Global Energy Policy Research | GEPR

GEPR??
????http://agorajp.com/??
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?? ?? · Friday, June 19th, 2026

TebNad/iStock

??????????????????6?14??????????????????????????????????4??????10?????1.9????????????????????
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2025?8??????????????????????1??????????????????2021?????11.99?16.49?/kWh??????????????????3???
??500????????????????????????

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???????????IPCC?WEF??

??2050????????????????
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??????????????????????????2025????????????????????????????????

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Drought??????????2021????????????????60??????????????????????????????2020?9????????18%??
???????????2021?9??????2%???????

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???????????2024??30%?????

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??Ossian?3.6GW????????????????
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??BP??

???????4????????????????????????CfD????????????????????????????????????

AR5?2023??????£44/MWh?????????????AR6?2024????66%??????£73/MWh????????????????????
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??ESG????????????????????????????????
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0.006?????????????

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0.006??????GX????10??150????????????????????2??

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??CfD????????????????????????GX
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?2050??

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

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

?? ?? · Thursday, June 18th, 2026

RapidEye/iStock

??2026?4?22??????????????????????????????23?????????????????????S&P????????3????????
?ESG????????????????????????????????

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

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> 1??
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> 2??
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> a. ??

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b. ??S&P??IEA??????????????????2050???????????2040????????????????????????

c. ??S&P????????????????????EV??????????????????????????????

d. S&P?S&P?????????ESG??ESG??????????????????????????????

3??

1. ?????ESG??
2. ????????ESG???
3. S&P???????S&P??

4?S&P???????????????????ESG??ESG??ESG???????????????????

5???????15???NRSRO??NRSRO??????????????????????ESG??????????????????UN PRI?????????????????????????????NZFSPA??

6?????ESG??UN PRI?????ESG?????????????????????????ESG??

7????????S&P?????NZFSPA??2050??

8?S&P?S&P??

9??

10????UN PRI????????????????????????????????????

11????????S&P????NZFSPA????????????????????????????????????

12????UN PRI???????NZFSPA??

13??

1. ???UN PRI????ESG????????????????????????????????????
2. ???????S&P????NZFSPA??

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3. ??
4. S&P?S&P??
5. ??????????????????S&P???ESG??
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6. ???ESG??????????????????????????????ESG????????????????????????????????????
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14??????S&P?ESG??
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15??
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16??????????????????ESG??

17????????2024??Nature???????Kotz?Levermann?Wenz????????????????????????
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18??
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1. ??
2. ??IEA????????????????????????
2050??????????????????
3. S&P??????S&P??
4. S&P?S&P??

19??

1. ?????ESG??
2. ????????ESG????????????????????????????????????
3. S&P??

20??IEA?
?????????????2050?????????????2040????????????????????????

21?S&P?S&P??S&P???
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22?S&P?S&P??
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23?????/S&P??
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24??

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> 25???2050?????
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> 1. ??
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>   i.??????????????NRSRO????6??????????????????????
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> 26????ESG??
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> 27??????????ESG????????????????????????UN
> PRI???????????????ESG????????????????????????????????

