

# Global Energy Policy Research | GEPR

GEPR <http://agorajp.com/>

5?10

?? ?? · Tuesday, May 14th, 2024

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

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?? ?? · Tuesday, May 14th, 2024



Mocho1/iStock

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???<https://www.pnas.org/doi/full/10.1073/pnas.1906691116>

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???<https://link.springer.com/article/10.1007/s11229-015-0739-8>

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???<https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2012MS000154>

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Posted in ???, ????? | No Comments »

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?? ?? · Wednesday, May 8th, 2024



Bet\_Noire/iStock

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

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

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?? ?? · Thursday, May 2nd, 2024



nzphotonz/iStock

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ean energy is boosting economic growth??????

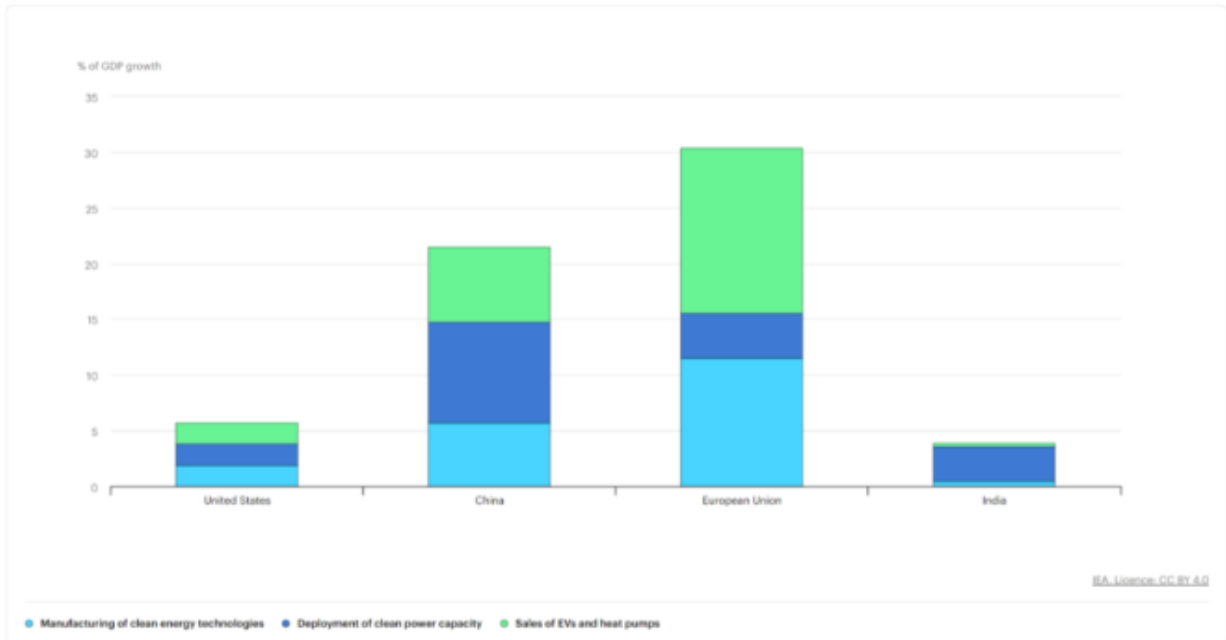
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- 2023????GDP????10??????????????????

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### Energy Information Has Never Mattered More—So It’s Time to Reform the IEA

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WSJスクープ エネルギー

# How the Rockefellers and Billionaire Donors Pressured Biden on LNG Exports

President's decision to halt new export terminals follows an intense campaign by environmental groups funded by wealthy contributors

By [Benoît Morenne](#) and [Andrew Restuccia](#)

2024年2月9日 12:10 JST

日本語に戻る

THE WALL STREET JOURNAL

??IEA????????????????



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IEA??

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

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?? ?? · Wednesday, May 1st, 2024



Koldunov/iStock

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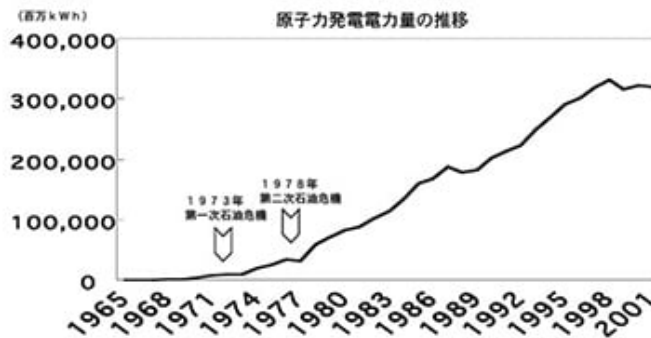
????????????????19??

# 19兆円の請求書

—止まらない核燃料サイクル—

## 日本における原子力発電の位置付け

現在日本の電気の約3割は原子力発電に依存



\*本ペーパーは原子力発電そのものの是非を問うものではない  
(脱原発は中長期的課題)

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2011.03.27??

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

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?? ? · Tuesday, April 30th, 2024



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??1920??50????2020????1?????  
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???1990???700????????2020????250????????????????????????????2050????????50????????????????????????  
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4. IPCC????????SSP?????????????????GDP?2050????4.5????????????????????????????????4.3????????  
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5. ???1800????????????????95  
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6. ???  
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???2.6??????????
7. 1.5????????????2050????????????2020??2100????4.5????????????????????????????????????26  
.8?????????????????????????????

8. ?????1?????????????EU?2020?20?????0.03??2050?????/1.5??0.17????????????????  
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9. ??1800????????  
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10. ??2015??970???
11. ?????????????????3????????????????????????????1????????????????87????????46??????65????  
??350????????420????????  
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2015??17?SDG????????????????5-7????????????2018????????COP28????????????2050  
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Posted in ??????????, ??, ????? | No Comments »

## ??

????????IEEI? · Friday, April 26th, 2024





bombermoon/iStock

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(PV?708TWh????????257+271TW?)????????????????118TWh?8????1180?kWh??17????  
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kW????????????????????

??2019????????????  
??1180?kWh??2000?kW????????????  
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??1????????????  
??24?3?27????????

