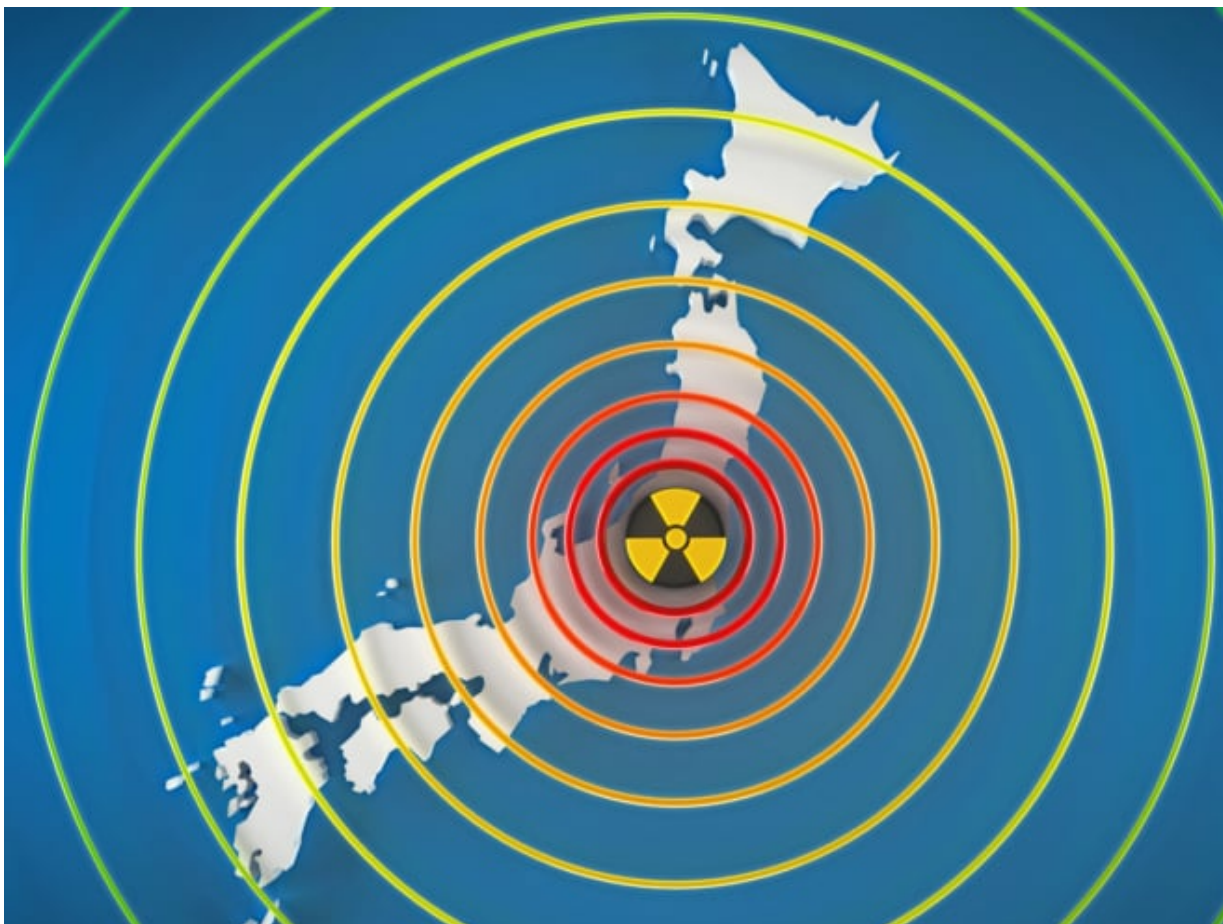


# Global Energy Policy Research | GEPR

GEPR??  
???http://agorajp.com/??  
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?? ?? · Thursday, August 3rd, 2023



adventr/iStock

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← ツイート



村本大輔(ウーマンラッシュアワー)  
@WRHMURAMOTO

...

事故があった時、地元の人だけじゃなく日本中が被爆しますように



NHKニュース @nhk\_news · 7月28日

福井県にある関西電力の高浜原子力発電所1号機が、28日午後、原子炉を起動し、12年ぶりに再稼働します

[www3.nhk.or.jp/news/html/2023...](http://www3.nhk.or.jp/news/html/2023...)

#nhk\_video



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??3.11??  
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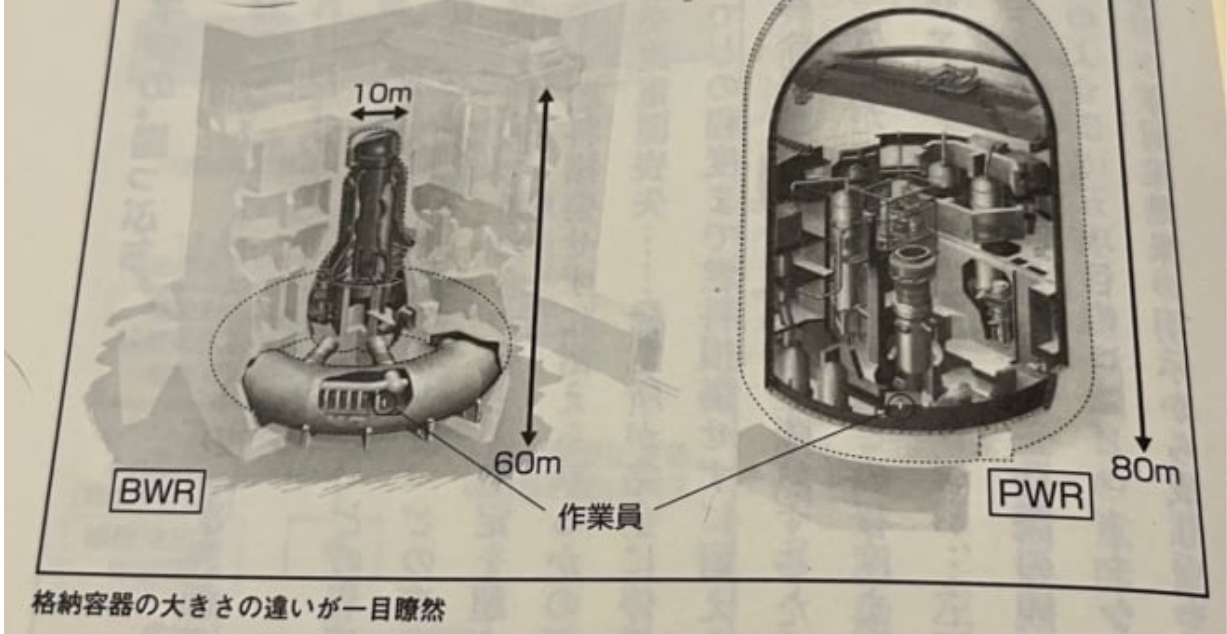
?????3????????????

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??BWR  
/Mark?I????????????????????????PWR??  
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第5章 原発復活への4つのカギ

BWRとPWRの格納容器の大きさ比較



????????BWR/Mark-I????????PWR????????

????????2012, WAC, 219???

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©? japan.cnet.com

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bluejayphoto/iStock

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

# ????????G20????????

?? ? · Monday, July 31st, 2023

7?22????G20??2022????????????  
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3G20G72030150GW1TW???

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G2012COP28???

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- 2030???
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- 2030???
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G201.5???

1.5???

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

# IPCC AR6

?? ?? · Sunday, July 30th, 2023

??623??IPCC??

??3??IPCC??6??AR6??

??1.5??GHG??7??

??2040??

??AR6??GHG??

??6??AR6-SPM??Longer Report??



NicoElNino/iStock

AR6?COP26????????????????????1.5????????????????IPCC????????????2014????5????  
?AR5????2021????????1.5??

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????<sup>21</sup>?

????2020????????50????GHG????????1.5????????10????23????7????  
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??AR 6-  
SPM?TableSPM.1????2????????????????GHG????2050??2019??64????2030??  
21????????2070????????Table

SPM.1?1.5????????2030?43??2050?84????????<sup>22</sup>?

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??AR6????1.5????????1.7?1.8????????1.5????  
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????825????????GHG????1.5????

AR6????????????????????1.5????????

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AR6-SPM?C.2.4

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AR6-SPM?C.2.4  
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39

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1.5 AR6-SPM?P26



1.5  
24

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IPCC AR6  
1.5  
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2030?21 GHG AR6-SPM?C.2.4

1.5 30?43?50?84 AR6-SPM?C.2.5



imply??  
59

1.5

AR6  
61

IPCC  
AR6  
2  
1.5

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AR6??1.5????????????  
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?1?AR6-SPM?B5.2????????1.5??

????????GHG????CO2????????????1.5????2050?99????2030?48????????????30????50????????????

?3?AR6.SPM?C.2.4?“Even without accounting for all the benefits of avoiding potential damages the global economic and social benefit of limiting global warming to 2°C exceeds the cost of mitigation in most of the assessed literature” (medium confidence)

?4?AR6-SMP P26 ??50?“The evidence is too limited to make a similar robust conclusion for limiting warming to 1.5°C. Limiting global warming to 1.5°C instead of 2°C would increase the costs of mitigation, but also increase the benefits in terms of reduced impacts and related risks, and reduced adaptation needs.”

?5?AR6.SPM C.2.5: “Ambitious mitigation pathways imply large and sometimes disruptive changes in existing economic structures, with significant distributional consequences within and between countries.”

?6?AR6-SPM E.1.3: “Strengthened and coordinated near-term actions in cost-effective modelled global pathways that limit warming to 2°C (>67%) or lower, reduce the overall risks to the feasibility of the system transitions, compared to modelled pathways with relatively delayed or uncoordinated action.”

Posted in ???, ????? | No Comments »

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?? ? · Saturday, July 29th, 2023



BrianAJackson/iStock

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Posted in ???, ????? | No Comments »

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

?? ?? · Thursday, July 27th, 2023



JaCZhou/iStock

????CO2????????????????2023????4??Enrico Mariutti????????????????????????????The Dirty Secret of the Solar Industry???

????????????????CO2????????????????????????????????CO2????????????????IEA?IPCC????????????????????????????????

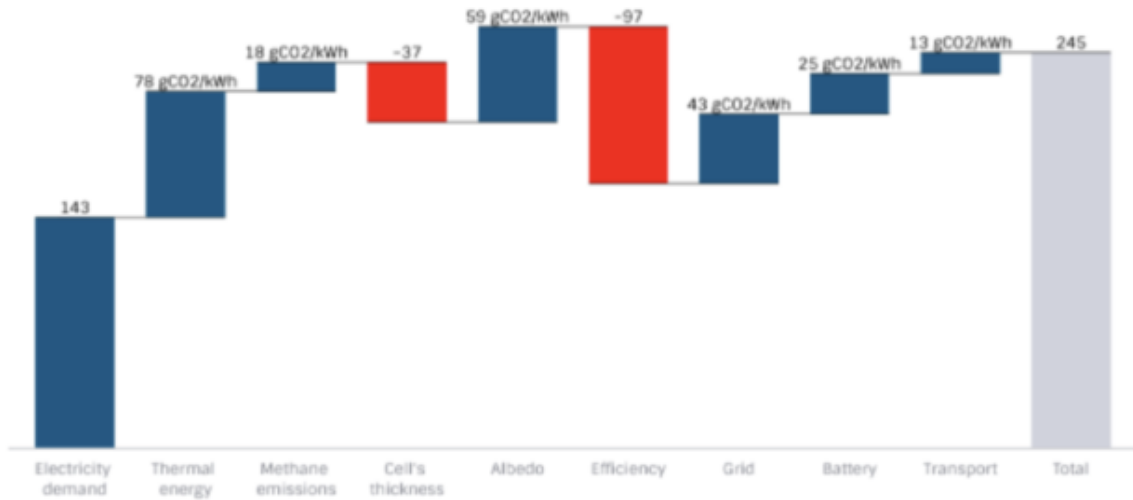
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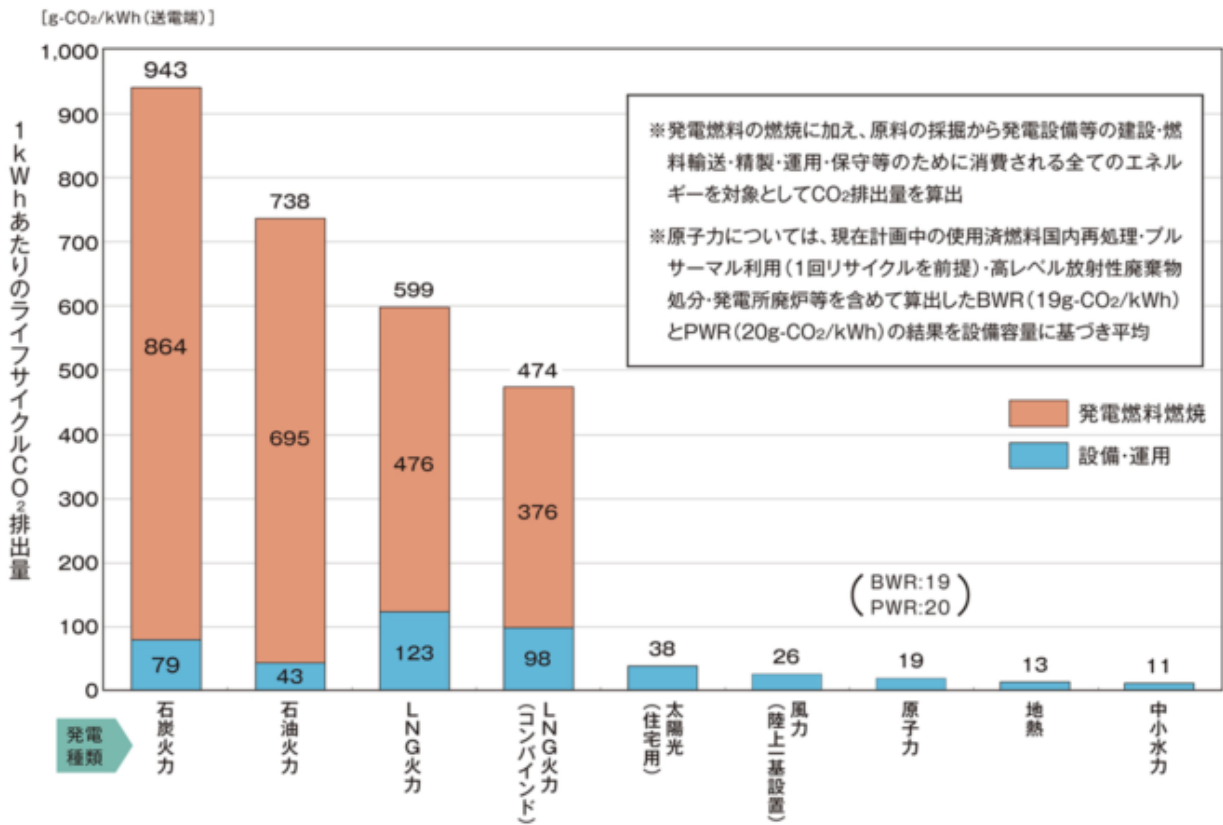
2022  
Carbon intensity, Worst Scenario



