

# Global Energy Policy Research | GEPR

GEPR <http://agorajp.com>   
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?? ?? · Friday, September 13th, 2024



Andrzej Rostek/iStock

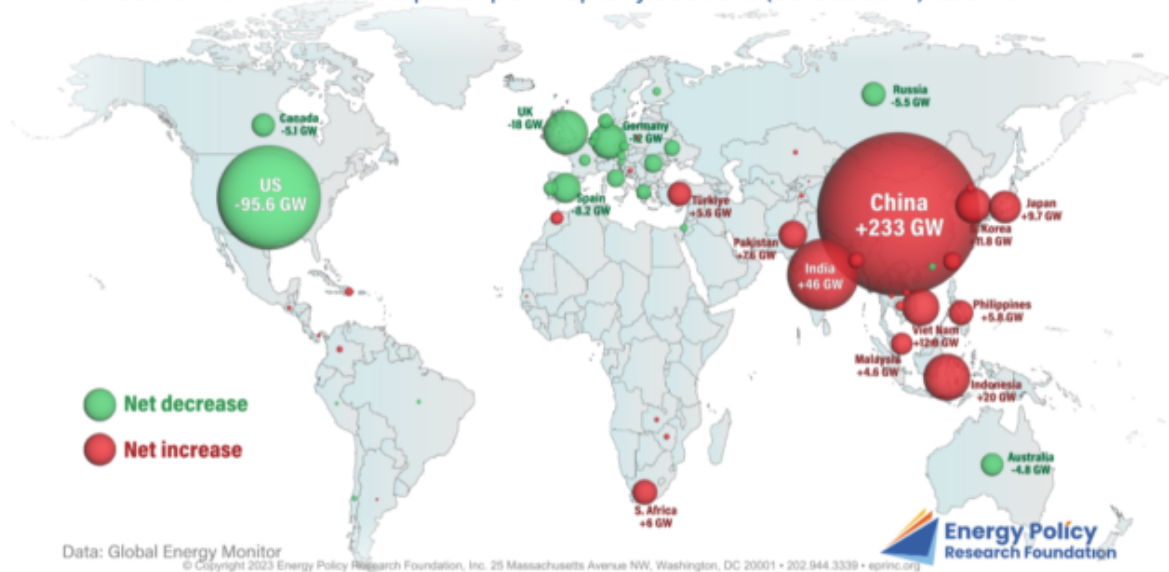
??2015??2023??GW??100??  
1????

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????Energy Policy Resaerc Foundation????

# NET ADDITIONAL COAL PLANT CAPACITY SINCE 2015 PARIS AGREEMENT

Cumulative net worldwide coal power plant capacity additions (2016-2023H1): 206.3 GW



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

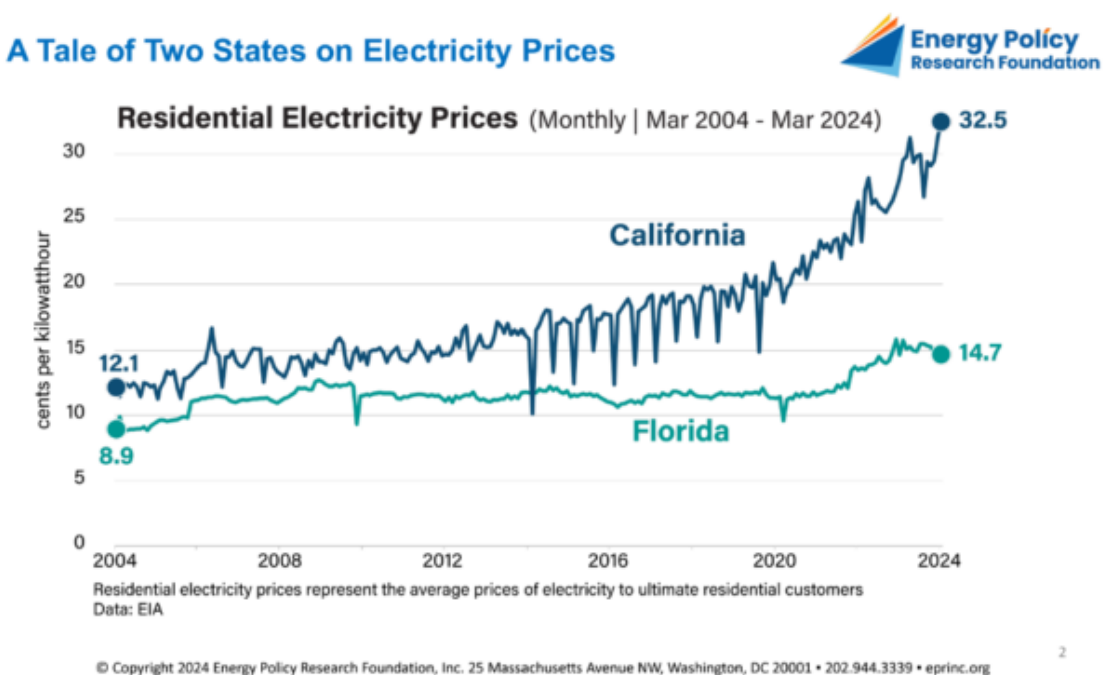
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?? ?? · Thursday, September 12th, 2024



kasezo/iStock

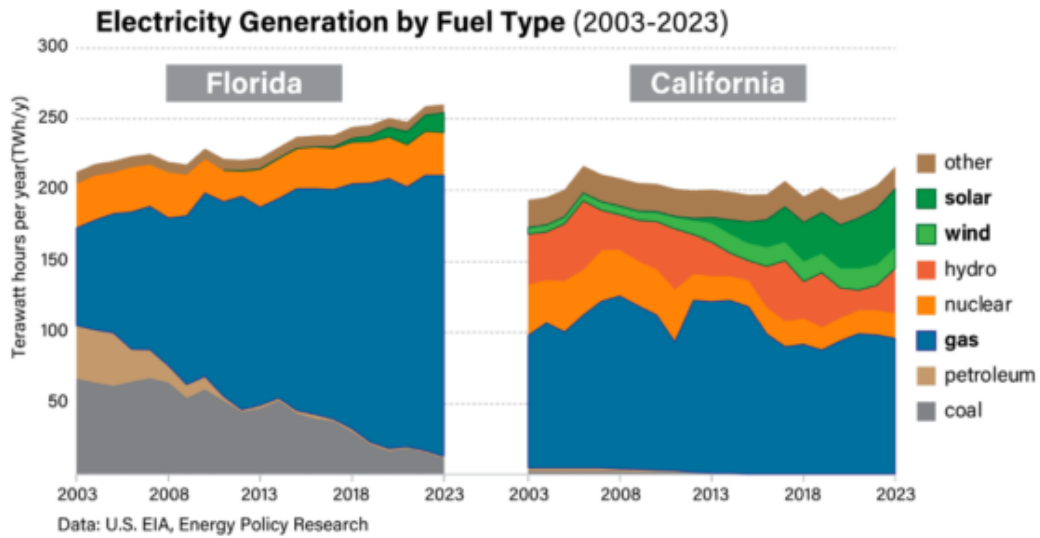
??EIA????????????????????????????????20????  
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# A Tale of Two States on Electricity Generation Mix



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????????????????Energy Policy Research  
Foundation??  
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Posted in ??????????, ??? | No Comments »

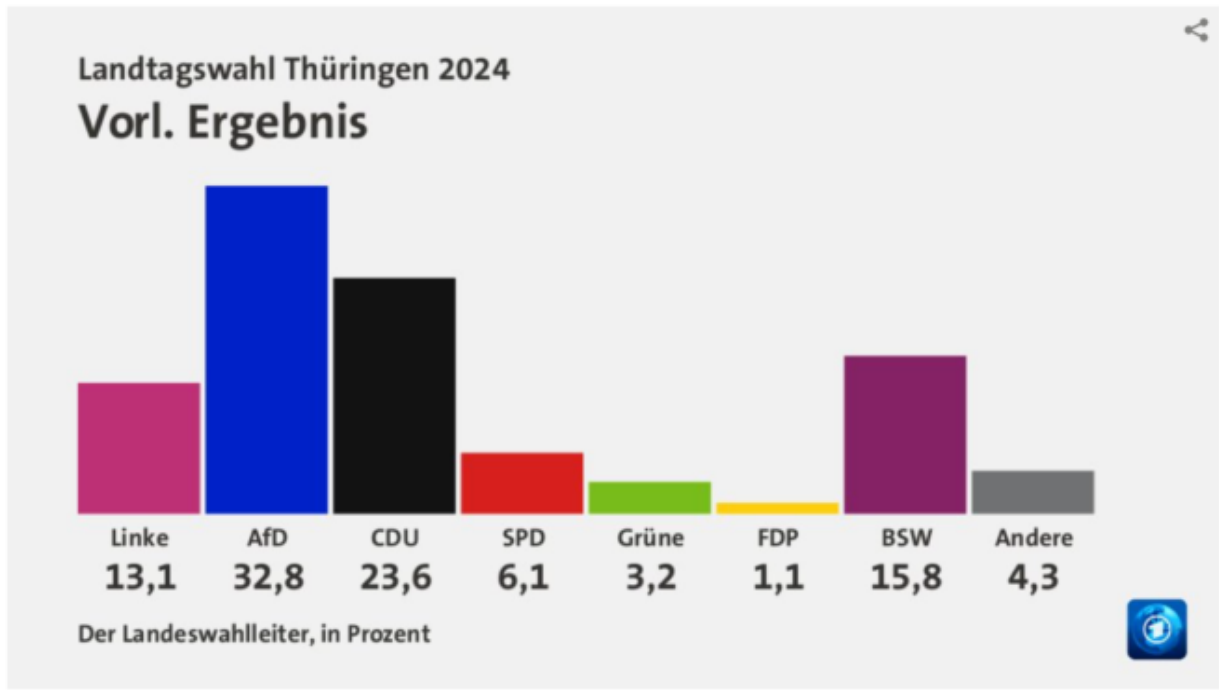
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?? ?? · Wednesday, September 11th, 2024



NHK??

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2002?2011??

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

# CO2????????????????????????????????

?? ?? · Friday, September 6th, 2024

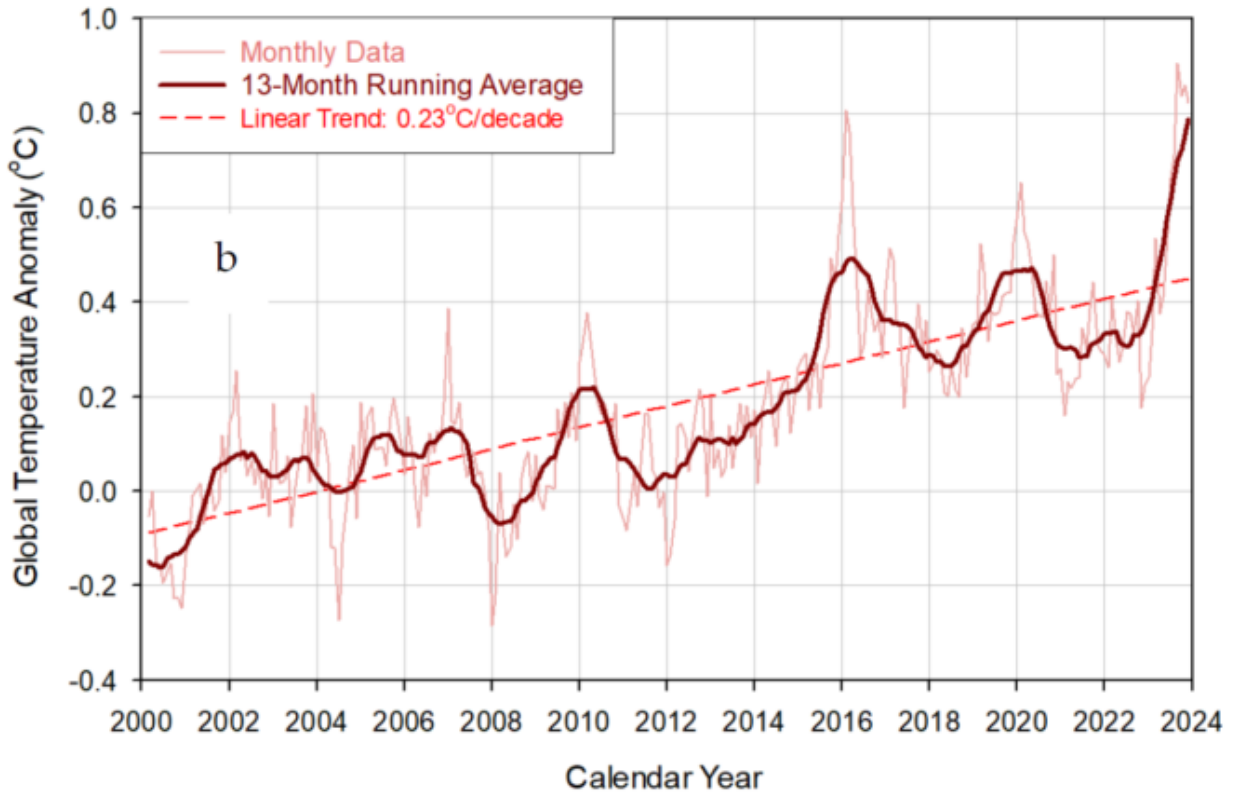


35007/iStock

2023????????????????????????????????1????????????????????????????????

