

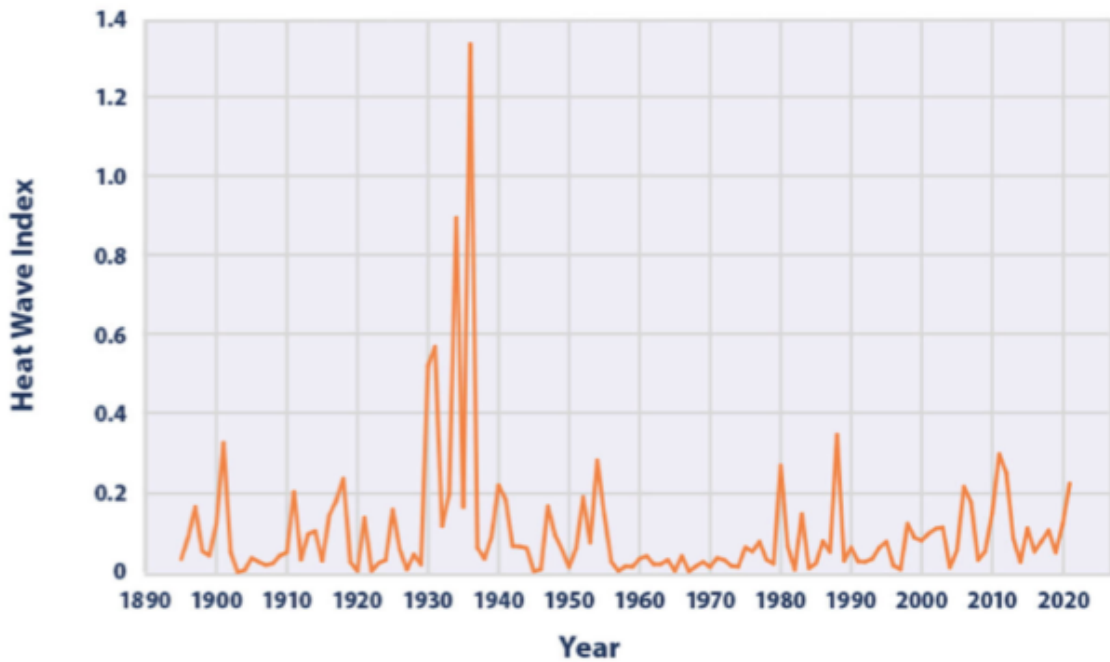
2?1961?1990????????????(GMST)

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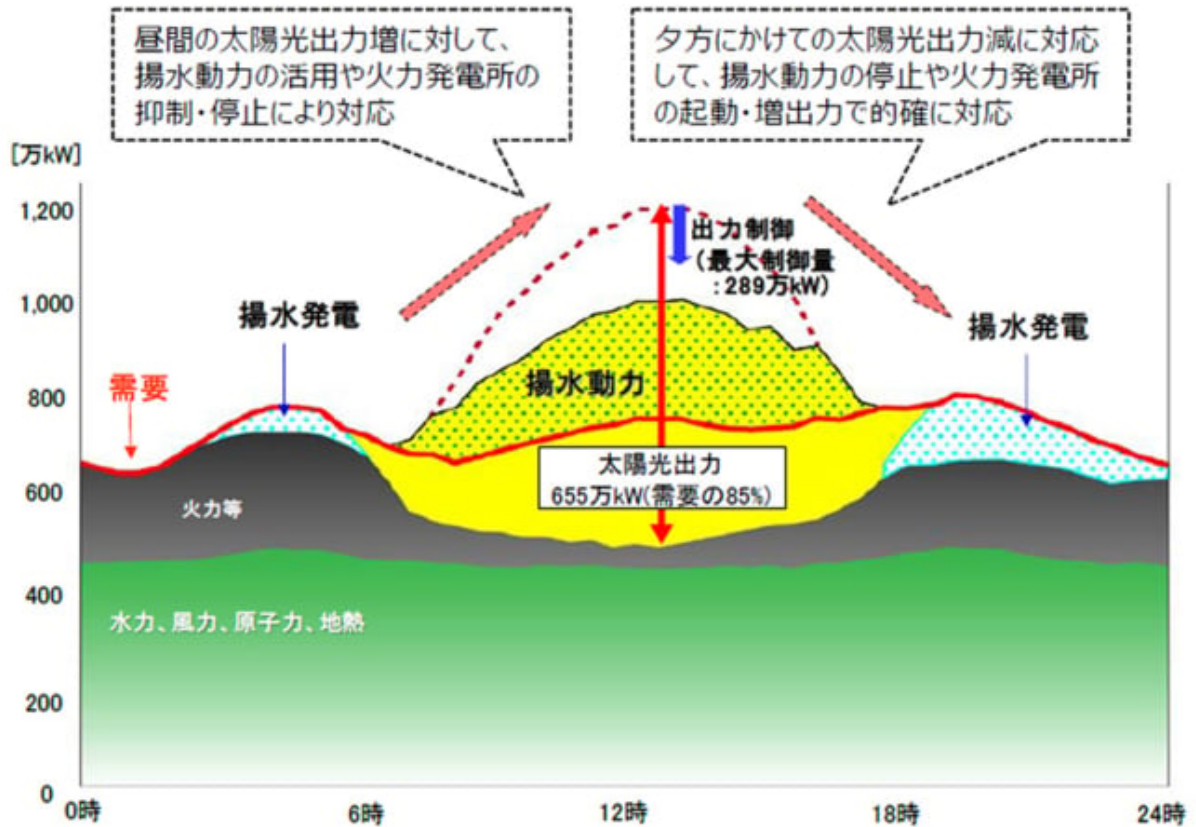
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<2020年3月8日の九州の電力需給イメージ>



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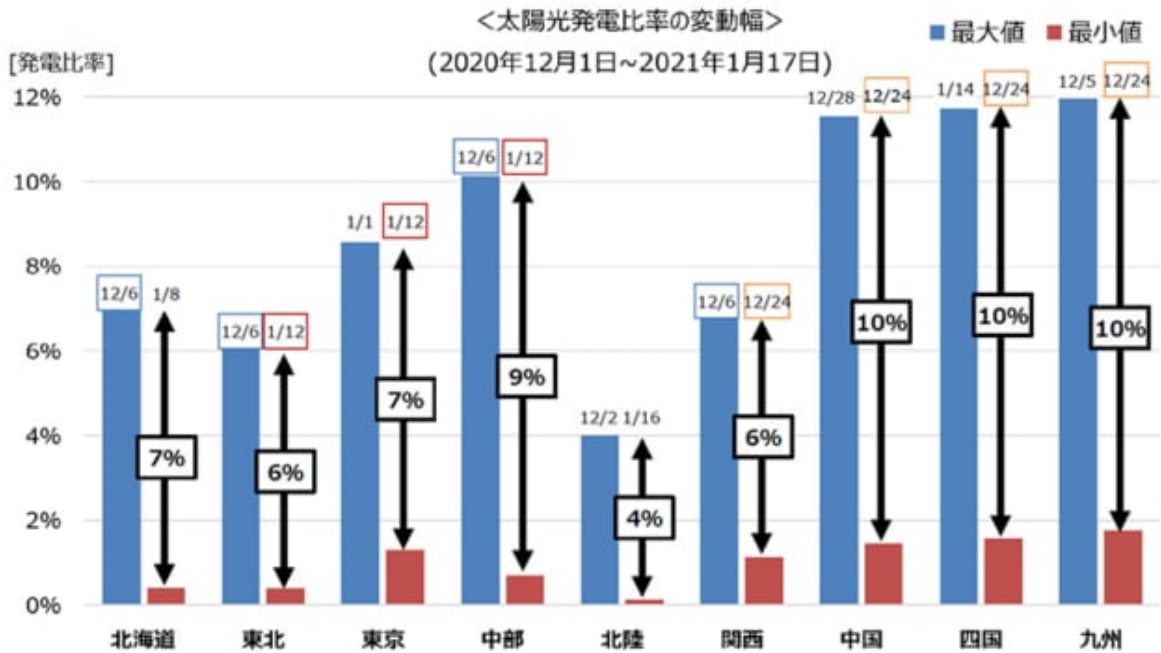
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【参考】太陽光発電比率の変動幅（2020年12月1日～2021年1月17日）