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??CO2??CO2????????????  
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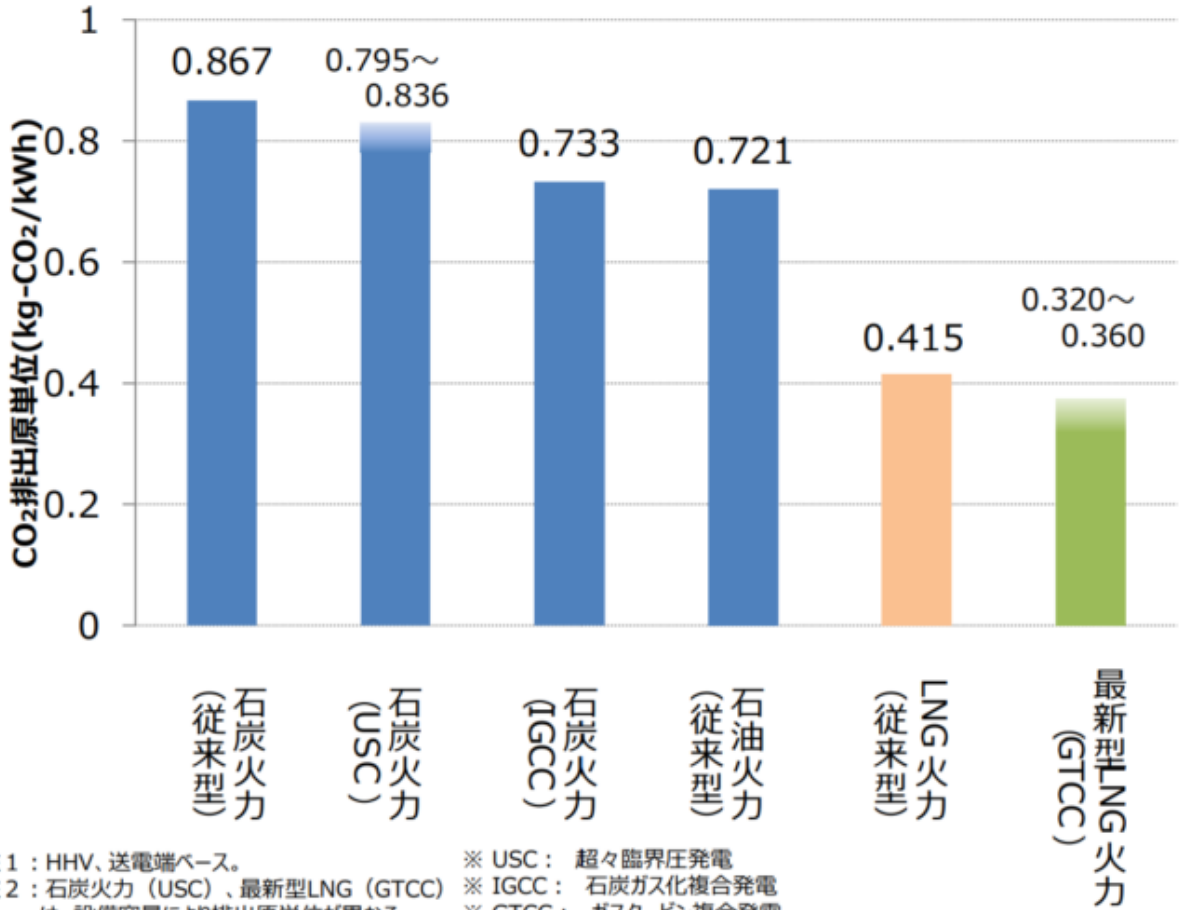
??1kWh??245??2016????????????????????????  
?????kWh??38????????????2??????????



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CO2 9

1kWh 245 CO2 2022 LNG CO2 1kWh 320 360



3

CO2

Vertical grey bar with placeholder text.

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“??????”

“????????20??CO2??”

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??CO2??

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Posted in ???, ????? | No Comments »

### ??????EV????????????????

?? ?? · Friday, July 21st, 2023

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EV????????????????????????????????



jetcityimage/iStock

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??EV??  
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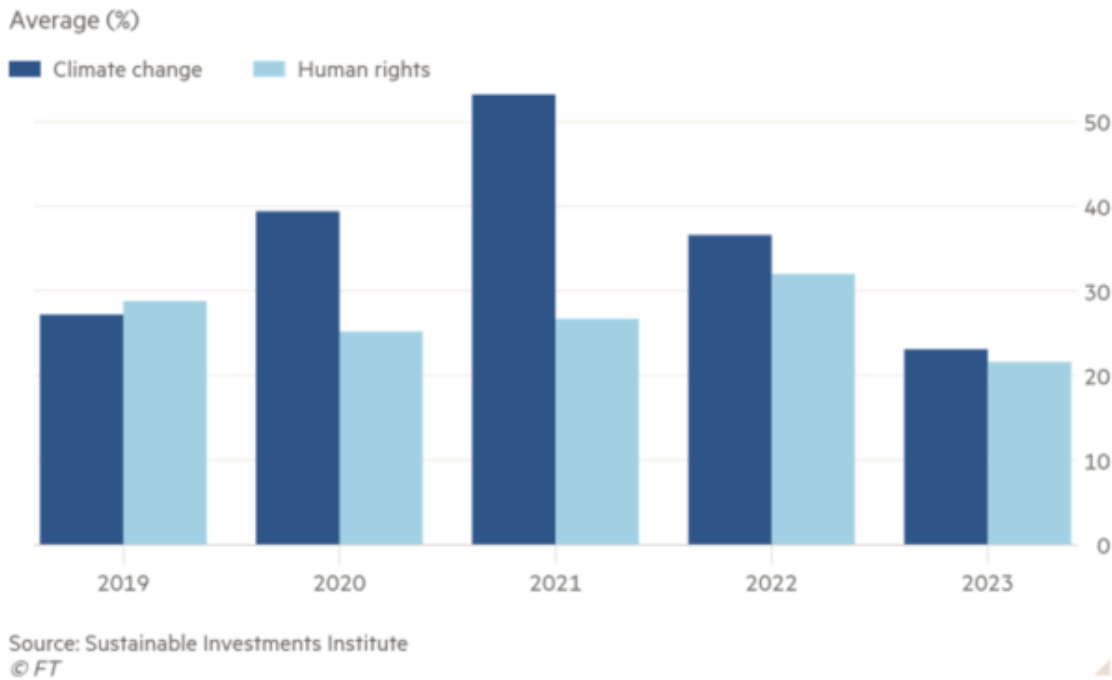
????????????????5??3?????????ESG????????????????????????????????????  
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## Investor support drops for environmental, social issues at US companies



### FINANCIAL TIMES??

??EPA??  
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4?12??EPA??2032????????????????????  
 ???67??EV??????????????????????50??????????????????????35??????????????????????25??EV?????????

????EPA??67??????????????EV??  
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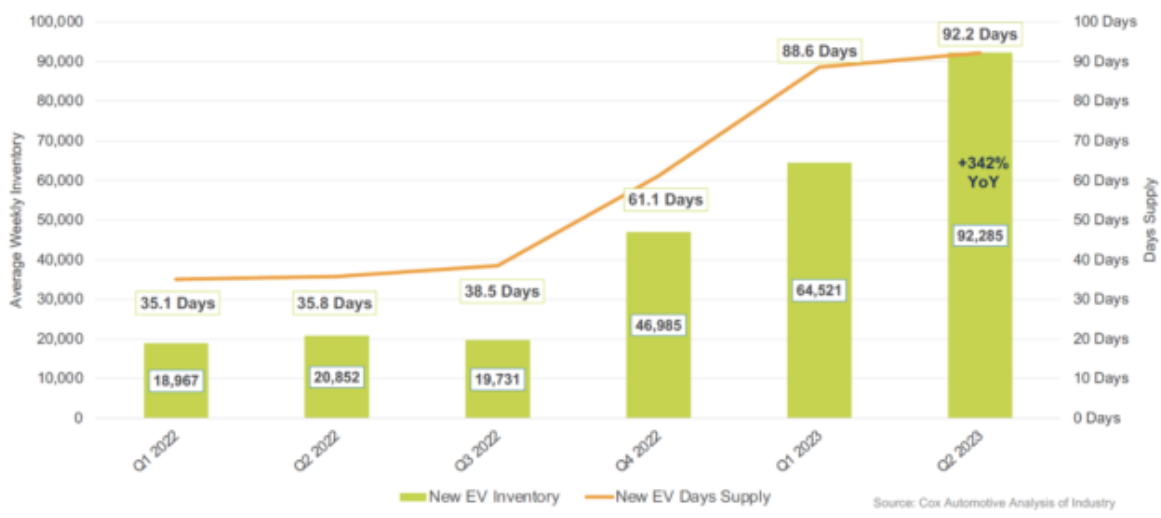
??????????????????????EV????????????????????????????????????JD??????????????????EV????????????????????  
 ???3??????????????????21??EV?????????????????????????????????????1??17.8??????????

???10????EV??  
 ??????????????????????EV?????????????????????

2023 Cox Automotive Mid-year Review?????????2023??2??  
 92,000?????????????2022??2????????????342% ?????????

### NEW EV INVENTORY & DAYS' SUPPLY ESTIMATES

EV inventory is having a "Field of Dreams" moment – and days' supply follows



COX AUTOMOTIVE

### EV????????????????

????????2050??EV??  
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??12??EV??

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

### ??

?? ? · Thursday, July 20th, 2023

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NickS/iStock

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**Nobel Physics Laureate 2022 Slams ‘Climate Emergency’ Narrative as “Dangerous Corruption of Science”**

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1??100????0.72??1979????????????????1.4  
????IPCC????????????3?5????????????????????????

2????CO2?????????2ppm?????????4????40????????????????CO2????????IPCC????????  
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3????????CO2??CO2????????  
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1?????CO2?????CO2?????2????CO2????????????3????????????

3????1????????????????CO2????????????

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Posted in ???, ????? | No Comments »

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?? ?? · Wednesday, July 19th, 2023



Max Lirnyk/iStock

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[Electric Vehicles for Everyone? The Impossible Dream](#)??