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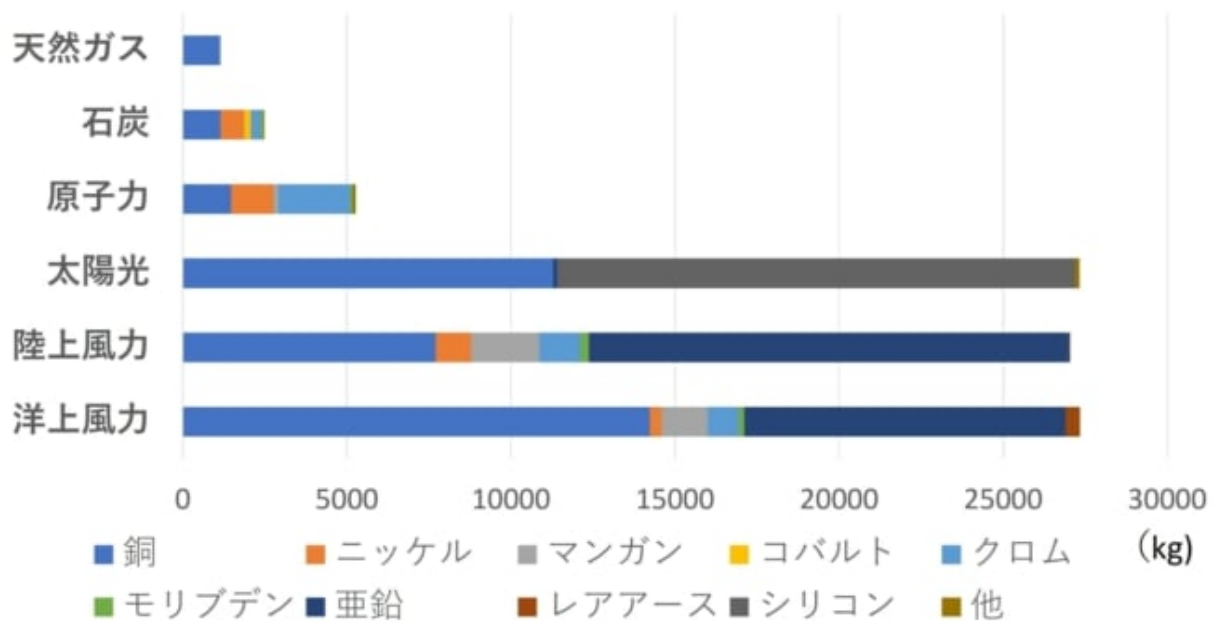
??NATO????????????????3????????????????  
??2020??EU????????????????????????

??NATO??????????  
??2021????????????????????????????????????  
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2050????100??  
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?????-1????????????????????????????????????6????7?????????-2????????????????????????4????3????????

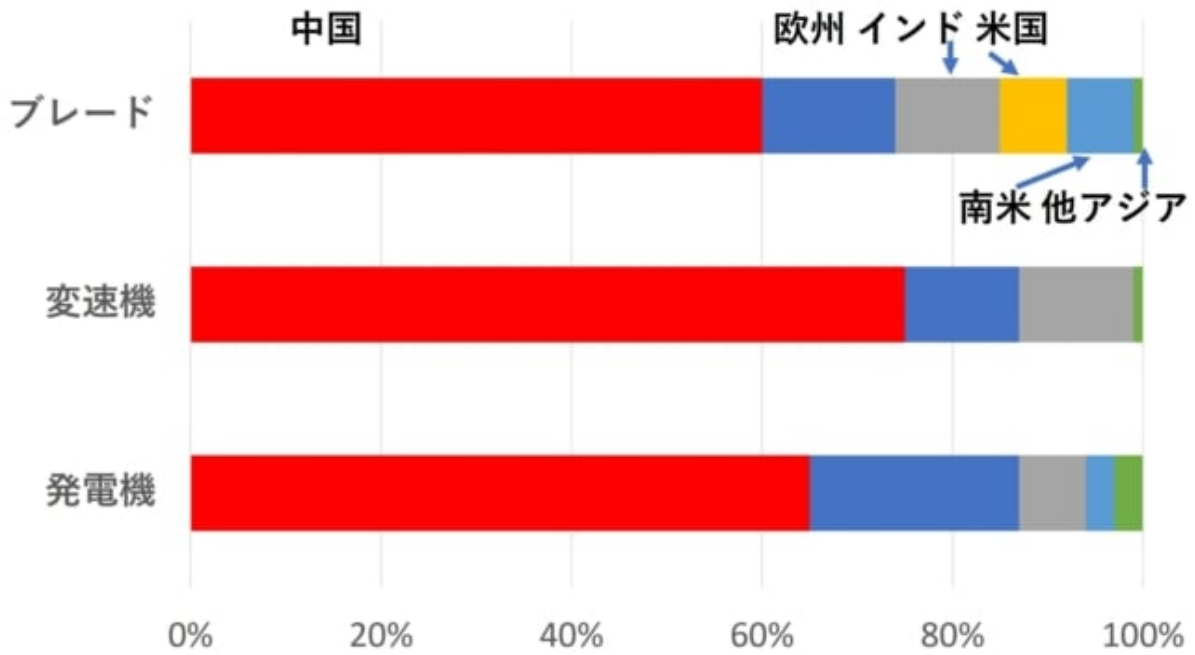
図-1 発電設備に必要な鉱物量



注：年間700万kWhの発電に必要な鉱物  
設備利用率：洋上45%、陸上30%、  
太陽光20%、他80%

出典：国際エネルギー機関資料から作成

# 図-2 風力発電設備国地域別製造能力



注：2022年の製造能力

出典：GWEC

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??100????????????????????

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

?????...???????SDGs??????????

?? ?? · Thursday, April 25th, 2024



manbo-photo/iStock

**????SDGs????????????????????????????**



????22??2030????????????????SDGs??????  
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???SDGs?3????????15??SDGs????????????????  
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**2030?SDGs???????????**



???SDGs????????????2030????????????????SDGs????????????????????????????????????20

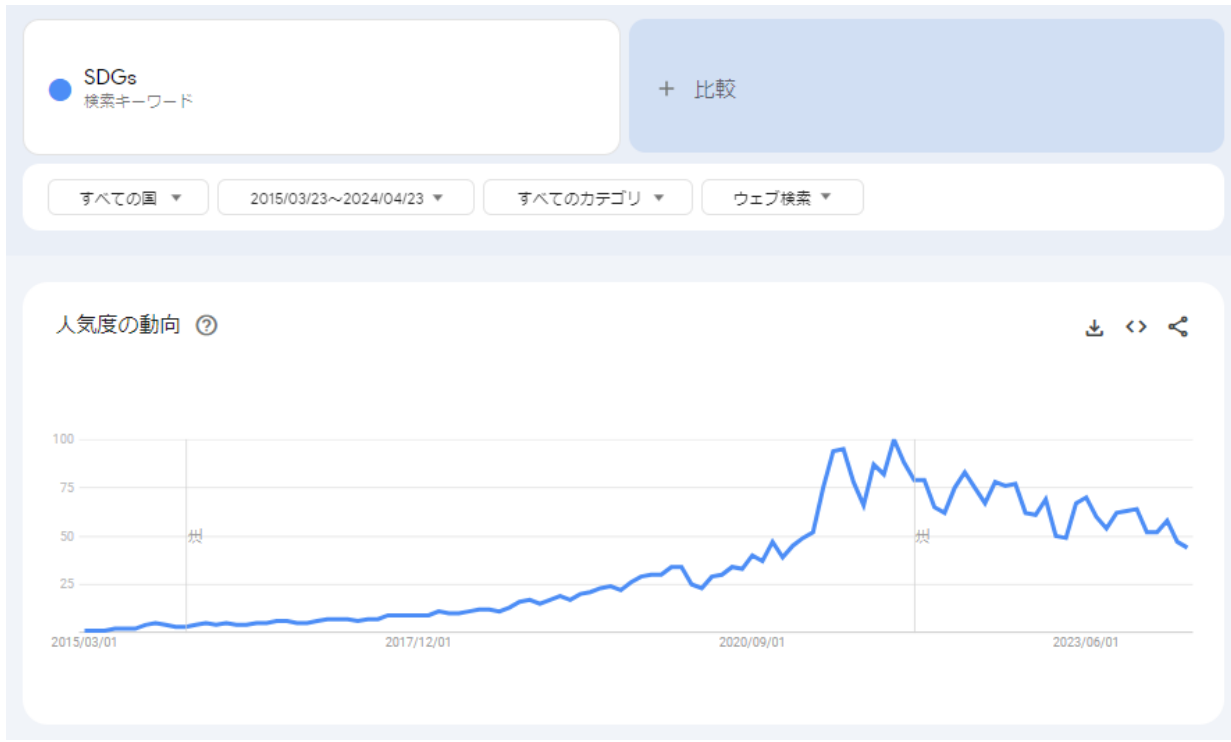
31????????SDGs??