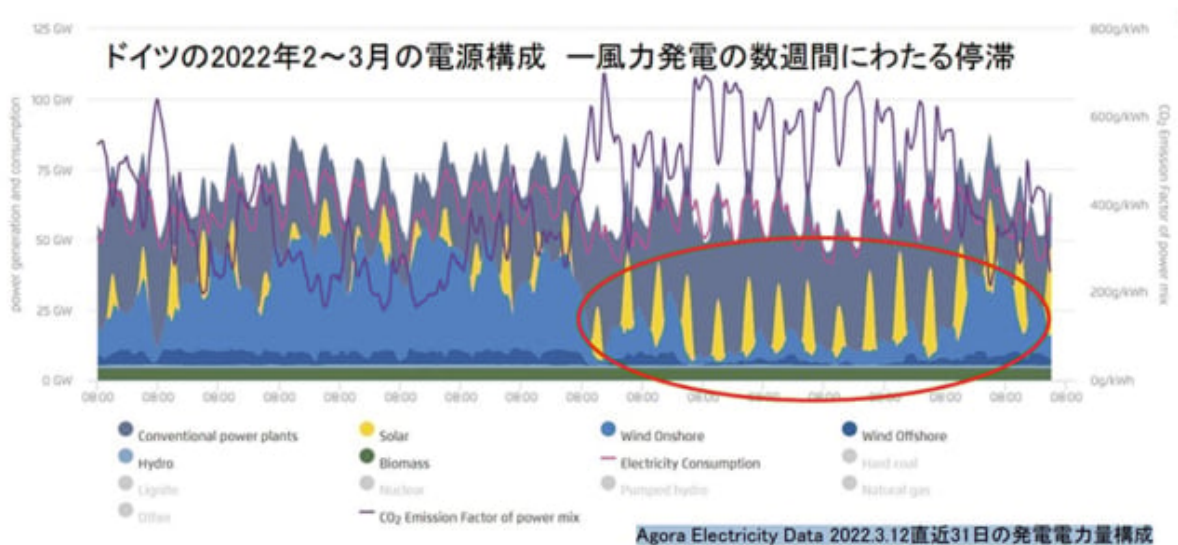
- 2020年12月1日～2021年1月17日の期間において、発電量全体に占める太陽光の発電量比率の変動幅（最大値と最小値の差）は、各エリアの総発電量の約4%～約10%分となっている。



※事業者ヒアリングに基づき、資源エネルギー庁作成。棒グラフ上に最大値、最小値を記録した日付を記載。12

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Agora Electricity Data 2022.3.12直近31日の発電電力量構成

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

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



Muhammet Camdereli/iStock

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32?????????????RIA????????????????????????5?????????????1?????3????????????????????????
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8????????36????????????

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?? ?? · Sunday, March 10th, 2024



taka4332/iStock

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????????????2000????????CO2????????????????????IPCC????1????0.5?????
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43????????????????60????

▶ 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CO₂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CO₂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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??2030?2050????????????????????????????
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2026??2023????????????????????????2023
?10?11????????????????2025??
?2026??

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202X?XX?XX?

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???202X?XX??2050????????????????2030??2013??47% ?????????????CO2????????
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??6????????????????2030?46% ?????????
??CO2????PPA??

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????????2030??CO2??46% ?????????????????????6% ?????????????????6??
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??????EU??2023?9????????UCPD????????CRD?????2026????????????????????????????
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ESG??

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

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?? ?? · Wednesday, March 6th, 2024



Dilok Klaisataporn/iStock

1. ????

2015?12??COP21?????2016?11?4????????????8????????????2020?10????????????2050????
????????????????????2035????????????EV????????????

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2. ?????EV?

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fuel????????????

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??EV????EBIT????47????EV????72,608????EV1????6
4,731????

2023?????EV?10????750,789??F????????????????????CFO??
????????2??EV????????????????????

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

EV????????SNS????EV????????????????TV????????????????????????????????????
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2019????????????????CO2????EV????????????10????????????????????????????CO
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3. ?????????

2021?8????????????2030????????????????????????????LCOE?Levelized cost of
electricity????????????????????????????????

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電源	石炭火力	LNG 火力	原子力	石油火力	陸上風力	洋上風力	太陽光 (事業)	太陽光 (住宅)
発電コスト (¥/kWh)	13.6~ 22.4	10.7~ 14.3	11.7~	24.9~ 27.6	9.8~ 17.2	25.9	8.2~ 11.8	8.7~ 14.9
設備利用率 稼働年数	70% 40年	70% 40年	70% 40年	30% 40年	25.4% 25年	33.2% 25年	17.2% 25年	13.8% 25年

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??BP??23????? ?Beyond
Petroleum?????2020????50????????????50GW????????????40????????
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BP lost \$1b in wind power and just flipped from cutting oil by 40% to increasing it « JoNova (joannenova.com.au)

??BP??????????11????????10??BP??????????BP????????????
??2027????23????????40????BP????
????????2.6????????

4. ESG

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2015????????????JP????3????????
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Climate Action 100+

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????68????700????16????ESG??
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5. ????

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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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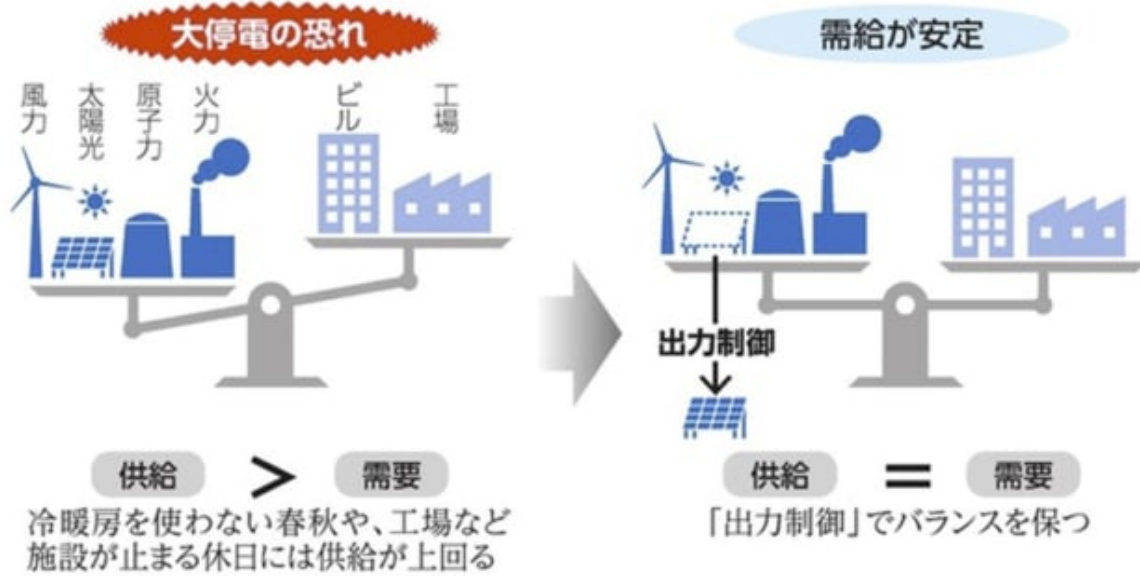
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電力は需要と供給のバランスが大切

