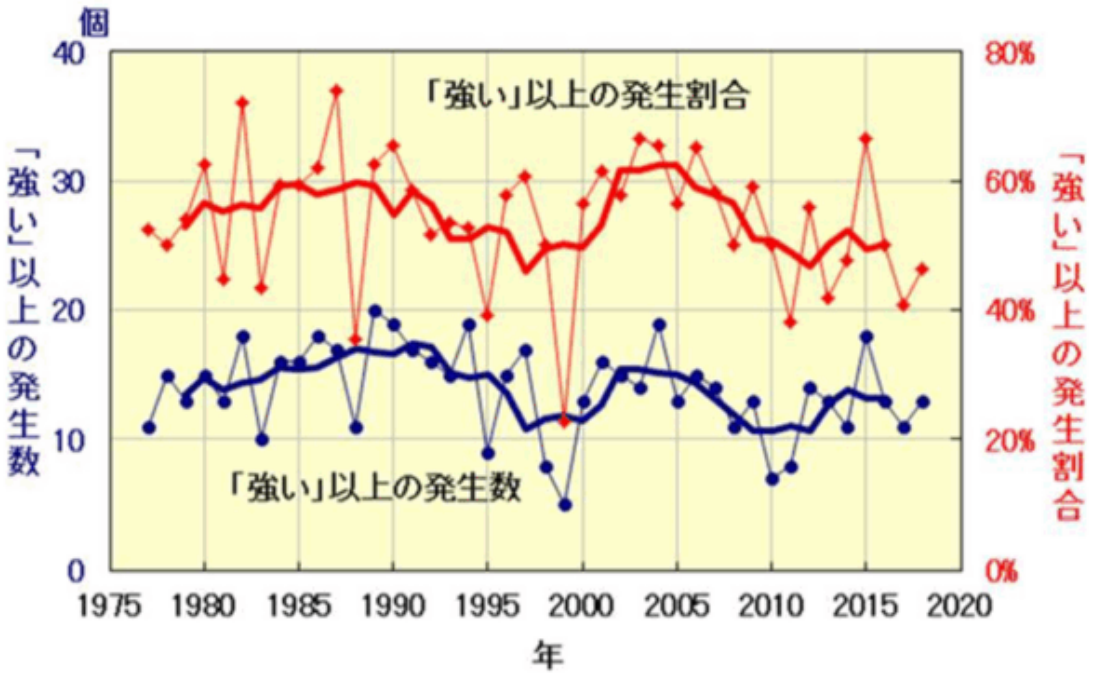

図 2.4-3　「強い」以上の勢力となった台風の発生数と全発生数に対する割合の経年変化

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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??15?????????????

◇ 令和6年9月下旬の石川県能登の大雨に地球温暖化が寄与－イベント・アトリビューションによる結果－（文部科学省ホームページ）

詳細はクリック(PDF)

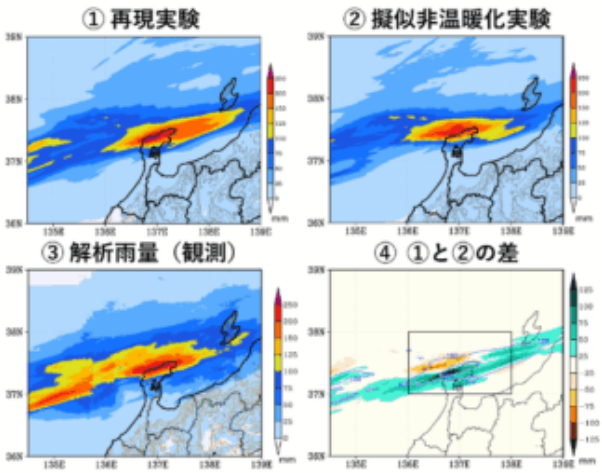

図 令和６年９月 21 日から 22 日の石川県能登の大雨のシミュレーション

１．概要

令和６年９月 21 日から 22 日にかけて、石川県能登で豪雨災害が発生し、一部地域で線状降水帯が発生しました。今回、この大雨を対象に地球温暖化の影響を評価したところ、地球温暖化がなかったと仮定した場合と比べて総雨量（９時間積算雨量）が 15%程度増加していたことが確認されました。

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Posted in ???, ????? | No Comments »

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

?? ?? · Monday, June 2nd, 2025

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3. JA????????????????

hungryworks/iStock

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NHK??

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

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6350????

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

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

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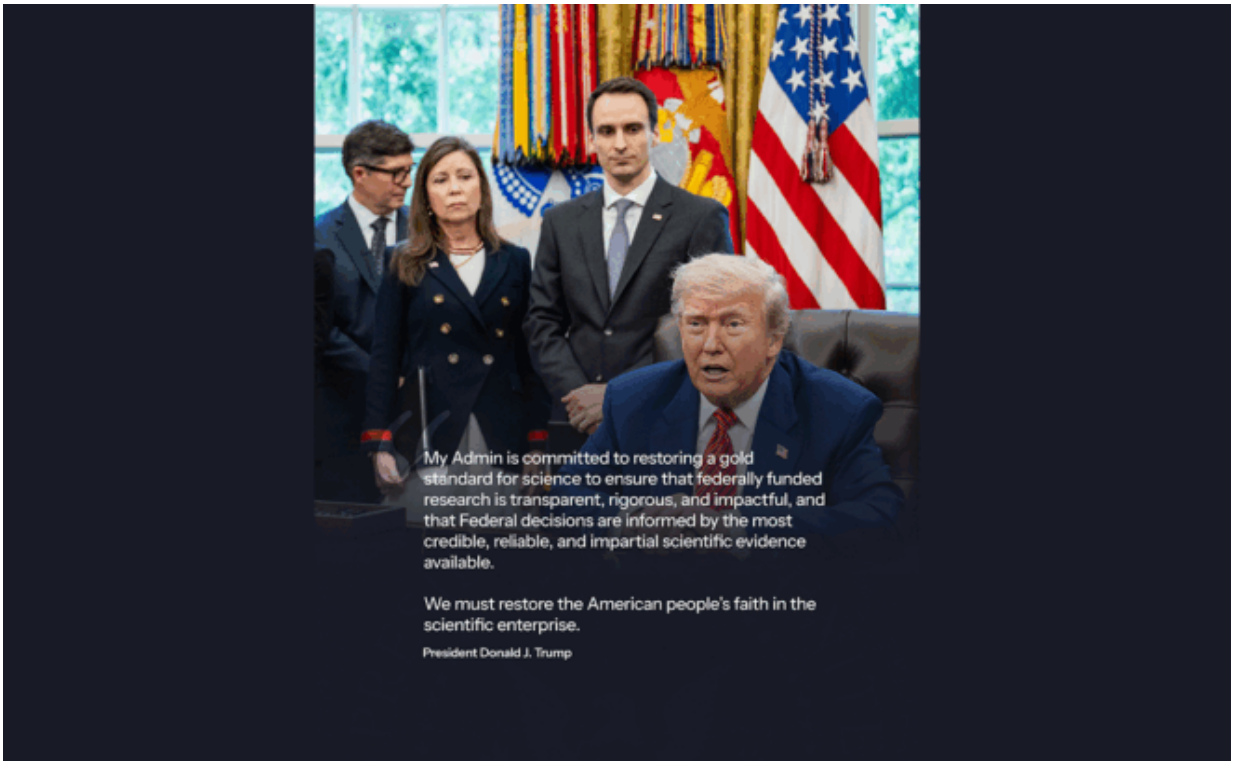

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5?23??????????? “?????????????????????Restoring Gold Standard Science?”??????????????

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

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??? ?? · Friday, May 30th, 2025

blackred/iStock

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

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

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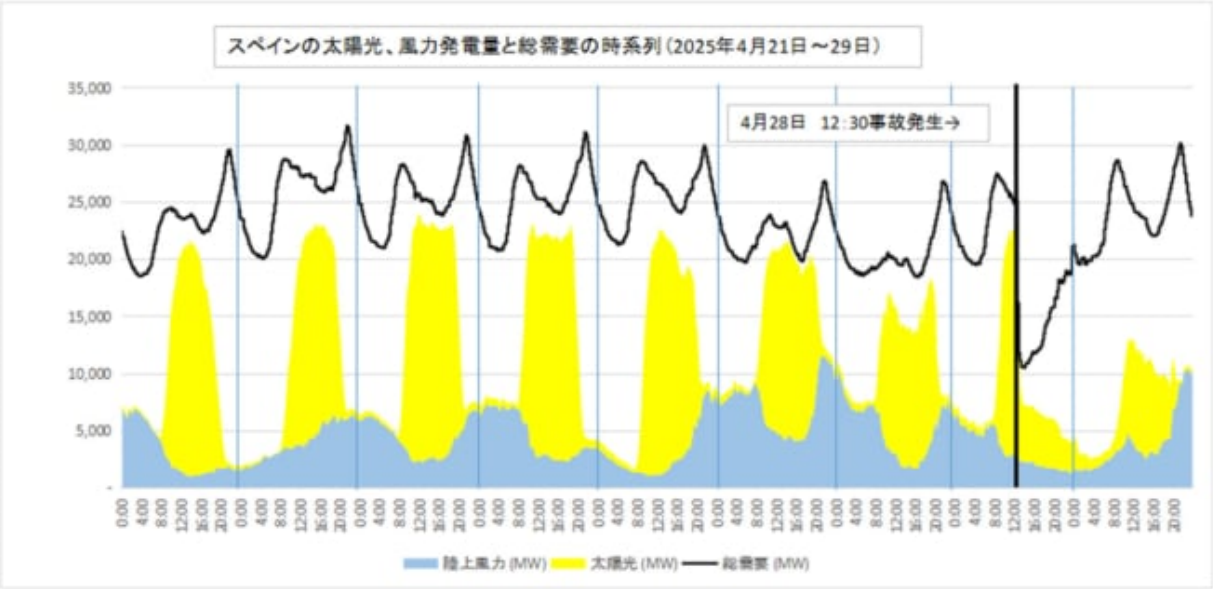

?1?????????????

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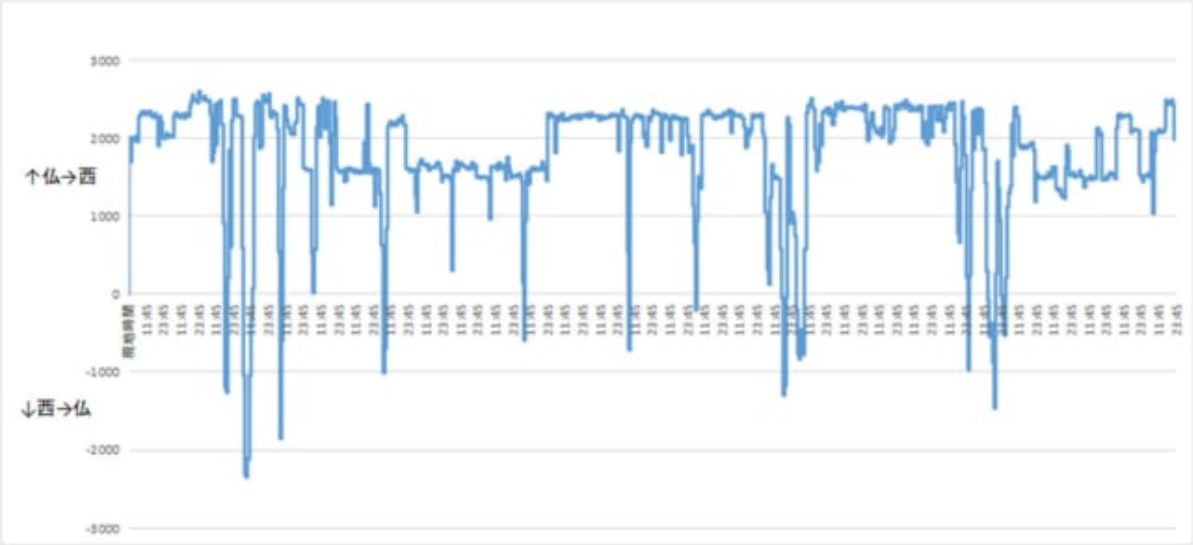
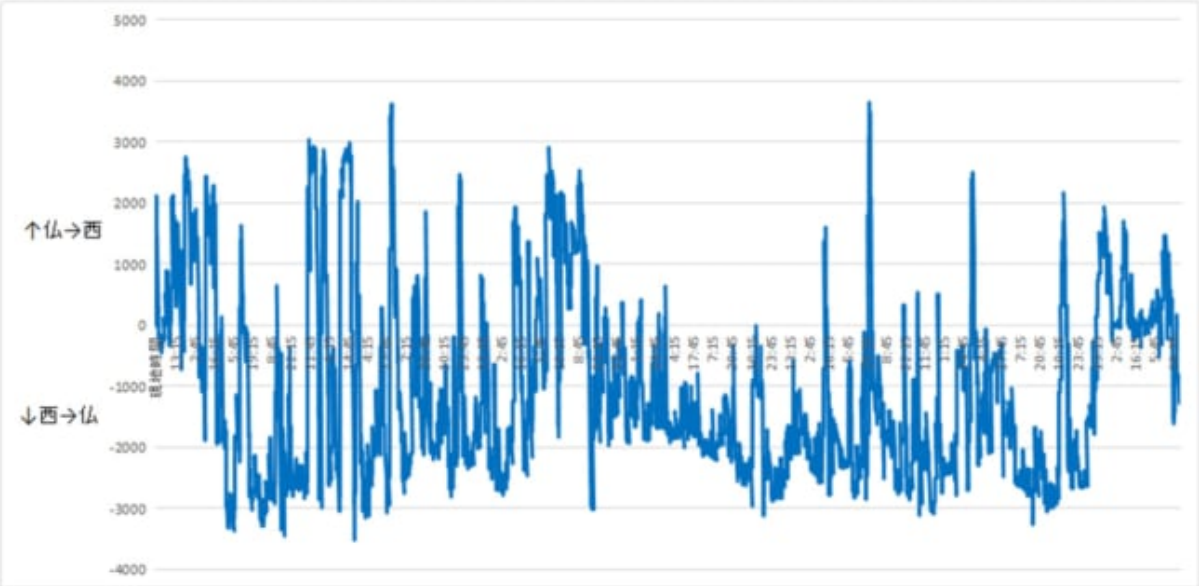
?2?2019?4???



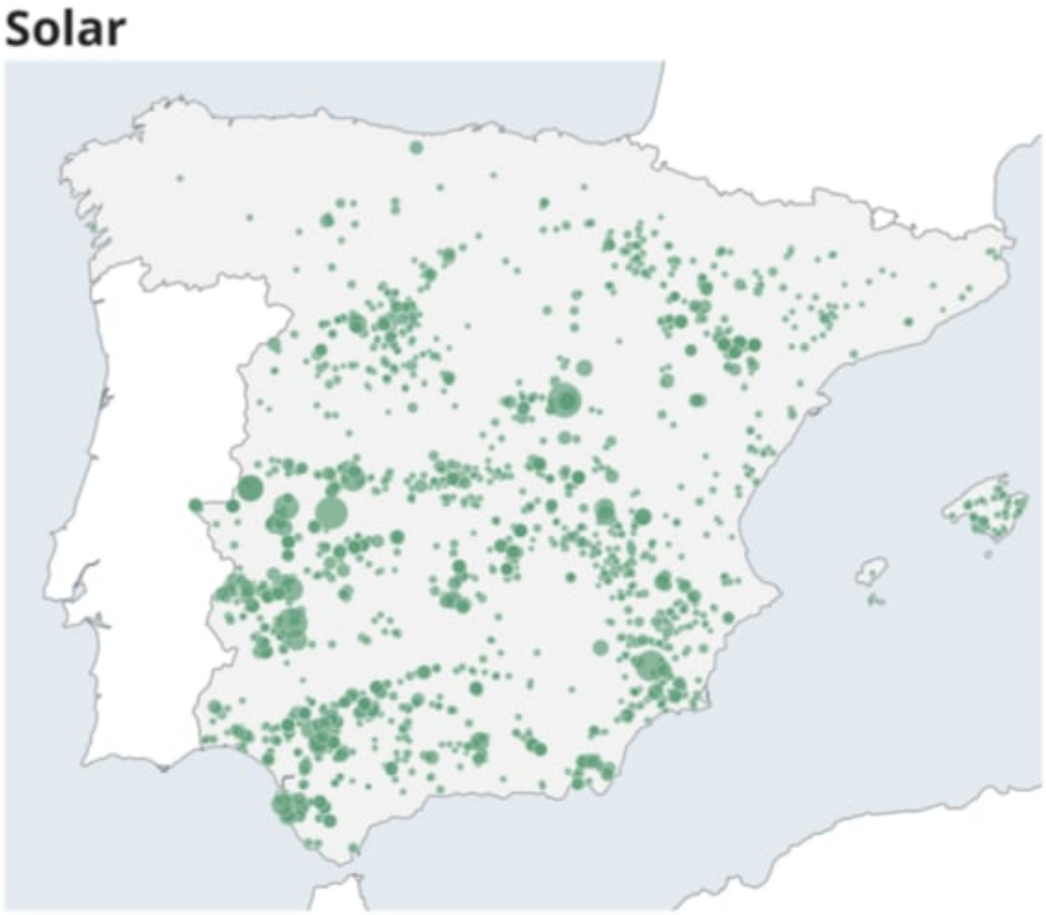
?2??????????????????
2019?4?Energy-chart??