## **Hunga Tonga volcano: impact on record warming**



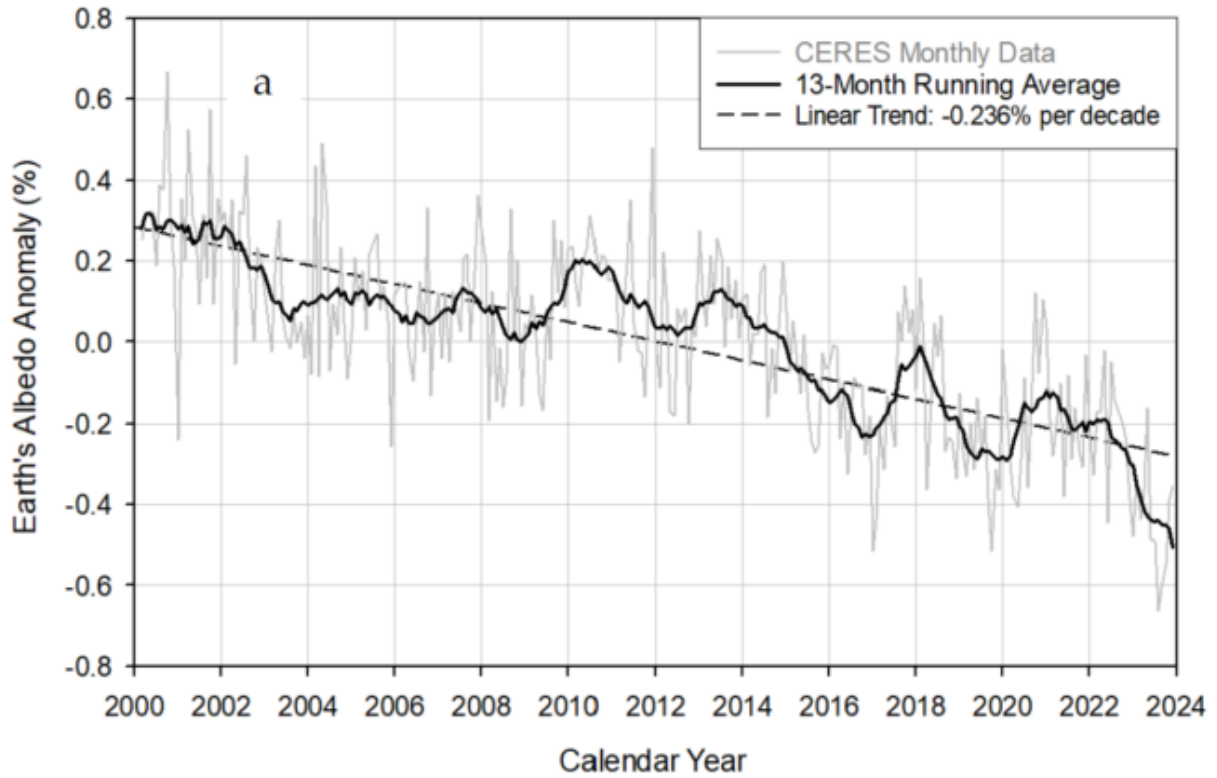


?1

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**Roles of Earth’s Albedo Variations and Top-of-the-Atmosphere Energy Imbalance in Recent Warming: New Insights from Satellite and Surface Observations**

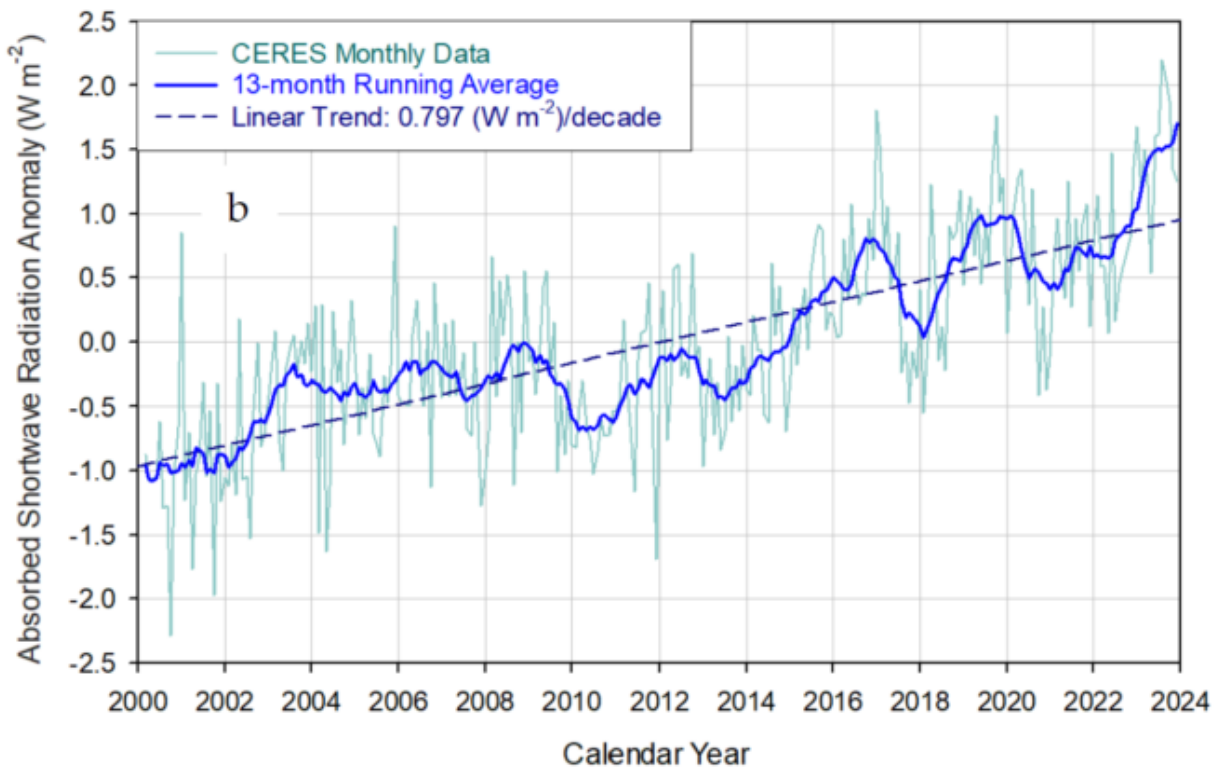
????????????????????2????????????????????????????????2000????0.79%??????????



?2

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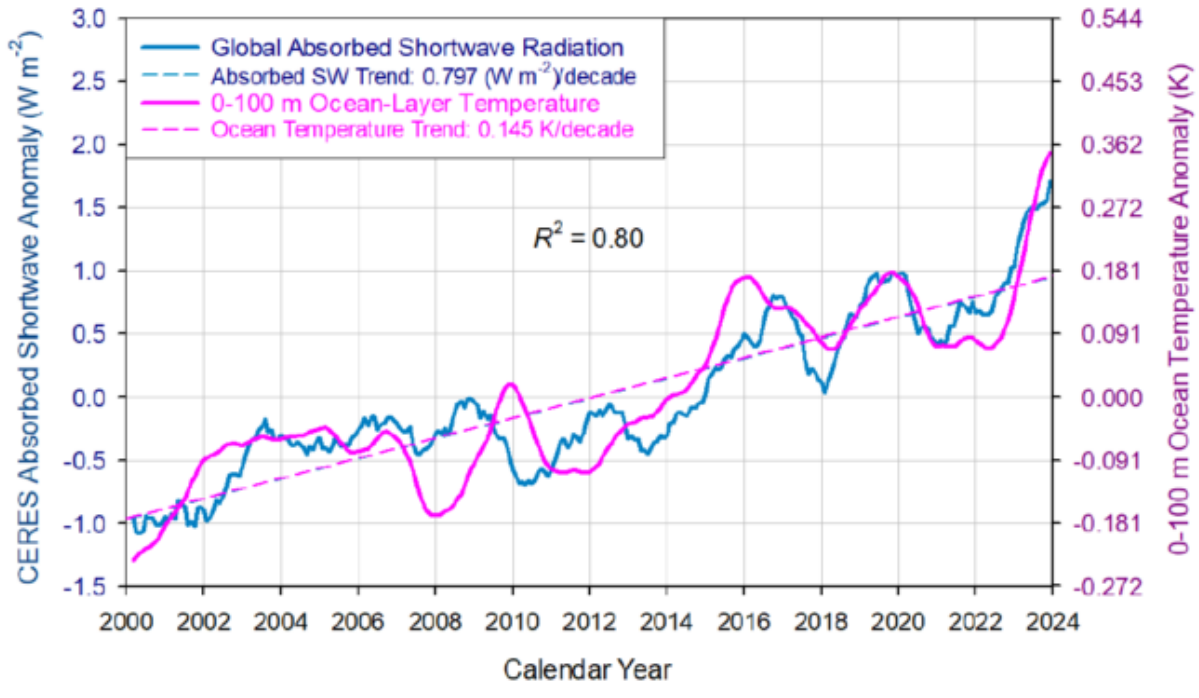
????????????????2000????1????????2.7????????3?????shortwave????????????????????????????1  
ongwave????????????????????