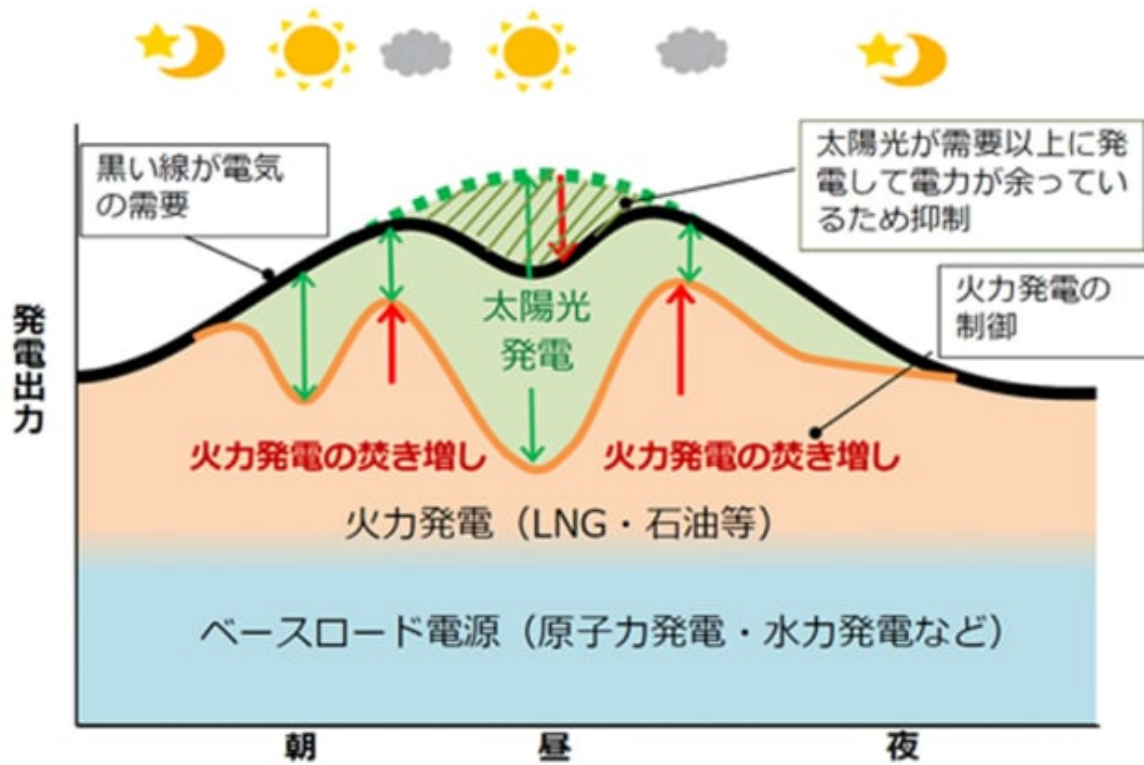


電力は需要と供給のバランスが大切

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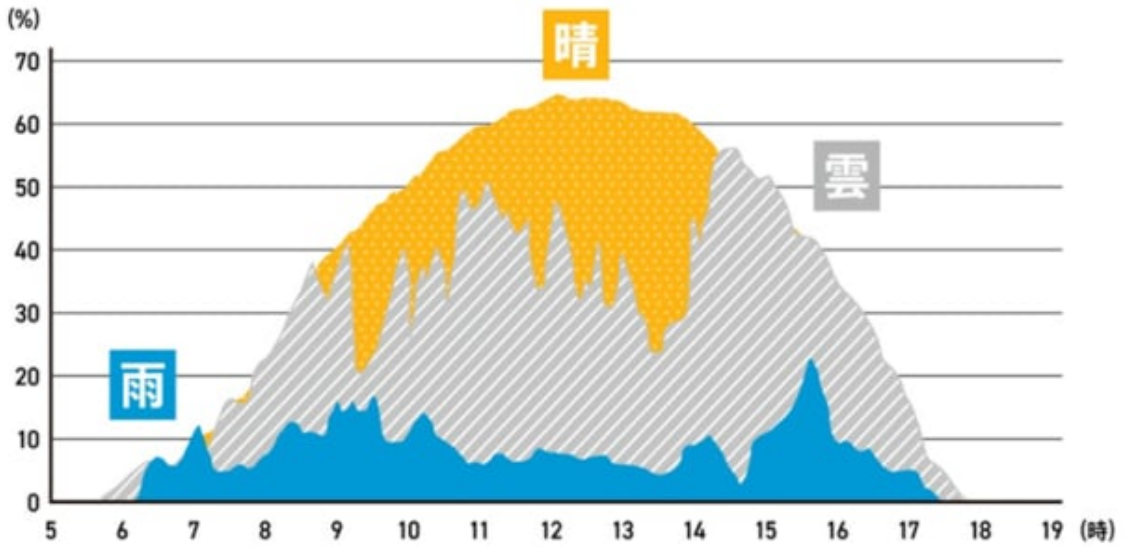


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出力比 (発電出力/定格出力)



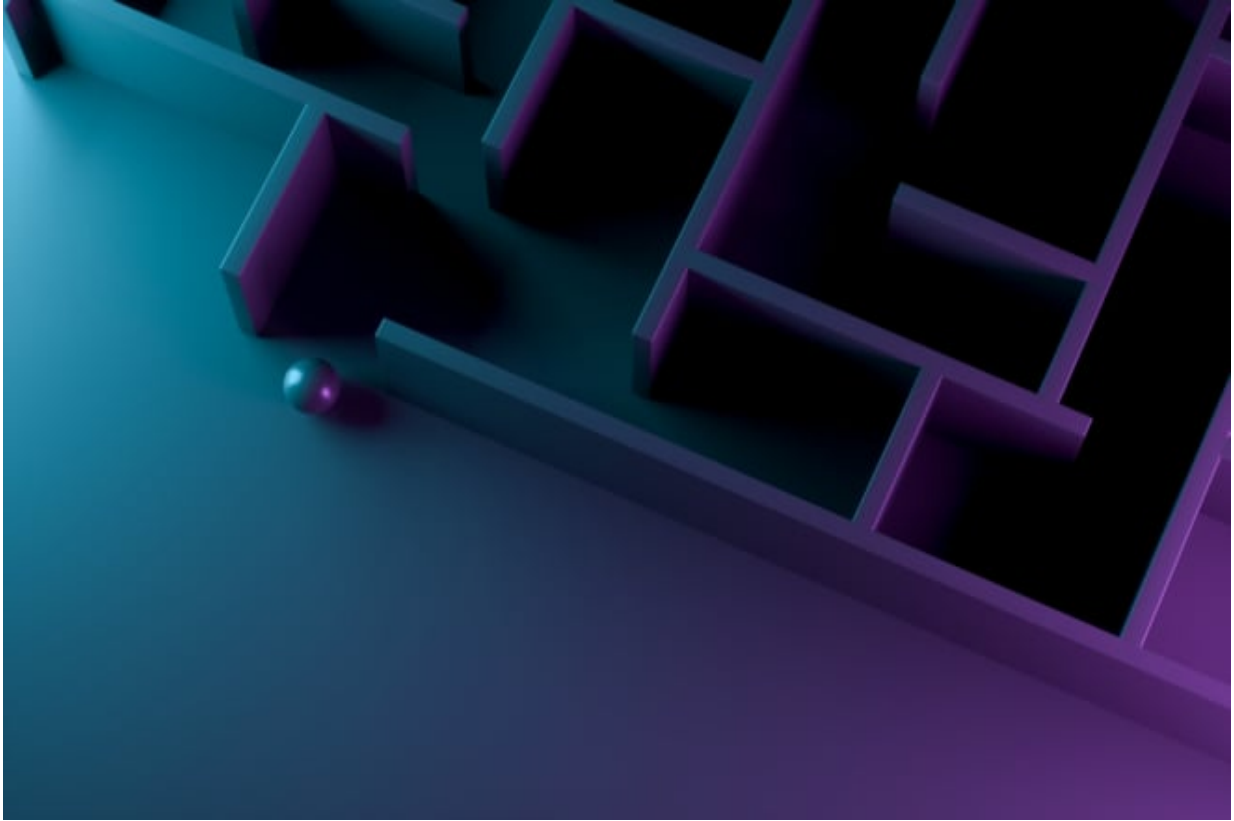
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-
- ①火力(石油、ガス、石炭)の出力制御、揚水・蓄電池の活用
 - ②他地域への送電 (連系線)
 - ③バイオマスの出力制御
 - ④太陽光、風力の出力制御
 - ⑤長期固定電源※ (水力、原子力、地熱) の出力制御
- ※出力制御が技術的に困難

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akinbostanci/iStock

COP28????????????????????1.5????????????????????????????????????1.5????2050
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The Death of the 1.5 Degree Climate Target????????????1?8???????????????
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Lari Bat/iStock

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— ?????????? (@kahoku_shimpo) January 27, 2024