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



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

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



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

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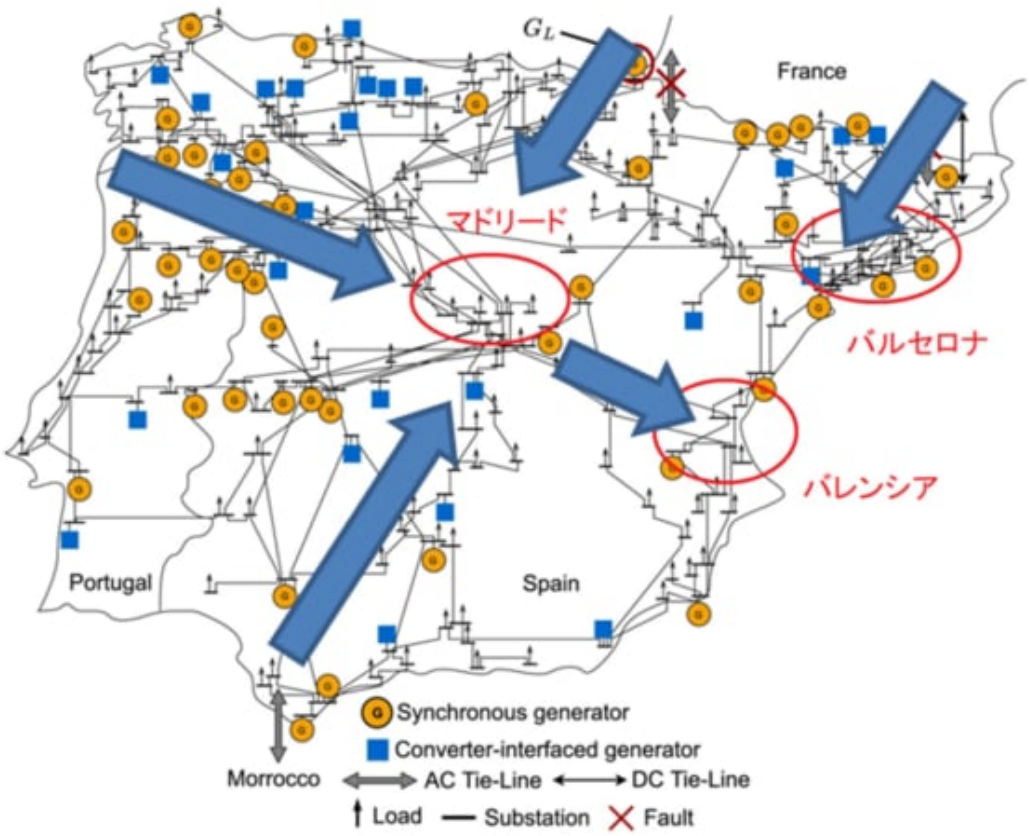
?5??????????2019??????????PV??



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

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

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

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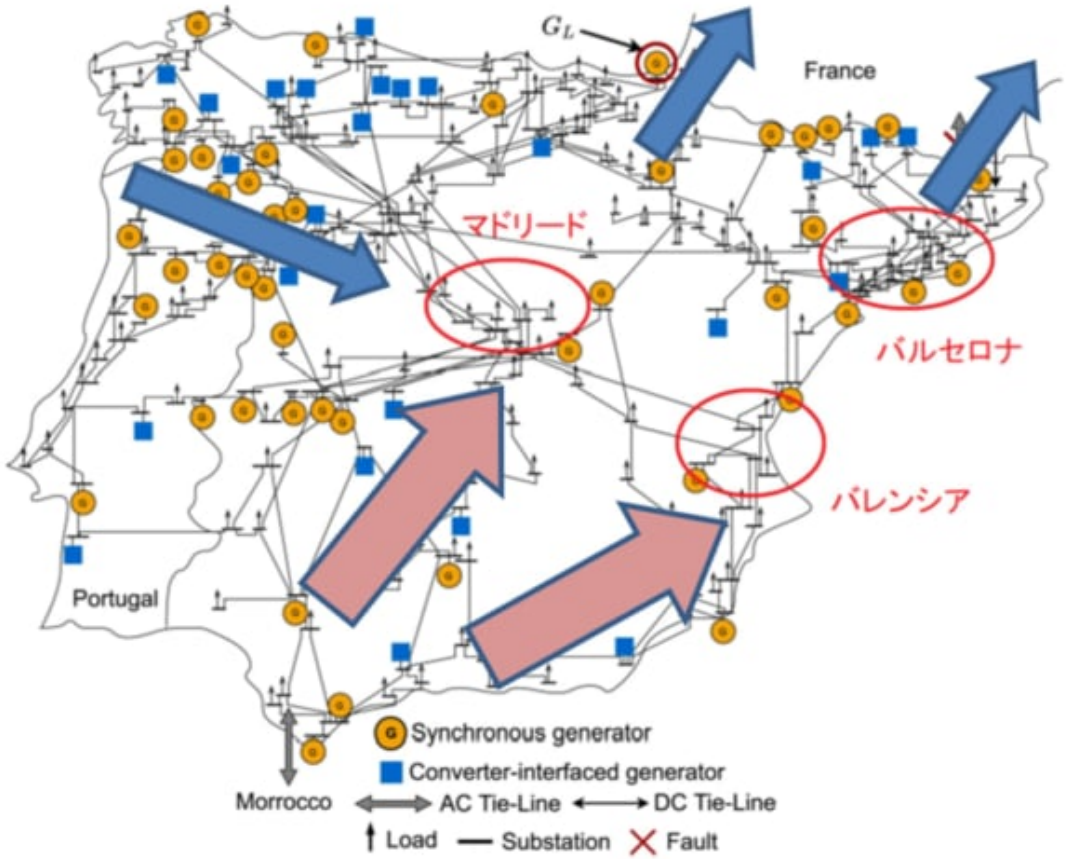
G_L
France
マドリード
バルセロナ
バレンシア
Portugal
Morrocco
Synchronous generator
Converter-interfaced generator
AC Tie-Line
DC Tie-Line
Load
Substation
Fault

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

?6???

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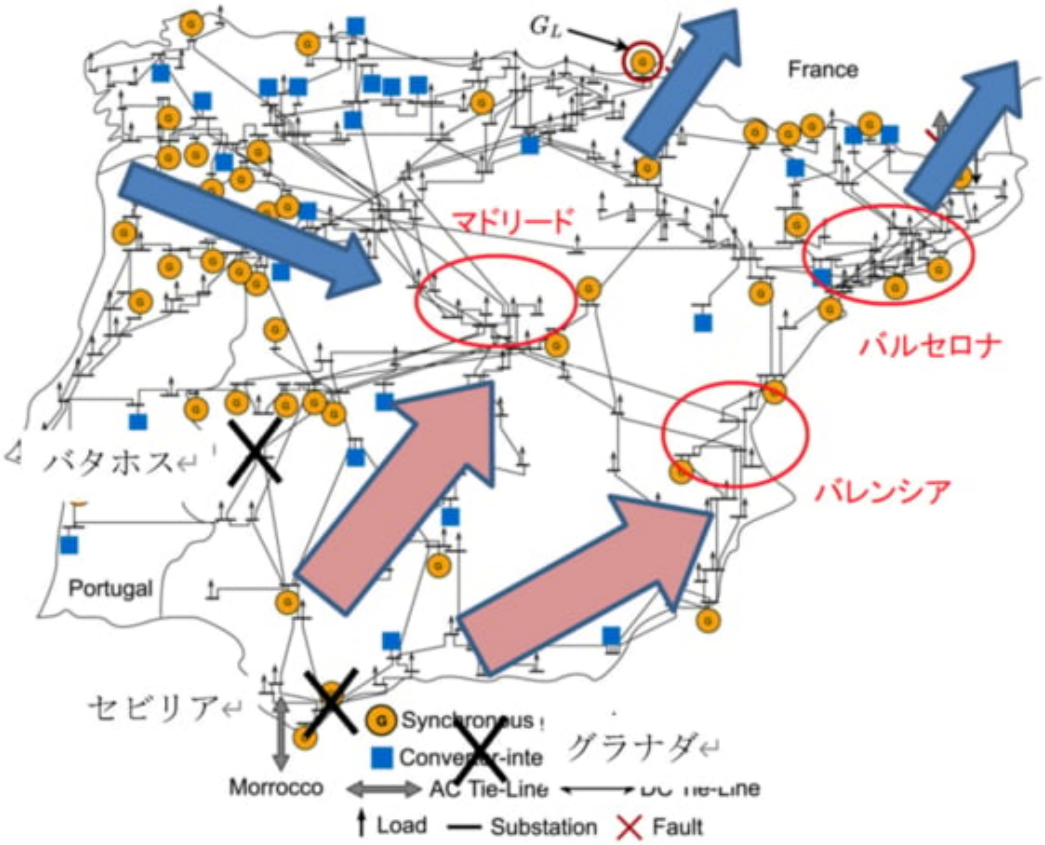
G_L
France
マドリード
バルセロナ
バタホス
バレンシア
Portugal
セビリア
グラナダ
Morrocco
AC Tie-Line
Load
Substation
Fault

?7??????????????3???????×????

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??3???

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

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

??IRA??

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

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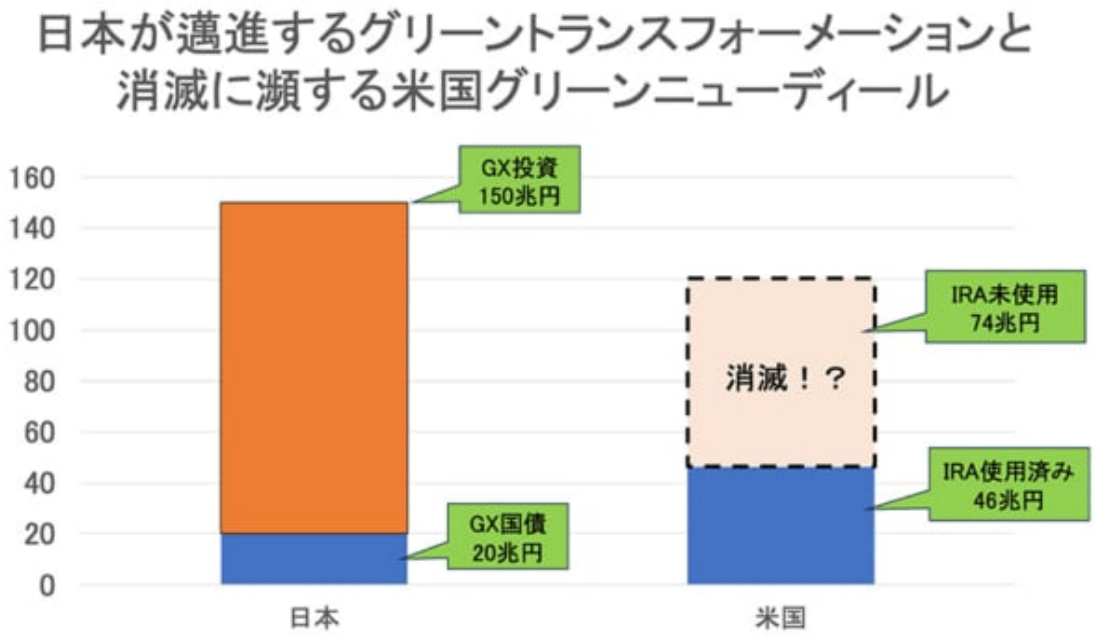

????????????????????????IRA????????????????????????????????GX????????

??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??

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

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NHK??

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

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?? ?? · Sunday, May 25th, 2025

ilbusca/iStock

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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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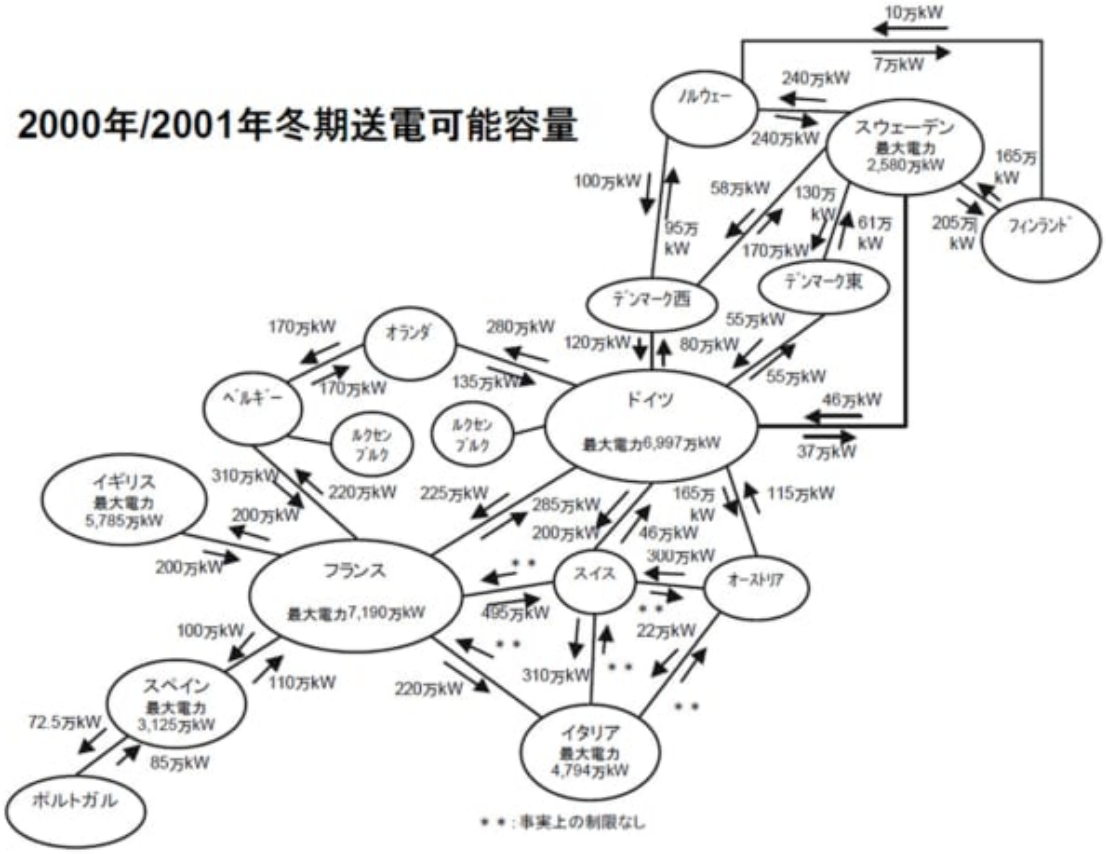
2000年/2001年冬期送電可能容量
10万kW
7万kW
240万kW
ﾉﾙｳｪｰ
240万kW
スウェーデン
最大電力
2,580万kW
165万kW
100万kW
58万kW
130万kW
95万kW
61万kW
205万kW
ﾌｨﾝﾗﾝﾄﾞ
170万kW
ﾃﾞﾝﾏｰｸ西
ﾃﾞﾝﾏｰｸ東
170万kW
ｵﾗﾝﾀﾞ
280万kW
120万kW
55万kW
80万kW
170万kW
135万kW
ﾍﾞﾙｷﾞｰ
ﾄﾞｲﾂ
最大電力6,997万kW
55万kW
46万kW
ﾙｸｾﾝﾌﾞﾙｸ
ﾙｸｾﾝﾌﾞﾙｸ
37万kW
イギリス
最大電力
5,785万kW
310万kW
220万kW
225万kW
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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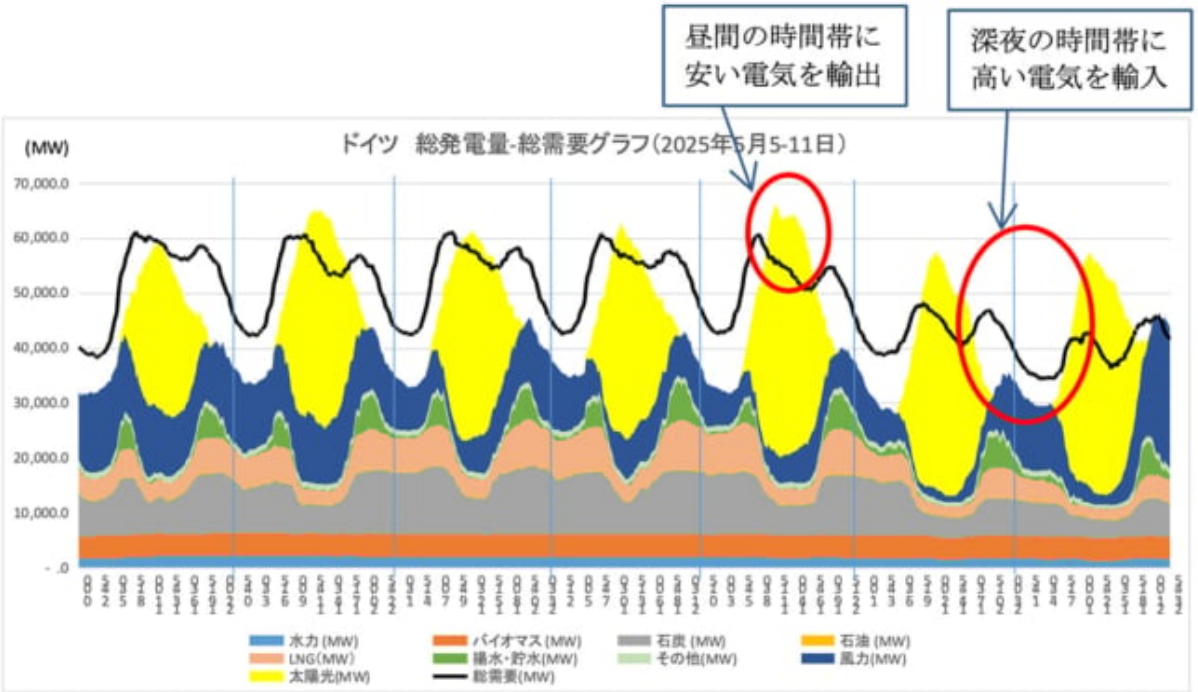
?2???????1???