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??CSR????????SDGs????????ESG??  
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????2022?6?8????????2024?4?23????????????2021????????????????????



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

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?? ?? · Wednesday, April 24th, 2024



FotografieLink/iStock

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Movie??X?150???YouTube?100????????????????  
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???Science Feedback??

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Ball????????????CO2????????????????????????95????????????????????

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MIT Carl

Wunsch CO2 70% 11,000m

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CO2 CO2 CO2 CO2

CO2 CO2 CO2 CCS 50 100 CO2

3. CO2

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CO2 CO2 CO2 Science Feedback CO2

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1,500ppm CO2 CO2 ACGIH 5,000ppm

1,000ppm 430ppm

CO2



$$N_1 = -D_{12} \frac{dc_1}{dx}$$

N : 単位断面積、単位時間当たりの移動モル量[mol/(m<sup>2</sup>・s)]  
 D<sub>12</sub> : 成分2に成分1が拡散する場合の相互拡散係数[m<sup>2</sup>/s]  
 dc/dx : 濃度勾配[(mol/m<sup>3</sup>)/m]

CO2 CO2  
 180ppm

4.

Andy May Science Feedback Science Feedback

Posted in , | No Comments »

?? ?? · Tuesday, April 23rd, 2024



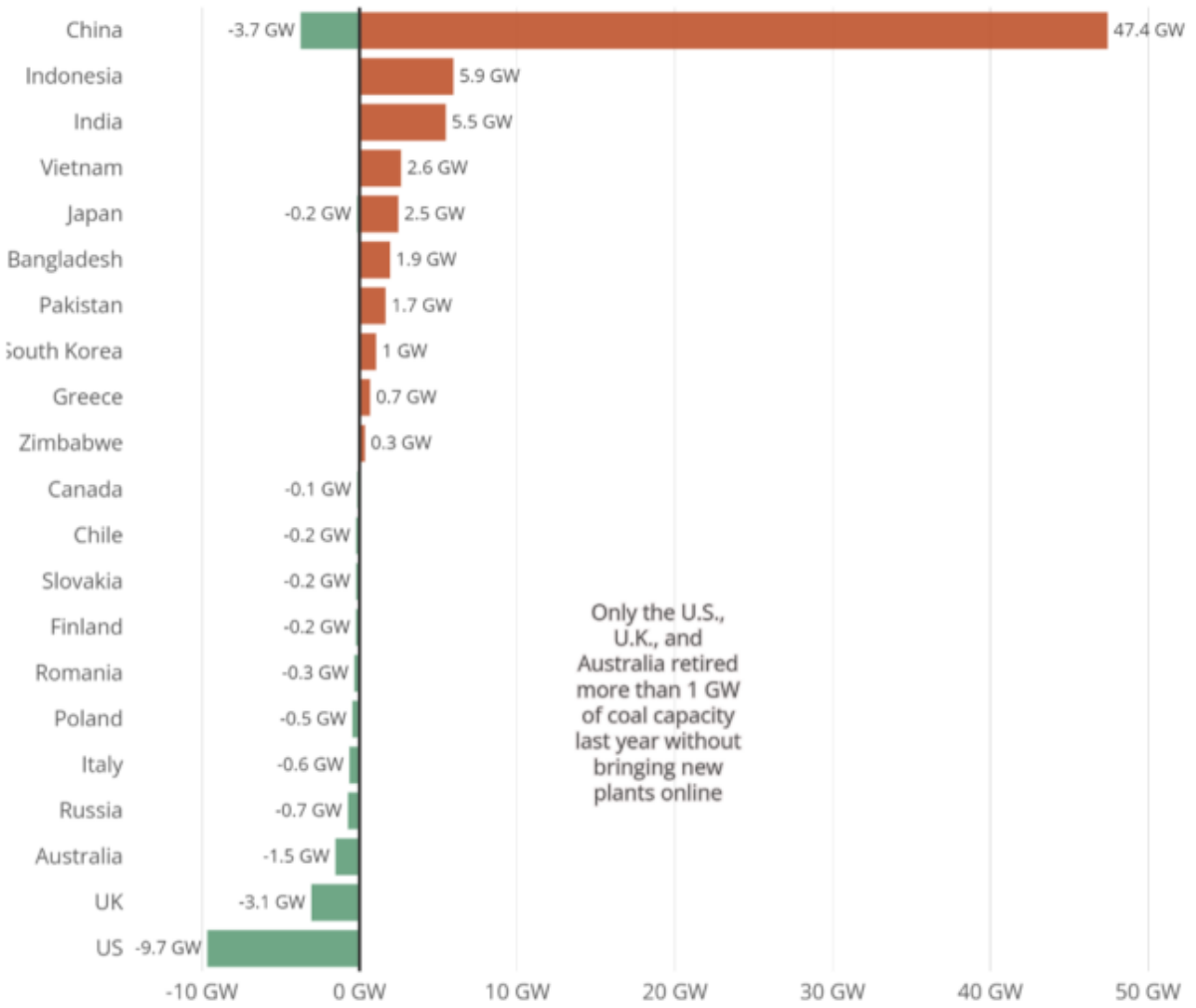
Andrzej Rostek/iStock

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??2023??1??47??????4700??????????