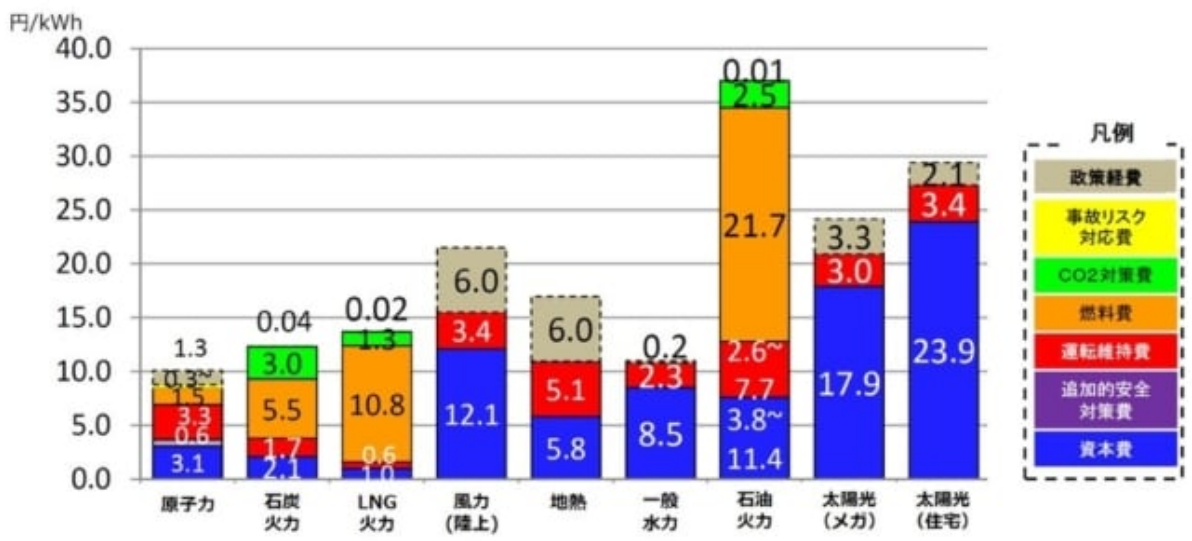
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1. ????A????????????????1,617????????????
2. ?5????????2????????B????????372????
3. ?A??B??4????????260kWh????????140????????611????
4. ?????????140????611????????

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

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?? ?? · Saturday, February 17th, 2024



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Climate change is “the single-most existential threat to humanity we’ve ever faced, including nuclear weapons.” ?Whitehouse.gov, January 31, 2023?

“If we don’t keep [global temperature] below 1.5 degrees Celsius over the — be — not go above that — we’re going to damn our children to a circumstance that is going to be the only truly existential threat under nu- — other than nuclear war.” ?Whitehouse.gov, March 14, 2023?

“The only existential threat humanity faces even more frightening than a — than a nuclear war is global warming going above 1.5 degrees in the next 20 — 10 years.”
?Whitehouse.gov, September 10, 2023?

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Posted in ???, ????? | No Comments »

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?? ?? · Monday, February 12th, 2024

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??ESG?Environmental, Social, and
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Posted in ????????????, ???, ?? | No Comments »

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?? ?? · Friday, February 9th, 2024



Agenda47: President Trump on Making America Energy Independent Again

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

CO2??

?? ?? · Tuesday, February 6th, 2024



baileystock/iStock

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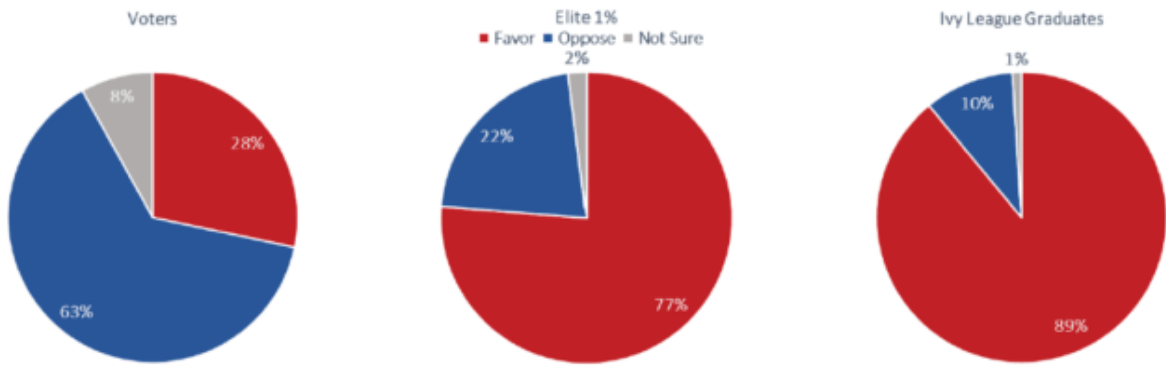
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1.????????????????????????????????????

?????63%????????????????77????????????????89%???

To fight climate change, would you favor or oppose the strict rationing of gas, meat, and electricity?



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

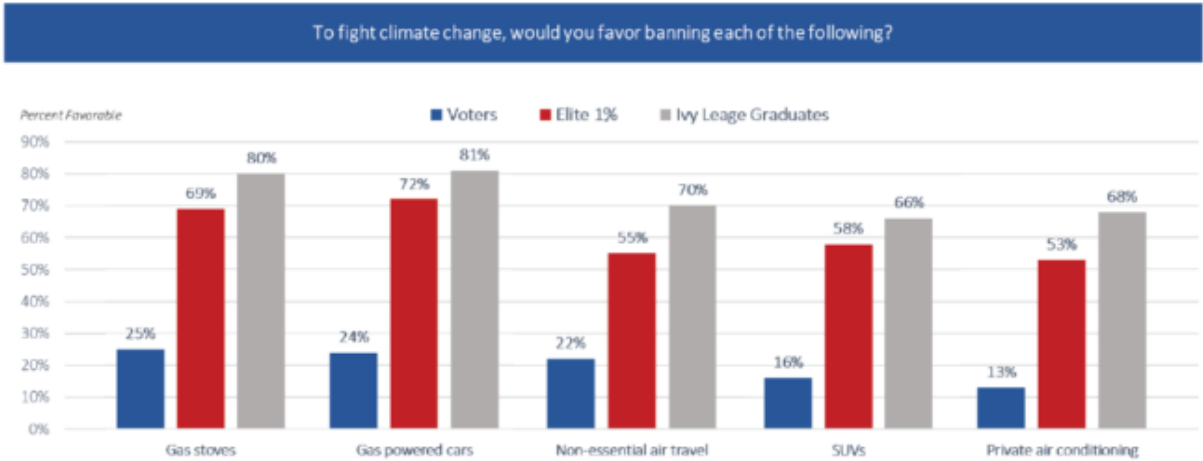
?????72??100??????????70??500?????

How much would you personally be willing to pay each year in terms of taxes and higher costs to reduce climate change?



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

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72????????????????66??81????????????



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Posted in ???, ????? | No Comments »

CO2??

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Sakorn Sukkasemsakorn/iStock