????????????????????BEV??ICE??BEV????????  
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EV??I  
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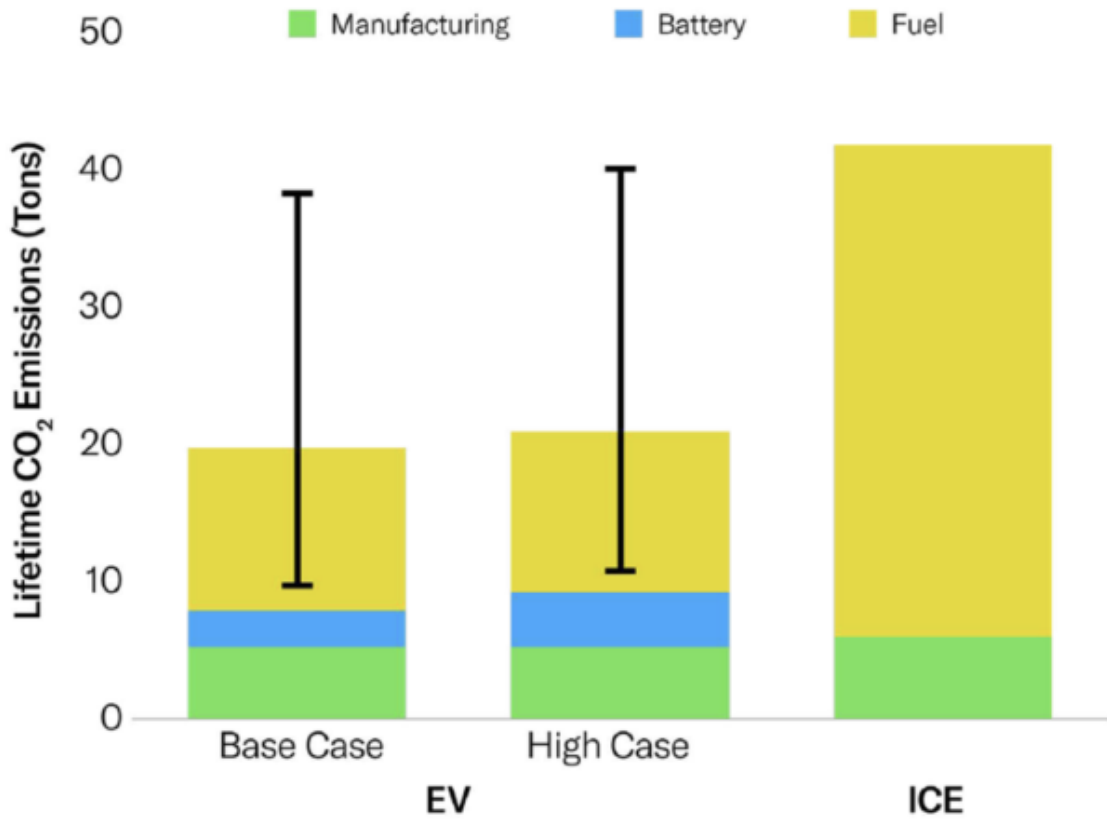
?????2??????CO2????????EV????CO2????????????????????

??1?CO2

??BEV????ICE????????????CO2????????????????

Figure 3

Estimated Life-Cycle Emissions for EVs vs. ICE Cars, per IEA



Source: IEA, "The Role of Critical Minerals in Clean Energy Transitions"

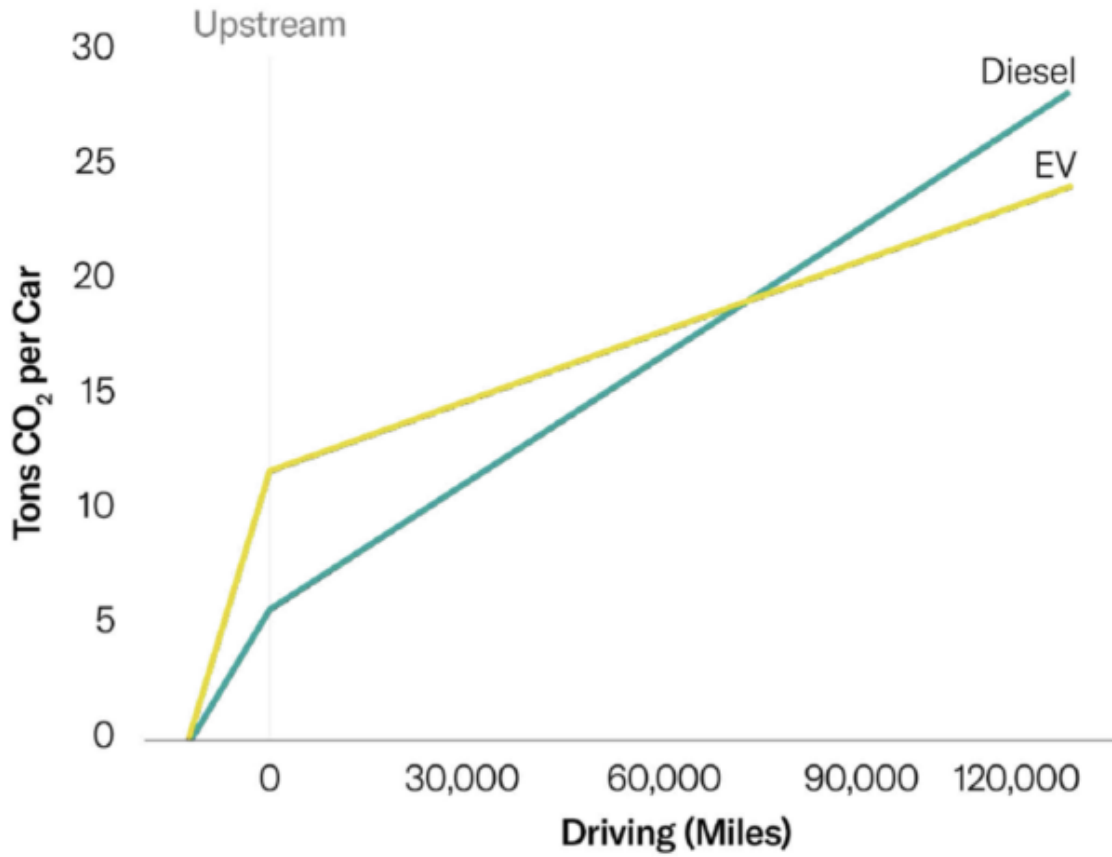
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????IEA??  
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????????ICE?EV????????CO2????????????6????????????????????EV????CO2????????????????  
??EV????????????

Figure 4

Life-Cycle Emissions: Volkswagen EV vs. Diesel



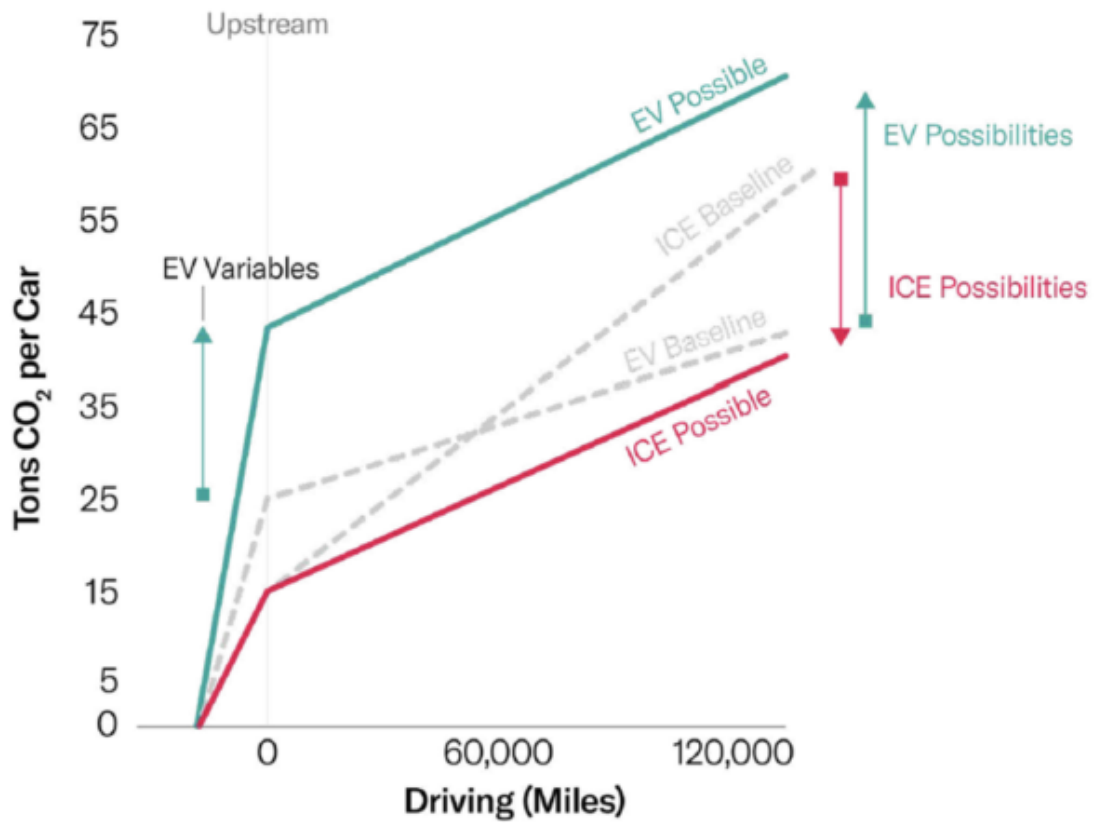
Source: Maciej Neugebauer, Adam Żebrowski, and Ogulcan Esmer, "Cumulative Emissions of CO<sub>2</sub> for Electric and Combustion Cars: A Case Study on Specific Models," *Energies*, Apr. 6, 2022

????????????????EV????????????????EV????CO2????????????????????????????????ICE????????????  
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????????????????EV????????CO2????????????ICE????????????????????????????????????12????????  
?EV???ICE???CO2?????????????????????????????????

Figure 6

### EV vs. ICE CO<sub>2</sub> Emissions: Scenarios with Known Unknowns



Source: Author's calculations from multiple data sources in this report; see Appendix

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CO<sub>2</sub>?????????1????????????????? EV??ICE????????????????????????????????

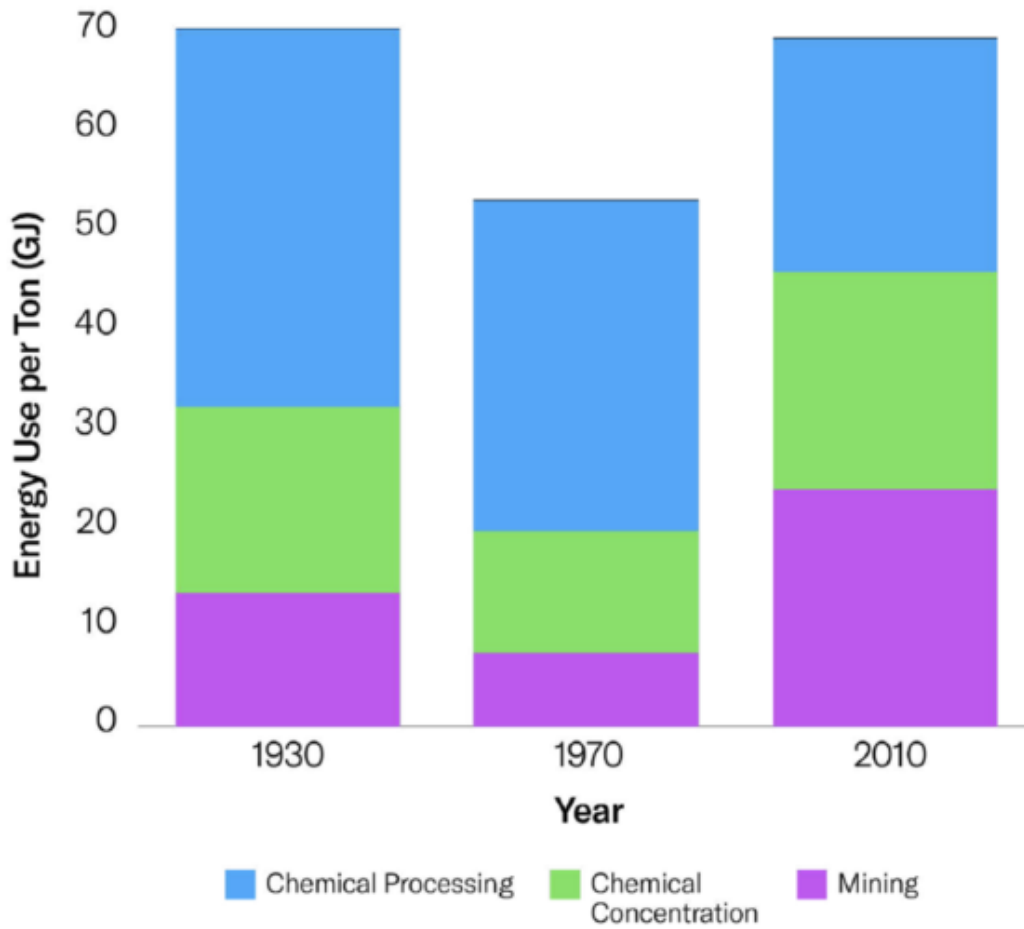
??1?????????????????????EV??