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

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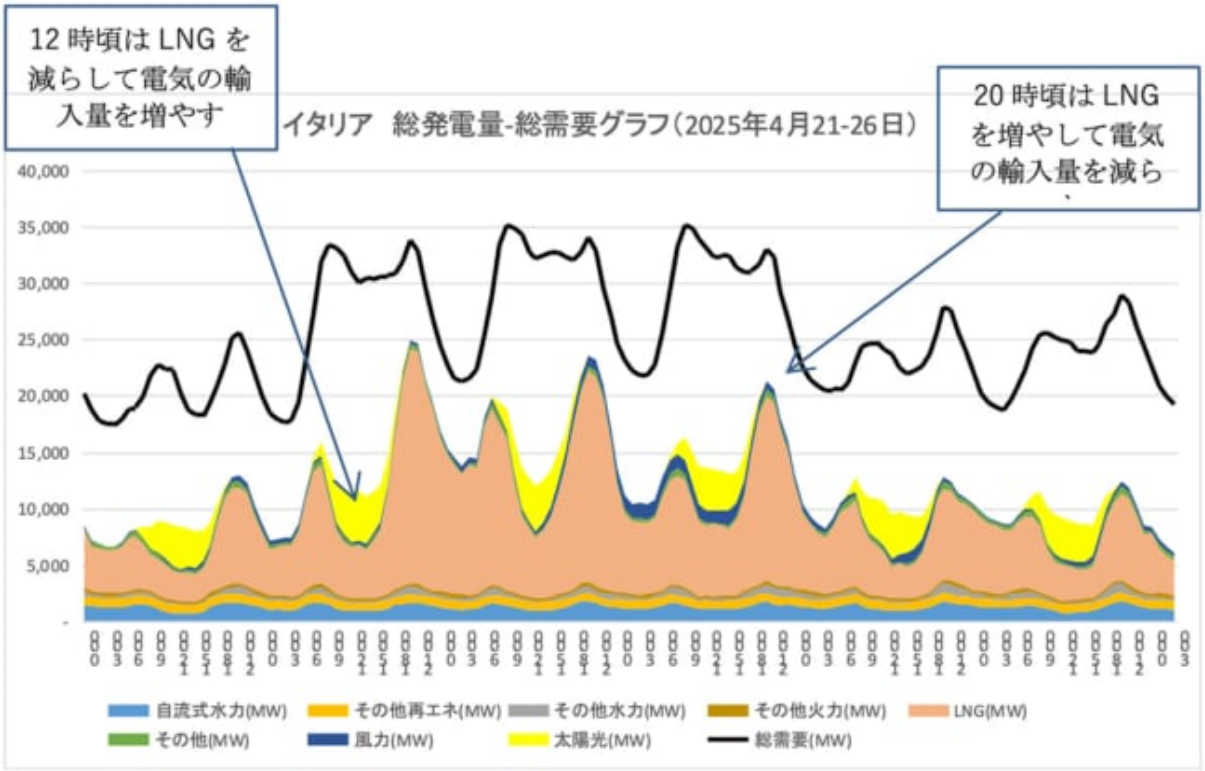

?3??????????????????
Energy-chart??

??????LNG??????????????12??????????????????????????????????????LNG????????????????????????
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IEA?????????????????????????70????????????????????4?????????????????????????4????????????????????
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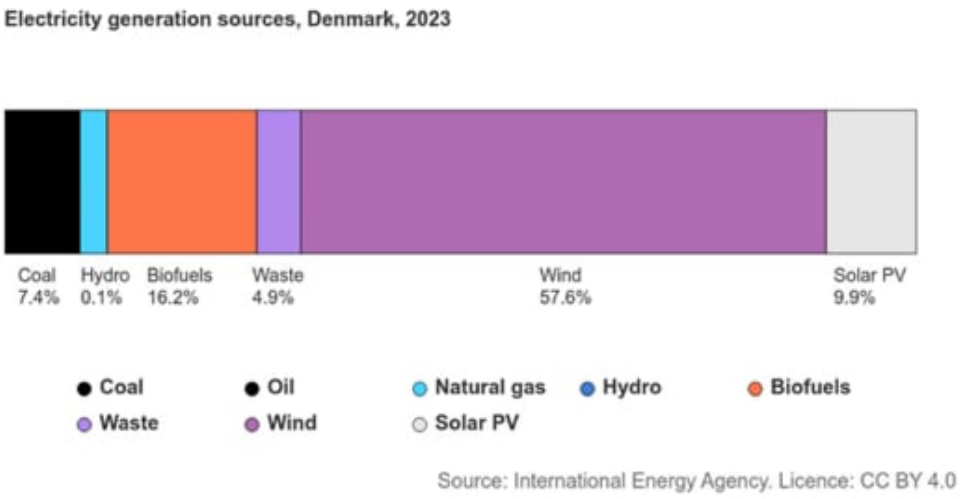

?4?????????????????2023??
IEA????

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

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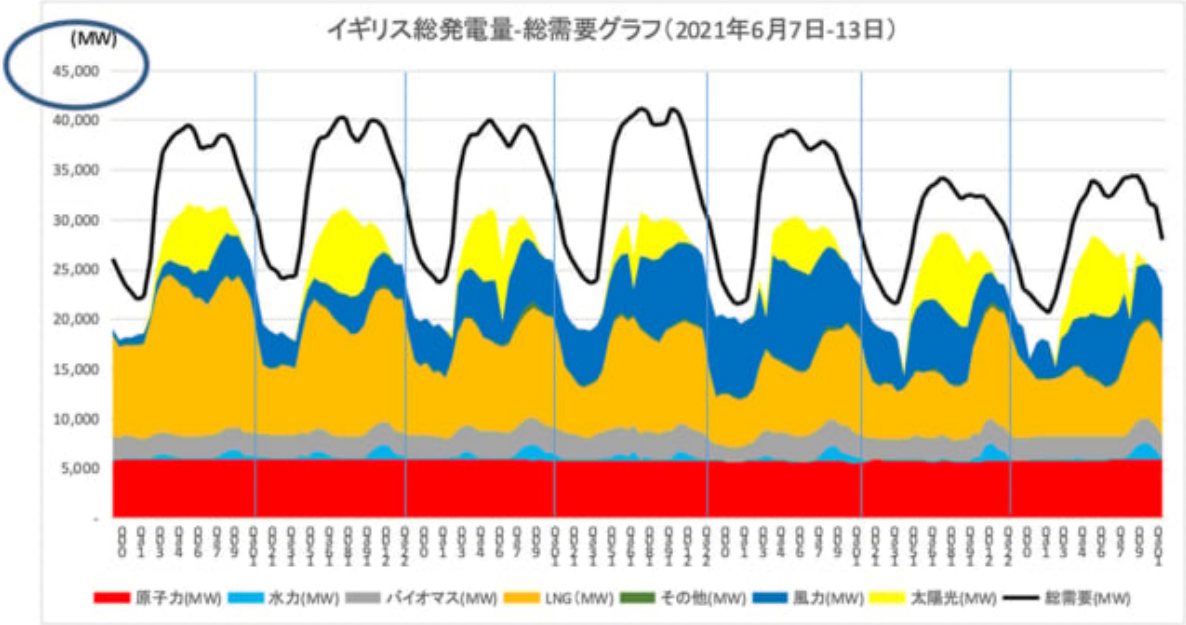
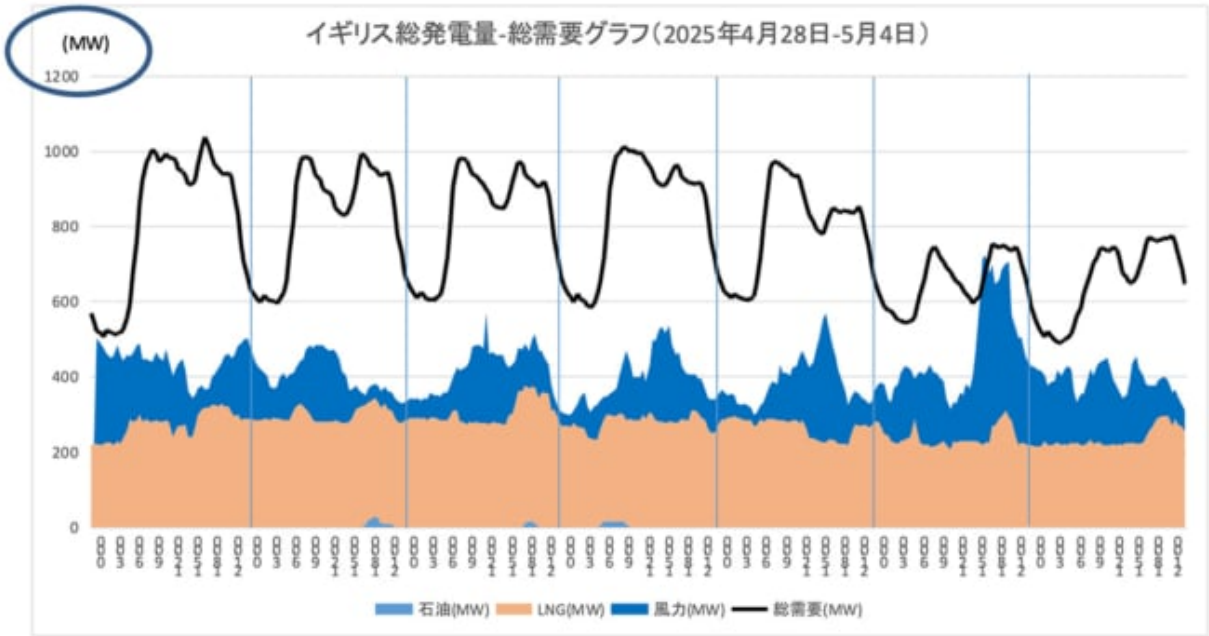
??????????????6??????????????????????????????????????2021?6?7??13?????????????

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



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

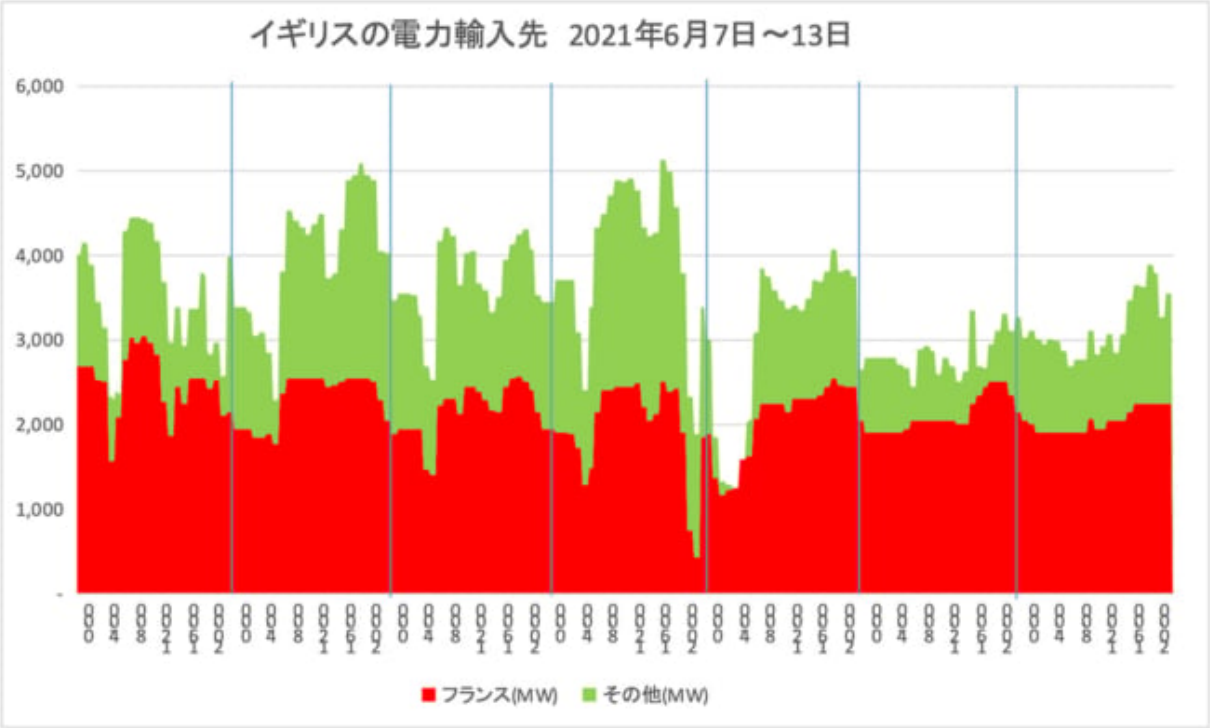


?7?????????????????????2025?4?28??5?4??
Energy-chart??

??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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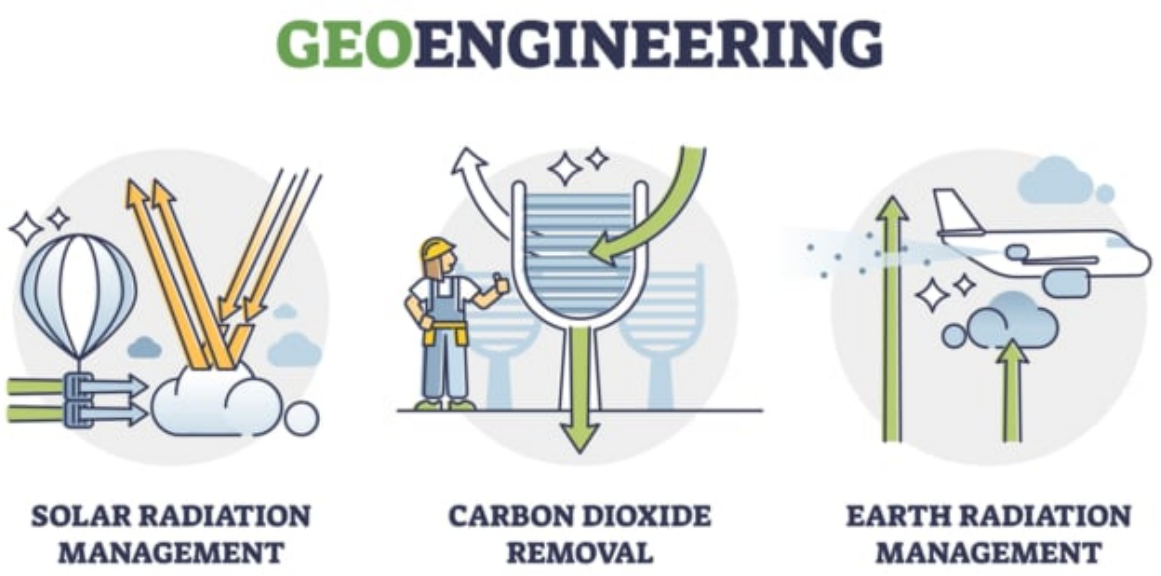
?? ?? · Wednesday, May 21st, 2025



VectorMine/iStock

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

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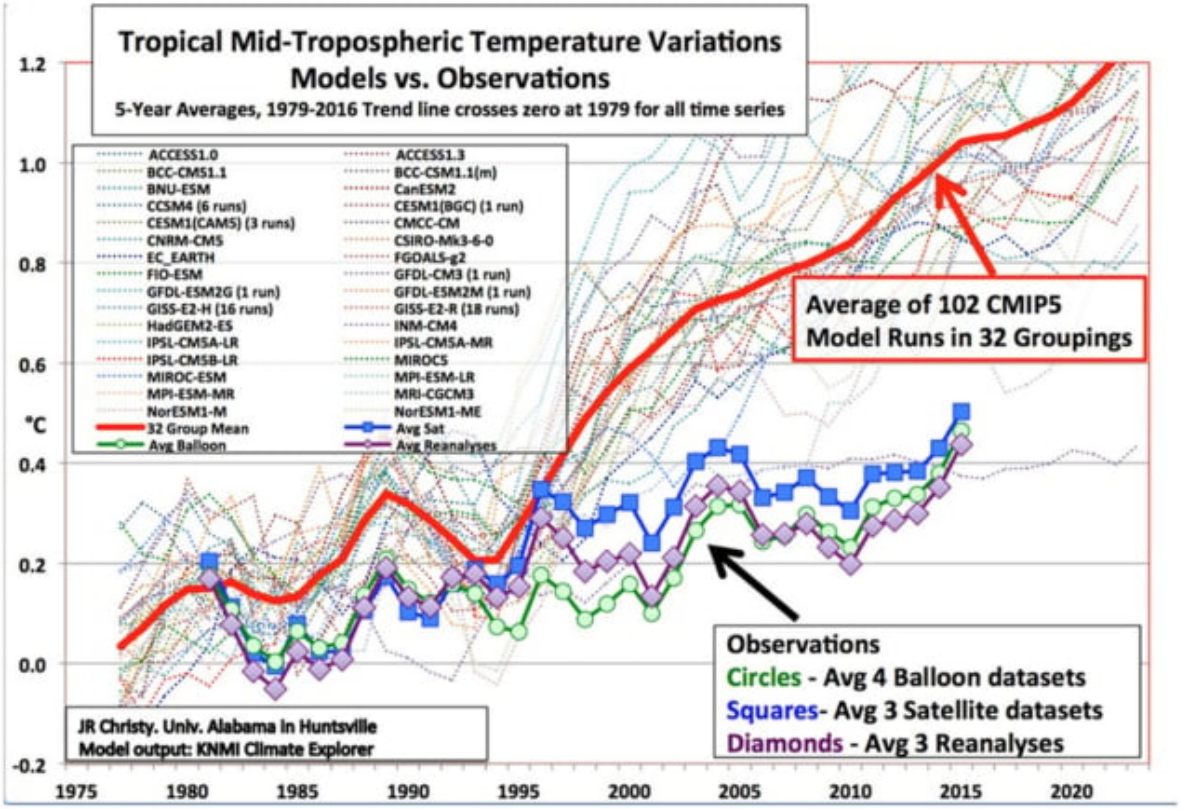
????????????????????EPA?????????????CMIP5??????????????40?????????????????????????1??????????????????????????????????????