?3

IPCC?6?????1750???2019?????????????????????2.72?????????????????2000????????????????????  
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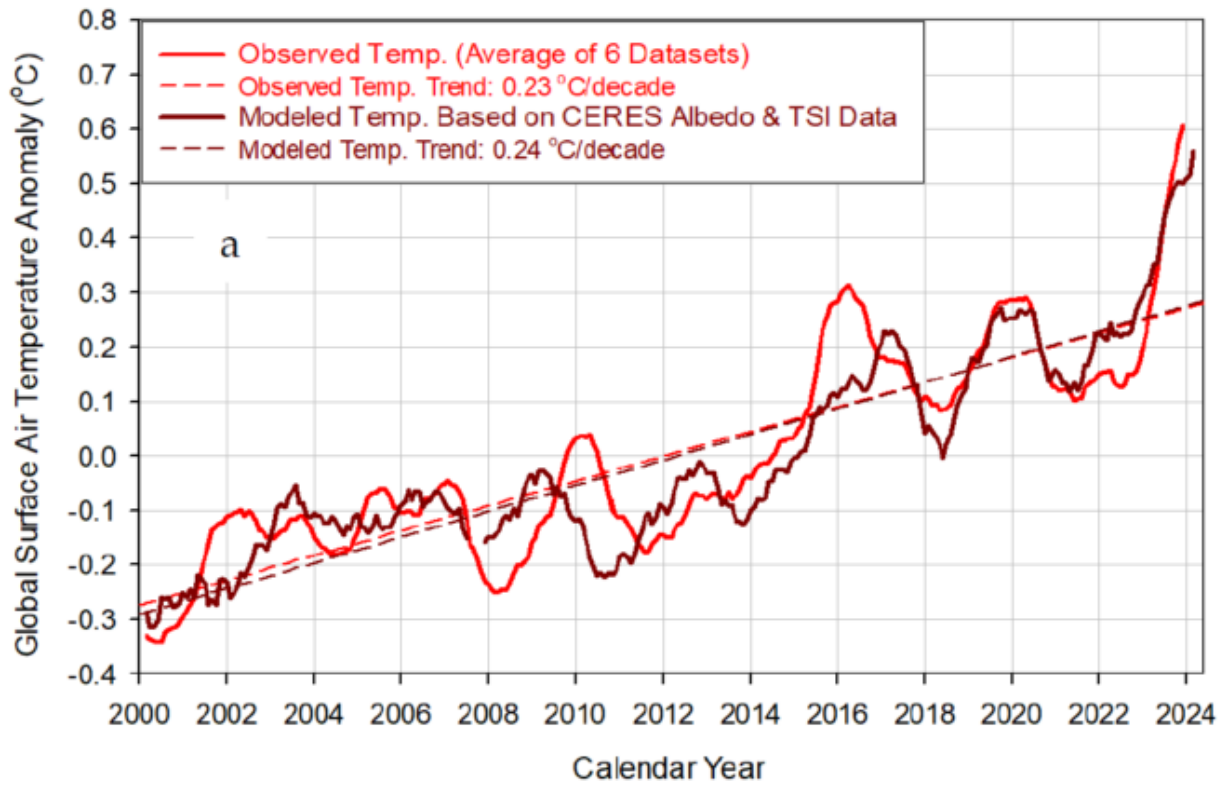
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???5?????????????CO2????????????????????  
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?5????????2024??????????????????????????????



25

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

# SAF??

?? ? · Thursday, September 5th, 2024

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Wishful Thinking in the Stratosphere

“Jet Fuel from Corn Sounds Sustainable, but Isn’t Much Cleaner”

Sustainable Aviation Fuel

60?80?CO2?CO2?SAF?

2020?SAF?6.3?kL?0.03%?SAF?2030?SAF?170?kL?2019?890?kL?19?

1/5?2030?6?

SAF?JOGMEC?SAF?

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HEFE?

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ATJ?

3???

HEFE?ATJ?

4???

1?FT??

5???

e-Fuel??FT??

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SAF?SAF??

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1?CO2?2?3?

100?/L??SAF?200?1600?/L??SAF??

JETRO?2024?2910?31?SAF?SAF??

SAF?2023?6?L?60?kL?2024?3?18?7000?L?187?kL?0.53%?2030?

SAF CO2 2.5% 2

SAF 3

SAF A B 1 3

B 4 5

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FT CO2

1980

B 5 e- Fuel CO2 CH4 FT

SAF A

1. CO2
- 2.
- 3.
- 4.
- 5.

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CO2 CO2

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CO2

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42 46 BDF

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??SAF??????Sustainable??????????????????

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CO2????????????????????CO2????2ppm????????5????0.1ppm????2.5%?  
????????????????

????????30????????????????SAF??

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

## ???AZEC????????????????????

?? ? · Tuesday, September 3rd, 2024

8?????????2AZEC????????????????????

AZEC????????????????????????2022?1????????????????????????????????????  
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??11??AZEC????????





The Government of Japan ??

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 ???one goal, diverse  
 pathways??  
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**AZEC????????????????**

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??61????????????63????10????  
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 ??AZEC????????????????????????

??COP28??AZEC????????????????  
??NGO????????????????

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??3????????????????????????????????2050????????  
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8??AZEC????????AZEC????????????????????????????????AZEC Advocacy Group??????

??JETP?Just Energy Transition  
Partnership??  
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??CCUS????????????????????AZEC????????????  
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??affordability???????

2050????????????????????????????????COP????????????????????AZEC????????????????  
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G7????????????1.5????????????????????????????????AZEC????????????????????1.5????2050?  
??NGO?AZEC????????????????????2050????????  
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????????2????????????2????????????1.5????????????4????2????????????  
????????????????????????1.5?2050????????????????????????  
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Posted in ??????????, ??? | [No Comments »](#)

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?? ?? · Monday, September 2nd, 2024



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?????2021?9??

<https://agora-web.jp/archives/2053254.html>

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**解説 小泉氏出馬へどうなる総裁選**  
異例の混戦 見過しは

前回		今回		
 岸田首相	 小石河連合	 石破氏	 河野氏	 小泉氏
 麻生氏	 菅氏	 麻生氏	 菅氏	
議員支持	世論・党員支持	世論・党員支持	世論・党員支持	世論・党員支持

©????NEWS

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©NHK

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

## 2024????????????????

?? ?? · Sunday, August 25th, 2024



andreasK/iStock

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**????????????????????2030????????????**



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0????2019????????28.9????????

????????????????CEO????????????2030??SBTi?  
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????????????????????????Google????????????????????????????1????????????????????????????????  
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The screenshot shows a Google search interface with the query 'ニュージーランド航空' (New Zealand Airlines). The search results are filtered to 'News' and show three items from 'FlyTeam':

- Item 1:** ニュージーランド航空 Airbus A320neo ZK-NHC シドニー国際空港 航空フォト | by JA8166さん 撮影2024年07月12日. Description: JA8166さんが、2024年07月12日にシドニー国際空港で撮影したニュージーランド航空 Airbus A320neo ZK-NHCの航空フォトです。 Date: 5日前.
- Item 2:** ニュージーランド航空 Boeing 777-300 ZK-OKR シドニー国際空港 航空フォト | by JA8166さん 撮影2024年07月13日. Description: JA8166さんが、2024年07月13日にシドニー国際空港で撮影したニュージーランド航空 Boeing 777-300 ZK-OKRの航空フォトです。 Date: 2週間前.
- Item 3:** ニュージーランド航空 Boeing 787-9 (ZK-NZL) 航空フォト. Description: Boeing 777-300さんが、2024年07月05日にシドニー国際空港で撮影した...

?1?Google????????????????????2024?8?24??

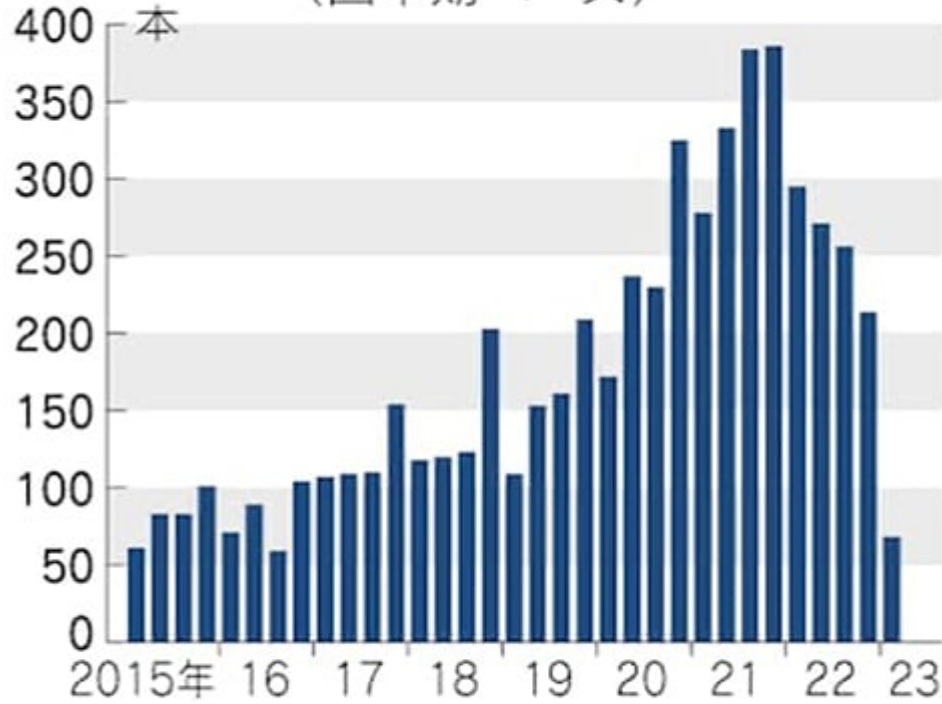
????????????????????ESG??

**2023??ESG??????????**

**????ESG???**

ESG????????2????????3??2021????????????????????

## ESG投信の設定本数は急減 (四半期ベース)



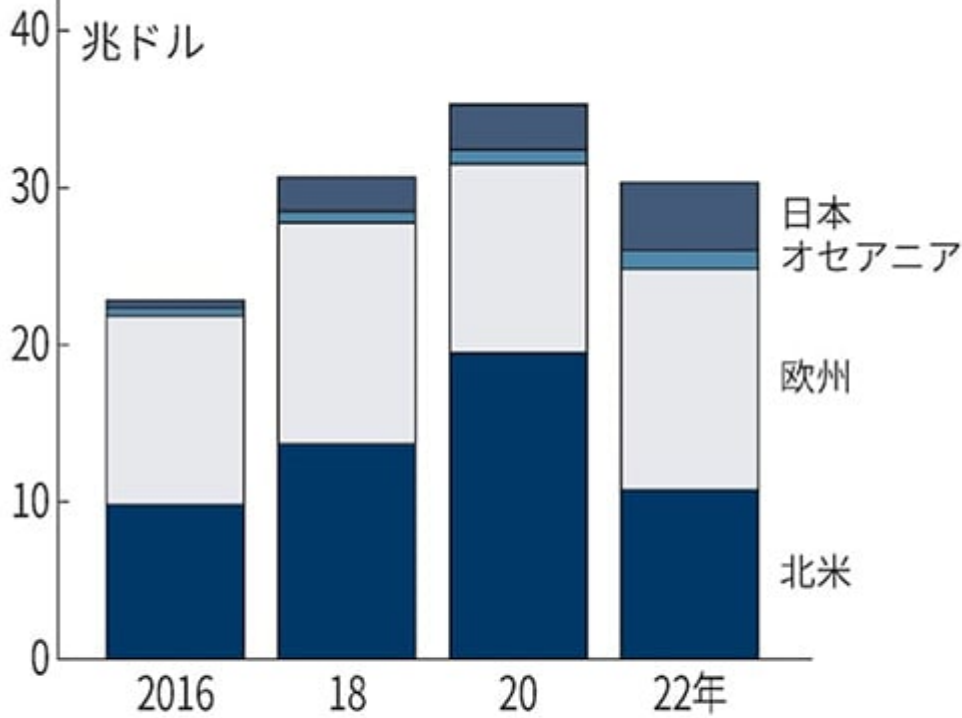
(注)モーニングスター・ダイレクトで追加型投信とETFを集計。類似投信のうち運用期間が最も長いものが対象。償還済みも含む

??ESG???????

???2023?3?20???????