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Figure 10

### Copper Production: Technology Trends in Energy Use per Ton



Source: Nadine Rötzer and Mario Schmidt, "Historical, Current, and Future Energy Demand from Global Copper Production and Its Impact on Climate Change," *Resources* 9, no. 4 (April 2020)

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??ICE?HEV????????????????????  
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**亡国のエコ**  
今すぐやめよう太陽光パネル

杉山 大志

ジェノサイドにつながる太陽光パネルの  
設置義務化を断固拒否  
地球温暖化問題の  
「嘘」「大袈裟」  
「まぎらわしい」  
環境プロパガンダにダマされるな！  
「新冷戦」時代に求められるのは安全保障と経済成長

問題は、  
CO<sub>2</sub>でなく、  
中国です  
自給自足を  
徹底せよ

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

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?? ?? · Sunday, July 16th, 2023



Douglas Rissing/iStock

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7?11???Blackout-News??

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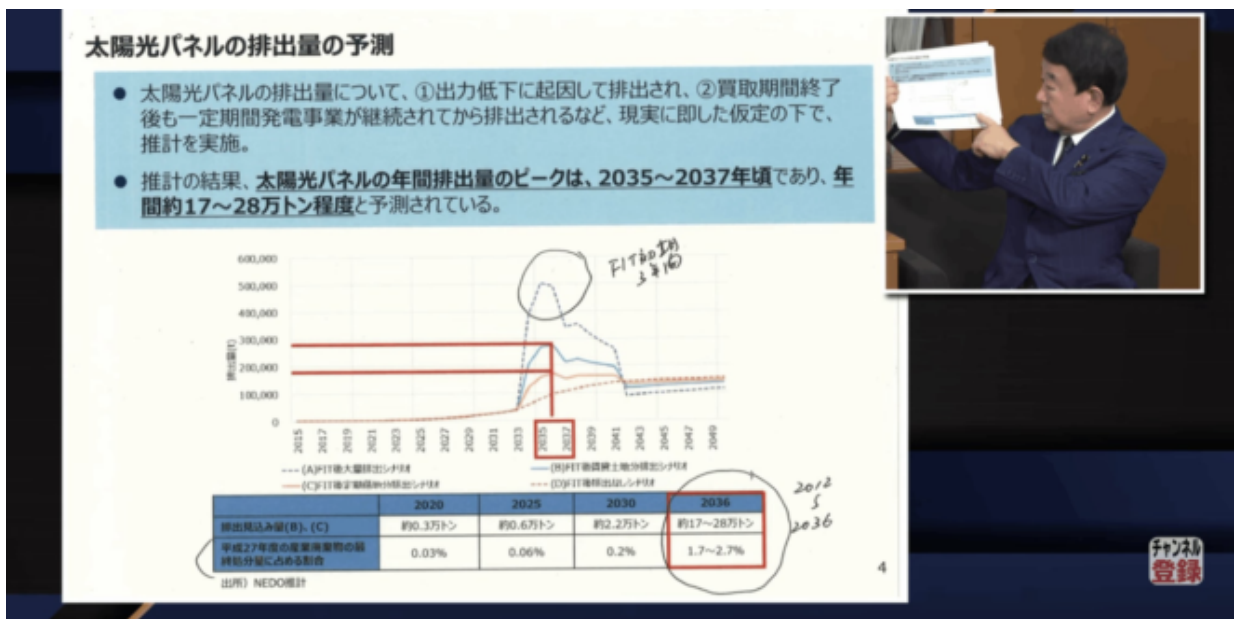
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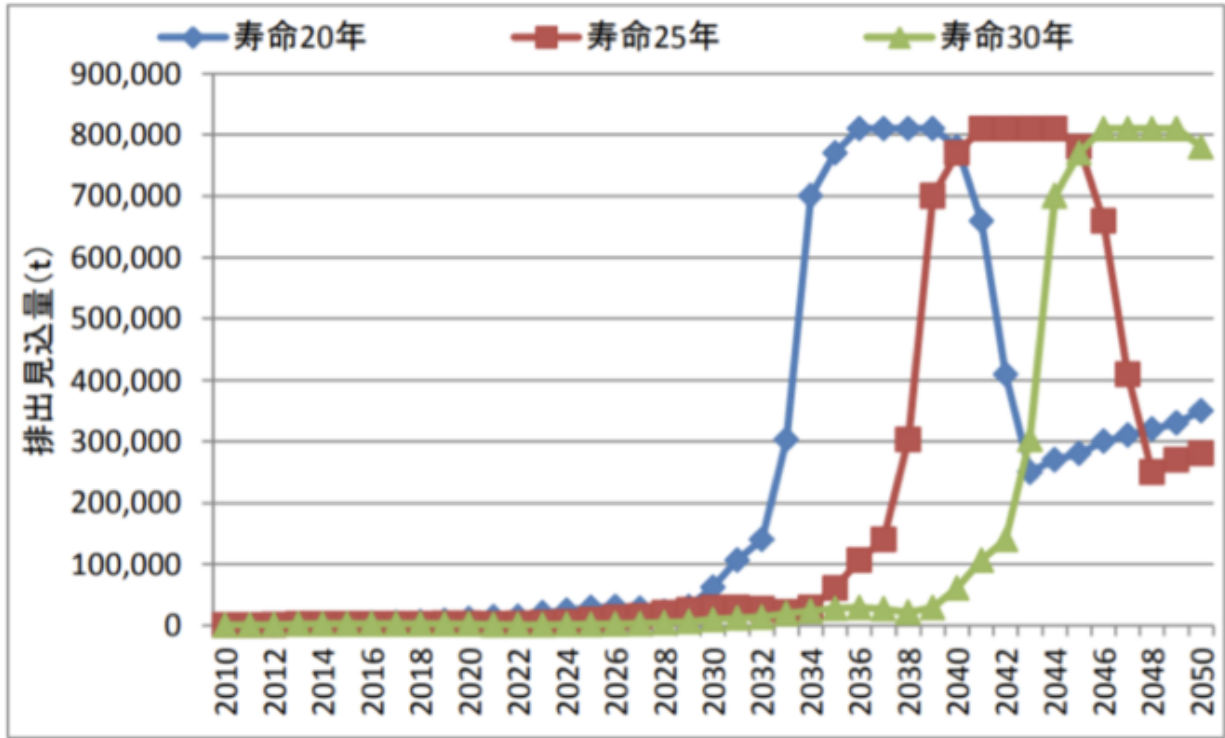
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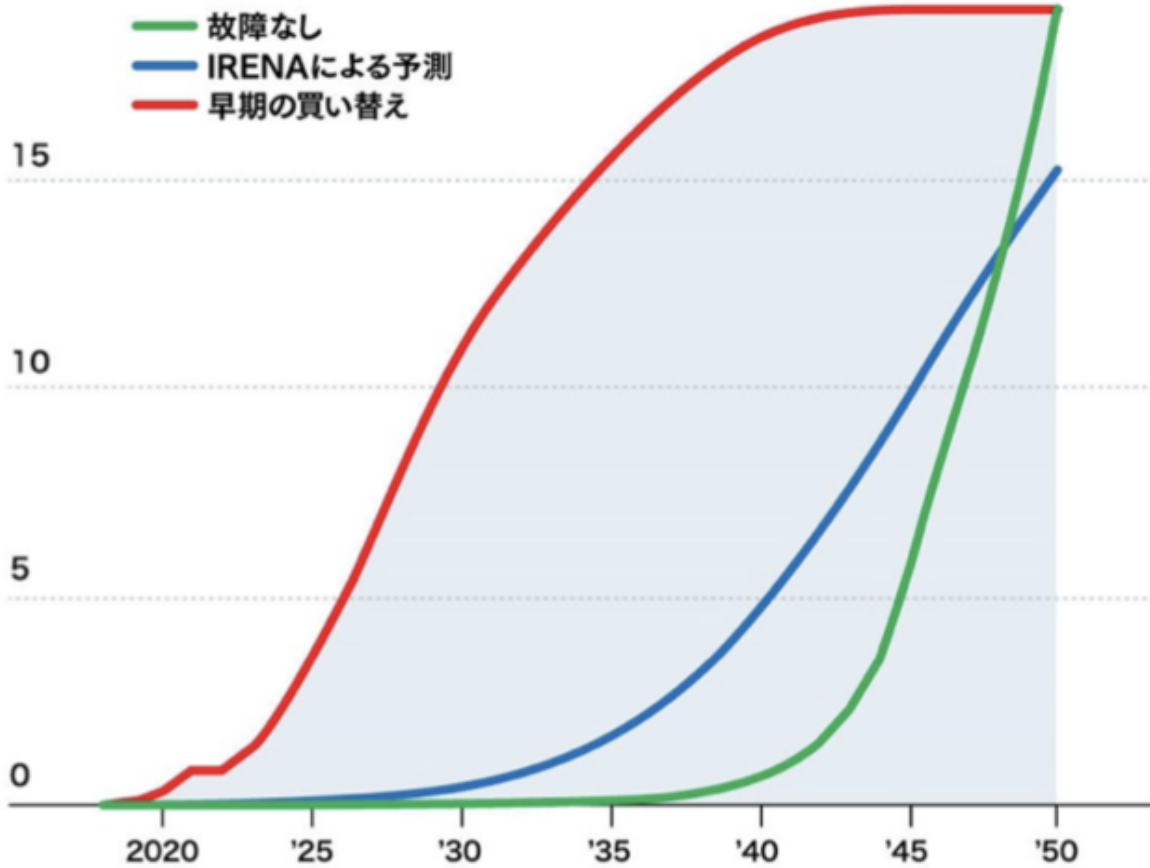




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廃棄物の累計  
 (発電容量ベース)

20ギガワット



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

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?? ?? ? - Sunday, July 9th, 2023



Grafissimo/iStock

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Posted in ???, ?? | No Comments »

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?? ?? · Thursday, July 6th, 2023



Pixelci/iStock

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

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

?? ?? · Tuesday, July 4th, 2023





xijian/iStock

??IEA????????????Net Zero Scenario, NZE????????????

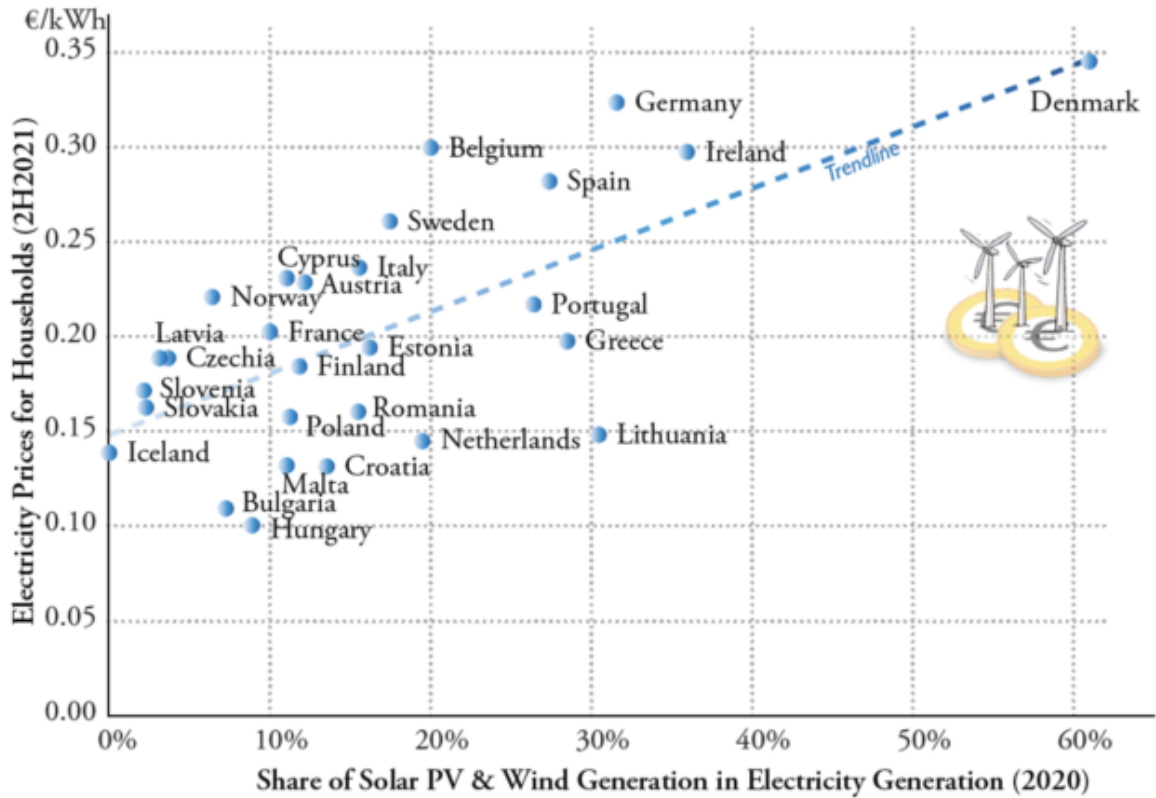
**A Critical Assessment of the IEA’s Net Zero Scenario, ESG, and the Cessation of Investment in New Oil and Gas Fields.**