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

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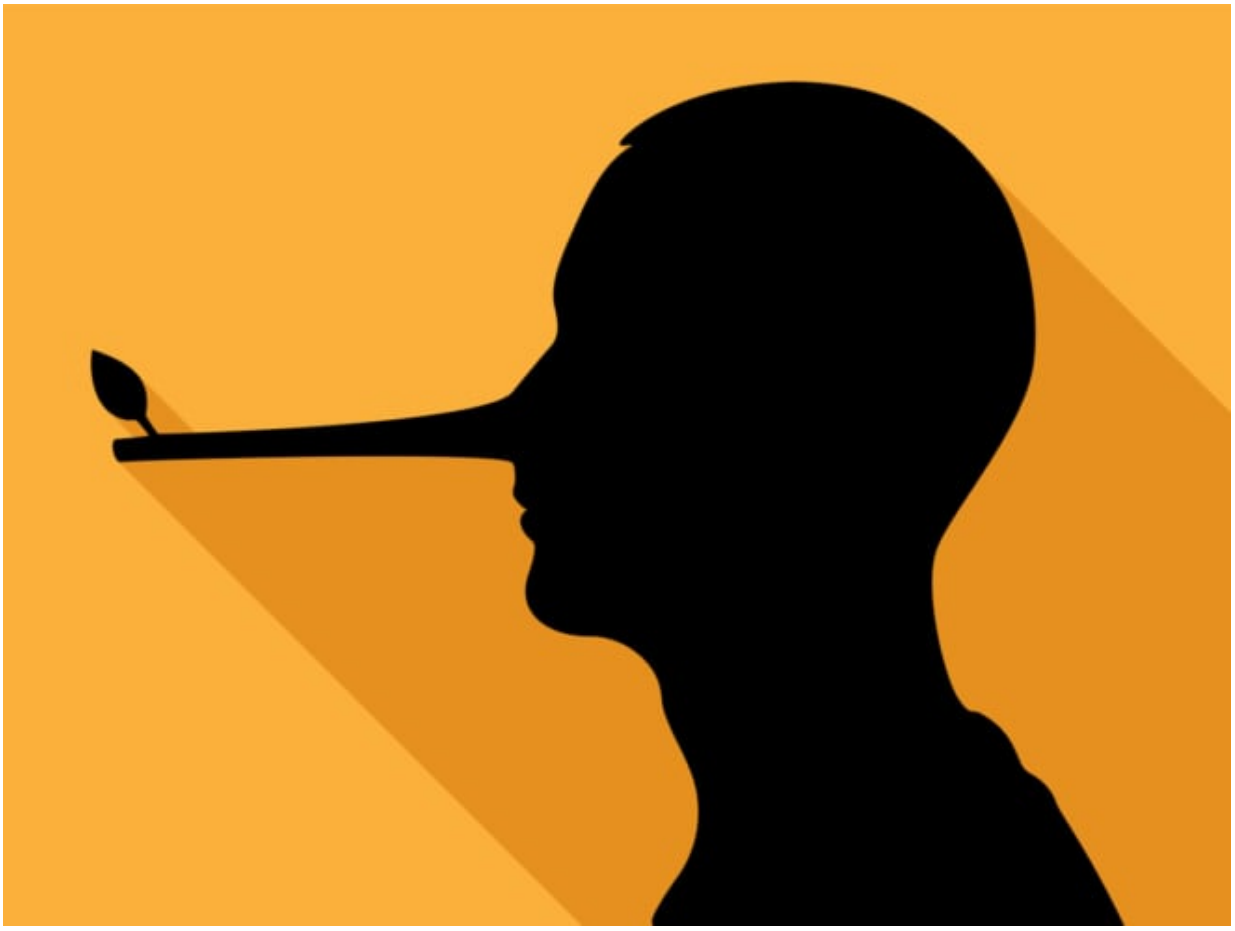
?? ?? · Tuesday, June 16th, 2026



A Mokhtari/iStock

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1. ???

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?????U.S. Steel	?7,000??9,000???	????????????????????????????
????????????????	?1.5??2???	??????????????CO2????
????????????????	?3.0??3.6???	????????????????????????????????????CO2?

2. ??????

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??	??????AI?????????????????9.2GW????NextEra?????????????????????????10GW?????19GW????
????	????????0.435kg-CO2/kWh?
???	??GW × 8.76TWh/GW? × ??? × 0.435Mt-CO2/TWh?

2-1. ????????????

???	??CO2??
60%	?4,400???
80%	?5,900???
90%	?6,600???

??????????????6,000?????????

3. U.S. Steel

??	CO2??	????
??U.S. Steel Scope 1+2	?2,560???/?	2024??Scope 1?2,283????Scope 2?278??????2,561???CO2e?
??????????	?100??600???/???	????????????????????????????????

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4. ???????

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JERA Haynesville	0.5?1.0Bcf/?	?1,000??2,000???
???? Aethon	2.1?2.6Bcf/?	?4,200??5,200???
????? ?????	1.2?1.4Bcf/?	?2,400??2,800???
JAPEX DJ Basin	5?boe/???	?500??800???
??	—	?8,000??1.1???

??????????1Bcf/?????????2,000???CO2??????????

5. ????????

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??	Texas GulfLink??????????????????100??????????????????
??????	?0.43??CO2/????
???	100????/? × 365? × 0.43??CO2/????
??CO2??	?1.57???CO2/??
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6. ???????