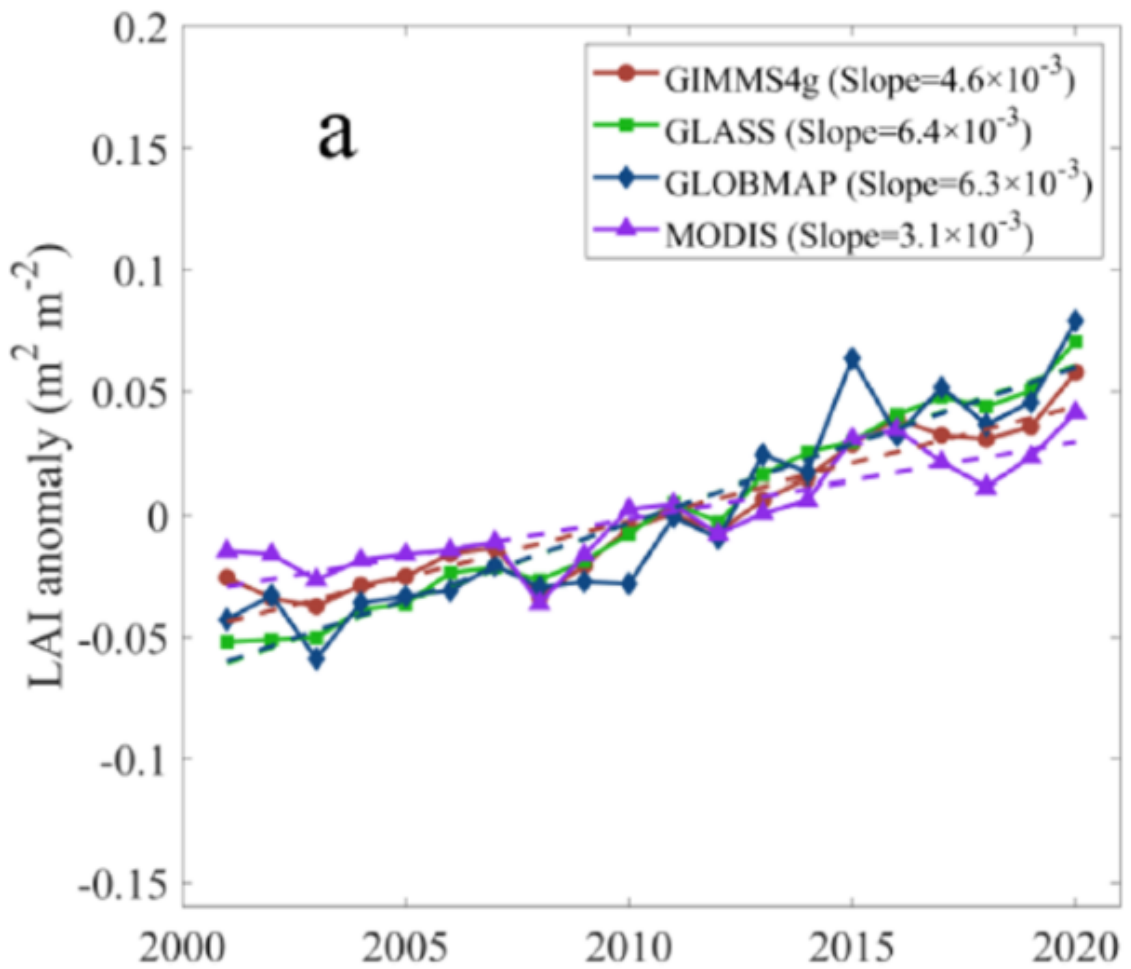
CO2???global
 greening)??

???2000??2020?????????????????Leaf Area Index, LAI??????

LAI??????1??3????1??????????1????????????????????
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????????LAI?20??0.1????????????????????1??????????????????0.1????????????????????????????????

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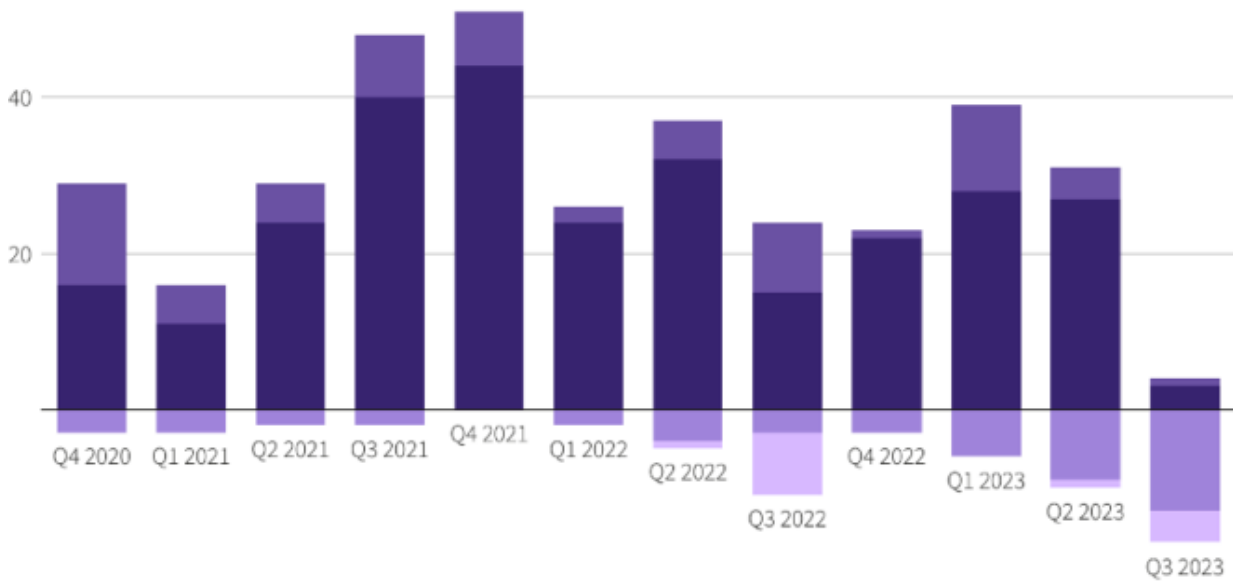
CO2?????Srad?????P???????Soil Moisture, SM?????Airt??5??????????????2??

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

Sustainable fund launches plummet

Asset managers closed sustainable funds faster than they opened new ones in the third quarter

● Launches ● Funds moved into sustainable category ● Closures ● Funds dropping sustainability mandates



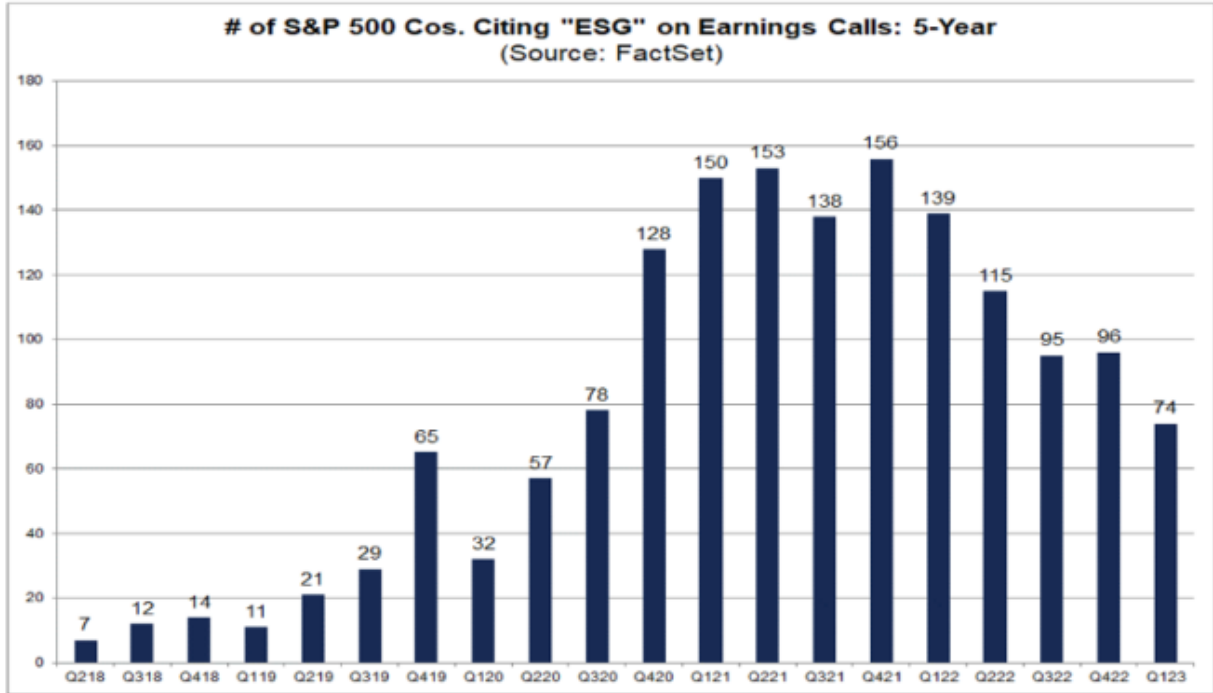
Source: Morningstar Manager Research

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??????ESG??????S&P500??????2020??2???????



??????ESG????????????????74??????S&P500????????????????ESG????????????2020
 ??2????57????????????????2021??4????156????????????????ESG??????S&P500?????5?
 ?????4????????????????2022??4????????????2023??1????????????ESG?????S&P50
 0????23%?????