?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????????????????“???”???
- ?????????????????????

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

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

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??GX??

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 国際合意への建前的参加（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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7. ????

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??[?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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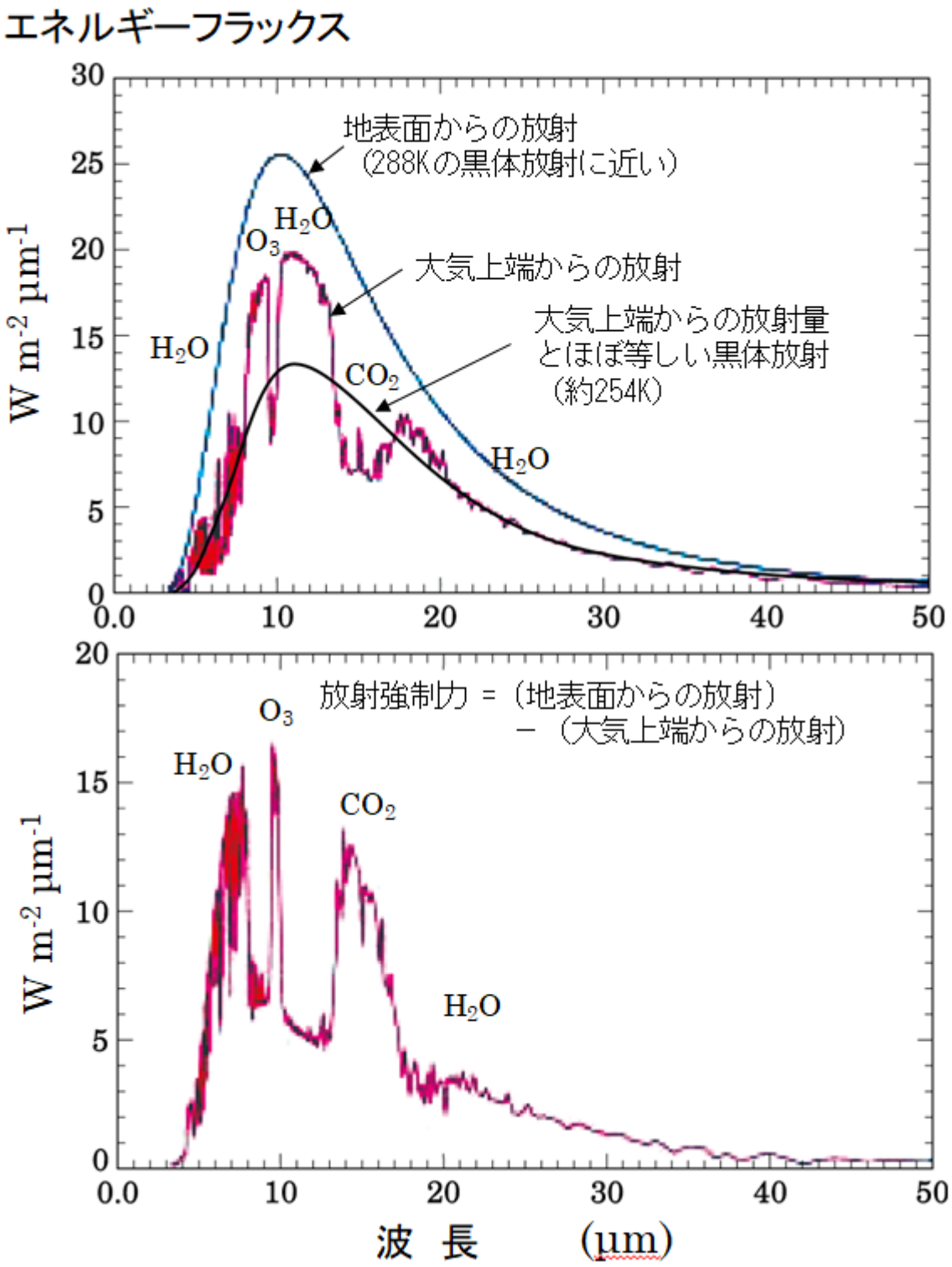
???CO_2????????????????????????????????????CO_2??CO_2??CO_2??CO_2????????????????

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

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

IPCC??CO_2????????????????????????????????1????????????????????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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Posted in ???, ????? | No Comments »

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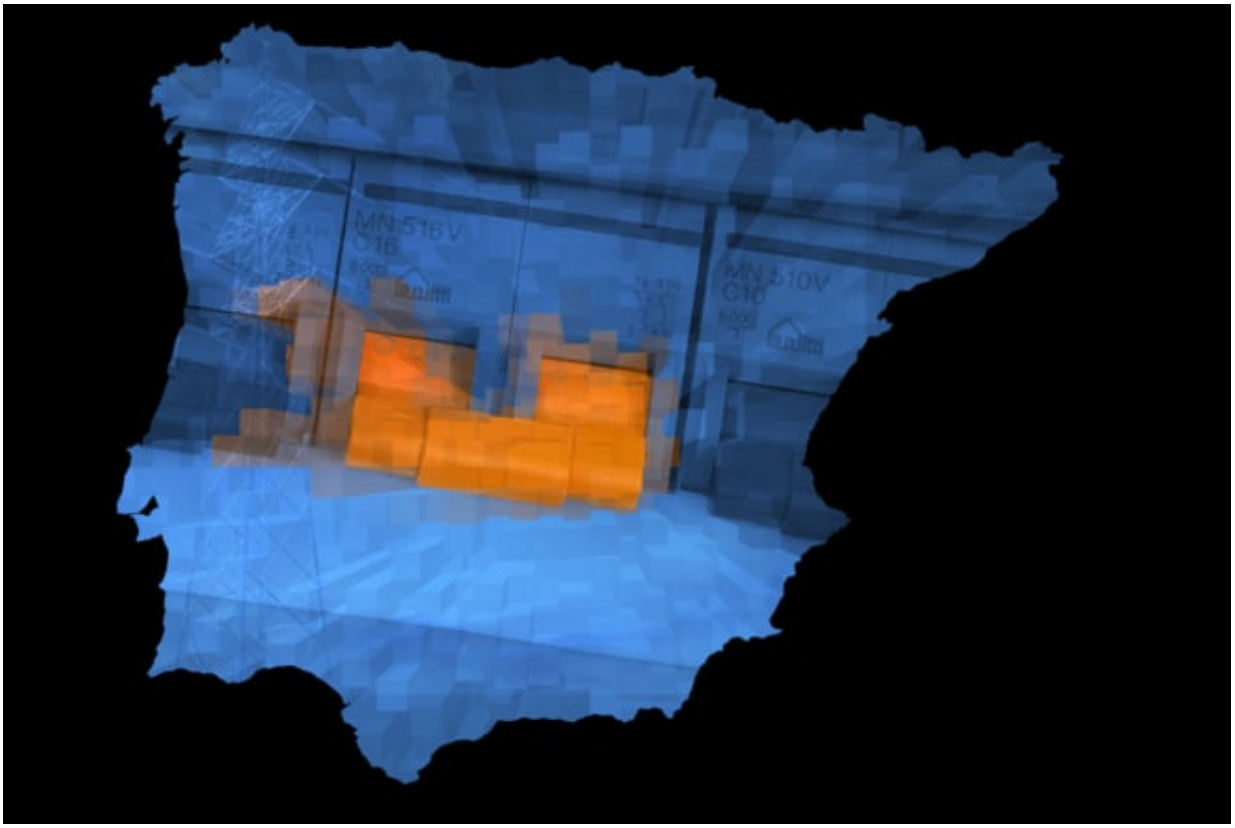
??? ?? · Monday, May 12th, 2025

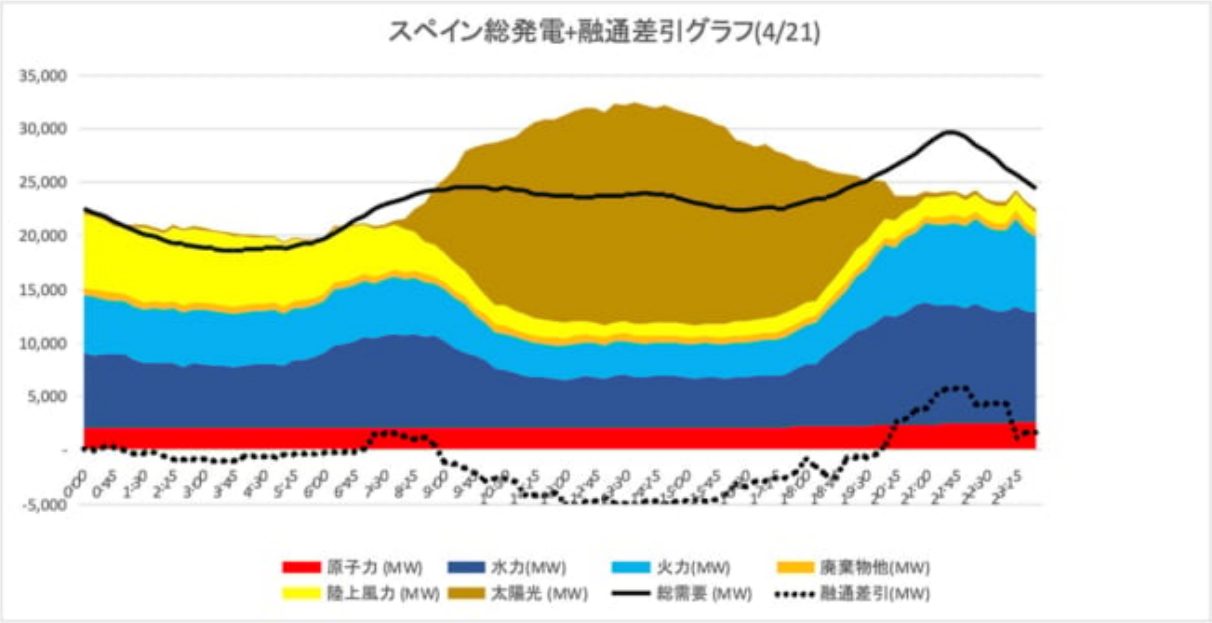


Jose Gonzalez Buenaposada/iStock

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

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

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

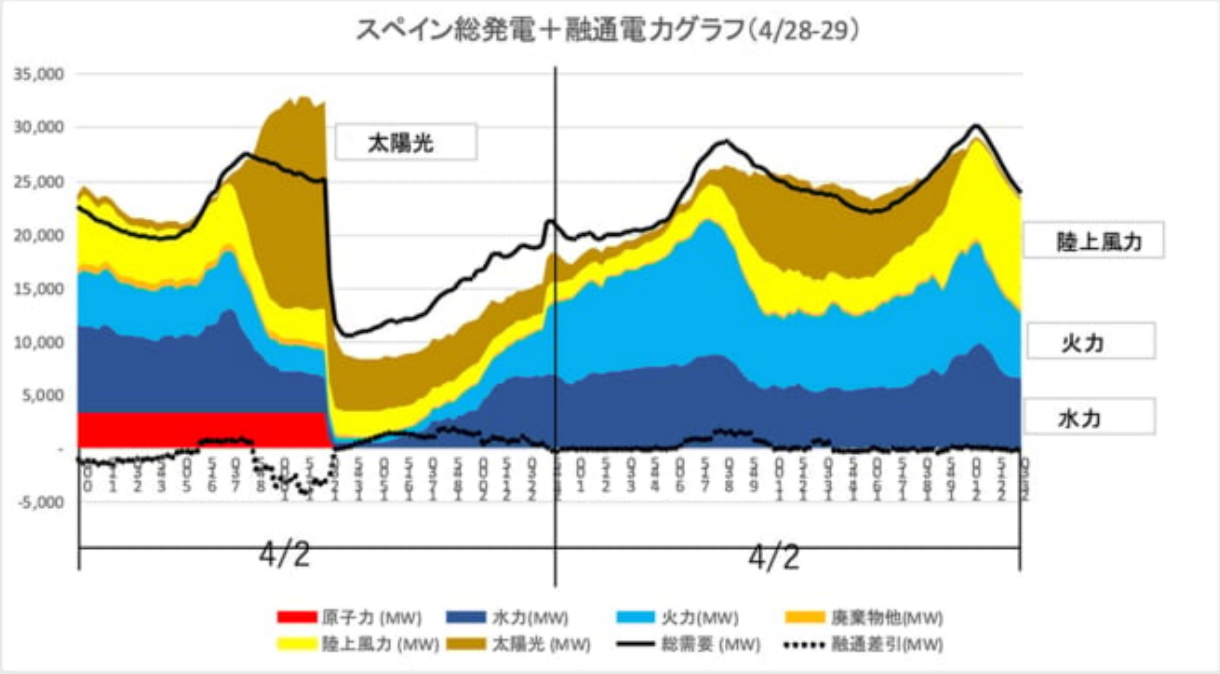

スペイン総発電+融通差引グラフ(4/21)
35,000
30,000
25,000
20,000
15,000
10,000
5,000
-
-5,000
原子力 (MW)
水力(MW)
火力(MW)
廃棄物他(MW)
陸上風力 (MW)
太陽光 (MW)
総需要 (MW)
融通差引(MW)

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

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

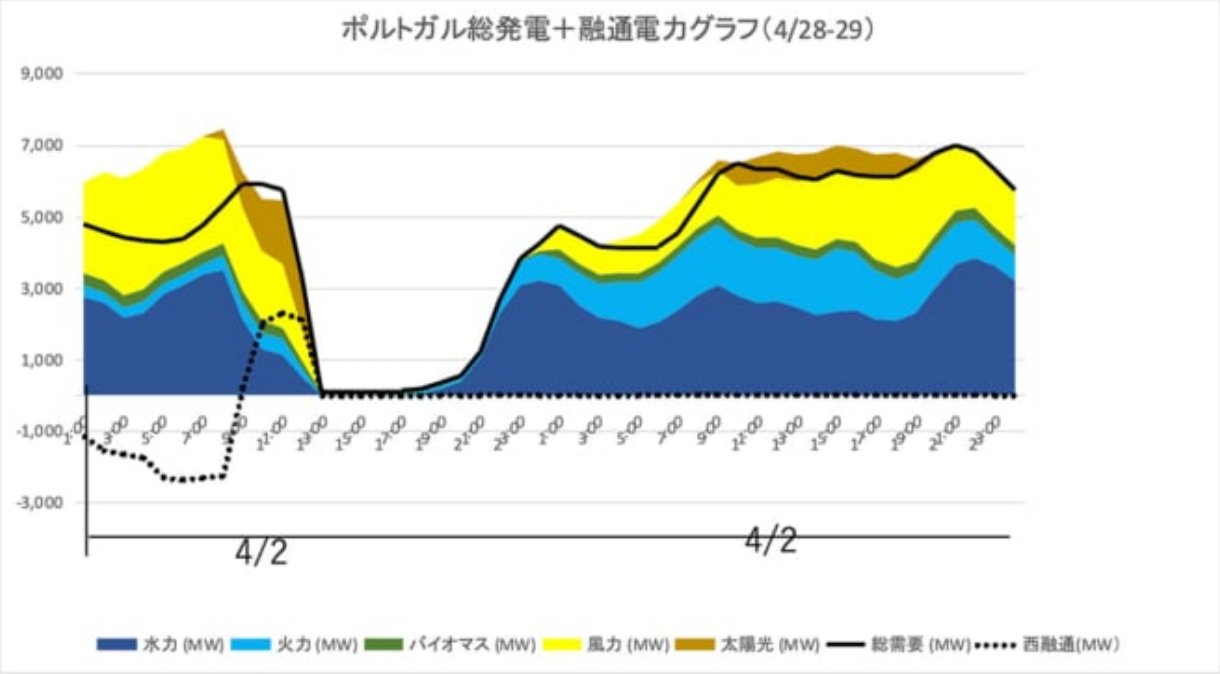
2. ?????????????????