# 世界のESG投資は22年に初の減少



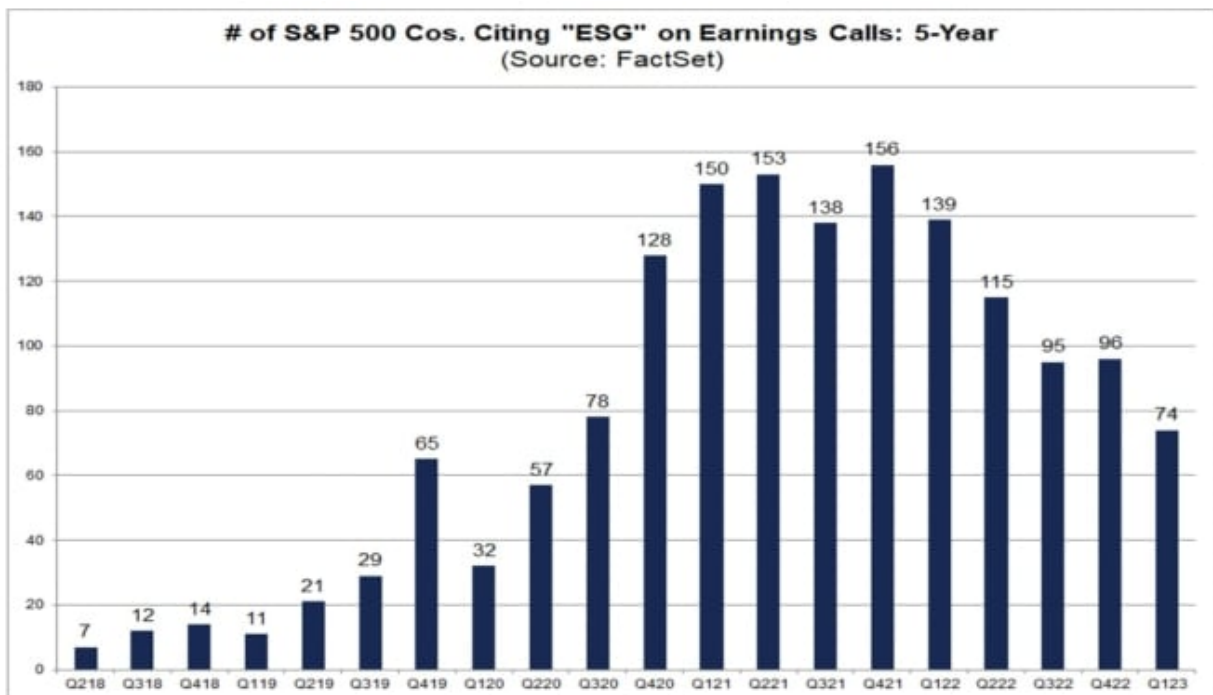
(注) オセアニアは豪州とニュージーランド、北米は米国とカナダの合計

(出所) GSIA

??ESG?????

???2023?11?29?????????

??ESG??4????????????????????????????????????



4 ESG S&P500

FACTSET

ESG 4 10 EV EV

202X XX

202X XX 2050 2030 2013 47% CO2

6 2030 46% CO2 PPA

5 6

2030 CO2 46% 6 6 46%

1 CO2 CO2

2022 11 27 COP27 CO2

EU 2023 9 UCPD CRD 2026

2050 2030 47% 2030 2050 CO2

SDGs

ESG

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??2??3??

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??BWR??

**1. ?????????????????????**

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??1.85  
?=1/0.54??

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**2. MAAP????????????????**

??MAAP?Modular Accident  
Analysis Program????????????

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1.33????????????0.54????????????????????????0.1013MPa????????????????????????????????????0.854MPa  
[gage]??

**0.854+0.1013?/ 0.54 – 0.1013 = 1.668 MPa[gage]**

????????1.668MPa[gage]??

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**3. ?????????????????????**

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??0.620?0.854MPa  
[gage]??1.233?1.668MPa  
[gage]??

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??2?3????????????????

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

# ????????????5????????

?? ?? · Thursday, August 22nd, 2024

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??37%??

??New York  
Times????????????????5??



Darwel/iStock

## 1. ????????

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**3. ??????**

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**5. ????????**

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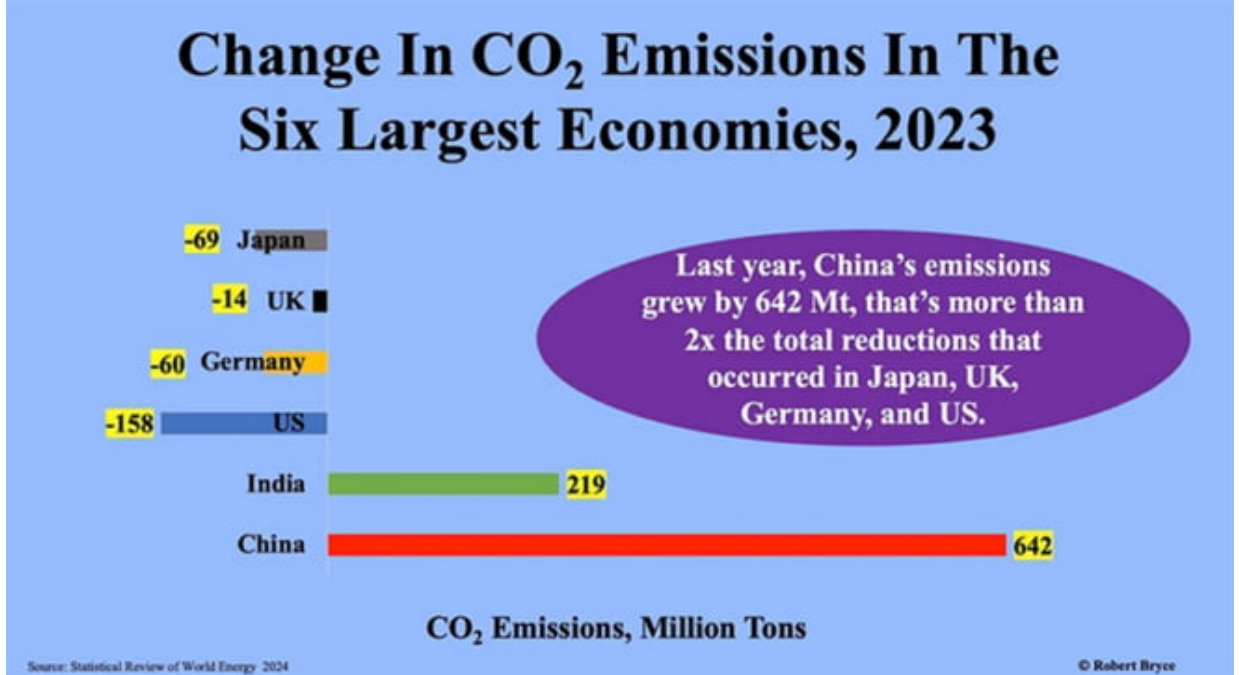
??DE&I?LGBTQ?SDGs?Net  
Zero??

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CO<sub>2</sub>??



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?? ?? · Tuesday, August 20th, 2024



vchal/iStock

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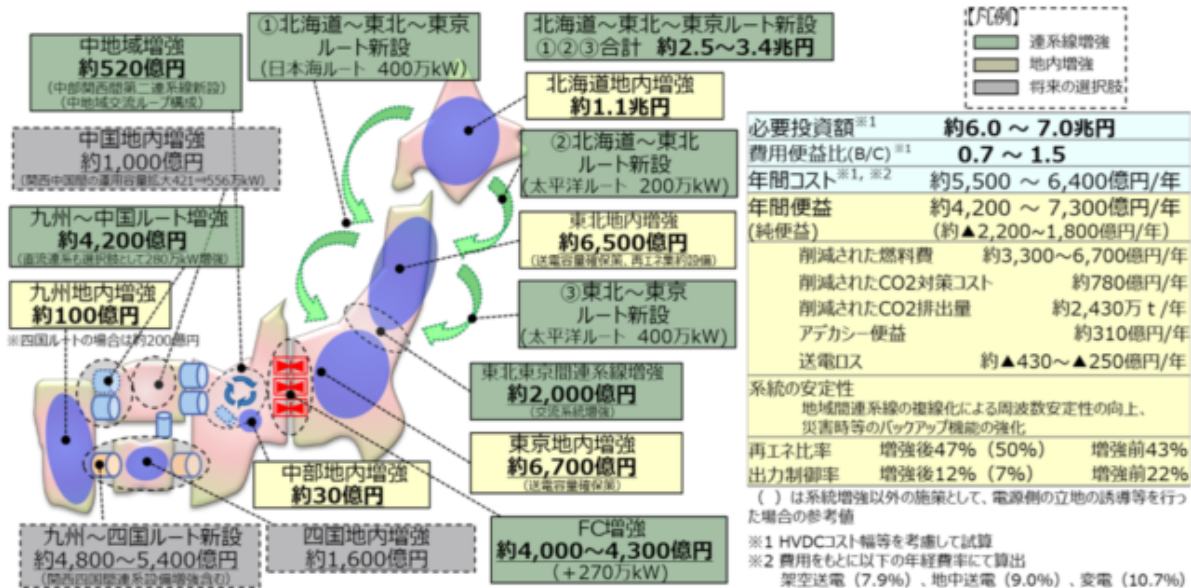


図 14 ベースシナリオの増強方策

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??6.07.0????????????????????????0.71.5????????????????

表 4 各シナリオの評価結果の比較

分析項目	シナリオ	需要立地誘導シナリオ	ベースシナリオ	需要立地自然体シナリオ
系統増強の投資額 <sup>※1</sup> (年間コスト <sup>※2</sup> )		約6.0~6.9兆円 (約0.55~0.64兆円/年)	約6.0~7.0兆円 (約0.55~0.64兆円/年)	約6.7~7.9兆円 (約0.62~0.73兆円/年)
費用便益比 (B/C)		0.6 ~ 1.2	0.7 ~ 1.5	0.7 ~ 1.5
年間便益 (純便益 (B-C))		約3,200 ~ 5,800億円/年 (約▲3,200~300億円/年)	約4,200 ~ 7,300億円/年 (約▲2,200~1,800億円/年)	約4,600 ~ 8,200億円/年 (約▲2,700~2,000億円/年)
燃料費・CO2コスト削減		約3,200 ~ 6,100億円/年	約4,100 ~ 7,400億円/年	約4,600 ~ 8,300億円/年
送電ロス		約▲590~▲350億円/年	約▲430~▲250億円/年	約▲410~▲240億円/年
アデカシー便益 <sup>※3</sup>		約330億円/年	約310億円/年	約310億円/年
CO2削減量		約870万t/年	約2,430万t/年	約2,830万t/年
再エネ比率 <sup>※4</sup>		49% (50%)	47% (50%)	47%
再エネ出力制御率 <sup>※4</sup>		10% (7%)	12% (7%)	13%

※1 偏在する電源等を大消費地へ送電するための連系線等の広域連系システムの増強コストのみを記載しており、再エネ増加に伴う、調整力確保及び慣性力・同期化力低下等の対策コストは含んでいない。

また、HVDC 送電コストは、2050 年頃におけるスケールメリットや技術革新のコスト低減を先取りした単価を採用、海底ケーブル工事は占用料等を含まず、水深等を考慮したルート変更によるコスト増の可能性あり。

※2 系統増強を行うことで毎年発生する費用（減価償却費、運転維持費など）

※3 系統増強による供給力確保量の節減効果

※4 ( ) は系統増強以外の施策として、電源側の立地の最適化等を行った場合の参考値<sup>※2</sup>

なお、電源については、再エネを最優先の原則の下で最大限の導入に取り組むという国の政策的議論を踏まえて、各シナリオにおいて同じ条件としていることに留意が必要

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?SDGs?????????

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

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?? ??? ?? · Friday, August 16th, 2024

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21?12?????????????????????????Bürgergeld?????????????????????????????????23?1????????????????  
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Stadtrate/iStock

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

**??**

GEPR?? · Friday, August 16th, 2024



songqiuju/iStock

2024?7?24??