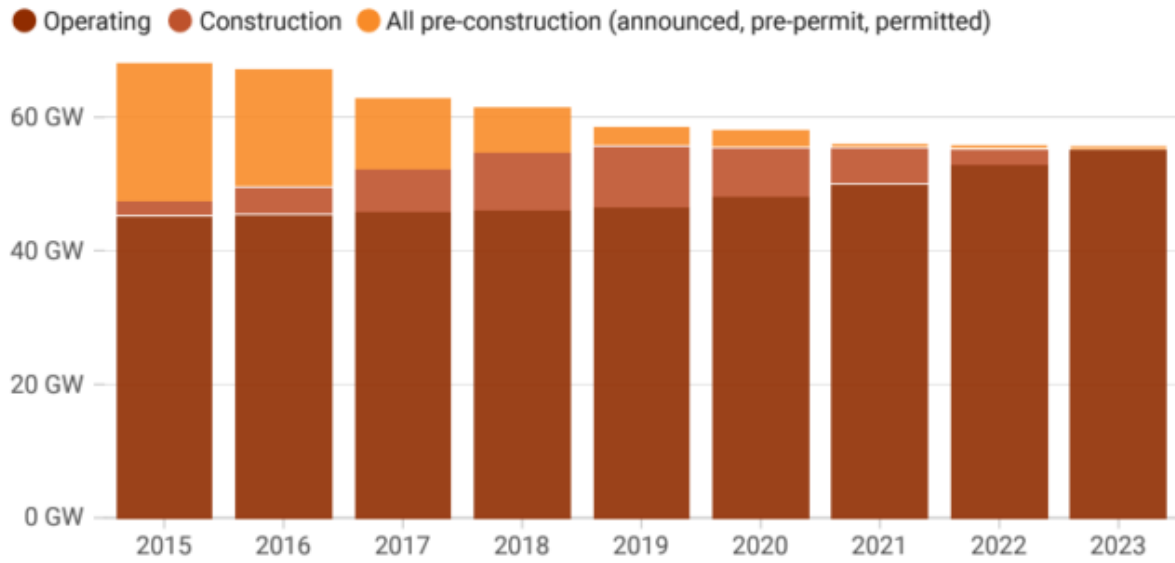
Newly **added** and **retired** operating coal-fired power capacity in 2023, in gigawatts (GW)



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### Figure 38: Japan increased its coal power capacity in 2023, and a coal plant proposal remains under consideration

Coal-fired power capacity in Japan by status, in gigawatts (GW)



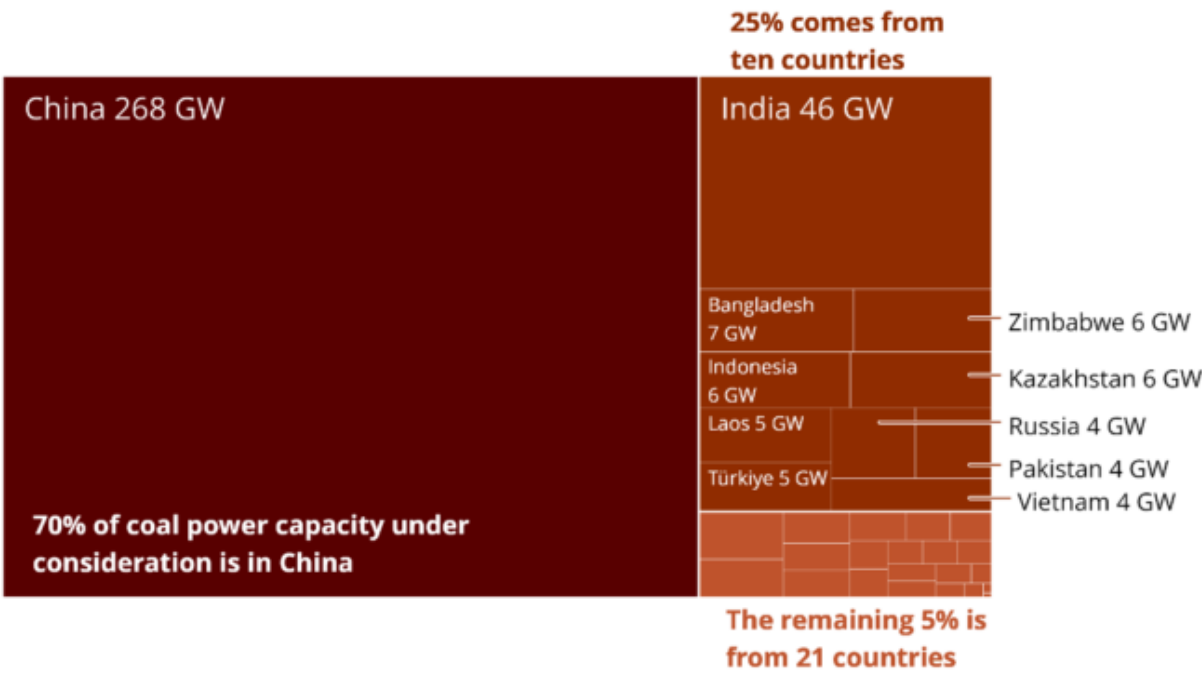
Source: Global Coal Plant Tracker, January 2024



??268????????????????????5?????

### China and ten other countries account for 95% of coal power capacity under consideration

Coal-fired power capacity in pre-construction stages (announced, pre-permit and permitted)