FACTSET

2018-2023

Q218-Q123

ESG



ESG
ESG
ESG
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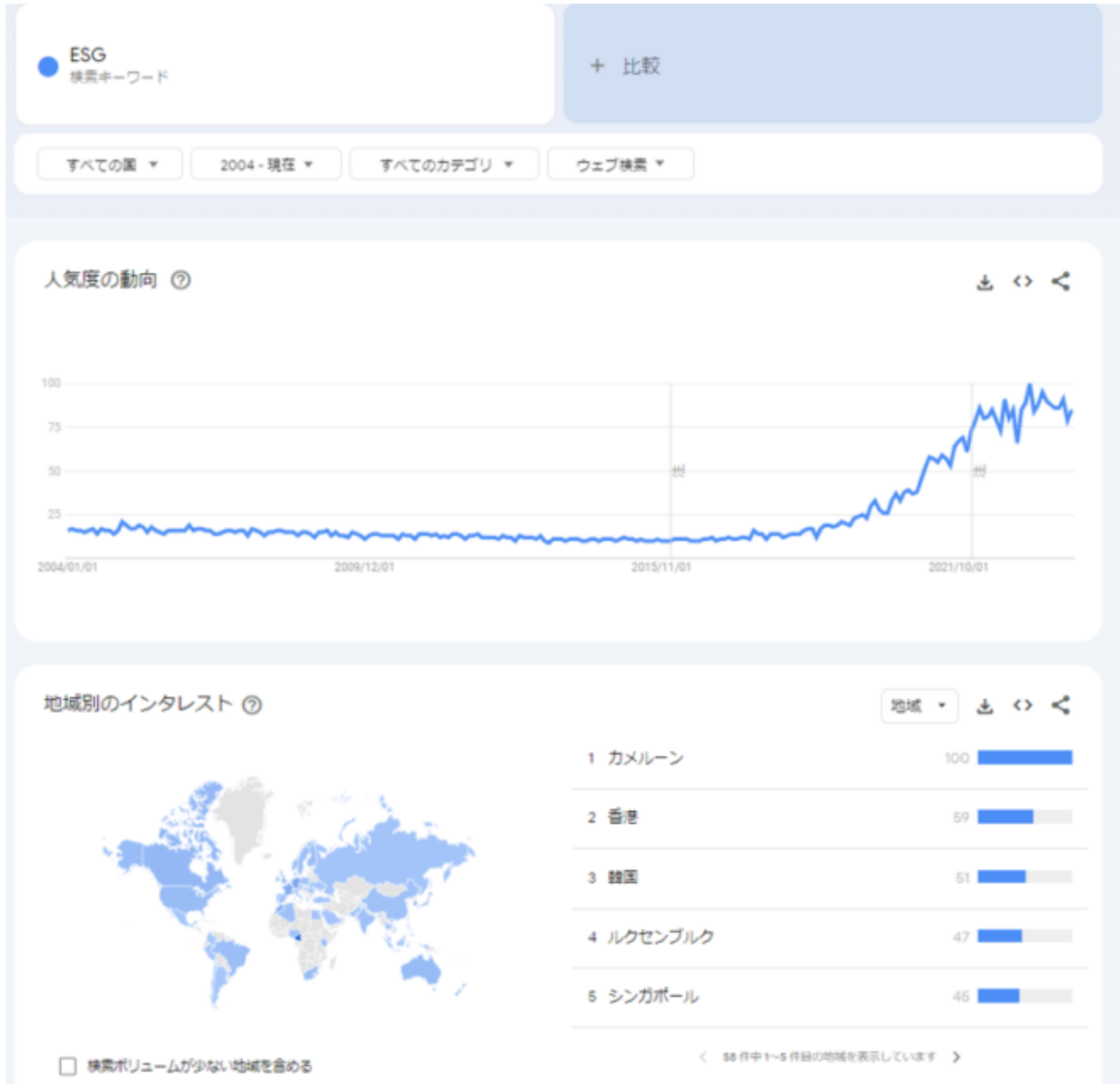
ESG
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???Google???

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2023??ESG????????

ESG??ESG??ES
 G??ESG????????????????????????

ESG????CO2??
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EV?HV?PHV?
“transitional
fuel?”COP
“transition away from fossil
fuels”COP
COP
COP?12?7?COP?1?
COP?UAE?
COP
COP28?
CCUS?COP?
COP?
COP28?
12?5?
CO2?
CO2?
de-
industrialization?

?????????10?11????????????5.4%?5.8%????¹¹????????????

????????????0.3%?????G7????

????????11????????600????????

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????????IT????????EU????

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

????????EU????EU-CBAM????

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

EU-ETS????2013????EU????1500????1000????1.5????2500????1500????1000????17????

EU????ETS????ETS????FIT????EU????EU????

EU????CBAM?EU??

???EU?????

EU????EU????

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EU????

EU CO2 EU
EU
EU

COP28

?

EurActiv, January 16, 2024

Posted in | No Comments »

Thursday, February 1st, 2024



ollo/iStock

CA?

????????GDL????????

????????????????????????????????????GDL????????????33?4000????????????
??100????????GDL????????????4????????????????????????????????????
????????????????????????????????15?GDL????????

GDL????????????555????????????25????????????????????3000????????????
????????38????35????????

??12?7?8?GDL??

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????????????12????????

????8????????????????1????????????????????????????????????
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??340km????????
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??6????????????????????????????????????1????2500?3000????????
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??6??10????????????EU????????????6????????
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DGL?4??
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??GDL??52????????????6????????
“?”??16????????????

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???29?18????????????????????5????????????????????????????????????3????????????

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Posted in ???, ?? | No Comments »

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?? ?? · Wednesday, January 31st, 2024

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- ???2????????1????????????????????????????????????
- ?????????????????????????1?2????600?????
- 2????????????????????????1000? ?????????????

1????????600??0.47????????????????????
????????871????600???"????????????????????846????????????????????

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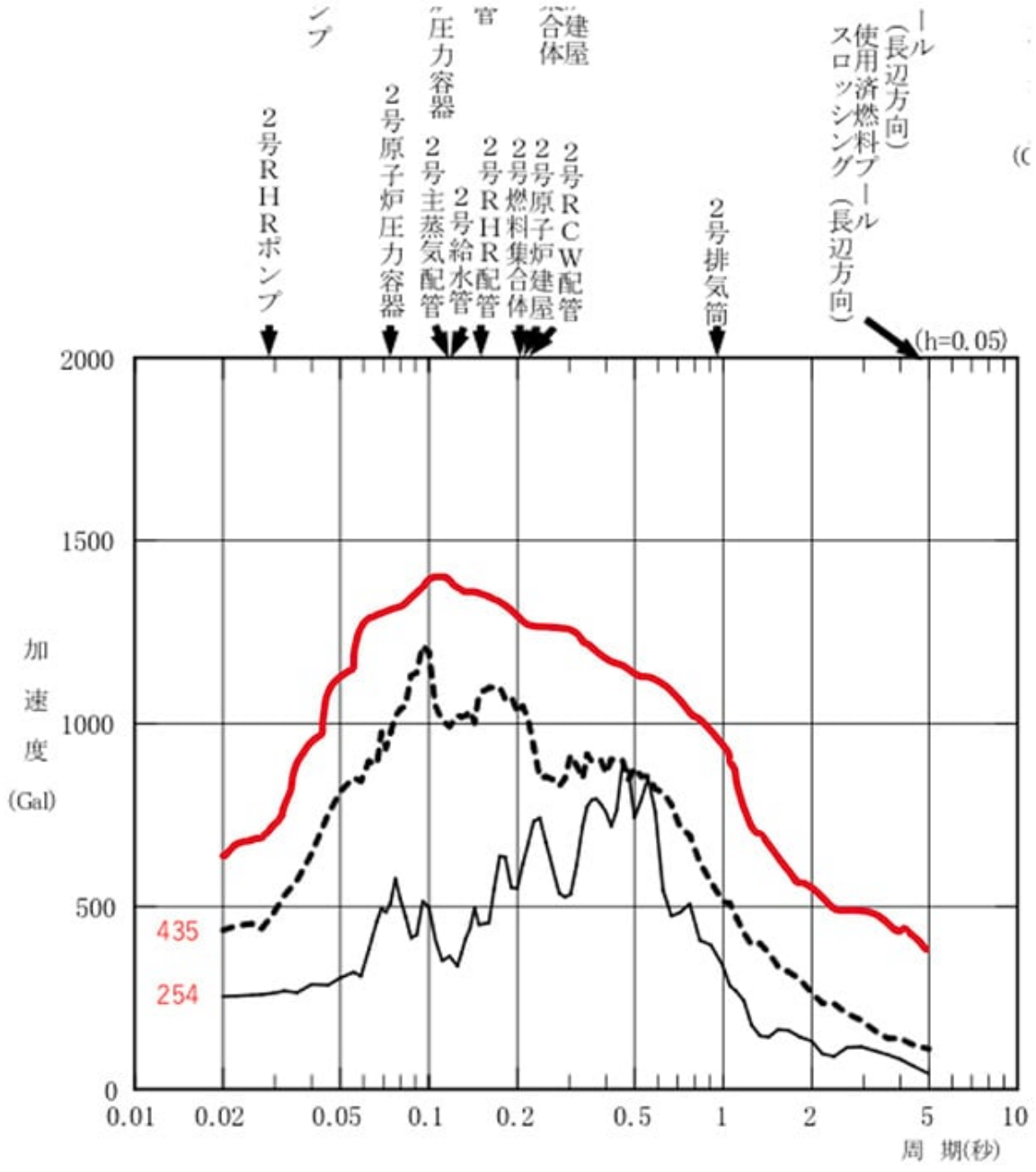
??F????????????????G????????????????G????????????
????????1G?980????????980??1G????????????????????????????