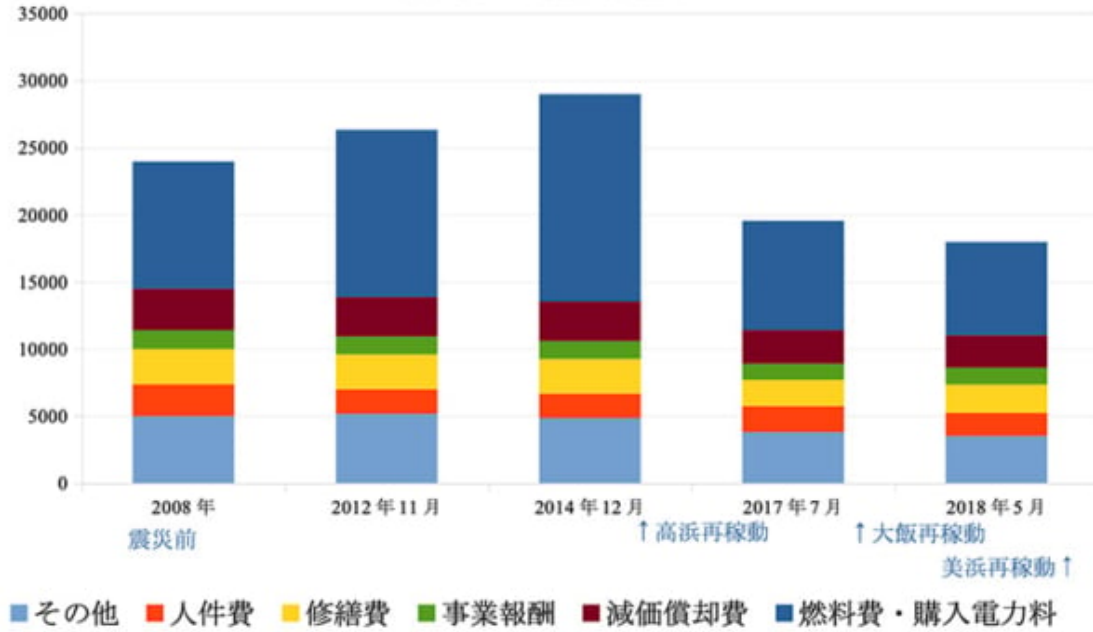
??3????????????????(2023.02.04)????????????????????????????????  
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関西電力電気料金原価推移

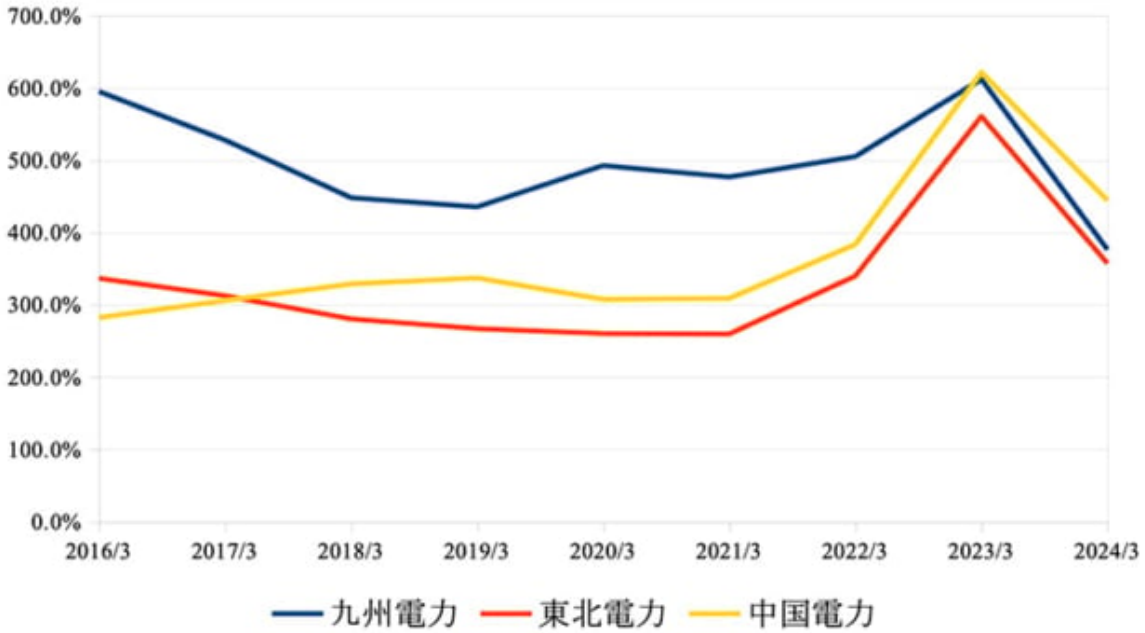


2008年2018年

2.

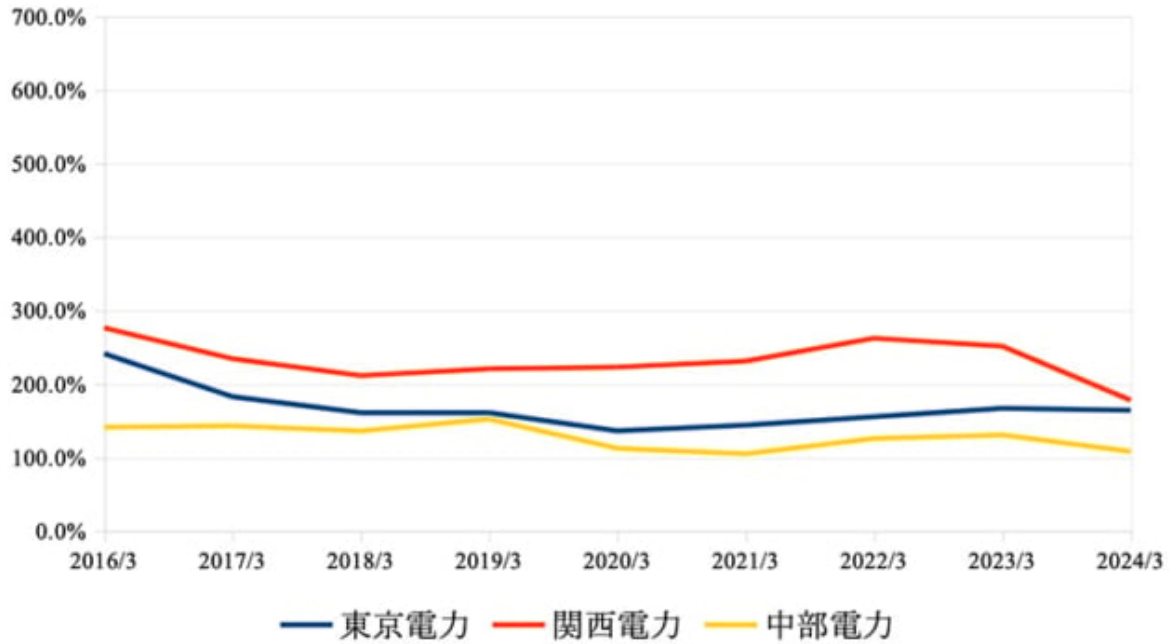
3.

中堅3社 有利子負債比率



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中央3社 有利子負債比率



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2024?3?????3?????????????????????3??100%????????????????

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1966????1990??

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

## ????????????????????

?? ? · Wednesday, August 7th, 2024



imagedepotpro/iStock

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**SHORT SUMMARY OF OBSERVATIONS UNTIL JUNE 2024**

1: Observed average annual global air temperature change last 30 years is about +0.016oC (UAH). If this change rate remains stable, additional average global air temperature increase by year 2100 will be about +1.2oC.

2: Tide gauges along coasts indicate a typical global sea level increase of about 1-2 mm/yr. Coastal sea level change rate last 100 year has essentially been stable, but with periodic variations. If change rate remains stable, global sea level at coasts will typically increase 8-16 cm by year 2100, although many locations in regions affected by glaciation 20,000 ago, will experience a relative sea level drop.

3: Since 2004 the global oceans above 1900 m depth on average have warmed about 0.037oC. The maximum warming (about 0.2oC, 0-100 m depth) mainly affects oceans near Equator, where the incoming solar radiation is at maximum.

4: Sources and sinks for CO2 are many. However, changes in atmospheric CO2 follow changes in global air temperature, and changes in global air temperature follow changes in ocean surface temperature.

5: There is no perceptible effect on atmospheric CO2 due to the COVID-related drop in GHG emissions 2020-2021, demonstrating that natural sinks and sources for atmospheric CO2 far outweigh human contributions. Therefore, any future reductions in the use of fossil fuels are unlikely to have any significant effect on the amount of atmospheric CO2.

**2024?6????????????**

1???30????????????????????+0.016??UAH????????????????2100????????????  
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5?2020?2021??COVID??GHG????????????CO2????????????????CO2?????  
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CO2??2.9%????CO2??2020?2021??COVID????CO2?????  
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C/????????????????

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C/?????IPCC????CO2?????

IPCC????CO2????CO2?????  
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21?????

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C/????2ppm????0.07ppm????

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Posted in ???, ????? | No Comments »

### ????????????

?? ?? · Tuesday, August 6th, 2024



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

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?? ?? · Monday, August 5th, 2024



GX2040????????????????

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

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GEPR??? · Friday, August 2nd, 2024



Alberto Masnovo/iStock

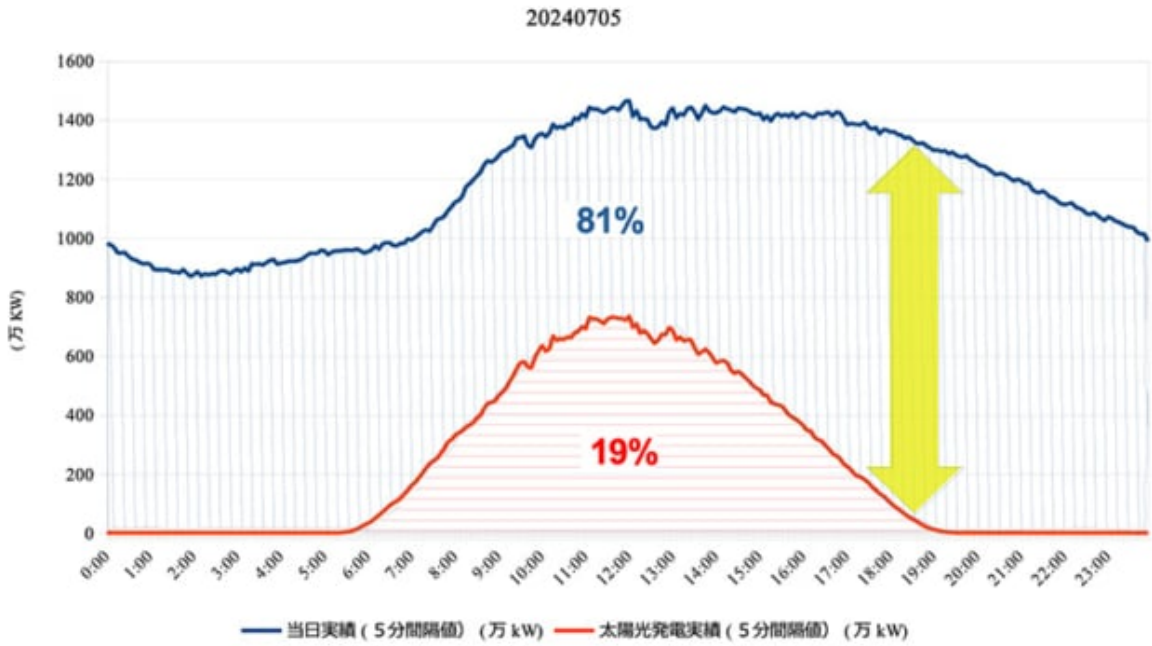
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**1. ????????????????**