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??PV??PV????????????????????????  
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Figure 46: Solar and Wind Penetration and Electricity Prices in Europe

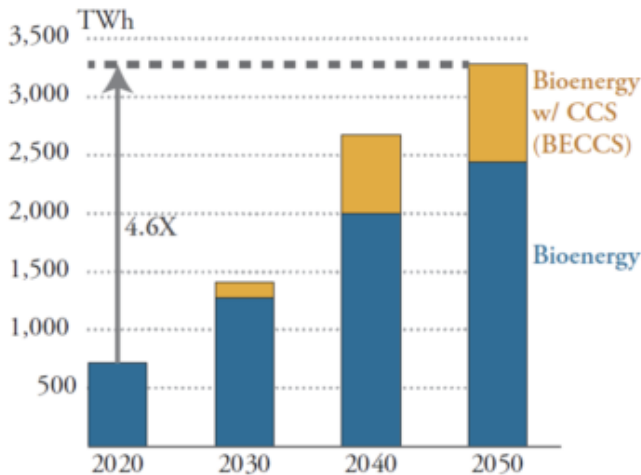


Source: Energy Policy Research, Eurostat, IEA

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IEA?NZE??2050??  
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Figure 23. Bioenergy for Electricity Generation in NZE



Source: IEA, Net Zero by 2050 (2021)

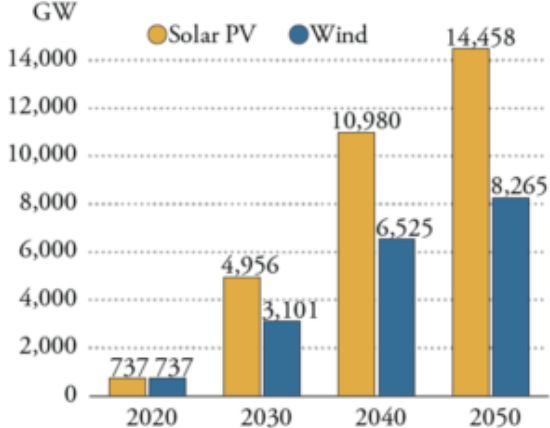
Figure 24. Global Land Requirements for Bioenergy for Electricity Generation in NZE



Source: Energy Policy Research. Land requirement calculations made using FreeingEnergy.

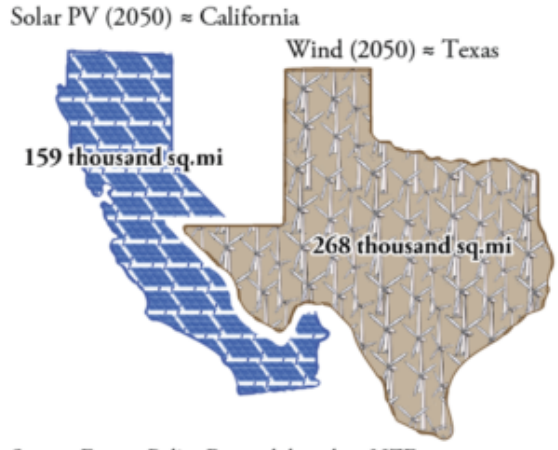
Batt Odgerel, Lucian Pugliaresi, Michael Lynch 38

Figure 25. Global Solar and Wind Capacity in NZE



Source: IEA, *Net Zero by 2050* (2021)

Figure 26. Global Land Requirements for Solar/ Wind Farms in NZE



Source: Energy Policy Research based on NZE  
Assumes sufficient/optimal grid infrastructure (transmission, storage) and current rate of efficiency

	万 km2	日本=1
メキシコ	197	5.2
フランス	55	1.5
カリフォルニア	42	1.1
テキサス	70	1.8
日本	38	1.0

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# ????????COP28????????????????????

?? ? · Monday, July 3rd, 2023



CHUYN/iStock

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- 2025?????GHG?????2050?????10?????  
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## EV ??????????????????????

?? ?? · Monday, July 3rd, 2023



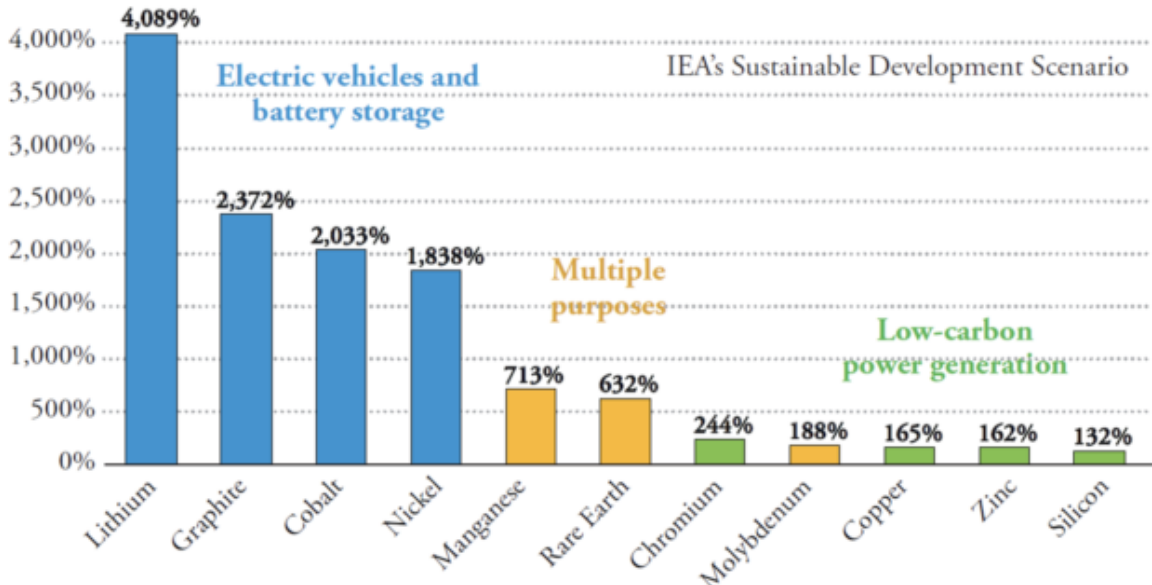
PhonlamaiPhoto/iStock

?????????????????????????????????????(IEA) ?????????? Net Zero Scenario, NZE ??????????????

### **A Critical Assessment of the IEA's Net Zero Scenario, ESG, and the Cessation of Investment in New Oil and Gas Fields.**

????????? EV ?? 2020????2040????20?????????????????????  
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Figure 33. Required Growth of Critical Mineral Supply (IEA's SDS scenario, 2020–40)



Source: Energy Policy Research, IEA, *The Role of Critical Minerals in Clean Energy Transitions* (2021)

EV??60kWh????????????????????????????????  
 150??200????????????????????

Table 13. Battery Chemistry by Content, Kg (60 kWh Lithium-Ion)

Mineral/Metal	NMC811	NMC523	NMC622	NCA+	LFP
Lithium	5	7	6	6	6
Cobalt	5	11	11	2	0
Nickel	39	28	32	43	0
Manganese	5	16	10	0	0
Graphite	45	53	50	44	66
Aluminum	30	35	33	30	44
Copper	20	20	19	17	26
Steel	20	20	19	17	26
Iron	0	0	0	0	41

NMC811 Nickel (80%) Manganese (10%) Cobalt (10%) NCA+ Nickel Cobalt Aluminum Oxide  
 NMC523 Nickel (50%) Manganese (20%) Cobalt (30%) LFP Lithium iron phosphate  
 NMC622 Nickel (60%) Manganese (20%) Cobalt (20%)

Source: Bhutada, G. VC Elements

EV??7000????????????????  
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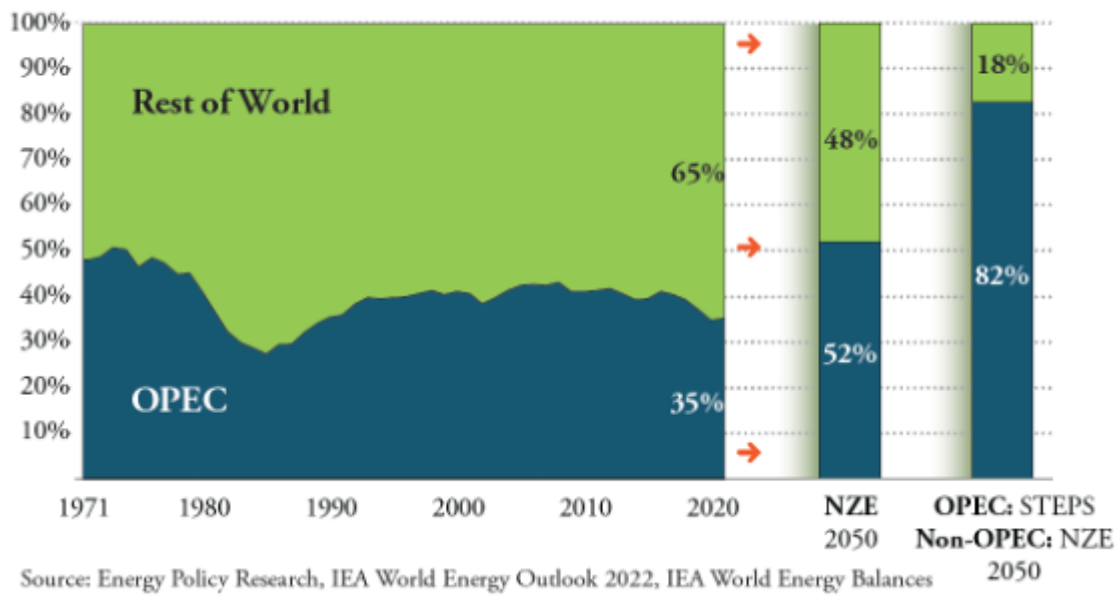
?? ?? · Sunday, July 2nd, 2023



A Mokhtari/iStock



Figure 17. OPEC Share of Global Oil Production

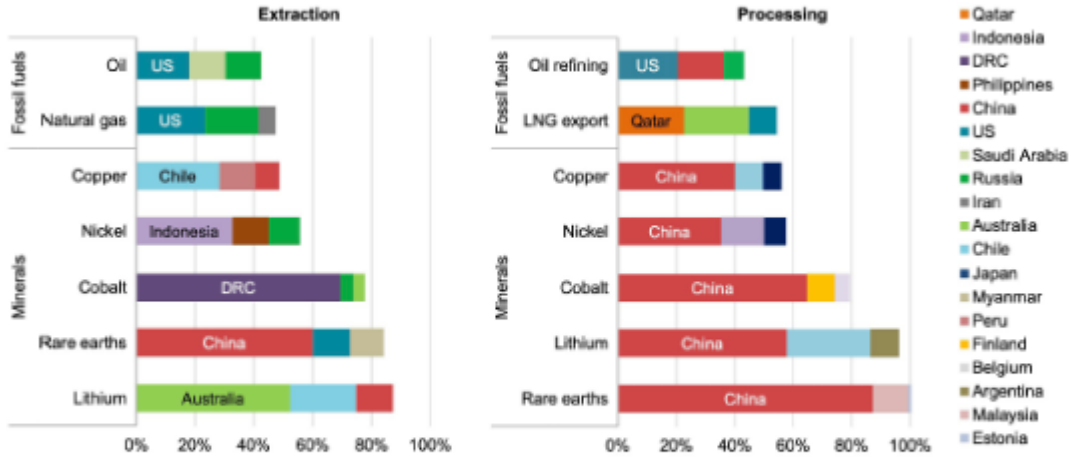


??OPEC??

NZE????????????PV????EV??  
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Figure 18. Share of Top Three Producing Countries in Production of Selected Minerals and Fossil Fuels, 2019



Source: IEA, The Role of Critical Minerals in Clean Energy Transitions (2021)

OPEC??NZE??  
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### IEA????????????????????????????