?3??



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

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



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

?5??

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

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

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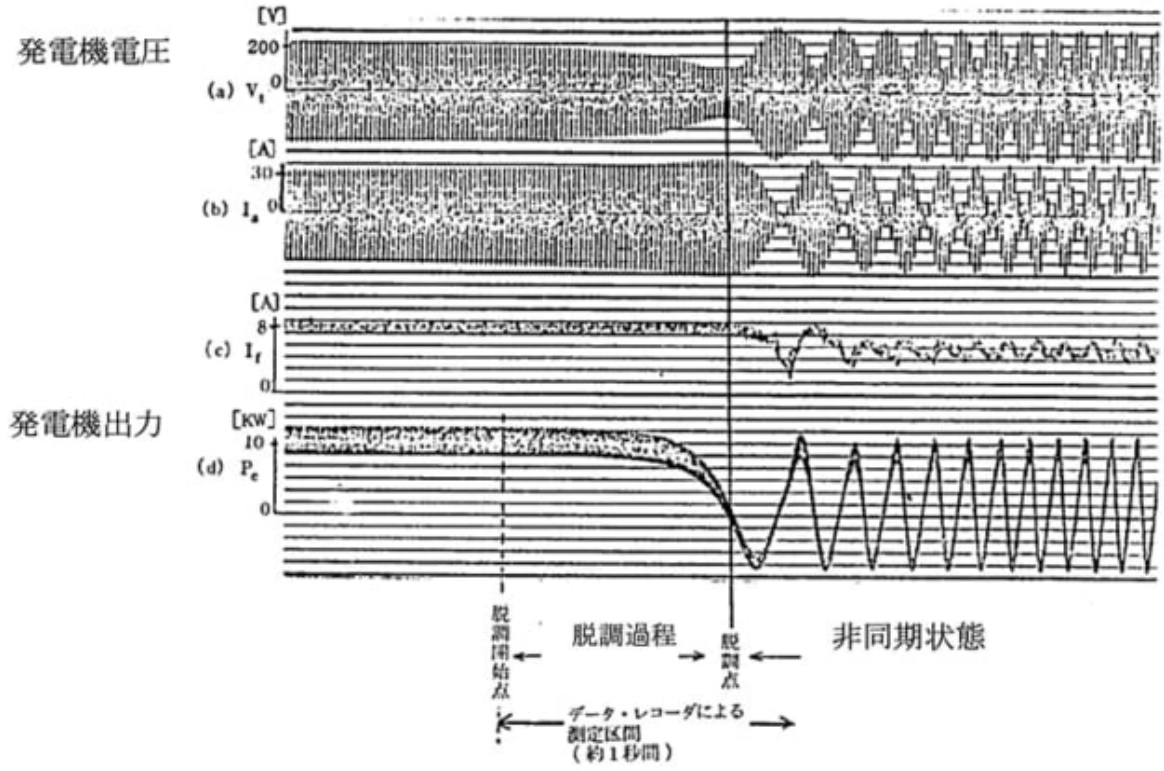

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??2????????15V????????????????????????
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???2??????????????**????????induced atmospheric vibration??6????????????????????
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6. ???????????

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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?	?…??…? (???)
??5?? ????2023?6? ??????	???	??1 ??? ?1?	???…? (??????????)
GX??????????GX?????????5?2023??2?1??????	????	p.1??????	???…2030????????46????2050??

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

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

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

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?? ?? · Saturday, May 10th, 2025

rkankaro/iStock

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

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

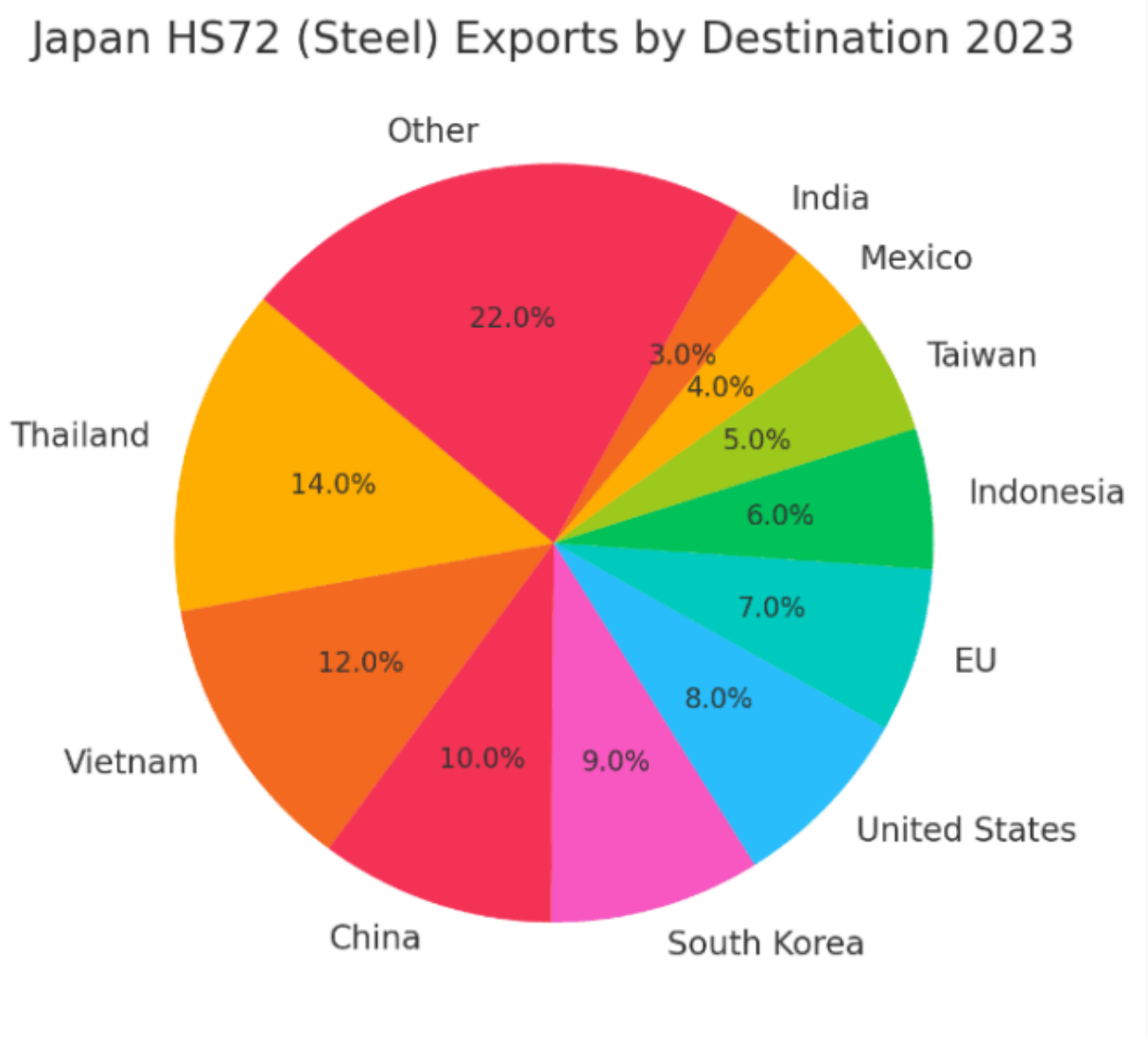
EU??????BRICS?????????????????????

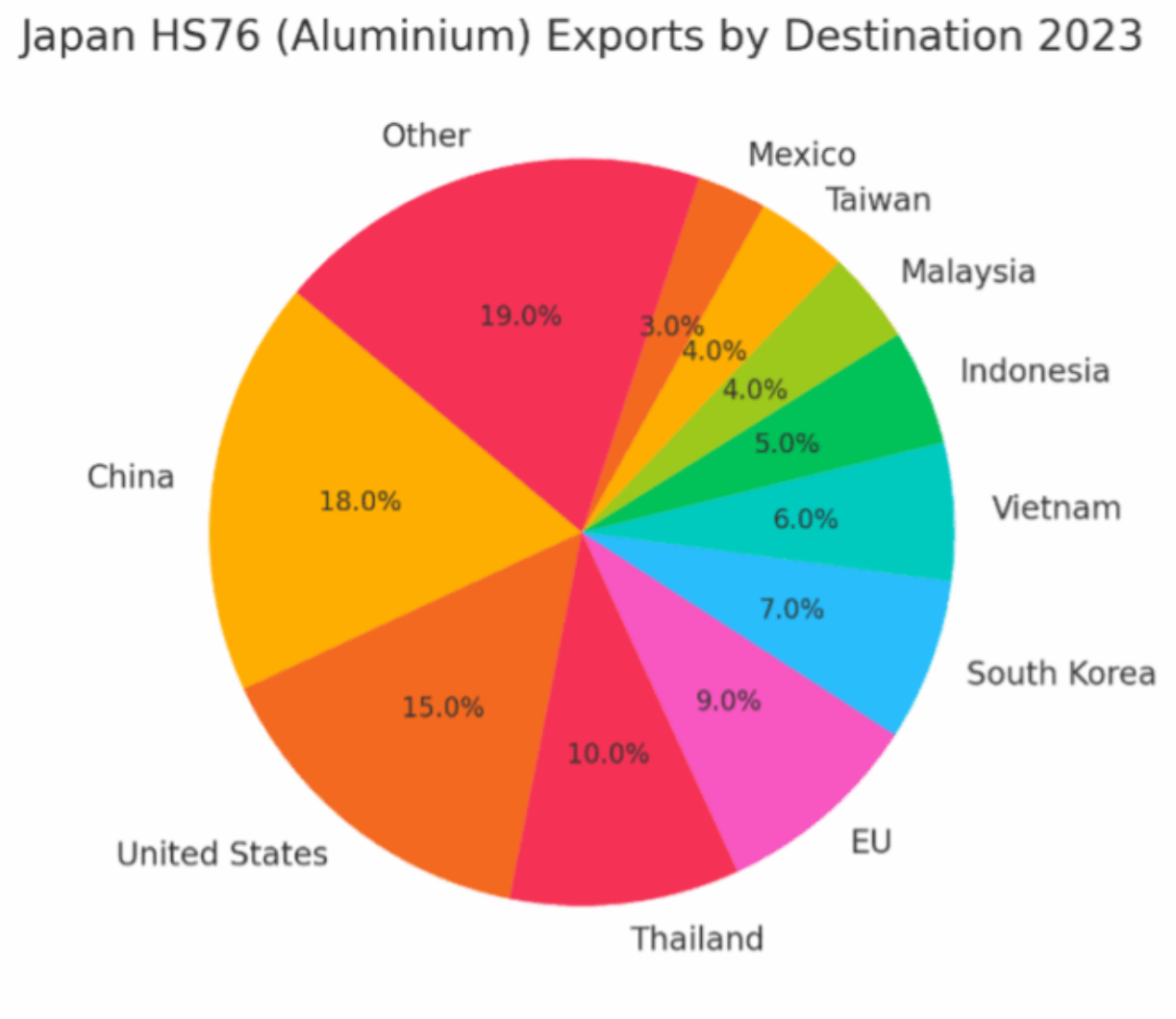
EU?????????????????????????

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

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

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





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

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

????????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??

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

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?? ?? · 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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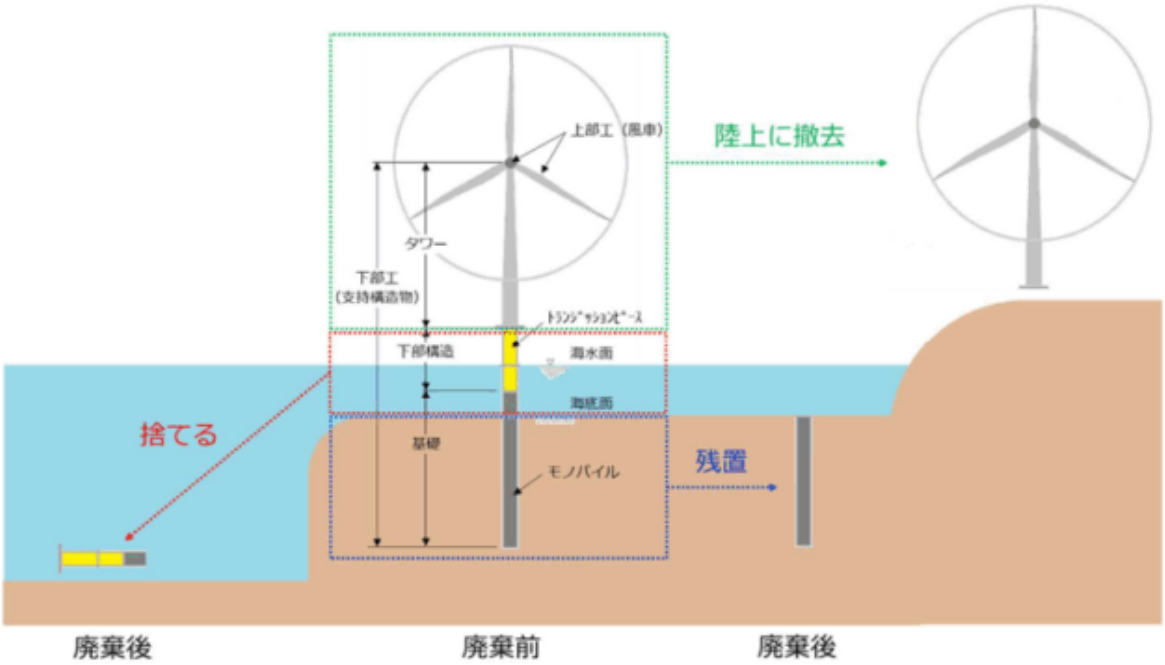

図 5　告示における「残置」と「捨てる」の違い

（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???…??

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

??? (blackout-news.de)

> ???

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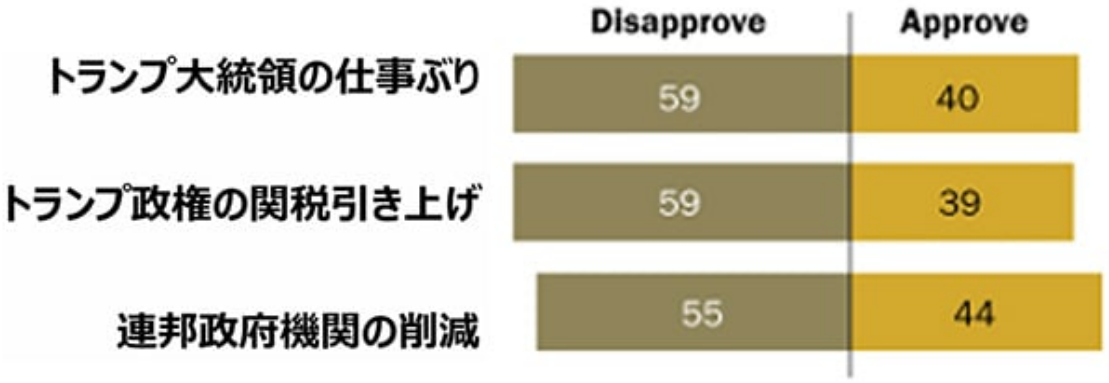
???????X??