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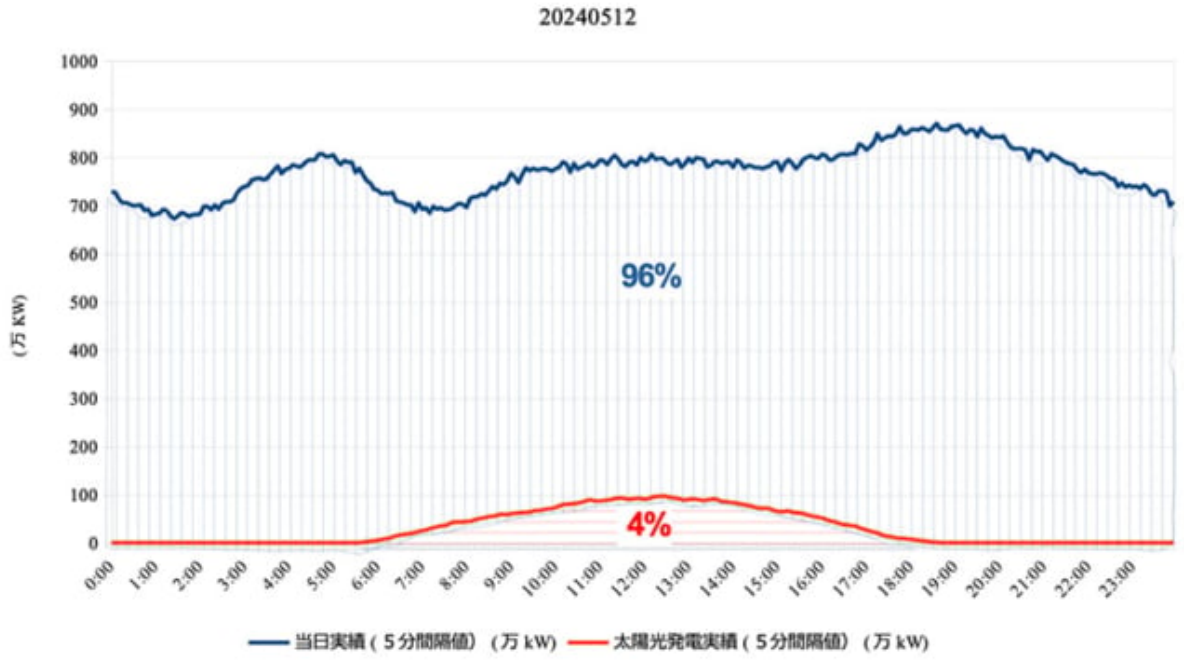
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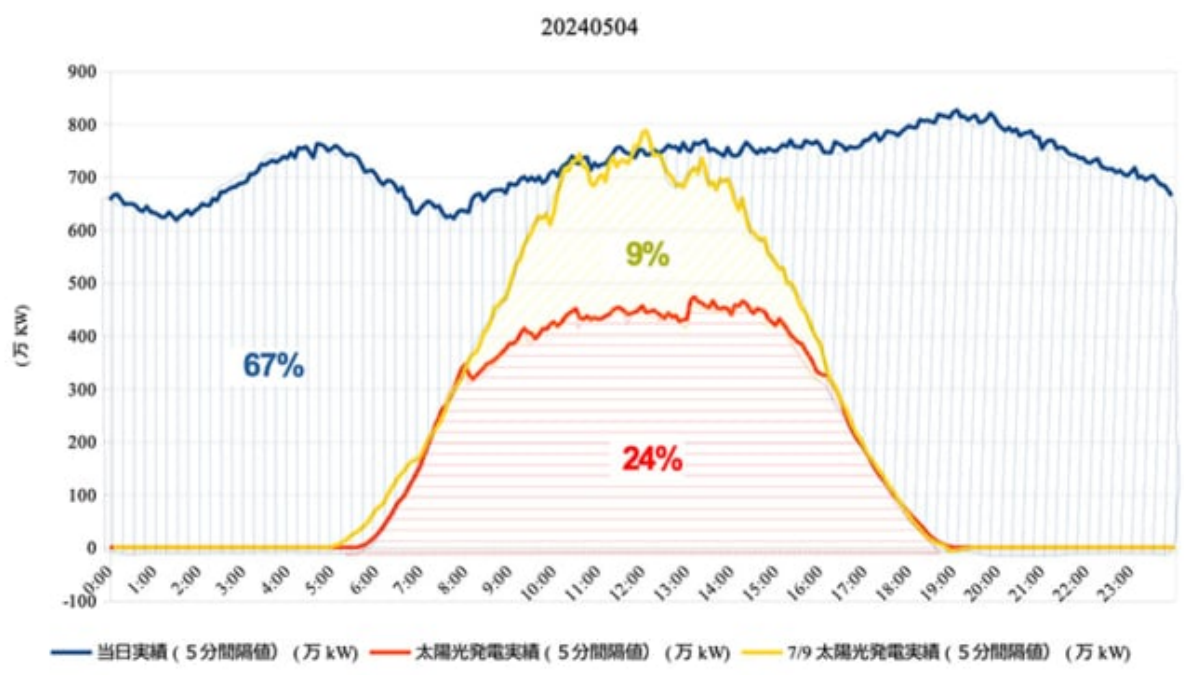
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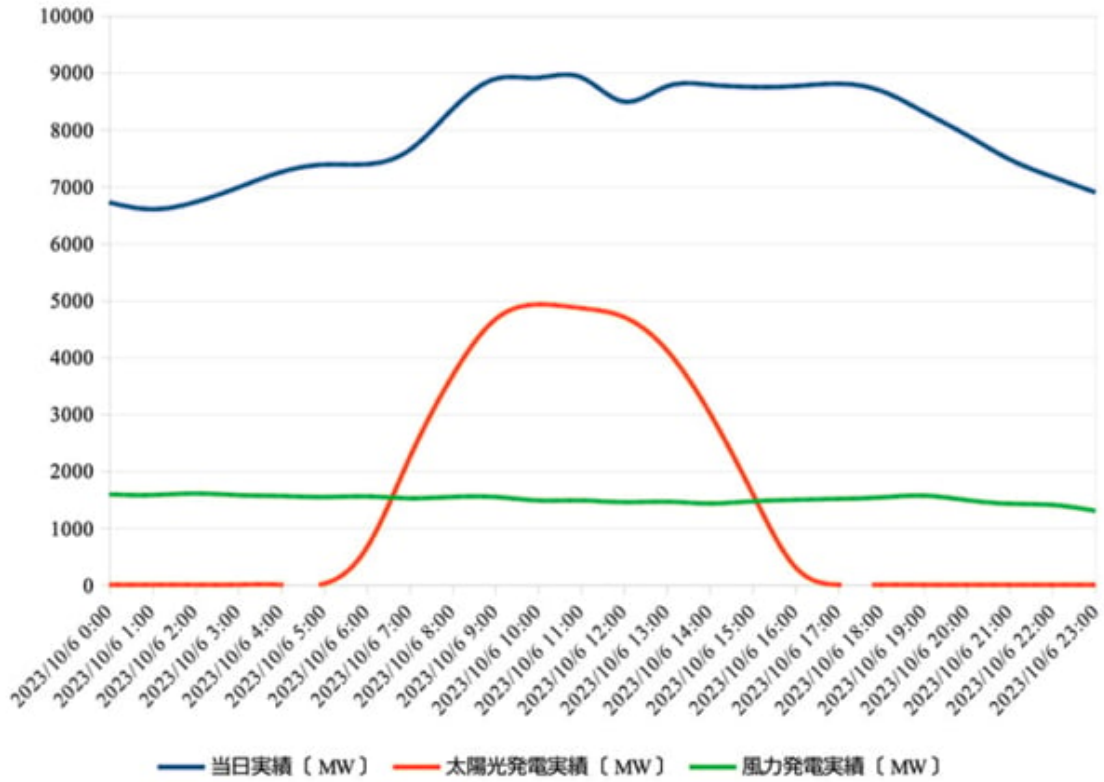
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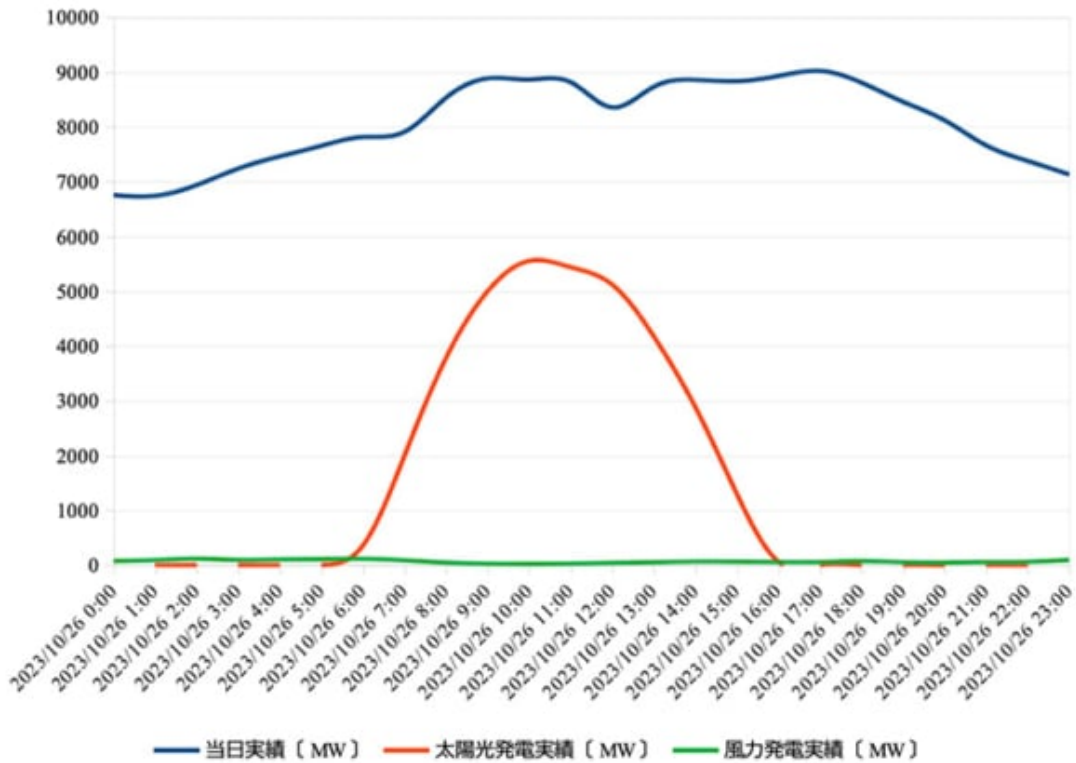
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1966????1990??

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

**????????????????????**

?? ?? · Thursday, August 1st, 2024



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

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?? ? · Saturday, July 27th, 2024

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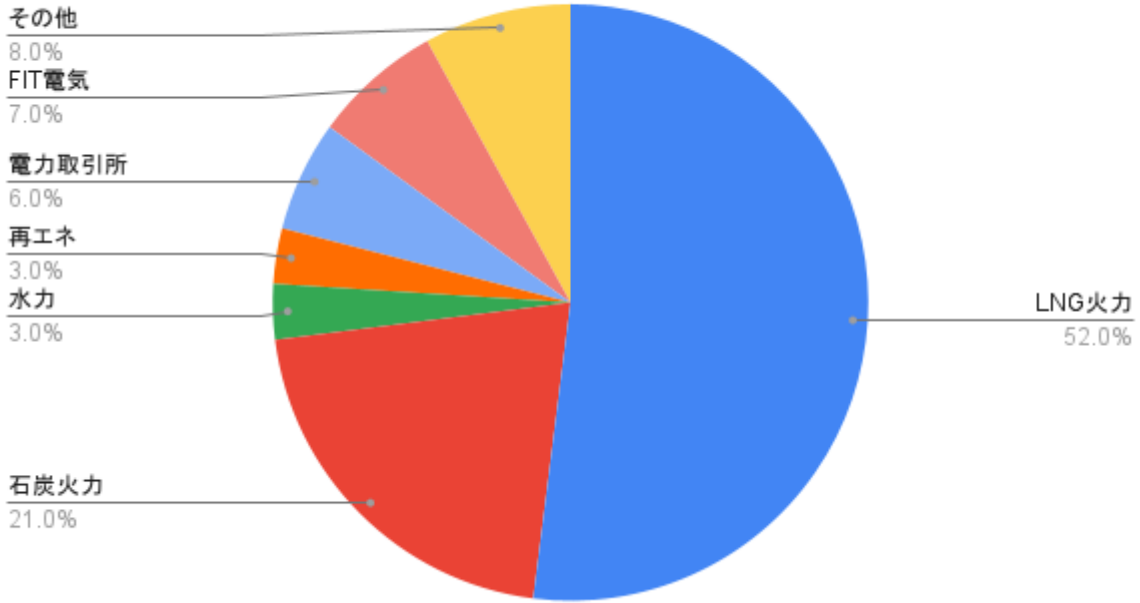
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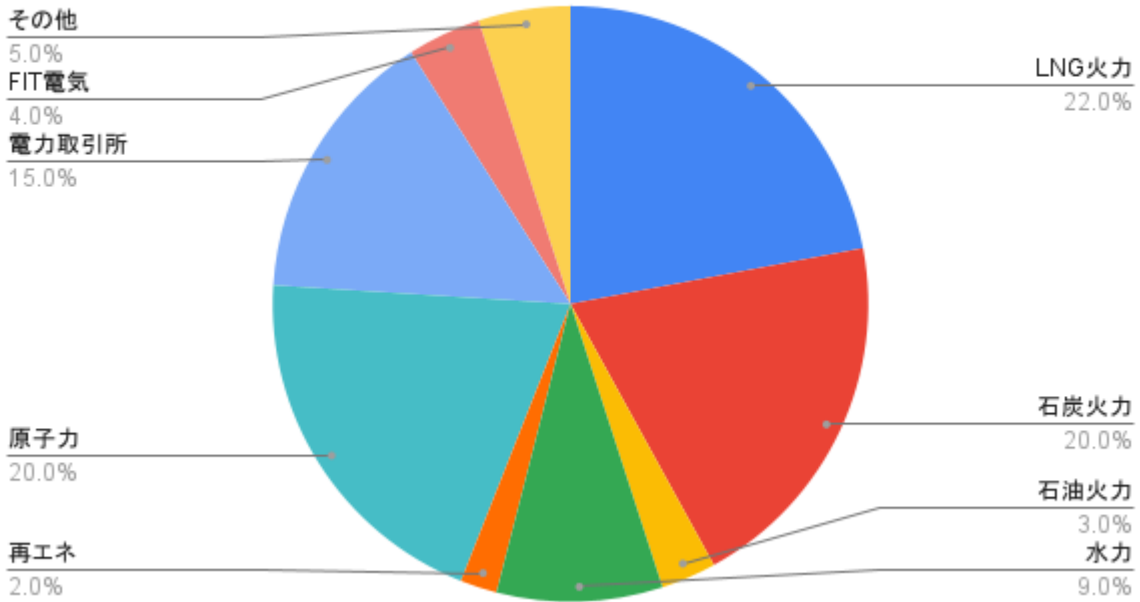
### 東京電力 2022年度実績