?? ?? · Saturday, July 1st, 2023



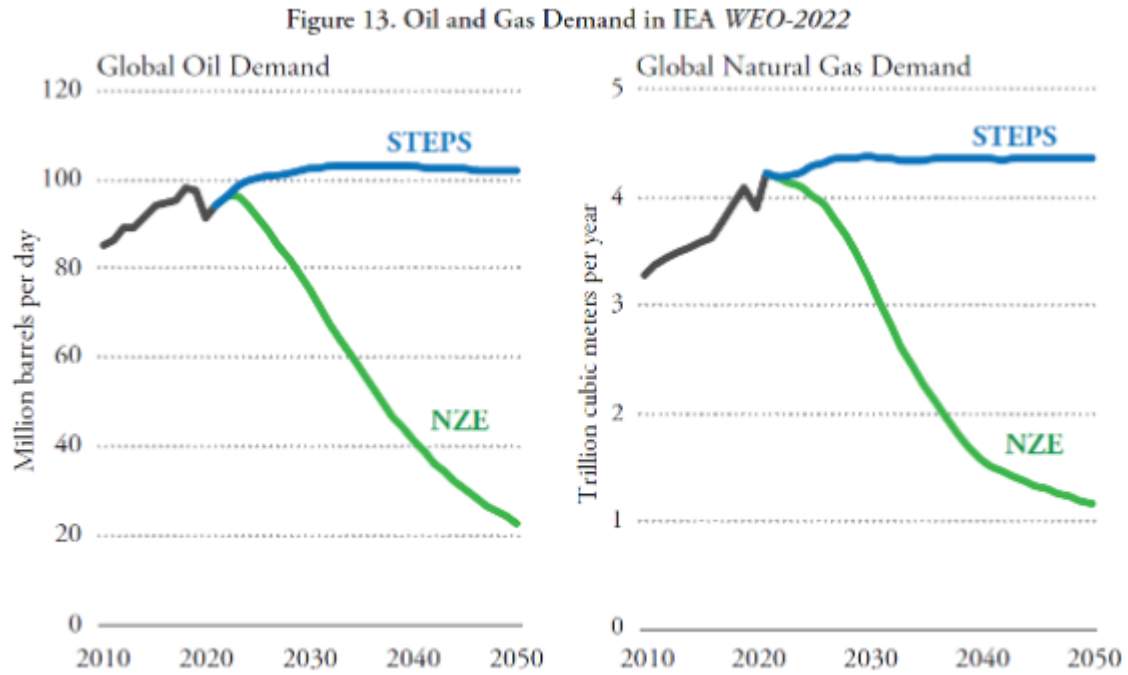
privetik/iStock

????????IEA????????Net Zero Scenario, NZE????????

????????IEA????????ESG??  
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**A Critical Assessment of the IEA’s Net Zero Scenario, ESG, and the Cessation of Investment in New Oil and Gas Fields.**

????????????????NZE??2050????CO2????????????STEPS????????????  
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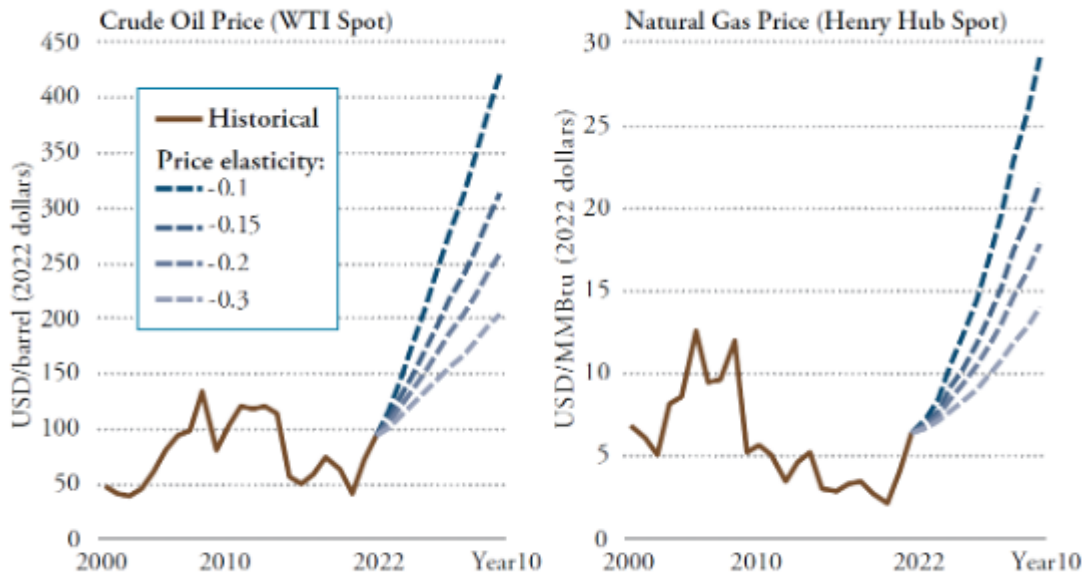
Source: Data from IEA, *World Energy Outlook* (2022) & *Outlooks for gas markets and investment* (2023). The data derived and estimated from graphs in the *WEO-2022* and the IEA’s gas report for the G7, as the IEA’s data tables only show scenario data for 2030 and 2050.

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Figure 14. Potential Price Spikes by Price Elasticity Level Under Net Zero Scenario



Source: Energy Policy Research based on IEA NZE

IEA NZE  
 NZE

IEA OPEC  
 IEA

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Posted in , , | No Comments »

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?? ?? ? · Monday, June 26th, 2023





Rawf8/iStock

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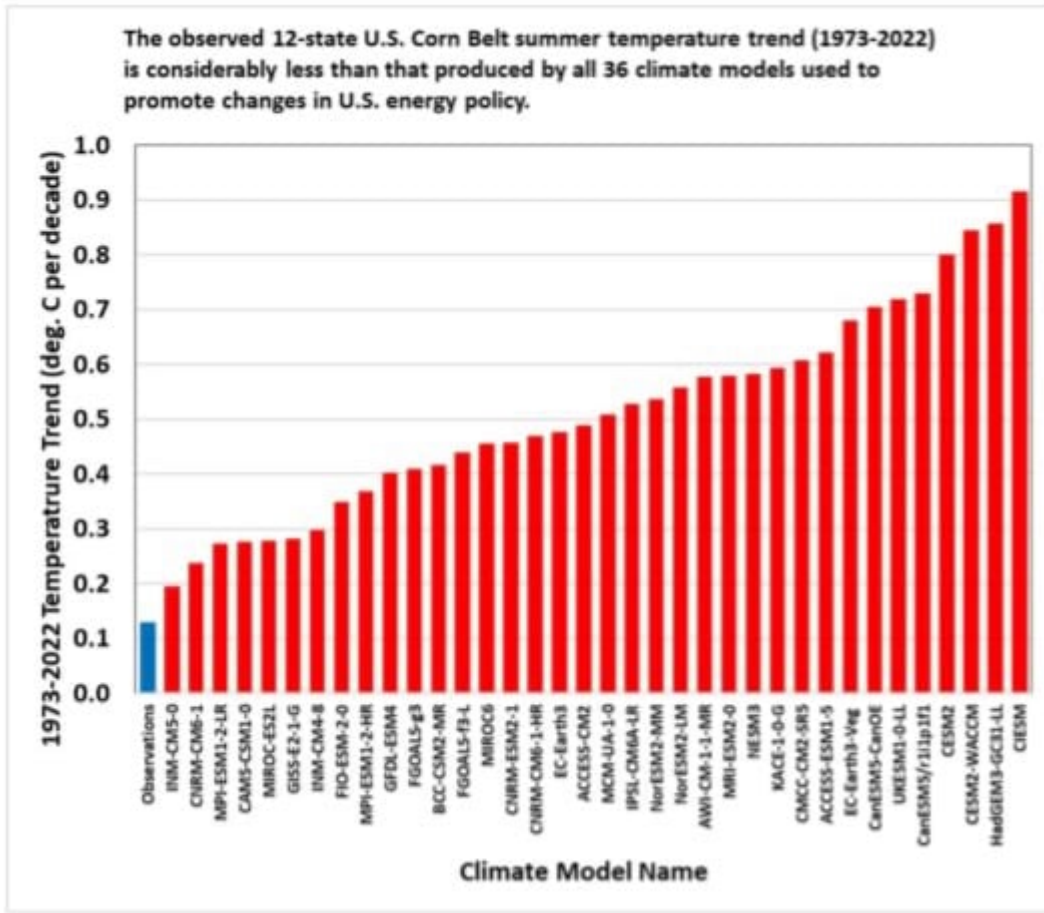
?? ?? · Friday, June 23rd, 2023



feellife/iStock

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BBC???? – ?????20??  
<https://t.co/pF1RfWUM94>  
 — BBC News Japan (@bbcnewsjapan) February 18, 2021

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### 【参考】今後10年間の火力供給力の増減見通し

- 今後も、主に緊急時に活用されていた石油火力発電設備の廃止が継続する見込み。
- 当面は火力の新設計画も予定されている一方、供給力全体としては減少傾向にあり、稼働率低下や卸電力取引市場の価格の低迷に伴う採算性悪化から、さらに加速する懸念。



注 1. 2017~2021年度：新設実績は真源エネルギー「石炭火力発電所一覧」および電気事業便覧（2021年版）、廃止実績は各年度供給計画および各社HP等より。  
 注 2. 2022年度以降（新設）：2022度供給計画より

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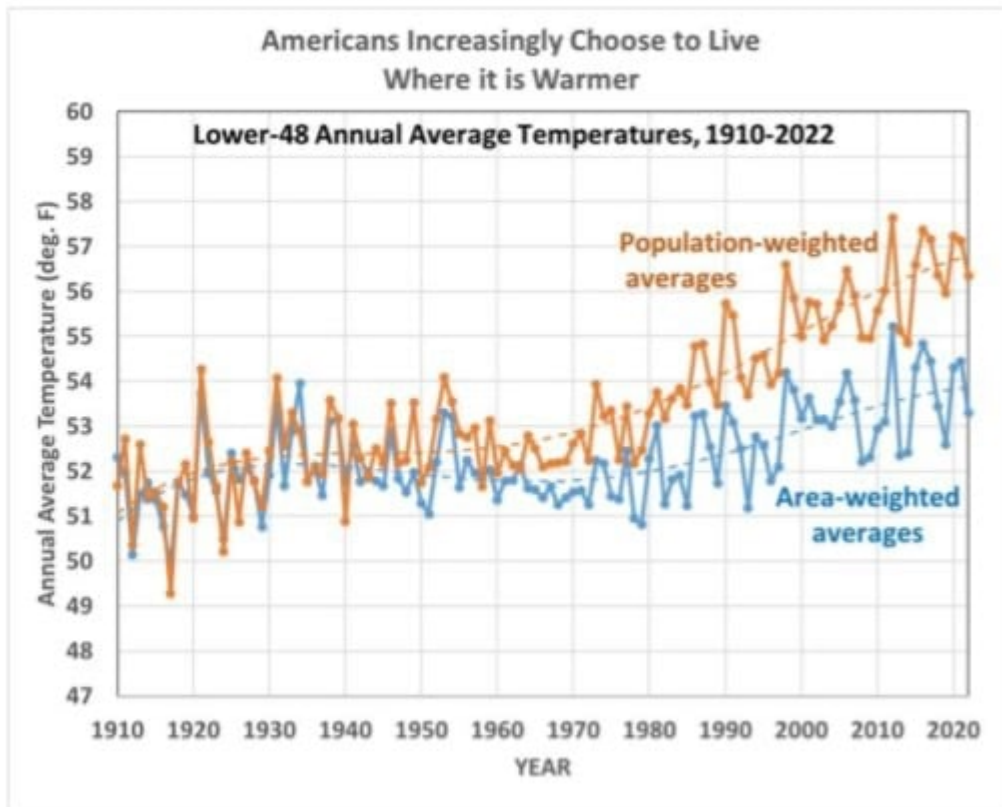




Darwel/iStock

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?? ? · Monday, May 29th, 2023

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spooh/iStock

“The Energy Transition Confronts Reality” 2023 1 23

- RePower EU
- 2021 4
- LNG
- 100

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?? ?? · Sunday, May 28th, 2023



sasun bughdaryan/iStock

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## Gx????????????????