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。

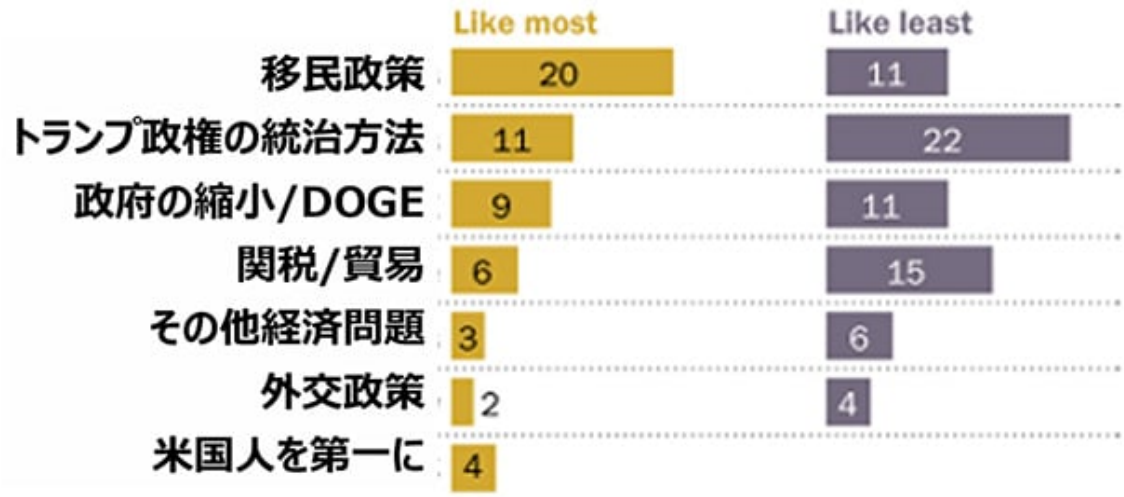
?1??????????????????
???Rasmussen

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



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

??3??

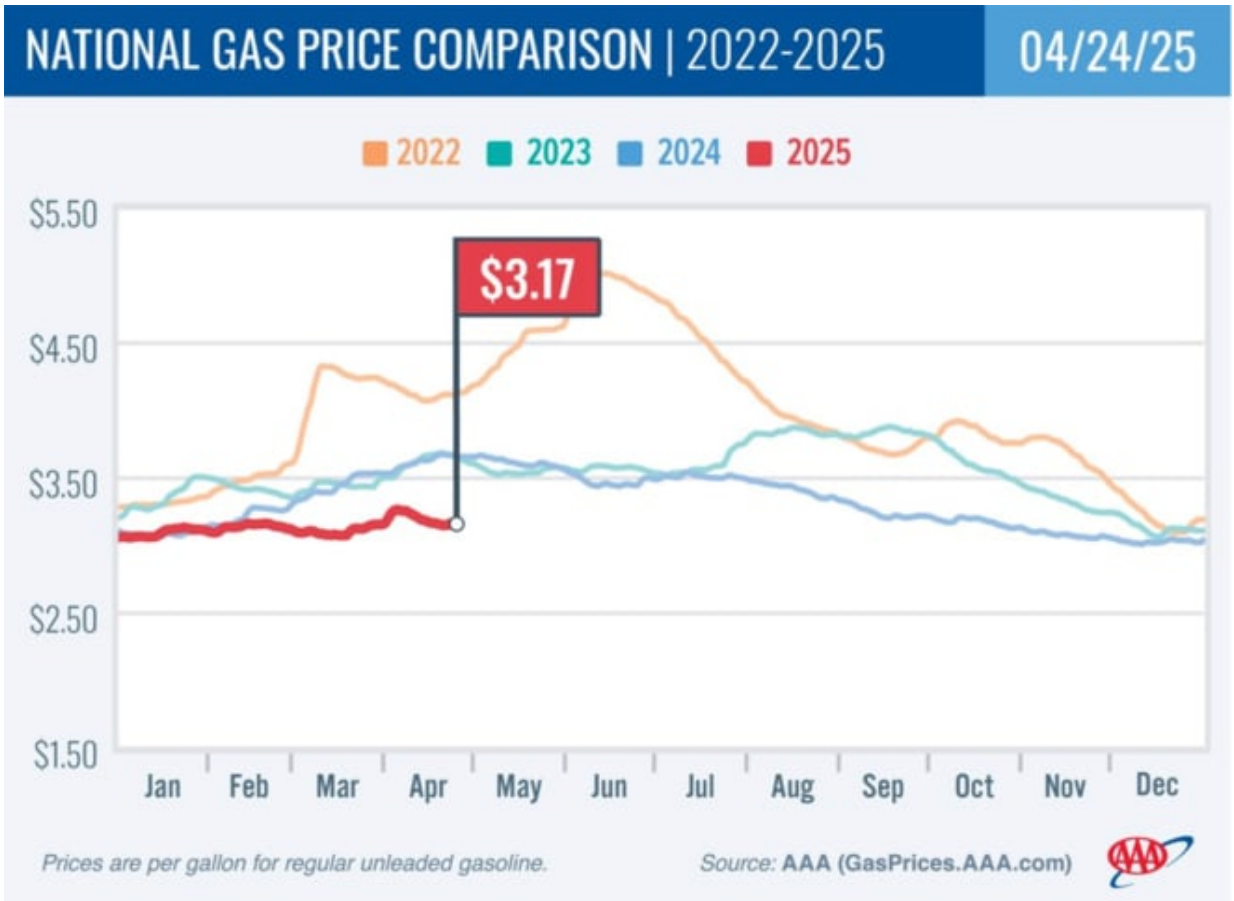


?3??????????????????

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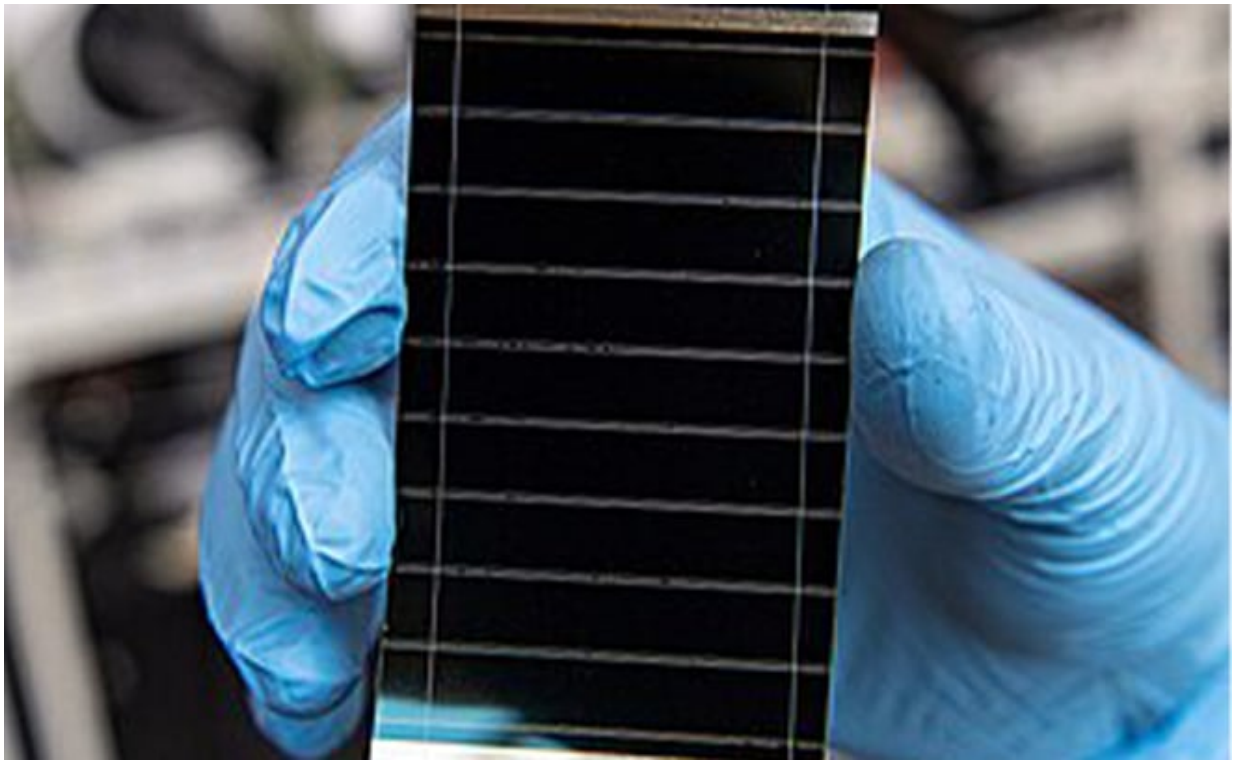
??26.?????????????????????????????????28.6????????????

??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 »

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?? ?? · Friday, May 2nd, 2025

EyeEm Mobile GmbH/iStock

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

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

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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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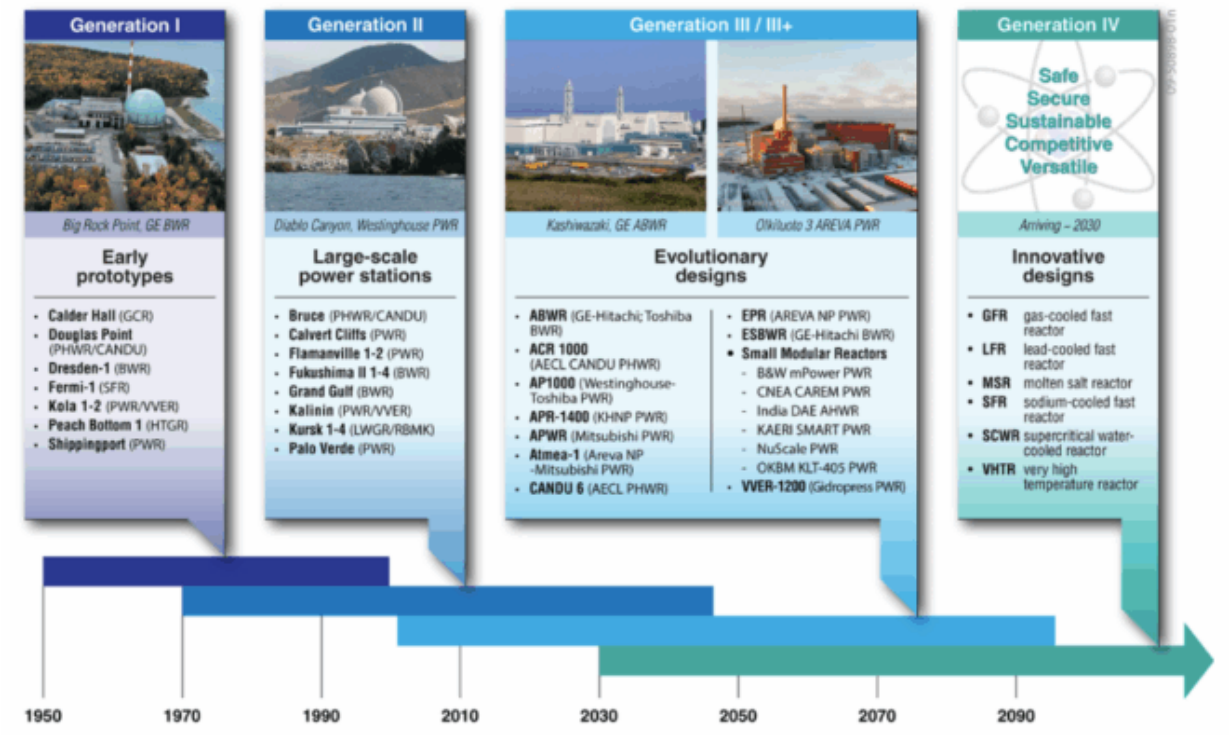
??Self-Consistent Nuclear Energy System?SCNES??????4?????????????????????Generation IV International Forum?GIF??????????SCNES?????????????????????[?1?]?

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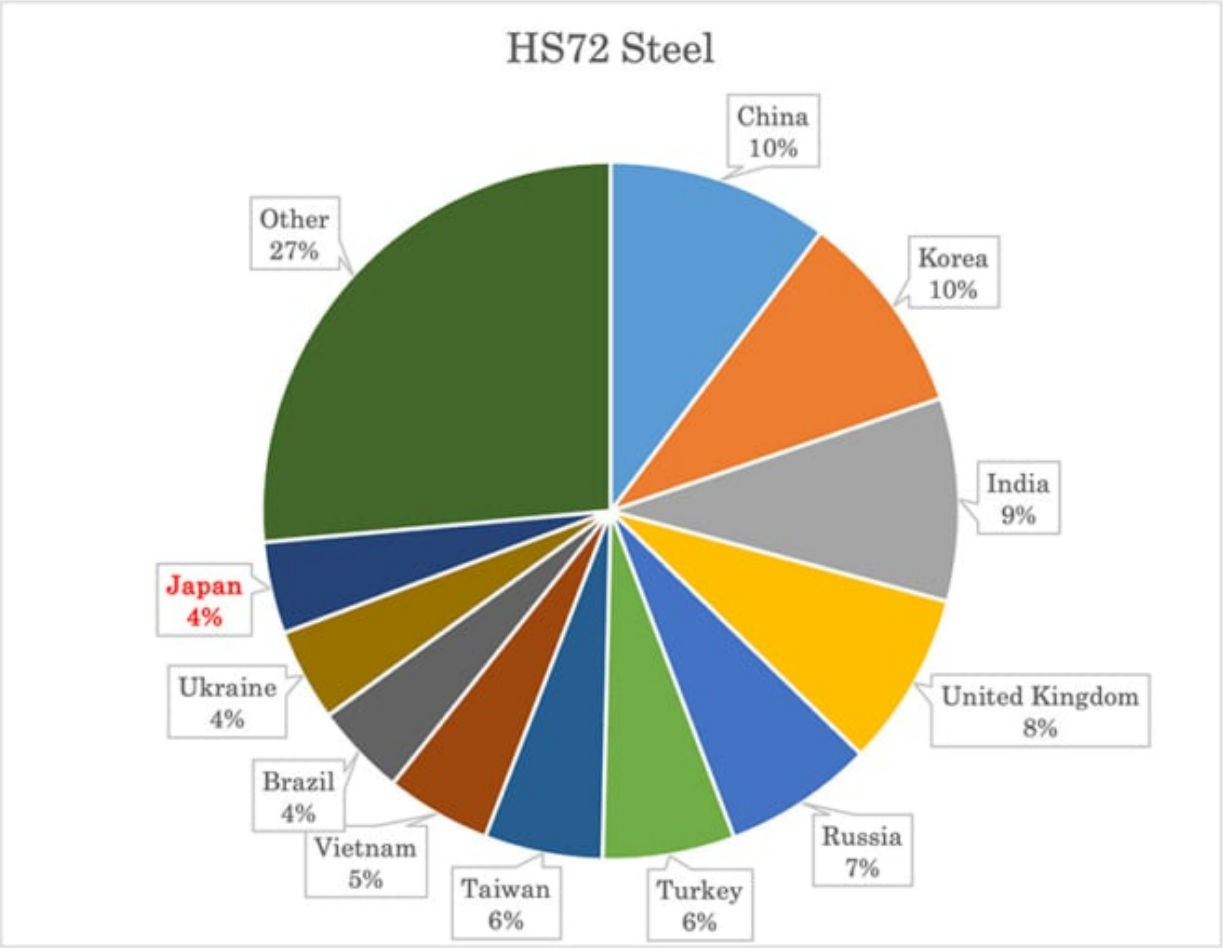
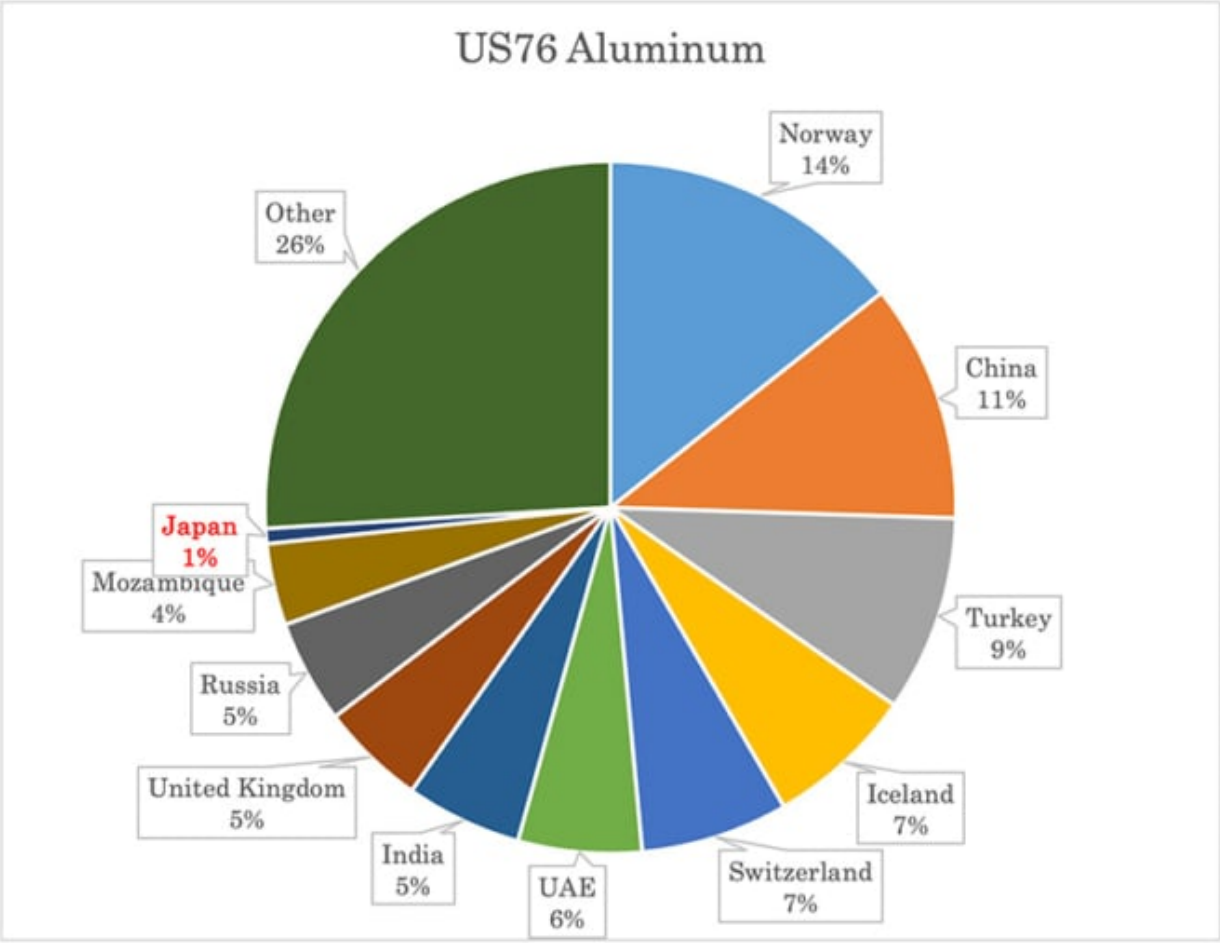
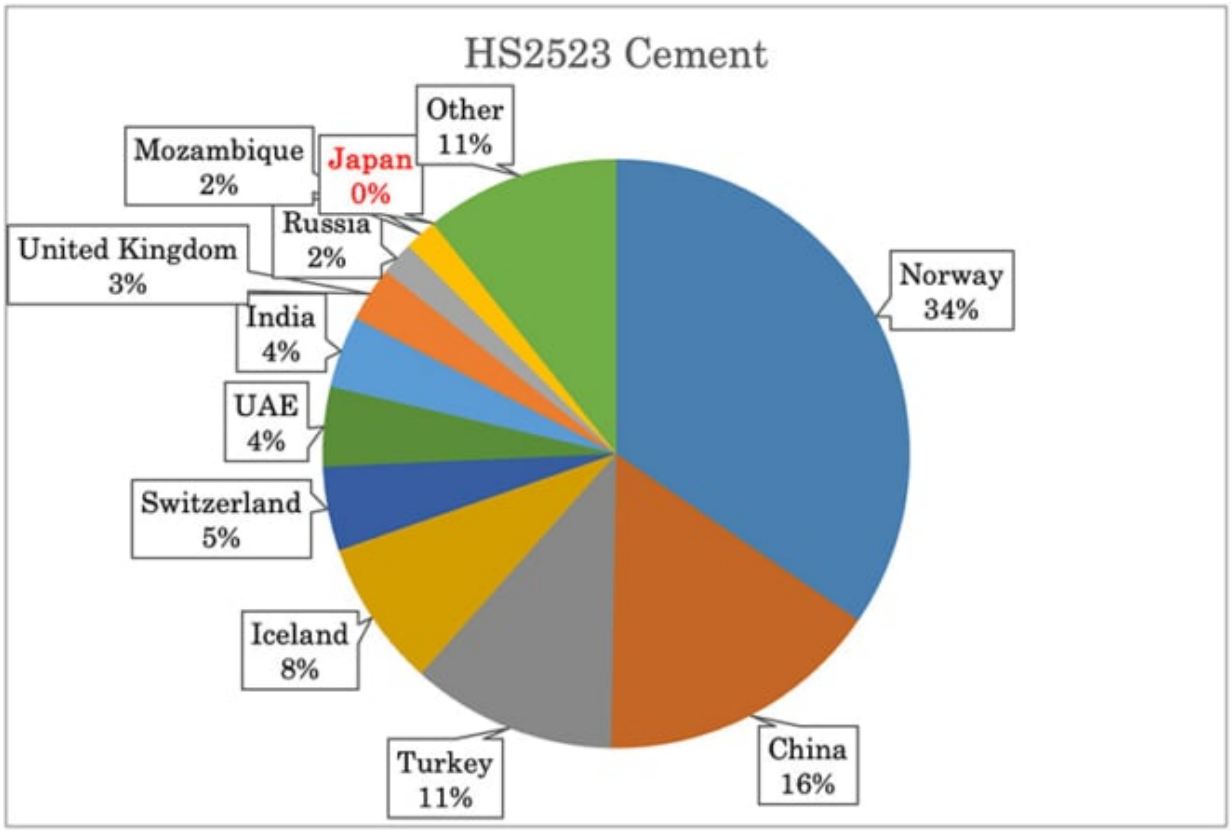
- EU? ??EU????????
- ???LCA?????????????????????????
- ETS??? €100/t ???????????????? **1.25?**????