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?????2?"??????1000??

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??2,933????????????????????????????????1????????????2?????B????????????

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

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?? ? · Wednesday, January 24th, 2024



Cinefootage Visuals/iStock

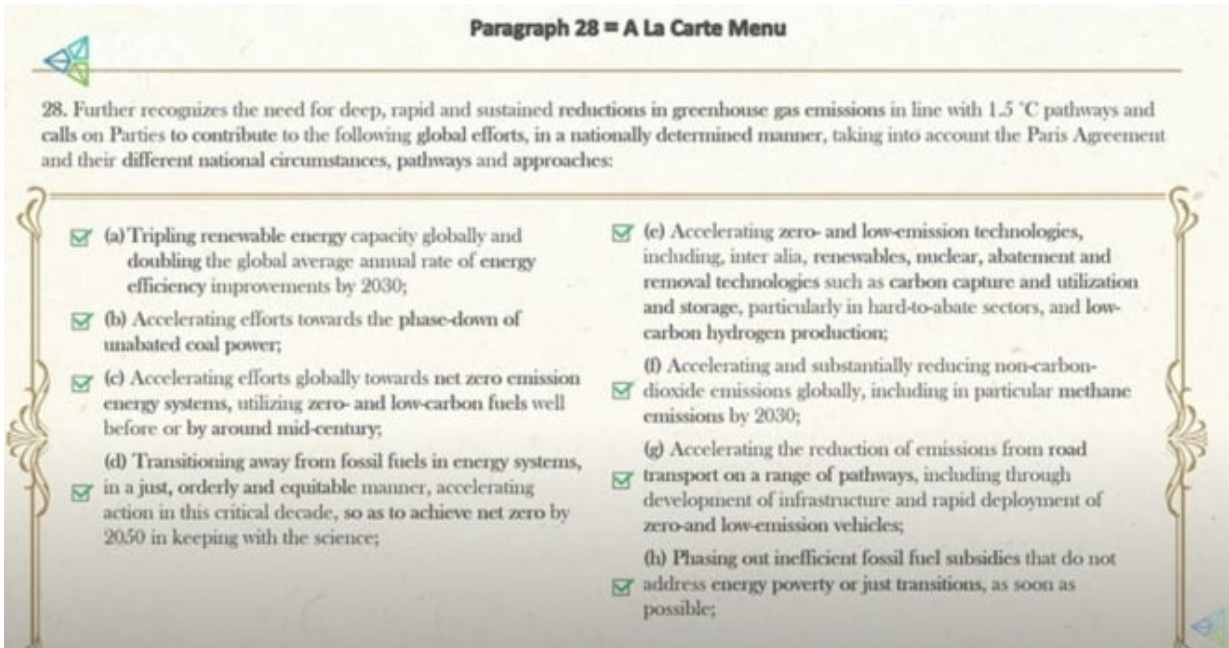
2023?12????????????COP28??

COP28??2050????????????????????????10??
??transition away from fossil
fuels??

???COP28?2??28????
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28.????1.5????(call on Parties)

- a. 2030????3????2????
- b. ?????
- c. ?????
- d. ?????2050????10????transi
tion away from fossil fuels)
- e. ?????
- f. 2030????CO2????
- g. ?????
- h. ?????

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??8????CCUS????CO2????CCUS????

????8????8????

????2030????

????COP????COP28????2023?12?14????

????????????????1928??
 ???10????????????????????
 ???UAE?
 ?????????????????????????????????????OPEC??2022??28??????????10.6????????????????
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Posted in ???, ????? | No Comments »

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

?? ?? · Saturday, January 20th, 2024



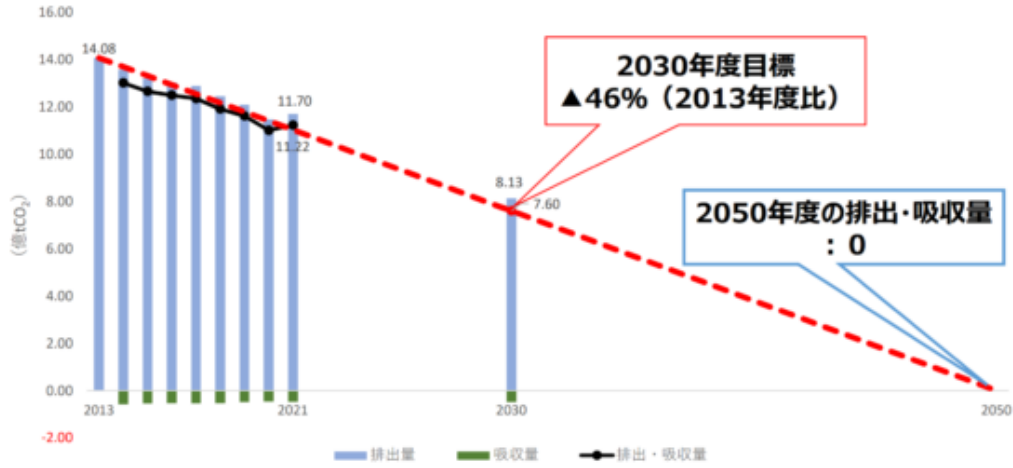
Slavica/iStock

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2030年度目標及び2050年カーボンニュートラルに対する進捗



- 2020年度からの増加については、コロナ禍からの経済回復により、エネルギー消費量が増加したこと等が要因と考えられる。
- しかし、2019年度からは3.4%減少しており、2030年度目標の達成及び2050年カーボンニュートラル実現に向けた取組については一定の進捗が見られる。