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PhonlamaiPhoto/iStock

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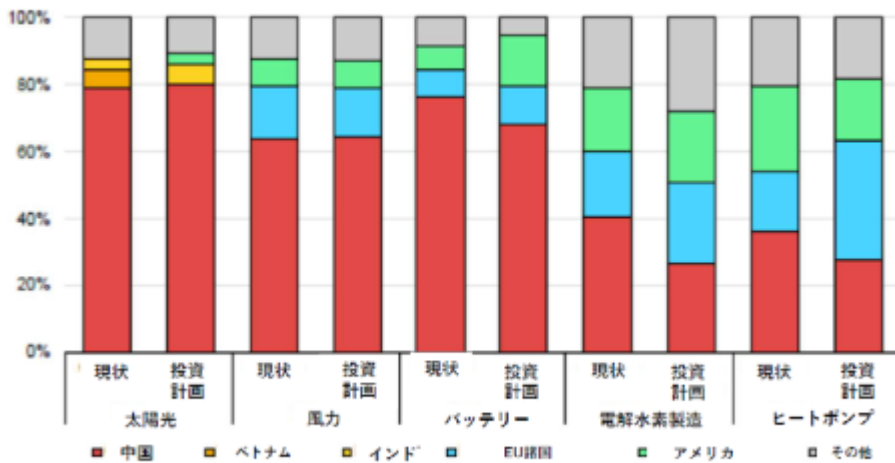
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図3. グリーン技術製造の地域集約度—現状と将来



出典：The State of Clean Energy Technology Manufacturing, IEA, May 2023

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?3?“Securing Clean Energy Technology Supply Chains”, IEA, July 2022 / “The State of Clean Technology  
Manufacturing”, IEA, May 2023

?4?Reuters, 2011?1?17?

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

## G7????????????????????????CO2??

?? ?? · Wednesday, May 24th, 2023

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???Twitter by True Science PEng, DFP, ADFS, MA, MBA

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?? ??? · Monday, May 22nd, 2023



Wikipedia??

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Allkindza/iStock

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**FACT SHEET: Biden-Harris Administration Proposes New Standards to Protect Public Health that Will Save Consumers Money, and Increase Energy Security**

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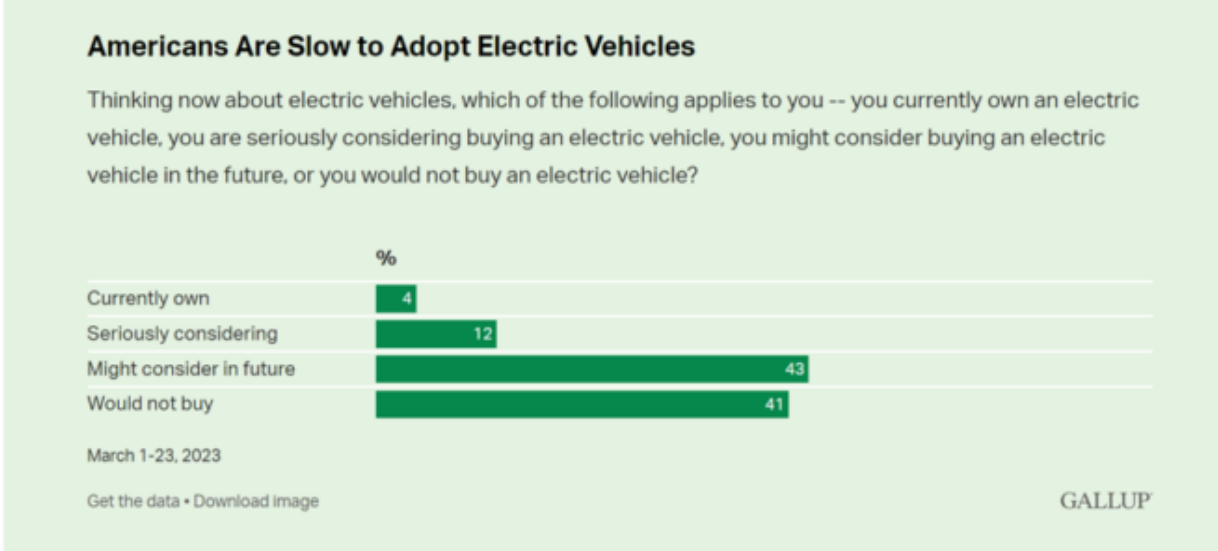
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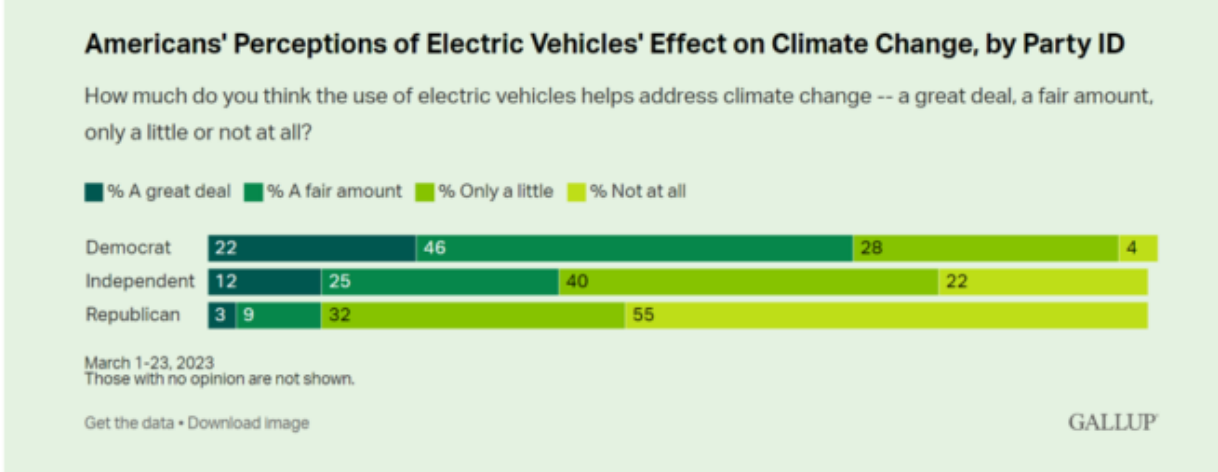
### Most Americans Are Not Completely Sold on Electric Vehicles

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- EV????????4????????????????12????????????EV????????
- ?????43% ?????EV????????????????41% ?????????



- ?????????????????EV????????????5????????16????????58????????????????????????????????????
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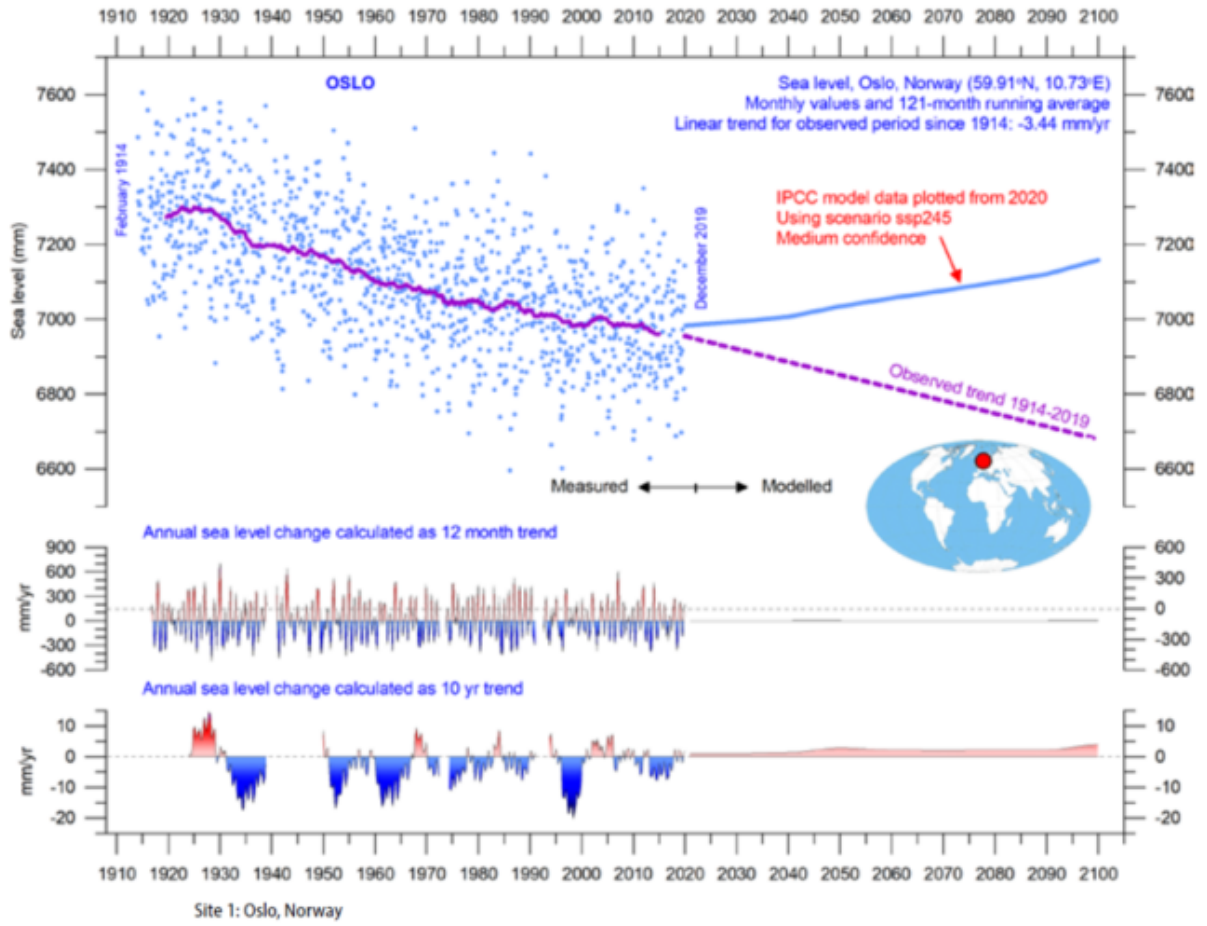
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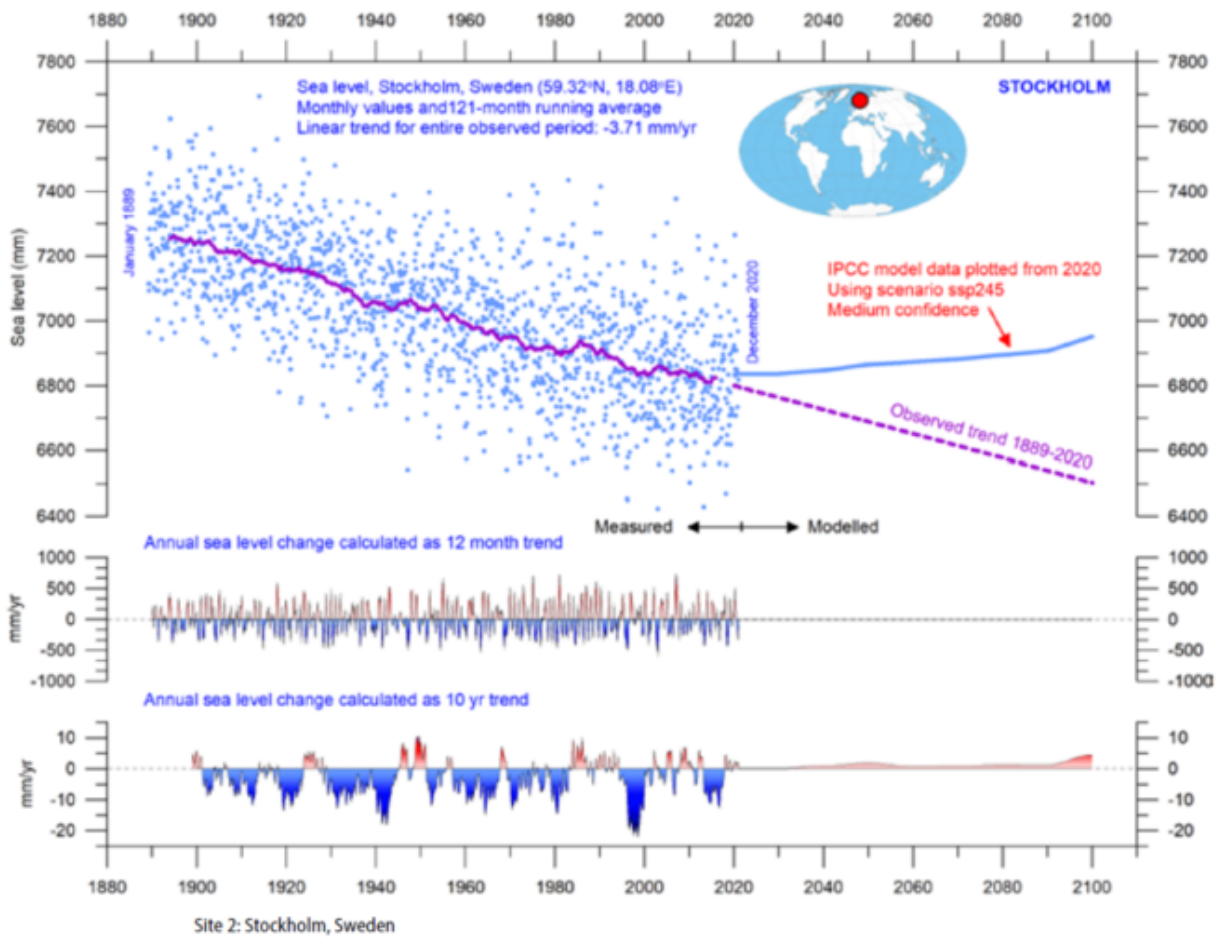
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### IPCC AR6 Sea Level Projection Tool