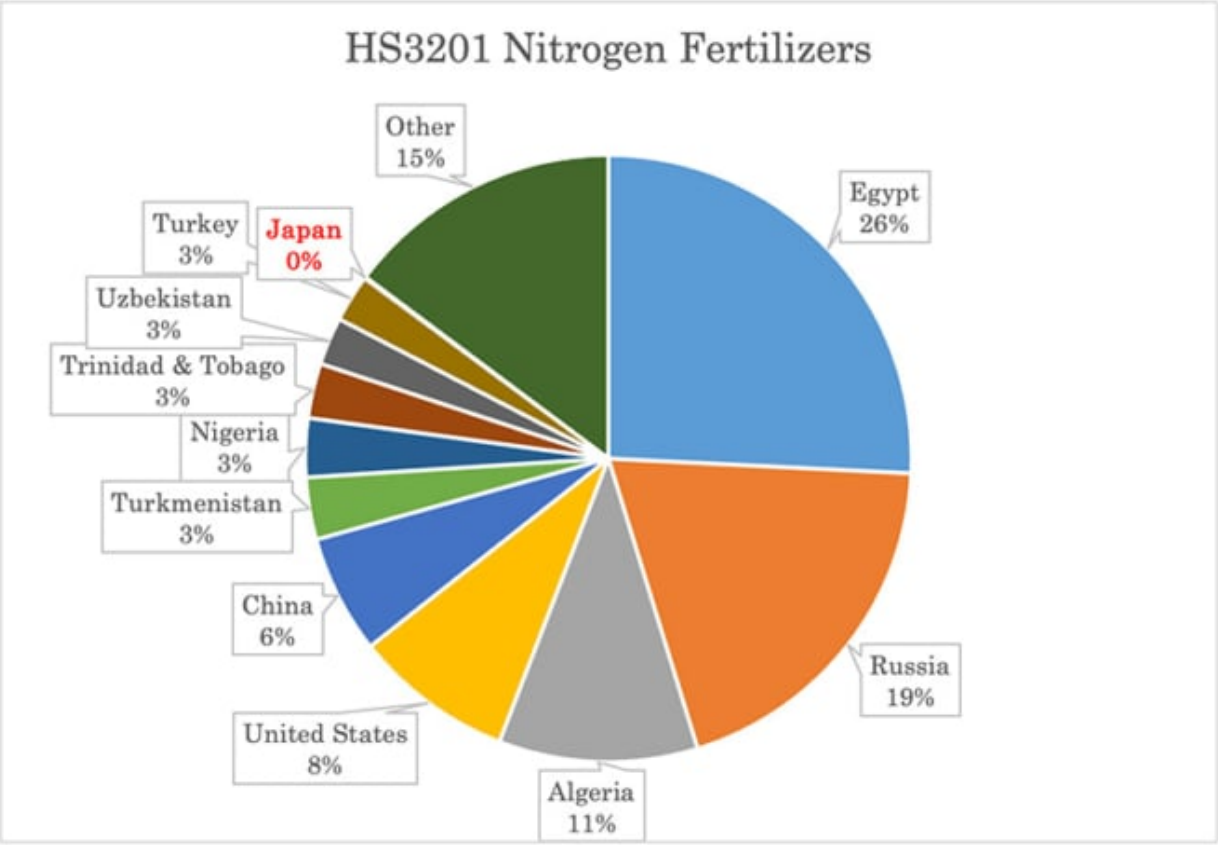
2. CBAM??????????????????

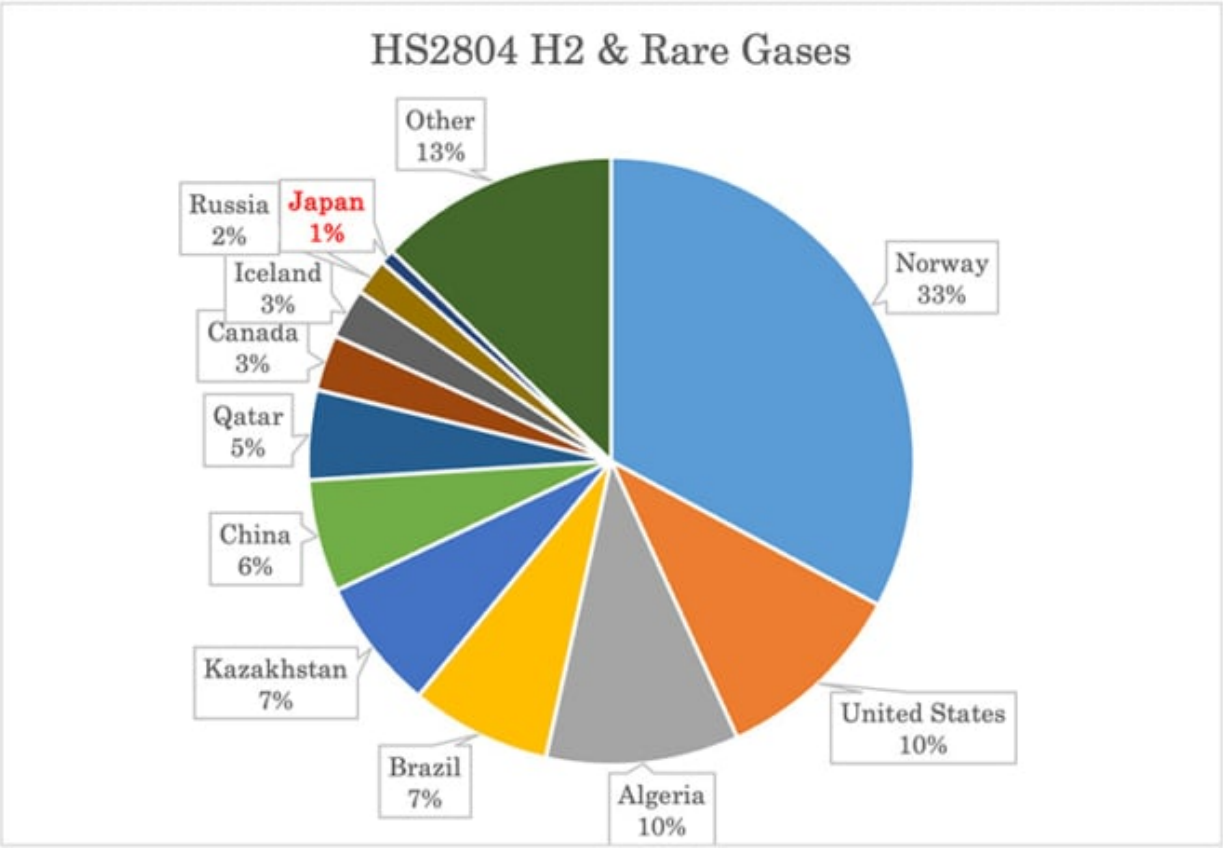
??????????????????????????EU???????100??????????????????????????6??

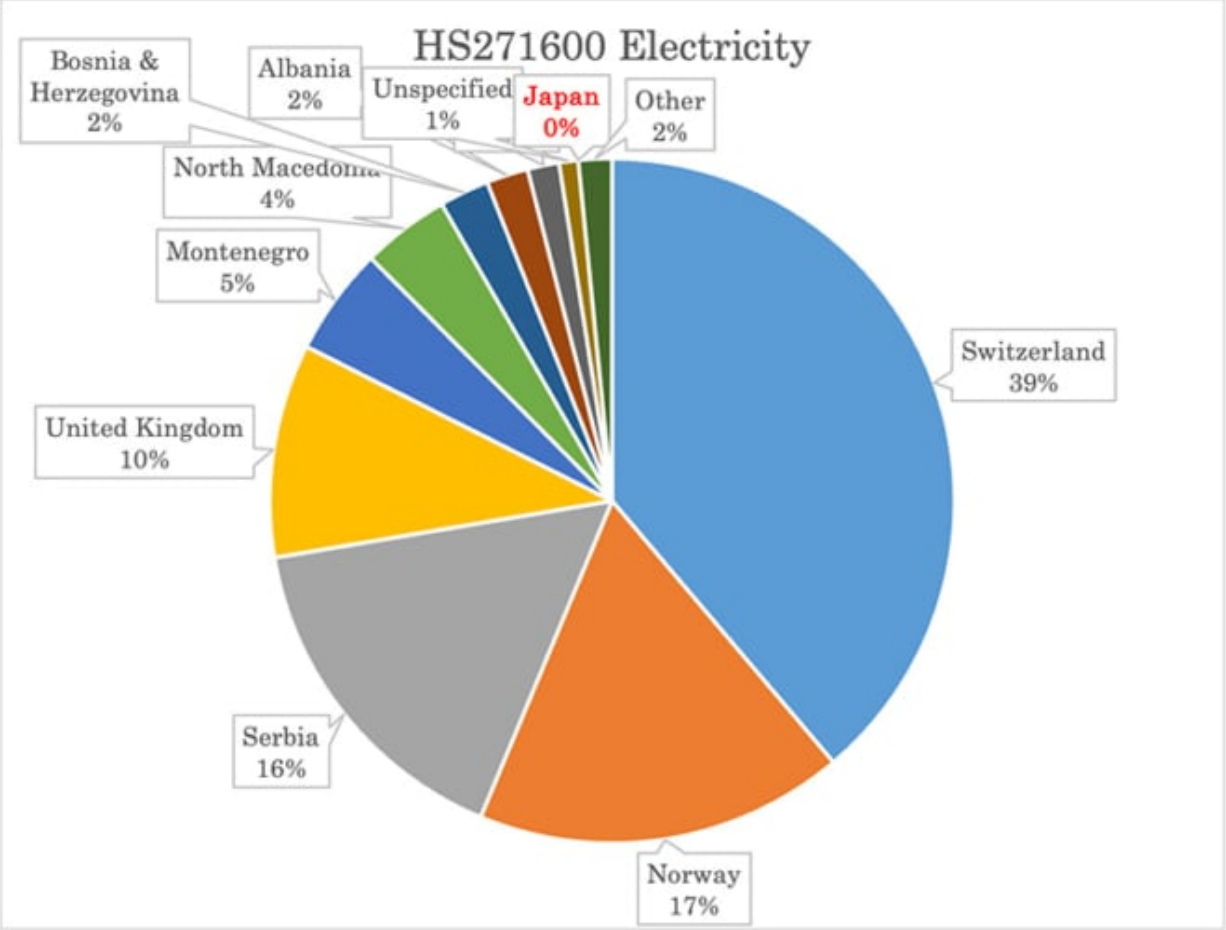



US76 Aluminum
Norway 14%
China 11%
Turkey 9%
Iceland 7%
Switzerland 7%
UAE 6%
India 5%
United Kingdom 5%
Russia 5%
Mozambique 4%
Japan 1%
Other 26%