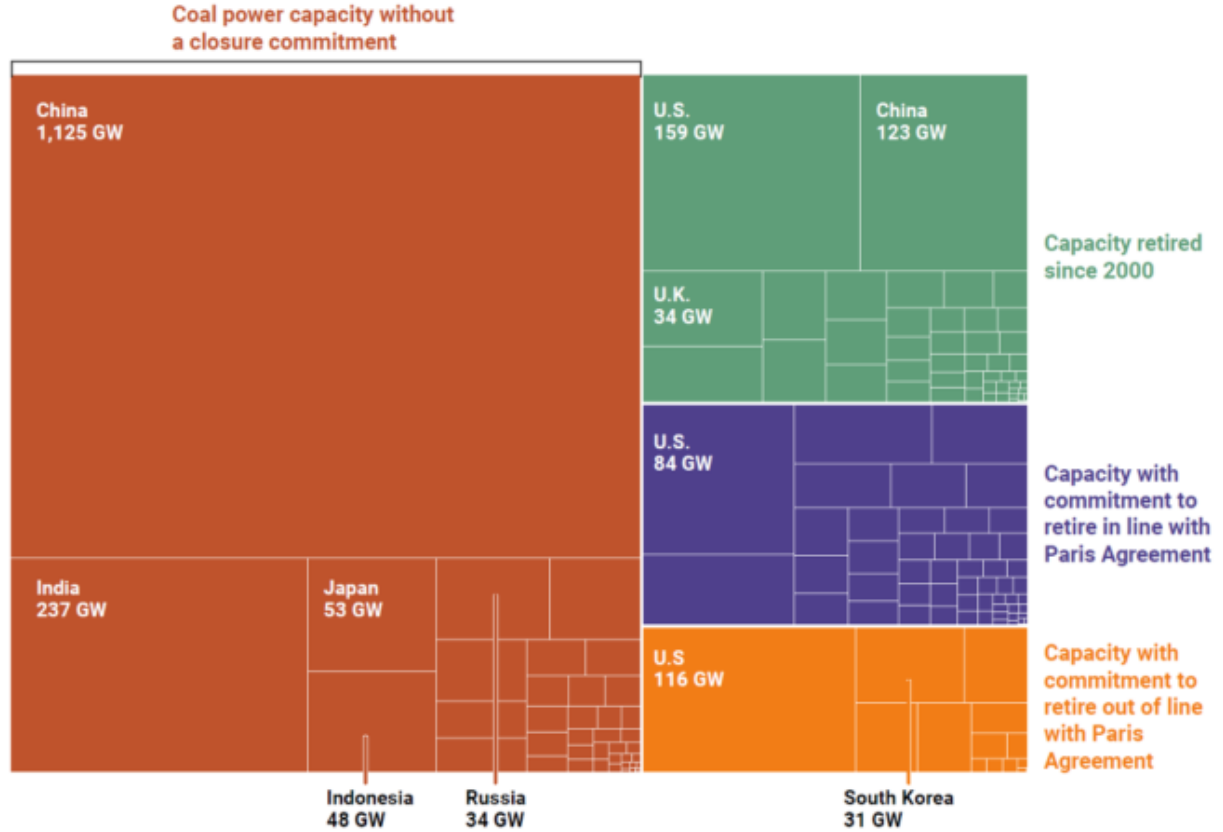
Source: Global Coal Plant Tracker, January 2024



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Figure 15: Most coal power capacity needs closure commitment

Coal-fired power capacity by phaseout status, excluding net zero commitments



Source: Global Coal Plant Tracker, January 2024



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??CO2??

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

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?? ?? · Tuesday, April 16th, 2024

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Jian Fan/iStock

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Posted in ???, ????? | No Comments »

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?? ?? ? · Friday, April 5th, 2024



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Posted in ???, ?? | No Comments »

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?? ? · Sunday, March 31st, 2024



Donaldjtrump.com??

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America First Policy

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- ?????????30????????LNG????????
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(Nationally Determined  
Contribution)????????

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

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?? ?? · Saturday, March 30th, 2024



Zbynek Pospisil/iStock

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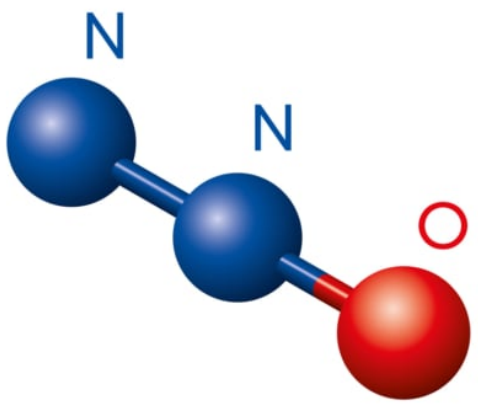
Sjo/iStock

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 1750????????????????????????270ppb????????????????2022?????  
 ?????????335.8ppb?0.3358ppm??????

2021????2022????????????????1.4ppb?0.0014ppm????????  
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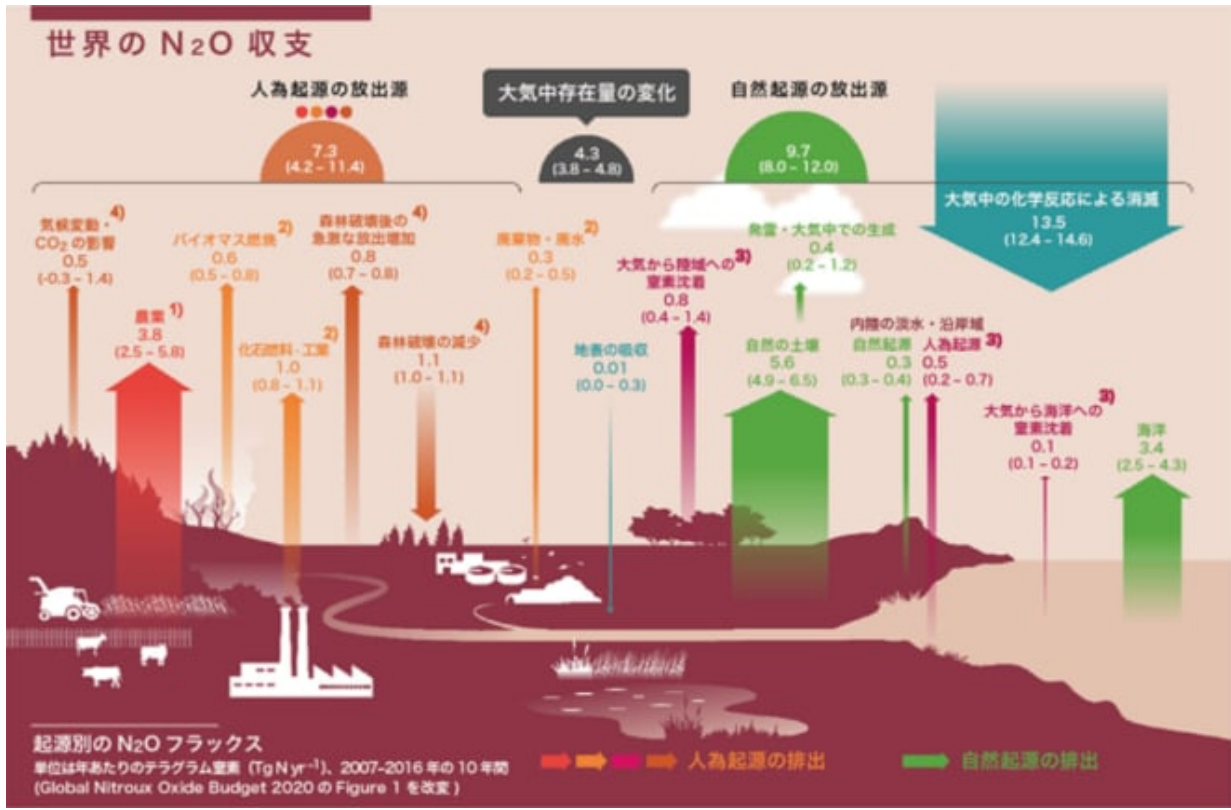
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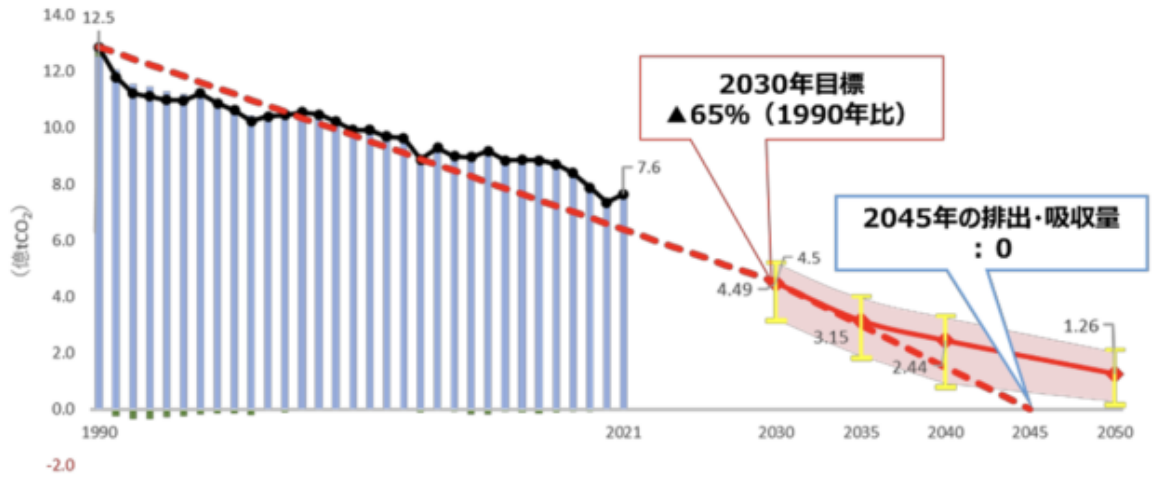
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 PeterHermesFurian/iStock