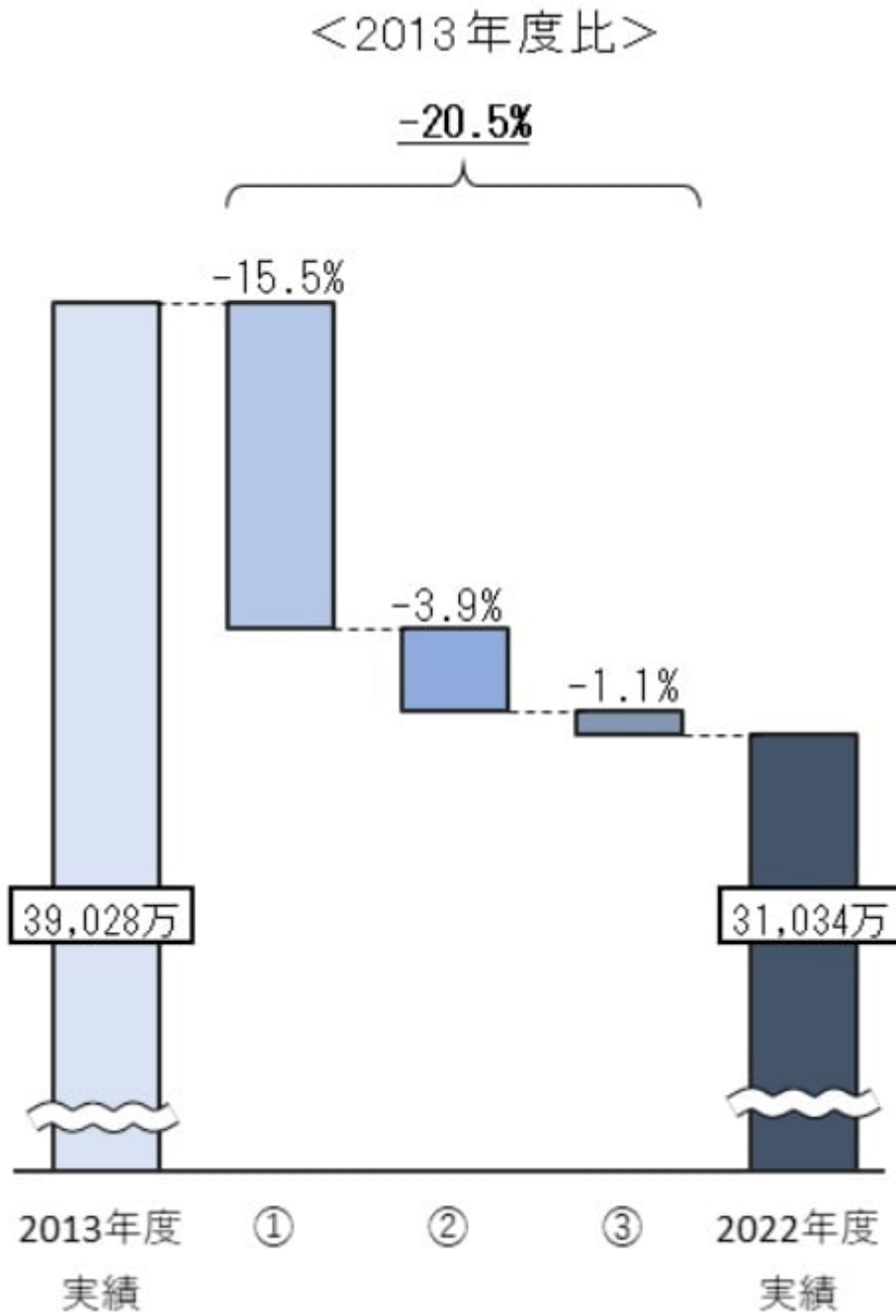
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????????2013????2022????CO2????????76????????????????

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????????????????????CO2????????????2030??2050????????????????????????????????????
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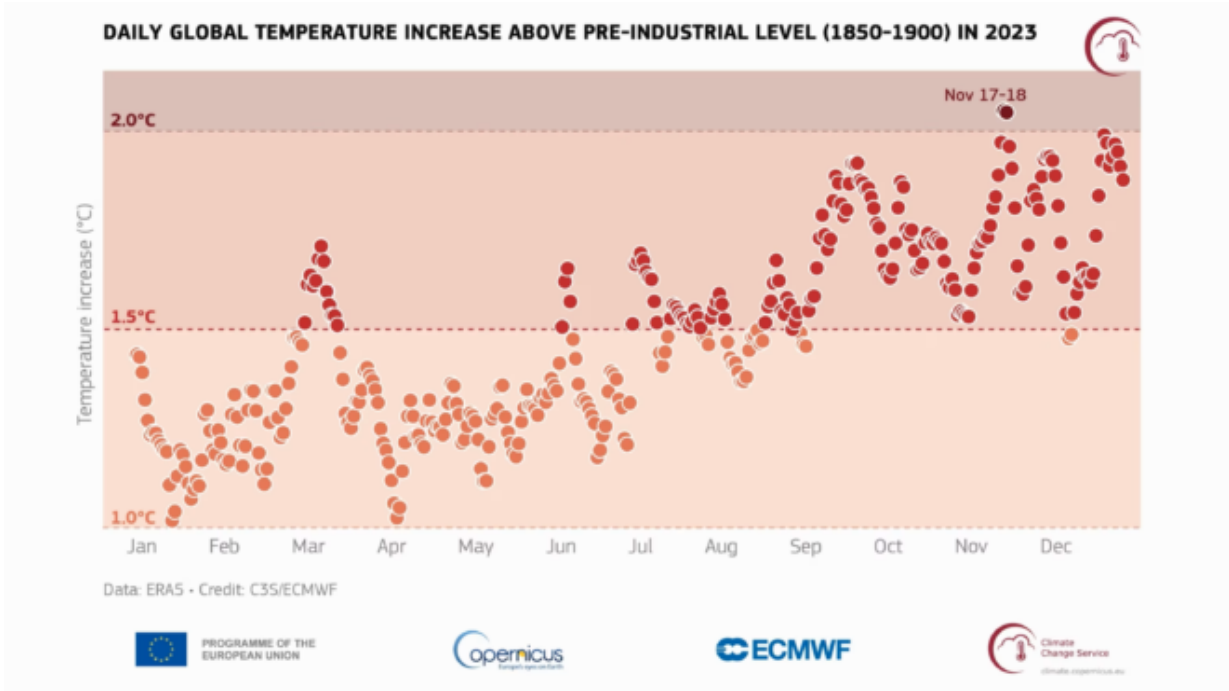
Posted in ??????????, ??, ????? | No Comments »

????????1.5????????????????

?? ?? · Wednesday, January 10th, 2024

EU????????????????????2023????????????????????1.48????????

????????1.5????????????????0.02????????????1.5????????????
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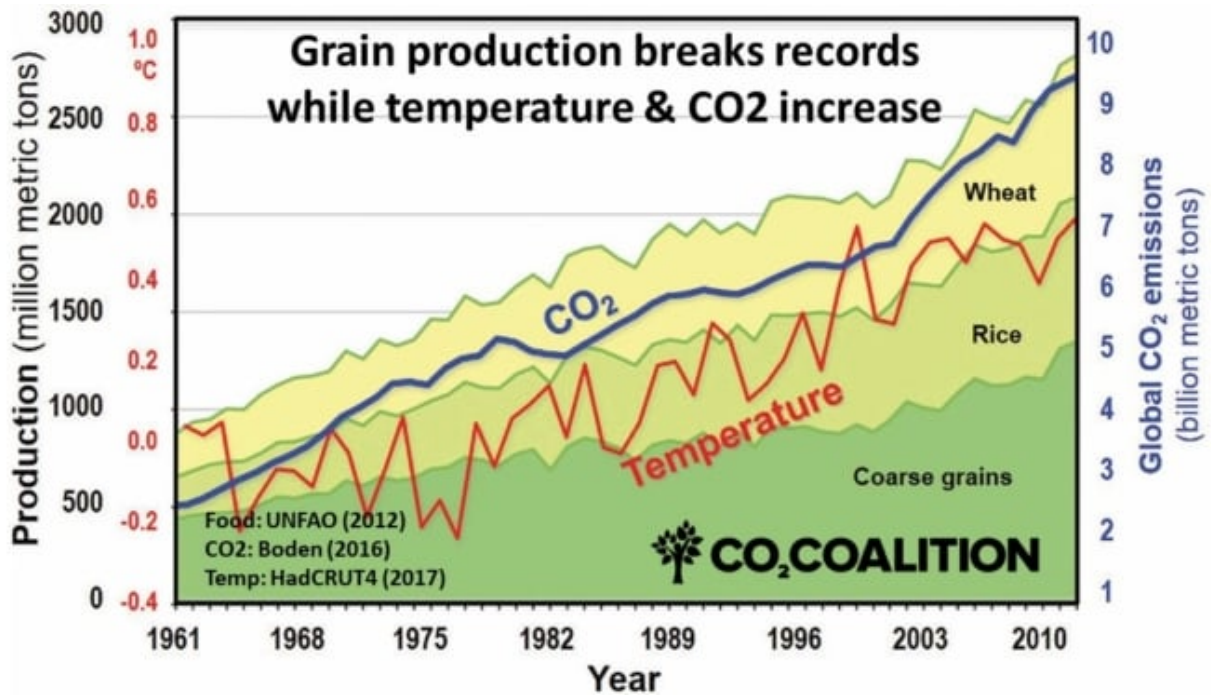
????1.5????(ABC News)

????????????1.5??

CO????????????????

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CO??



CO2????????(CO2 Coalition)

??10????????WMO??????????4.5mm????????IPCC????????7mm????????????????????????????????

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??145??18??????????????41??????

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4??4500????????????????????????????????
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Posted in ???, ?? | [No Comments »](#)

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?? ?? · Sunday, December 31st, 2023



shotbydave/iStock



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??CO2????
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??OPEC????????????????????????????
????????????????????OPEC????????????????

????G7???CO2??
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Posted in ????????????, ???, ????? | No Comments »