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

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

????????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

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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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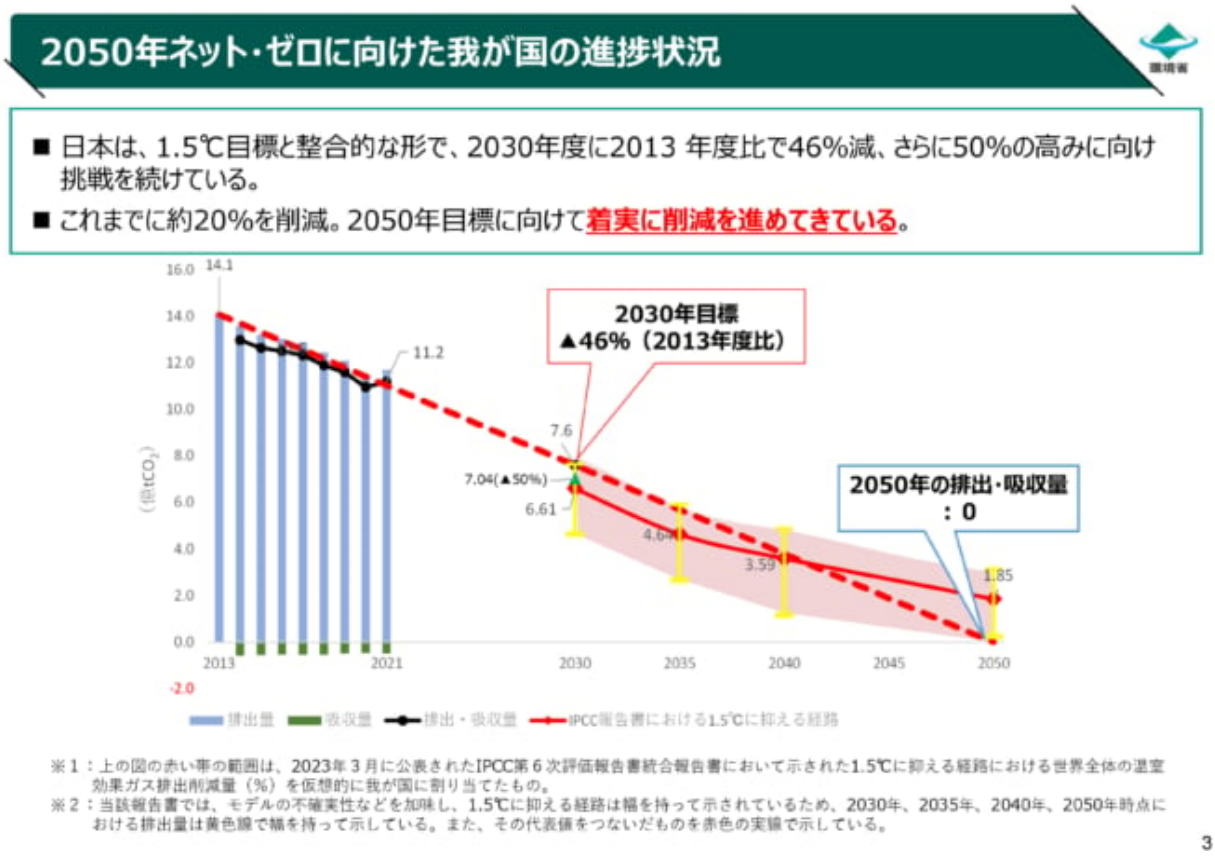
?? ?? · Monday, April 28th, 2025

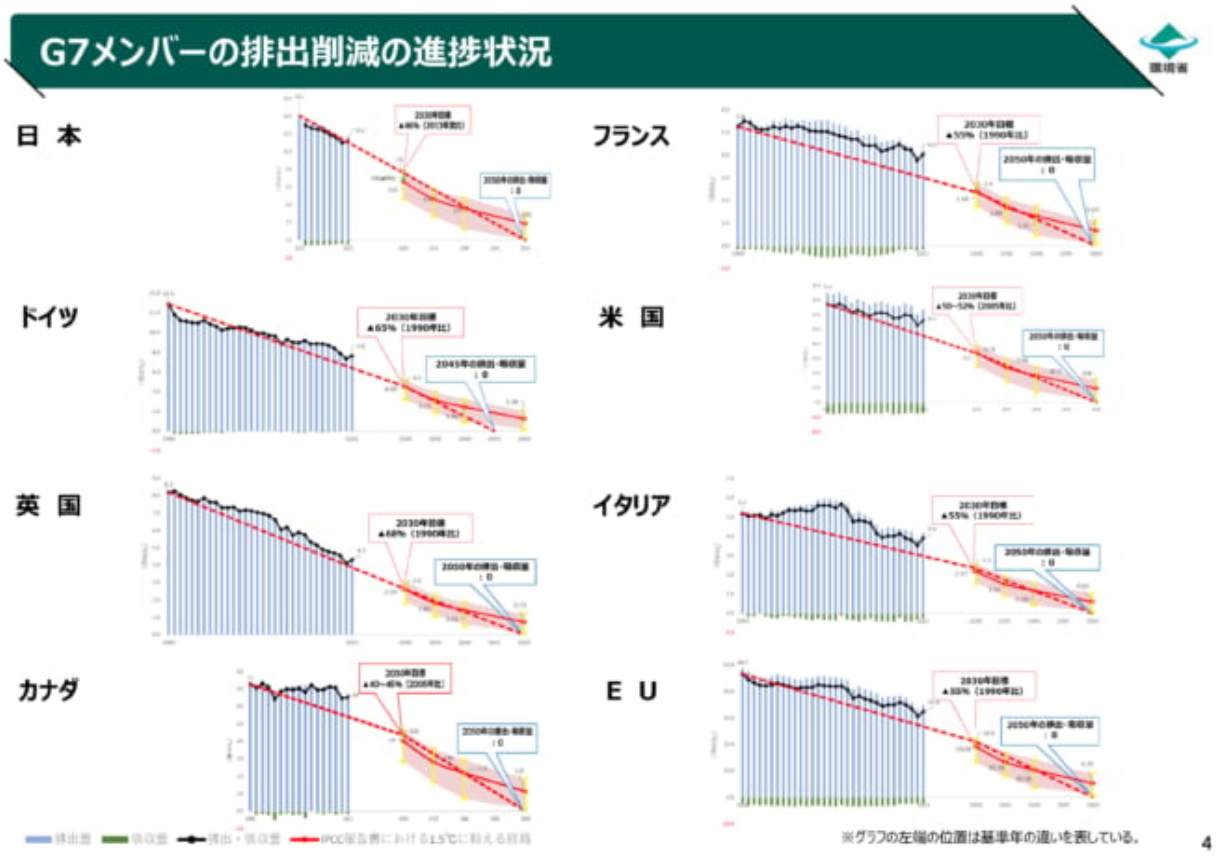
Floriana/iStock

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



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

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



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

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

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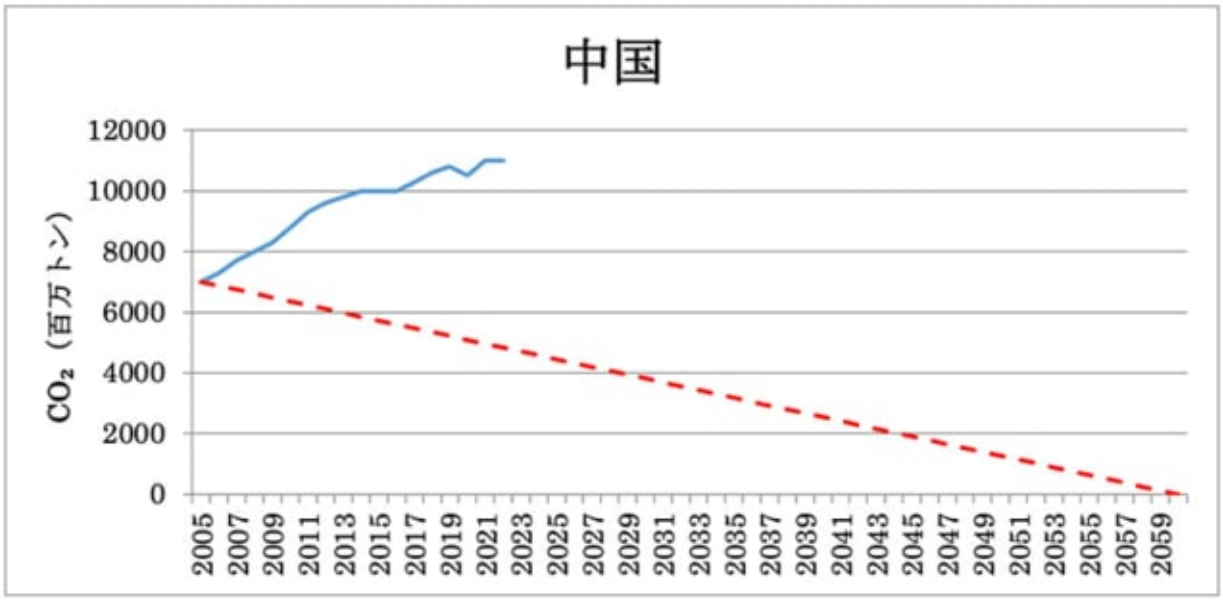
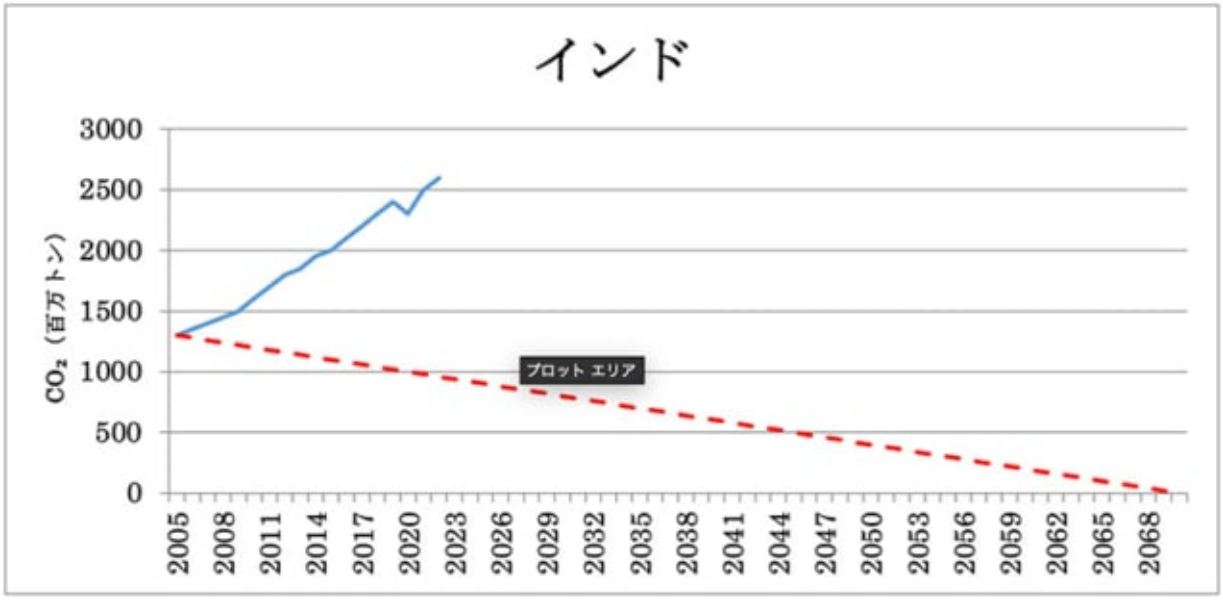
??2060??????2070????CO2??





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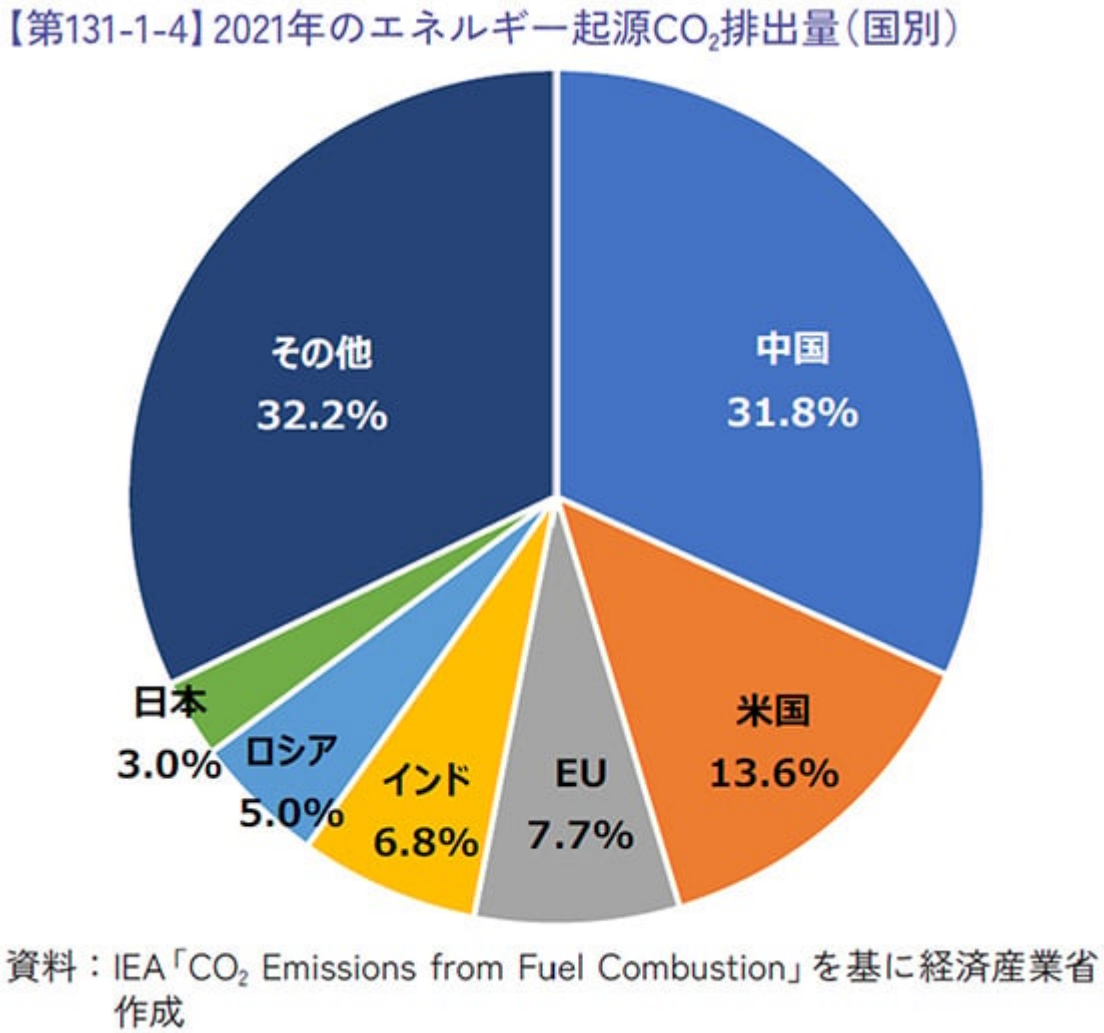
【第131-1-4】2021年のエネルギー起源CO2排出量（国別）
その他
32.2%
中国
31.8%
米国
13.6%
EU
7.7%
インド
6.8%
ロシア
5.0%
日本
3.0%
資料：IEA「CO2 Emissions from Fuel Combustion」を基に経済産業省作成

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

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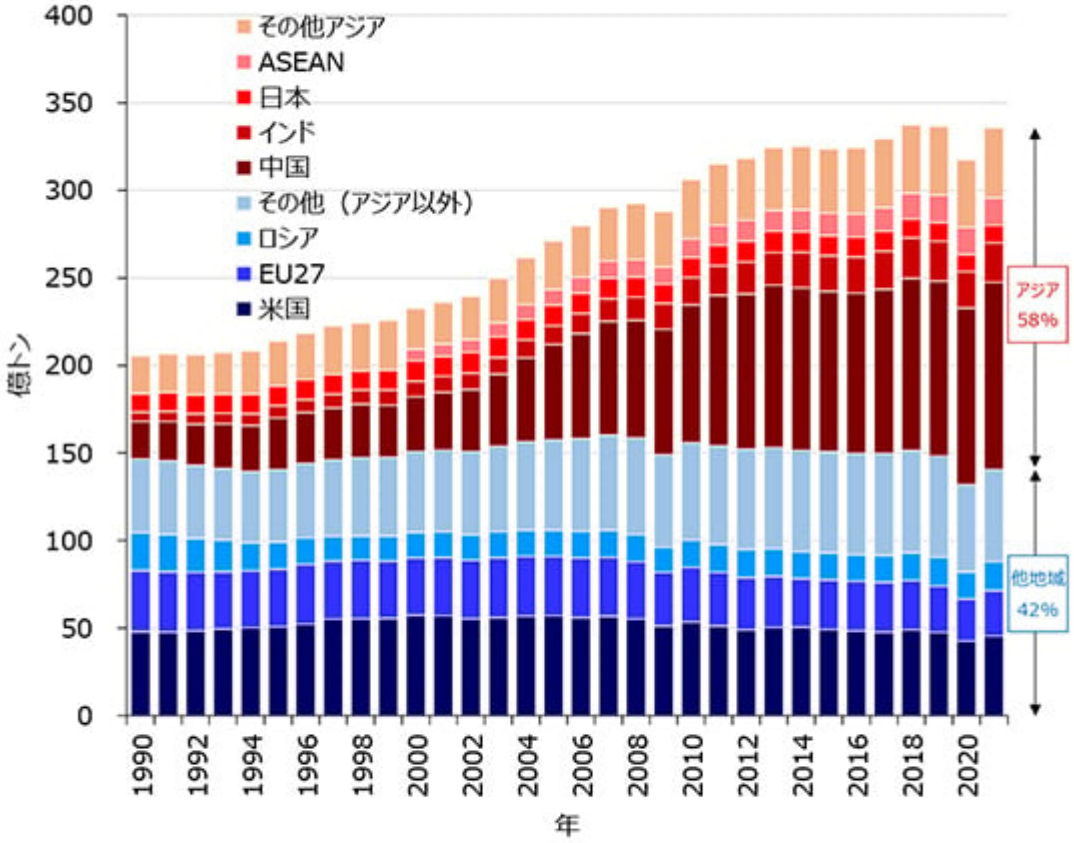
【第132-4-1】エネルギー起源CO_2排出量の推移（主要国・エリア別）



（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

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

????1??2??

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Posted in ???, ????? | No Comments »