©????????

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 ???COP28????GX?????9?????????2023?11?28??

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IMF?????????2024?1????<sup>22</sup>?????2023?????GDP?????????????????0.3%????????????????????  
 ??????GDP?????????????????2.5%?????0.8%??1.9%?????0.5%??1.1%??G7????????????????  
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23?4???2.2%?????4????????????????<sup>23</sup>????????????????  
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 ???16.5%??700????????????????????1?????CO2?????2????????????????CO2?????????1400????  
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??BASF????????????????????????????  
 ???2600????????????????  
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????????????????????????????2018??2023??5????10%????????????????????????????????20%????????<sup>24</sup>??  
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?? ?? · Thursday, March 28th, 2024



metamorworks/iStock

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# (参考) 出力制御対策パッケージ (案)

- **出力制御の低減に向けた新たな対策パッケージでは、**
  - **需要面**での対策により、出力制御時間帯の**需要家の行動変容・再エネ利用を促しつつ、**
  - **供給面**での対策により、**再エネが優先的に活用される仕組みを措置**するとともに、
  - **系統増強等**により、**再エネ導入拡大・レジリエンス強化の環境を整備**するなど、**切れ目のない対策**を講じる。
- その際、太陽光等の更なる導入拡大を見据え、**中長期的な観点から、特に需要面の対策に重点**を置き、家庭・産業それぞれの分野で**予算措置と制度的措置を一体的に講じる**ことにより、**供給に合わせた需要の創出・シフト**を図る。

### 【具体的な対策】

**1. 需要面での対策**

- ①需要側のリソースの活用に向けた消費者の行動変容の促進（電気料金メニューの多様化等）
- ②家庭用蓄電池・ヒートポンプ給湯機の導入を通じた需要の創出・シフト
- ③機器のDR Ready化（通信制御機器の設置）
- ④電炉等の電力多消費産業におけるDRの推進
- ⑤電力の供給構造の変化に合わせた電力多消費産業の立地誘導・需要構造の転換
- ⑥系統用：蓄電池、再エネ併設蓄電池、水電解装置の導入を通じた需要の創出・シフト
- ⑦事業者用：蓄電池の導入や、事業者所有設備への通信制御機器の設置の支援等

**2. 供給面での対策**

- ①再エネ発電設備のオンライン化の更なる推進等
- ②新設火力発電の最低出力引下げ(50%→30%) 等
- ③出力制御時の他エリアでの非調整電源の出力引下げ
- ④火力等発電設備の運用高度化
- ⑤水力発電を活用した出力制御量の抑制
- ⑥電力市場の需給状況に応じた再エネの供給を促すFIP制度の更なる活用促進

**3. 系統増強等**

- ①連系線の運用見直し等による域外送電量の拡大
- ②地域間連系線の更なる増強による域外送電量の拡大

**4. 電力市場構造における対応（中長期的な検討課題）**

- ◆価格メカニズムを通じた供給・需要の調整・誘導

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# 火力設備の調整力一覧

出力変化率	： 1分間当たりの出力変化速度	(%/min)
LFC幅	： LFC信号に基づき変化できる出力の幅 (Load Frequency Control:負荷周波数制御)	(%) (定格出力に対する割合)
最低出力	： 安定運転が可能な最低出力 (定格までの出力が調整力となる。停止した場合と異なり、需要の変化に即応できる)	(%)
起動時間	： ユニット起動から最大出力までの時間	(分)
DSS	： 日間起動停止 (短時間での停止起動に対応) (Daily Start Stop)	

- ・ 既存の設備を活用
- ・ 燃料供給により長時間の対応が可能

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?? ?? · Wednesday, March 27th, 2024



MicroStockHub/iStock

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?? ?? · Tuesday, March 26th, 2024





Jeff\_Hu/iStock

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- 2024年度の賦課金単価は、再エネの導入状況や卸電力市場価格等を踏まえ、1kWh当たり3.49円となりました。目安として一ヶ月の電力使用量が400kWhの需要家モデル<sup>※</sup>の負担額を見ると、月額1,396円、年額16,752円となります。
- ※ 総務省家計調査に基づく一般的な世帯の1ヶ月の電力使用量

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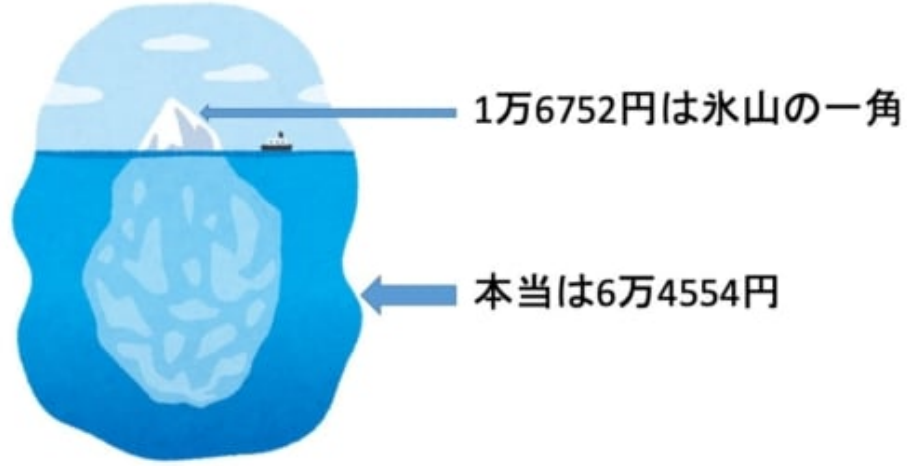
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Posted in ??????????, ??? | No Comments »