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???????LNG?????73????????????????27??CO2????????  
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### 関西電力 2022年度実績



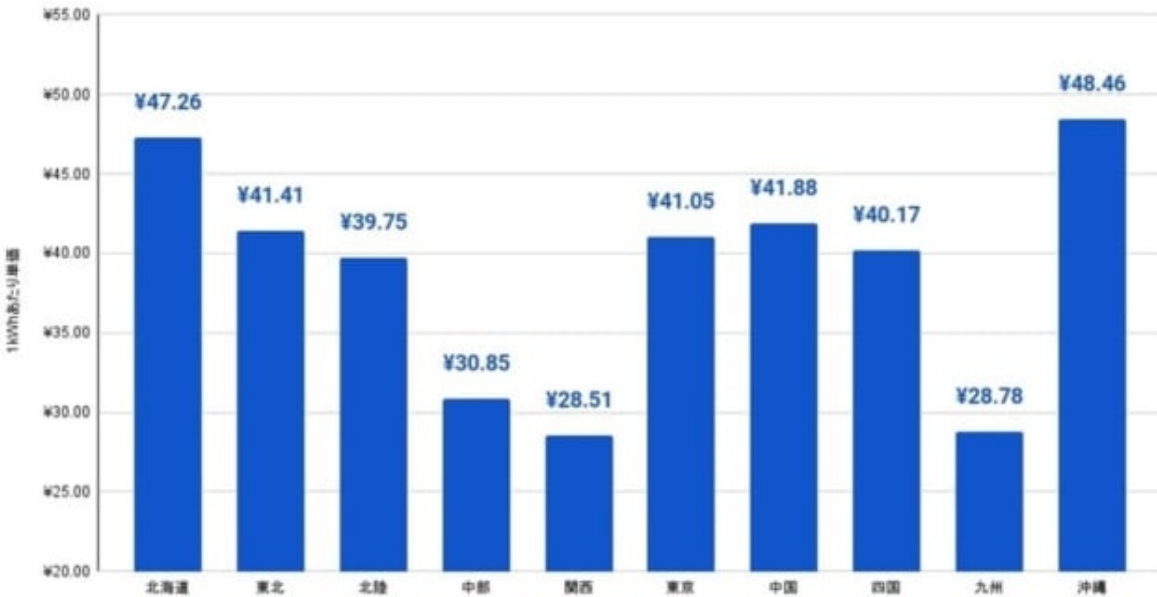
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???????LNG???????45????????????????20????????????????35??  
????CO2??????????????

????????55????272????????

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【地域別】電気料金1kWhあたりの目安単価 (2024年4月以降)



3???10????????1?

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1?1kWh????????????????????

2?2????HP????CO2????????2021??

3?3???10????????????????????????????????2024?6?7???

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



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?? ?? · Saturday, July 20th, 2024



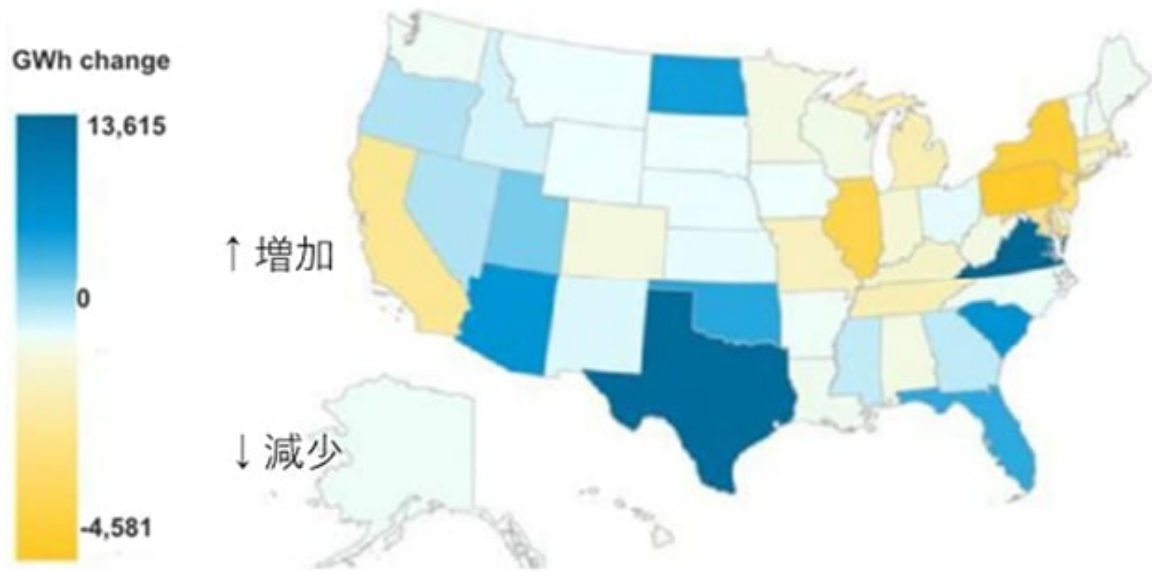
da-kuk/iStock

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??6????????????????EIA????????????????<sup>21</sup>????2019??23??4????????????????????????????????  
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### U.S. states change in commercial sector electricity consumption (2019–2023) change in annual sales of electricity to commercial customers, gigawatthours (GWh)



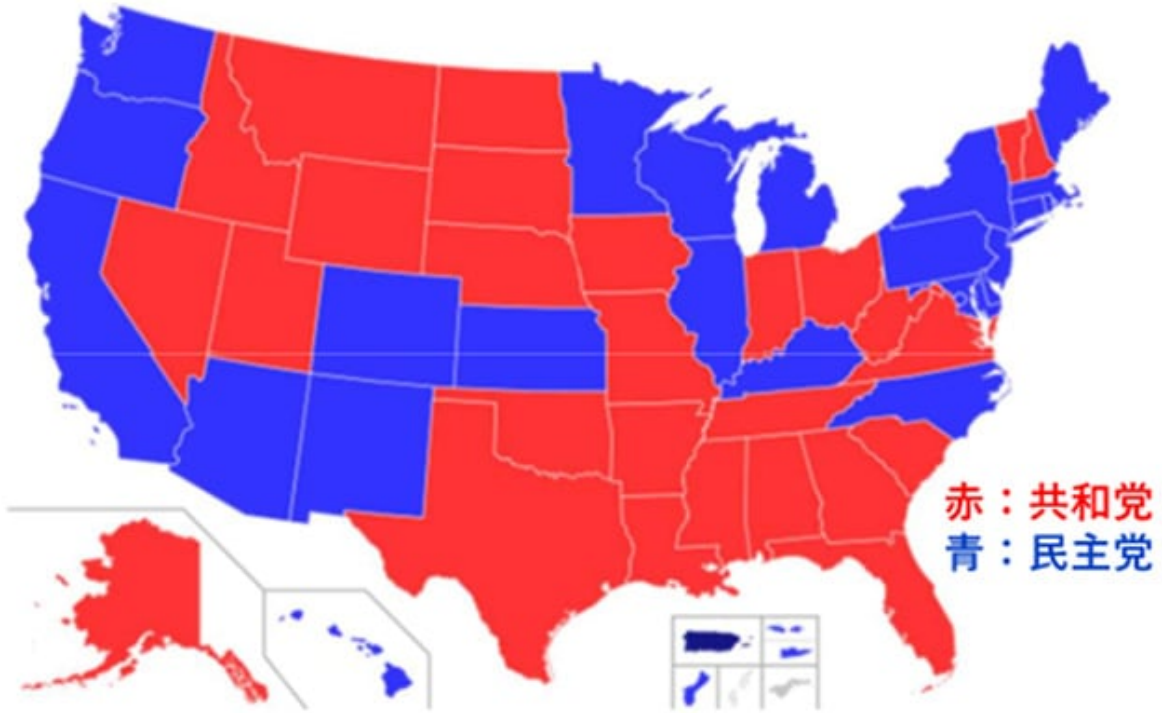
Data source: U.S. Energy Information Administration, [Electricity Data Browser](#)

出典：Commercial electricity demand grew fastest in states with rapid computing facility growth”, Today in energy, June 28, 2024, EIA

?1 ??????????2019?2023?

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??Red state????????????????????????????????????Blue State????????????????



出典：Wikipedia “ List of current United States governors”

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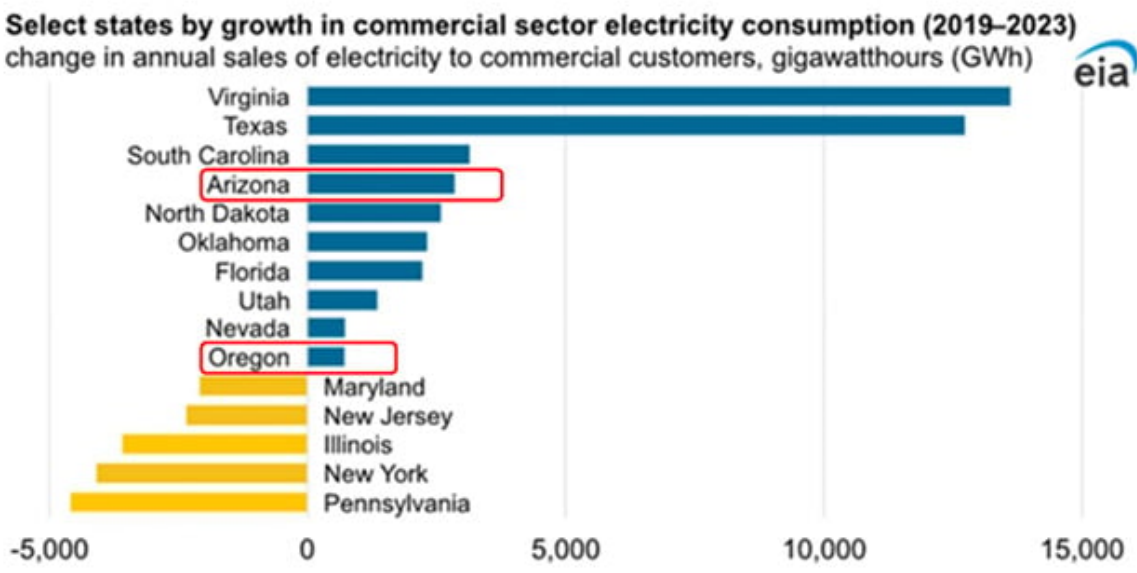
?1?????????1????????2????????1?????2????????????????????????????????