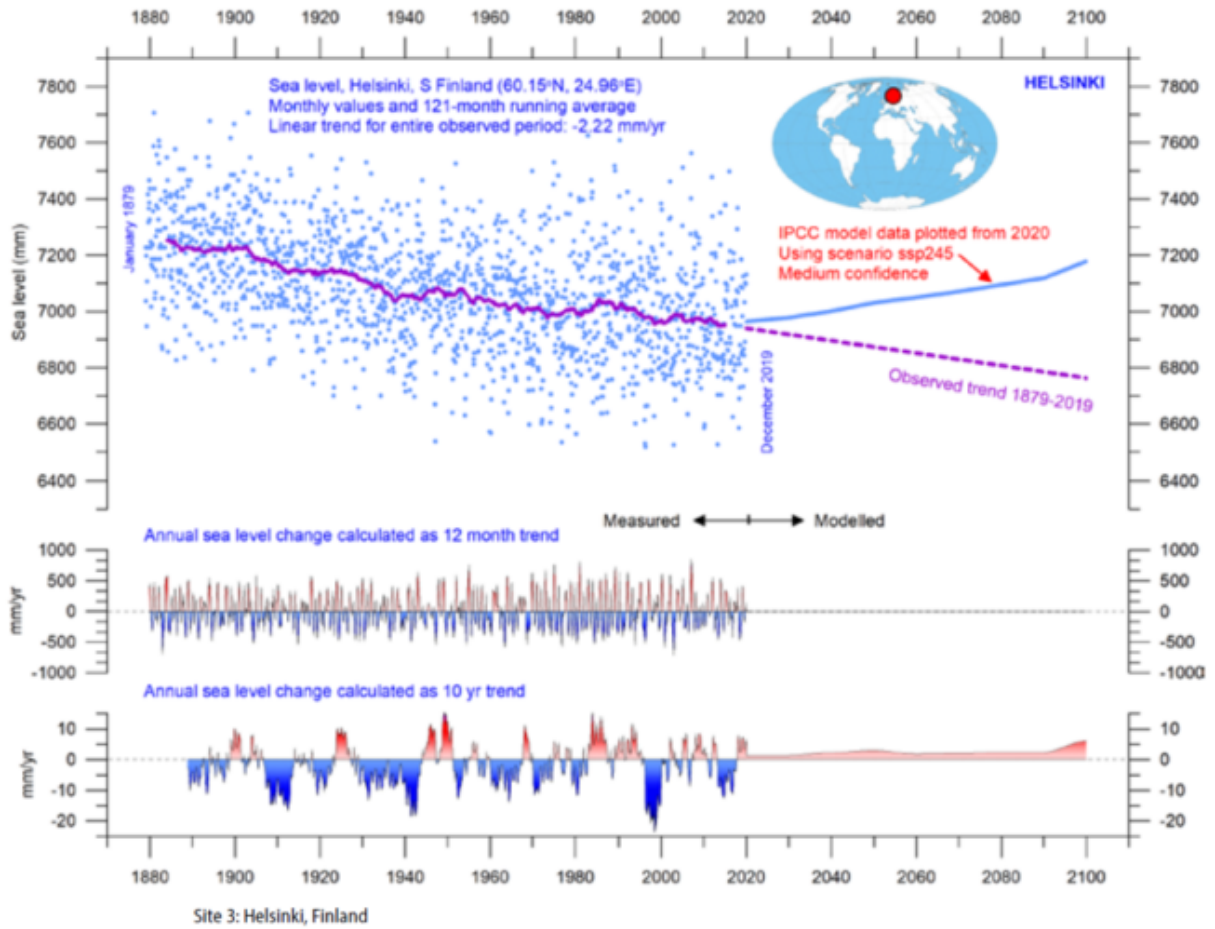




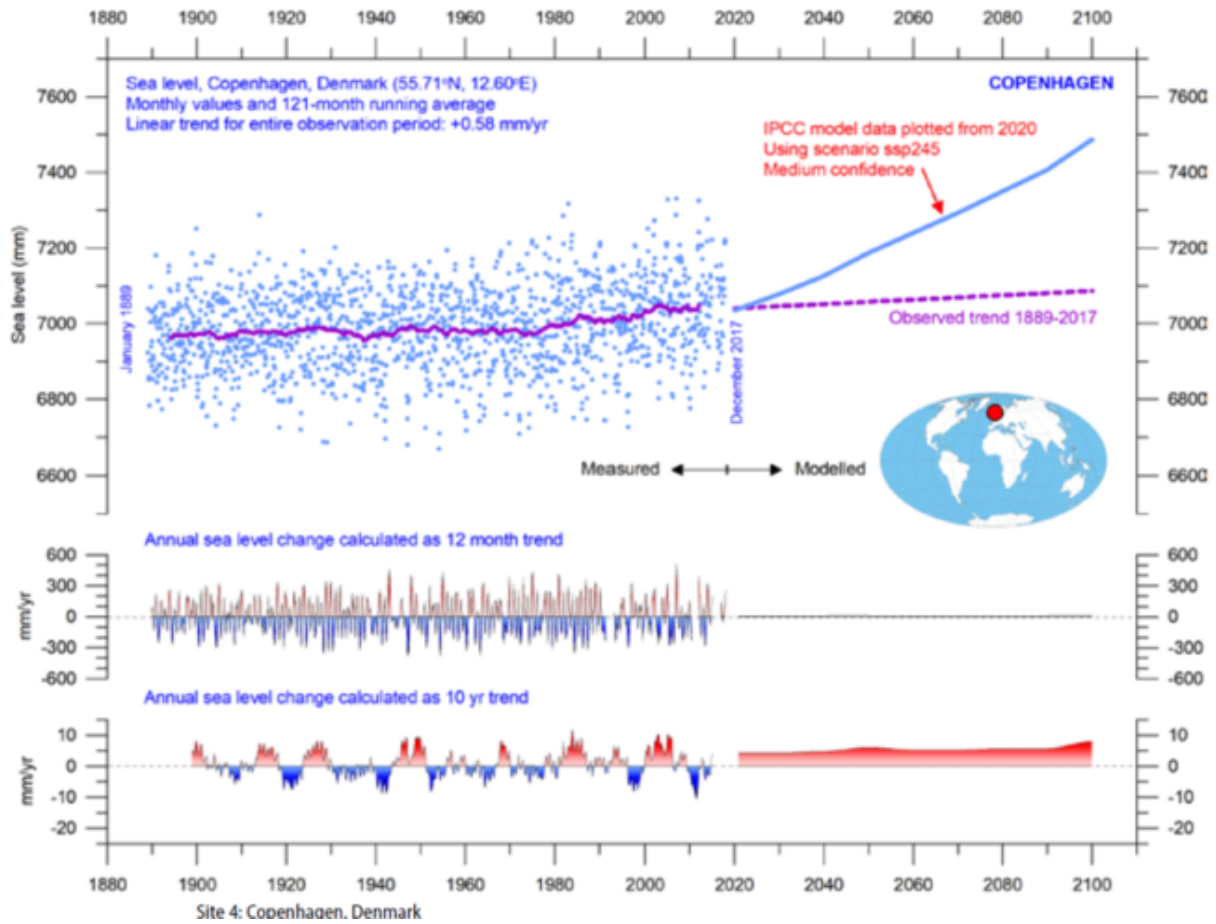
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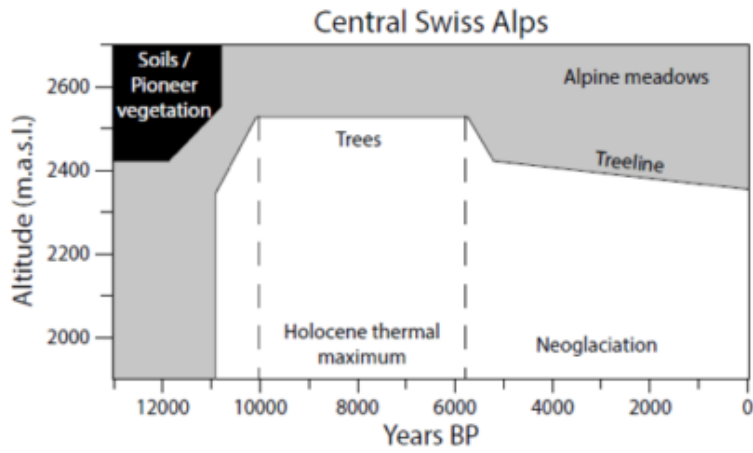
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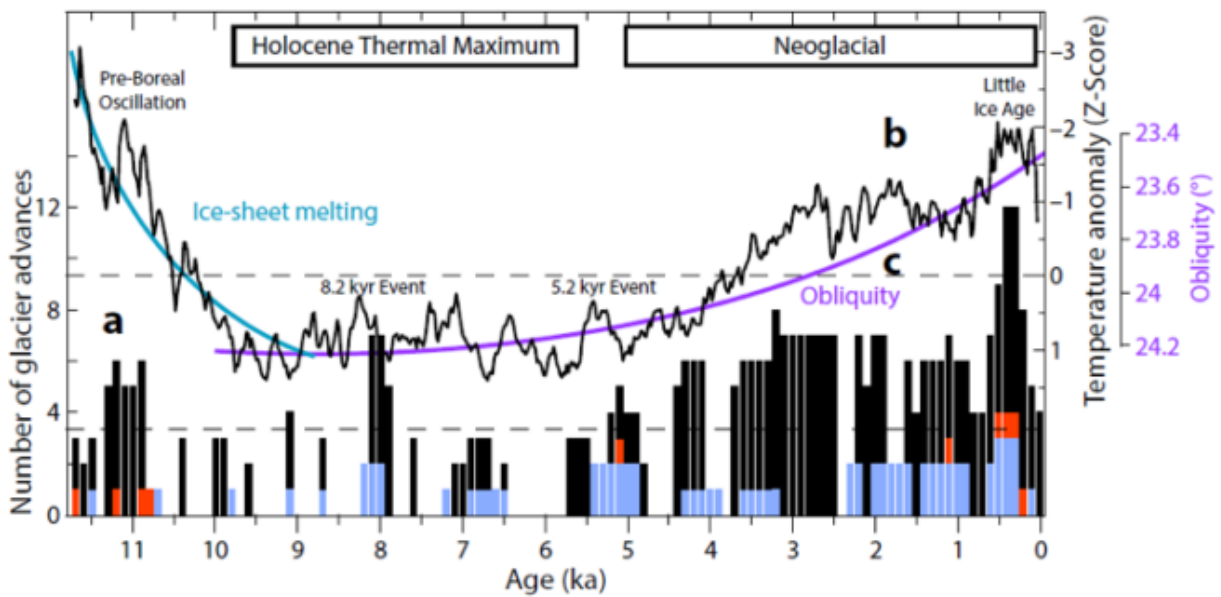
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**Figure 4:** Fluctuations of the treeline in the Swiss Central Alps during the Holocene. The limits of the vegetational zones are placed between the sites according to the presence of the respective vegetation type as inferred by macrofossil analysis. Altitude in meters above sea-level. After Tinner & Theurillat 2003. Current treeline in the Swiss Central Alps is 150-200 m below Holocene Thermal Maximum treeline limit.

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**Figure 3:** Glacial advances versus temperature (inverted) during the Holocene. a) Number of regions displaying glacier advances at each Holocene century. Black, NH 17 regions; orange, low latitudes single region; ice blue, SH 4 regions. Bottom dashed line, Holocene glacial position average. b) Inverted temperature reconstruction from the same 73 proxies used by Marcott et al. 2013. The reconstruction ends in 1910 and does not include modern warming. Temperature anomaly changes are expressed as Z-score (distance to the mean). Some well-known cooling periods or events are indicated by their accepted names. The period affected by the melting of the extra-Arctic ice sheets is indicated in aquamarine. c) Inverted changes in obliquity. Vinós, 2022, page 55.<sup>13</sup>

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