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?? ?? · Friday, March 22nd, 2024





Cristian Storto Fotografia/iStock

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?? ?? · Wednesday, March 20th, 2024



Jay\_Zynism/iStock

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?? ?? · Tuesday, March 19th, 2024



JohnPitcher/iStock

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?? ?? · Monday, March 18th, 2024



Niklas Flindt/iStock

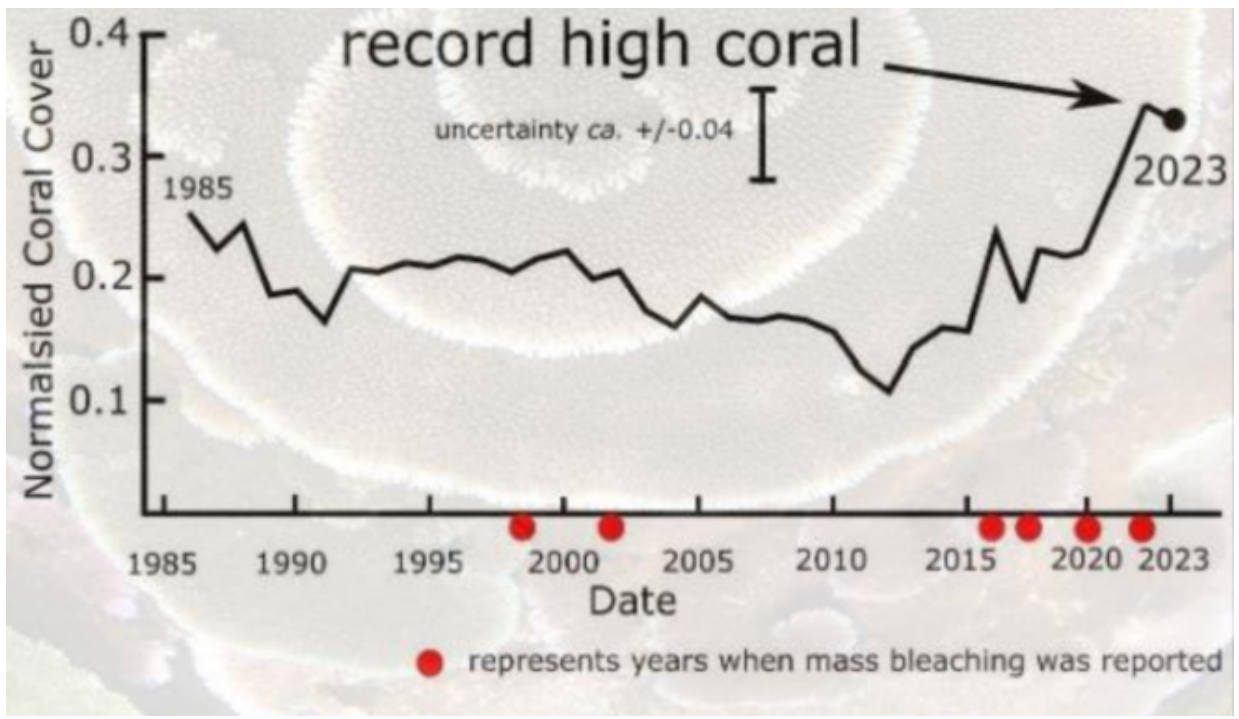
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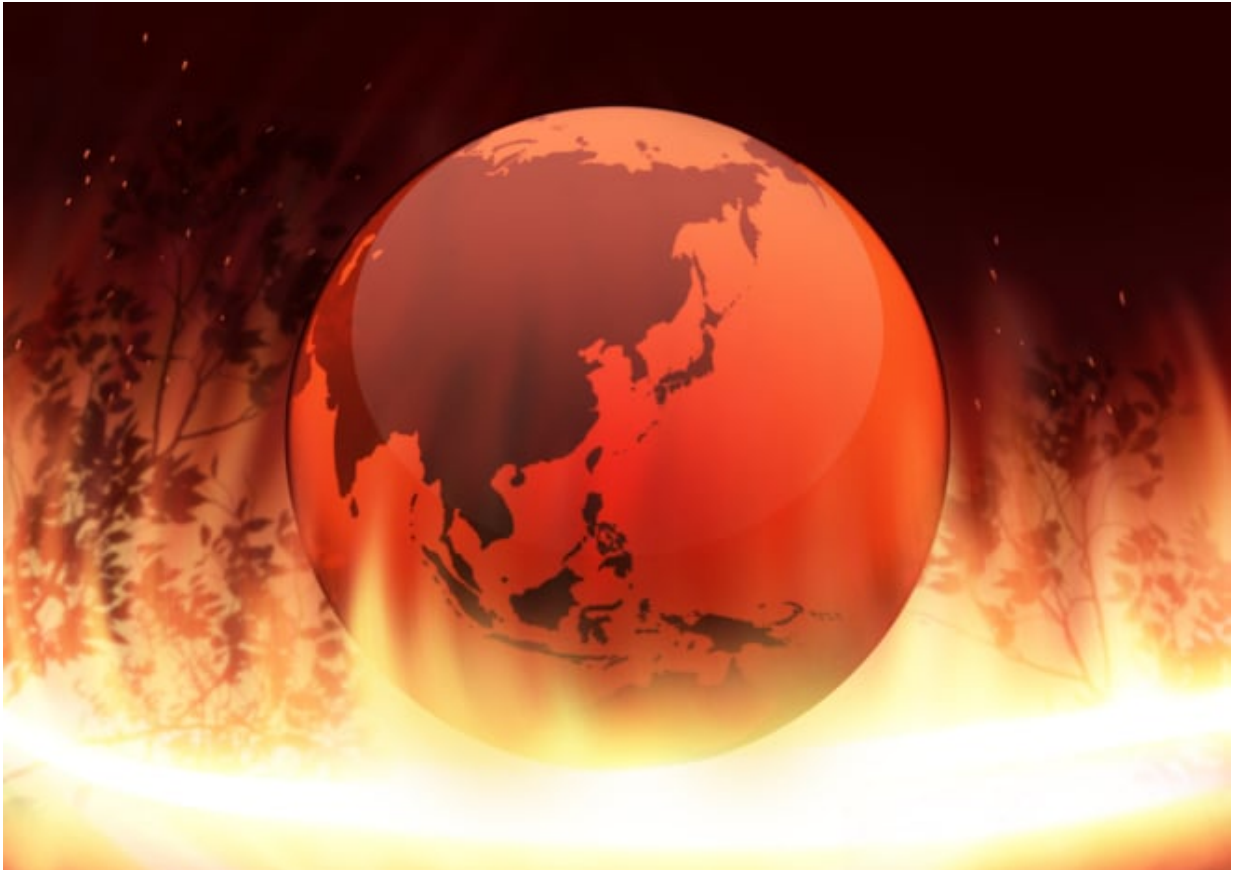
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Posted in ???, ????? | No Comments »