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EIA??4????????????????10?????  
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??<sup>22</sup>?2019????94????????????????????????????????  
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Data source: U.S. Energy Information Administration, *Electricity Data Browser*

出典：Commercial electricity demand grew fastest in states with rapid computing facility growth”, Today in energy, June 28, 2024, EIA

23 ?????????????????

2022年、米国で商業部門の電力消費量が急増した。これは、データセンターの建設が加速していることによる。米国では、2022年の商業部門の電力消費量は、前年比で約10.8c/kWhから9.35c/kWhに減少した。これは、エネルギー効率の向上によるものである。米国では、2022年の商業部門の電力消費量は、前年比で約12.41c/kWhから9.05c/kWhに減少した。これは、エネルギー効率の向上によるものである。米国では、2022年の商業部門の電力消費量は、前年比で約21.81c/kWhに増加した。これは、データセンターの建設が加速していることによる。

米国では、2022年の商業部門の電力消費量は、前年比で約5%増加した。これは、データセンターの建設が加速していることによる。米国では、2022年の商業部門の電力消費量は、前年比で約5%増加した。これは、データセンターの建設が加速していることによる。米国では、2022年の商業部門の電力消費量は、前年比で約5%増加した。これは、データセンターの建設が加速していることによる。

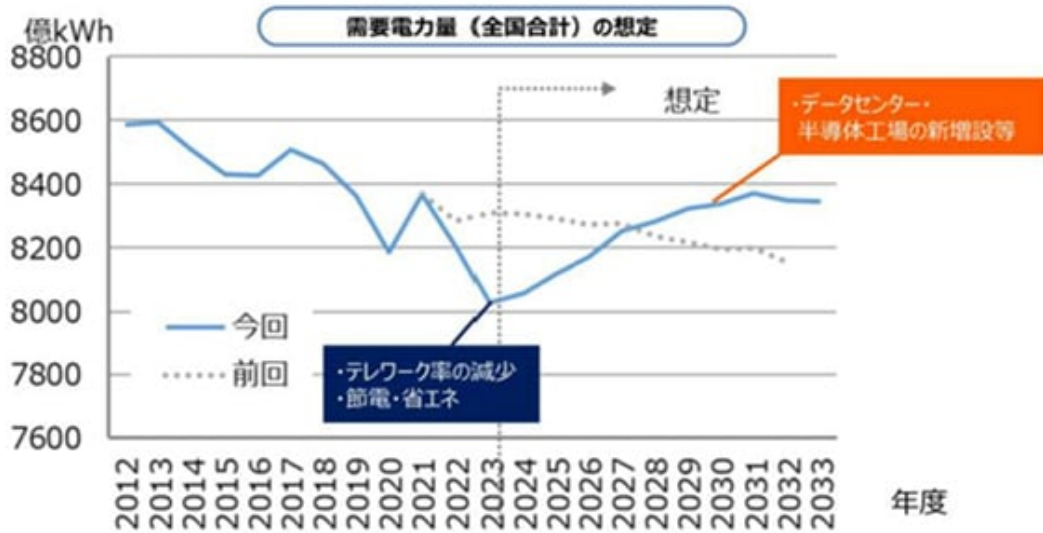
米国では、2022年の商業部門の電力消費量は、前年比で約5%増加した。これは、データセンターの建設が加速していることによる。米国では、2022年の商業部門の電力消費量は、前年比で約5%増加した。これは、データセンターの建設が加速していることによる。

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米国では、2022年の商業部門の電力消費量は、前年比で約5%増加した。これは、データセンターの建設が加速していることによる。米国では、2022年の商業部門の電力消費量は、前年比で約5%増加した。これは、データセンターの建設が加速していることによる。米国では、2022年の商業部門の電力消費量は、前年比で約5%増加した。これは、データセンターの建設が加速していることによる。



(出典) 電力広域的運営推進機関HP 2024年度 全国及び供給区域ごとの需要想定について

出典：第55回総合エネルギー資源調査会基本政策分科会（2024.5.15）資料 1

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??20??GX????????????????????????GX????????????????????????  
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CO2??374??  
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?1?“Commercial electricity demand grew fastest in states with rapid computing facility growth” Today in energy, IEA,  
June 28, 2024

?2????????????????DC??

?3?RGGI????????????????????????CO2??  
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?4?????1kW?????????10?????????14????????300?kWh?????????????????????245?????????5240?????????

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

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?? ?? · Tuesday, July 16th, 2024

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





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Posted in ???, ????? | No Comments »

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?? ?? · Saturday, July 13th, 2024



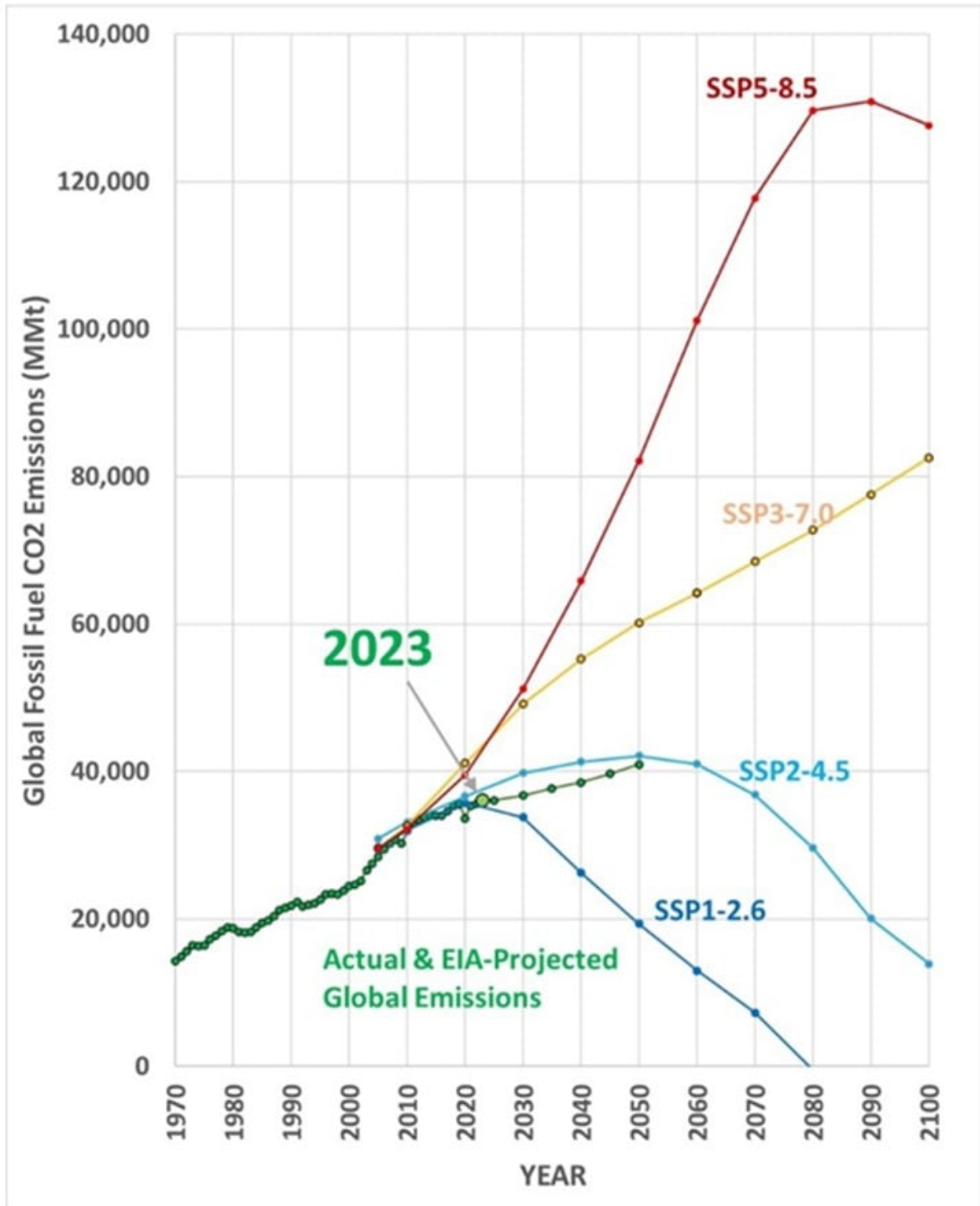
alexis84/iStock

??CO2????????????????????IPCC????SSP5-8.5????????

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????????????CO2????????????2050????????????Department Of Energy, Energy Information Administration??????

??EIA????????????CO2????????????EIA????????????

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IPCC?SSP5-8.5??  
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Posted in ???, ????? | No Comments »

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?? ??? ?? · Friday, July 12th, 2024



Stadtratte/iStock

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Wikipedia

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Posted in ???, ?? | No Comments »

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?? ?? · Monday, July 1st, 2024



zhengzaishuru/iStock

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

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?? ? · Saturday, June 22nd, 2024



REPowerEU 2030 100

European Hydrogen Backbone EHB 5

EHB EU 800 98 CO2



Petmal/iStock

2030 1000 2050 5000 CO2 10%

EU

FC

2017 2020 100 4 FC 2023 27 FC 8000

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

## ????COP29

?? ? · Friday, June 21st, 2024



COP29 HP??

6????????60????????????????????SB60????????????SB60????2023??COP28????????????????????2024?11??COP29????????????????????????????

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COP29????COP????????2015????????????????????1000??N CQG????????????????NCQG?COP29????????????????????2025????????????NDC????????????????????????

????1.5????2050??

COP28????????????????????????????????2025????????????2030??43??2035??60????2019????2030????? ??????3????????????2????????????????1.5??

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SB60????????????

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COP28??NCQG????????COP29????????????N  
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COP27????????????????????COP28????????????UAE??  
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- COP28??????
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COP29????????????????????1.5??

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

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?? ?? · Monday, June 17th, 2024



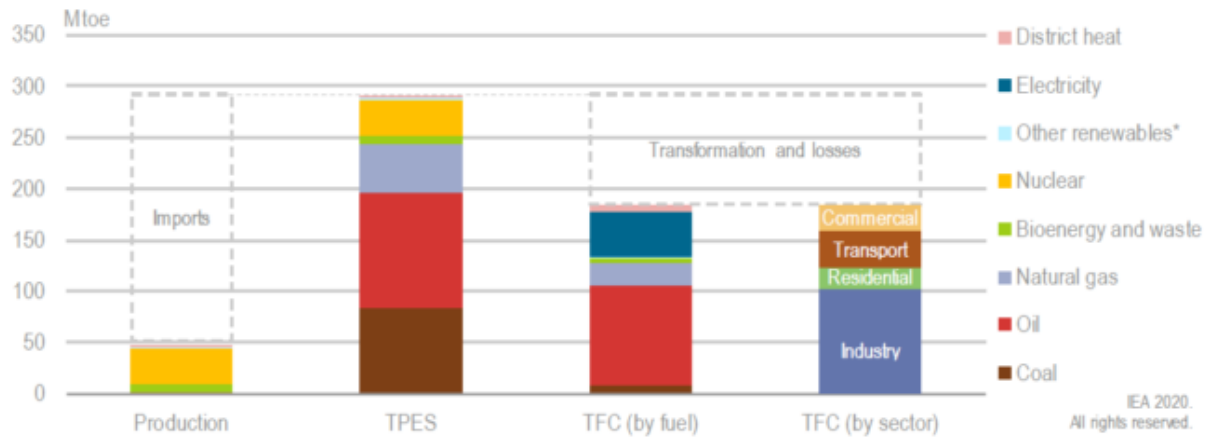
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**Figure 2.2 Overview of Korea's energy system by fuel and sector, 2018**



Both energy supply and demand in Korea are highly dominated by fossil fuels due to a strongly developed industry sector.

\* Other renewables includes wind power, geothermal, hydro and solar energy.

Note: TPES = total primary energy supply. TFC = total final consumption.

Source: IEA (2020), IEA World Energy Statistics and Balances (database), [www.iea.org/statistics](http://www.iea.org/statistics).

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