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 ?? ?? · Tuesday, March 12th, 2024





Tr6/iStock

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[pic.twitter.com/Jriq7emhUT](https://pic.twitter.com/Jriq7emhUT)

— Kenji Shiraishi (@Knjshiraishi) March 8, 2024

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?? ?? · Monday, March 11th, 2024



gorodenkoff/iStock

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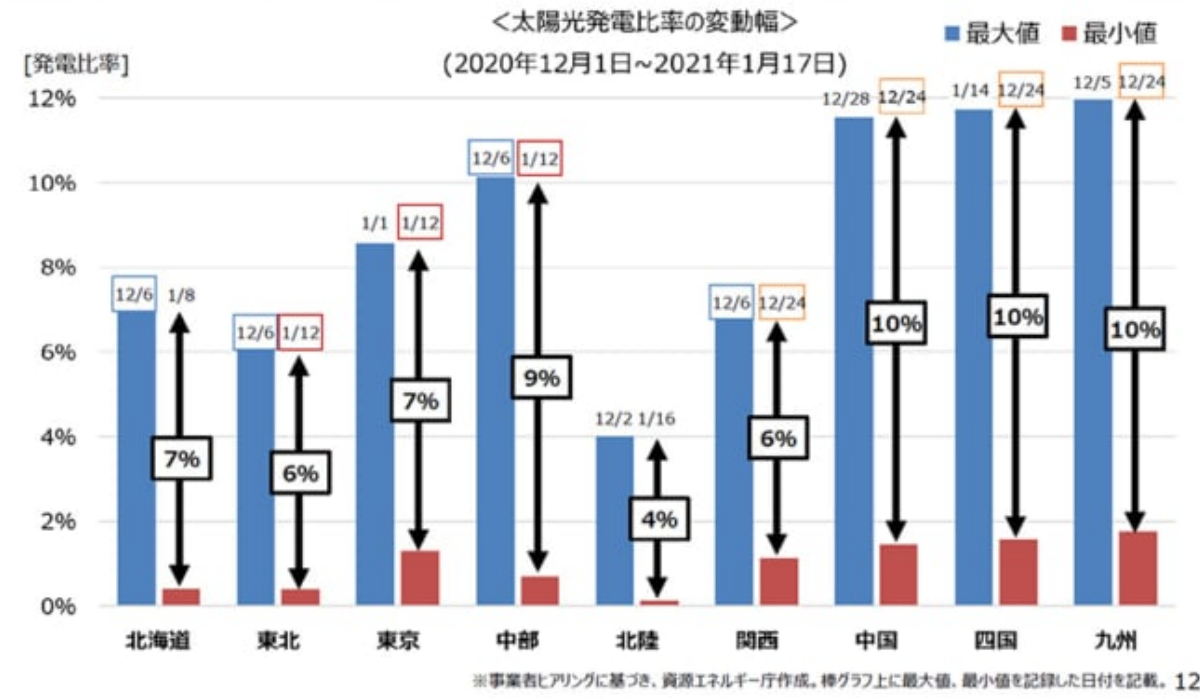
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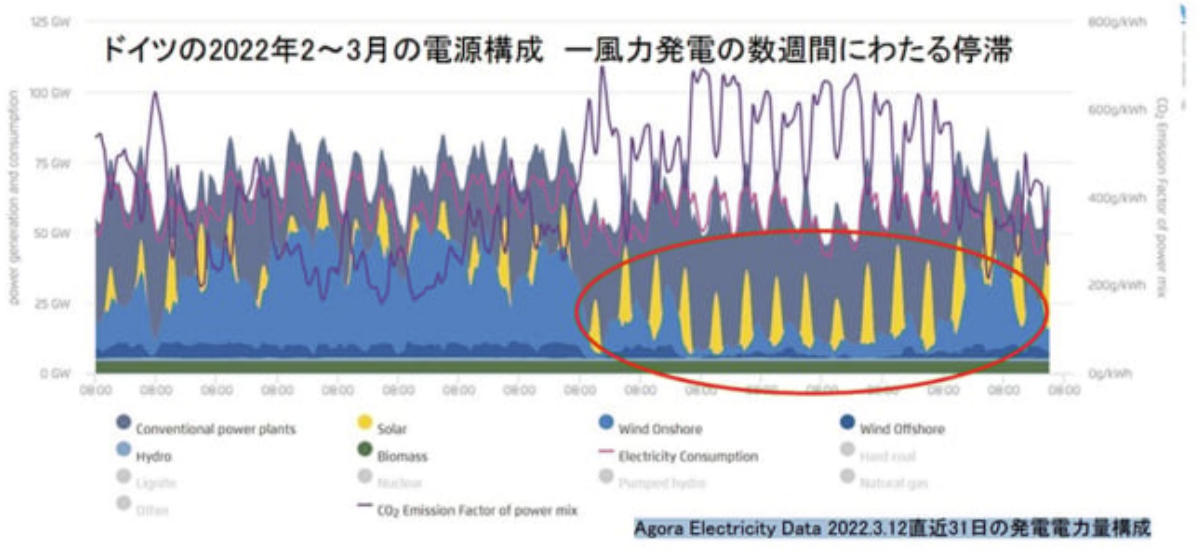


### 【参考】太陽光発電比率の変動幅（2020年12月1日～2021年1月17日）

● 2020年12月1日～2021年1月17日の期間において、発電量全体に占める太陽光の発電量比率の変動幅（最大値と最小値の差）は、各エリアの総発電量の約4%～約10%分となっている。



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?? ??? ?? - Sunday, March 10th, 2024



Muhammet Camdereli/iStock

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Posted in ???, ?? | No Comments »



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?? ?? · Sunday, March 10th, 2024



taka4332/iStock

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**Q26-3 太陽光パネルの導入効果について③** 60

新制度により住宅への太陽光パネルの導入が増えると、どの程度のCO<sub>2</sub>削減効果がありますか？

**A 26-3** 新制度で義務化される導入分に加え、その波及効果等も合わせると、2030年までに新築・既存含めた都内住宅で新たに100万kWの太陽光パネルが導入されることを想定しています。このCO<sub>2</sub>削減効果は、年間約43万tであり、2030年までに家庭部門で必要な削減量の約5%に相当します。

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



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?? ?? · Thursday, March 7th, 2024



ConceptCafe/iStock

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**Ford Lost \$4.7B On EVs Last Year, Or About \$65K For Every EV Sold – Climate Change Dispatch**

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