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

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

?? ?? · Tuesday, June 16th, 2026

gorodenkoff/iStock

??2026?4?22??????????????????????????????23?????????????????????S&P????????3?????????ESG????????????????????????????????????

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ESG????????

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

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3?????????????????????????????????????PRI?NZFSPA??????????????ESG????????????????????????
??????????1?????????????????????????PRI?NZFSPA????????????????????????ESG??????????????
??????????????95??

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??????????????????2026?2??2,950????????PRI??
?????ESG?????????????????????????????????????

???????UDAP???????

??ESG????????????????????????????????????UDAP?????
??MBS??
???????????ESG???????????????????

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????????S&P????????ESG????????UDAP?????????????S&P?ESG????????????????????????????????
??S&P????????????????????CPC????????????????????
??????ESG??

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??????????????????????S&P?ESG?????????????28???????33??????41??CPC?46?????????2026?6?7?????CPC????????????
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????23??

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

1. 90????ESG?????????????????????????????ESG??????????????????
2. 60??????PRI????????????????????????????????
3. ??????????????ESG???????????????3?5????????????????????????
4. ESG?????????ESG????????????????????????????????
5. ESG??

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- ??????ESG???????????????? ??
- ESG???????????????????????????????? ??
- 2026??????????? ? 2027???????????????? ??
- Amazon?Apple?GM???????????????????????? ??
- 2026???????????????? ??

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

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

?? ?? · Monday, June 15th, 2026

Narongrit Doungmanee/iStock

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2026?5?26??
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CO??????????????????

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$N_1 = ?D_{12} \ dc / dx$
N?????????????????????? [mol/(m² · s)]
D?????2???1????????????????? [m²/s]
dc/dx????? [(mol/m³)/m]

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??????**??????????????**??????????????????????CO???Ca??
CO???????????????Ci?????Ca???????????Ca?Ci?????????????????Ca?????????????????????????

??????CO?????430ppm?????????????????????????1,000?1,500ppm?CO????????????????????????????
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????CO??????????????????????????????CO??????????????????????????CO????????????????????
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???????????WUE: Water Use Efficiency?——??????????1??????????????——??????CO??????????????????????????????
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????430ppm??????????

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

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????Ca?????????????????????Ca?Ci?????????????????CO????????????????????1,000?1,500ppm??
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CO????????????????????????????????WUE??

???430ppm?????????????????????????CO????????????????????????????????????

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??????????????????????2??????????????????????????????2024?10?31??????????????????

Posted in ???, ????? | No Comments »

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

?? ?? · Sunday, June 14th, 2026

??????HP??

??2026?4?22??????????????????????????????????23????????????????????????S&P????????3?????????
?ESG????????????????????????????????????

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2024????????????????????????????ESG????????????????????????

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- ??23??SBTi?????????????????? | ??? ??????????
- ??11???????????????????? | ??? ??????????
- ??????CDP?SBTi????????????????? | ??? ??????????

?????????GFANZ?NZBA?????????????????????????????????SBTi?CDP????????????????????????????
??3????????????????????????

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> a. **??????????????????**
> b. **????????????????????????????????????**
> c. **??????????????????????**
> d. **ESG??????????**

???4?????????

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a. **????????ESG??????????????**
b. **??**
c. **??**
d. **????????????????ESG???????????????**

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a. ????????ESG?????????????

- ??????ESG??
- ??????????????????????18%????????????3????????Climate Action Tracker(CAT)??????????????????????????????
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- ????????????????????EPA??
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d. ?ESG?????????????

- S&P?2021?????NZAM???????????????1?????????????????????????????????????NZAM???NZBA???????2025?1??????????????????NZIA??
- ??????????????????????????????????S&P?2021??49%??????? ????????????????????????????????15%????? ????????????????
- ????ESG??????????????????????????????????840??????????????????????????????3?????????????????

?????23??

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

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?? ??? ?? · Friday, June 12th, 2026

Marcus Millo/iStock

RAF??????????????????1??????2??

1960??????????????1970????????????????????????????PFLP????????????????????????????????????
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??1970?????RAF????????2??
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1977?9??
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??4????????????????
??GSG-9?
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??3??
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??????????3??
?????320????????????5.9????????????????????

?????RAF??3????????????????????3????????????????????????????2024?2????????1????????????67????
????????????????????????????15????????????????????????????????????

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RAF??
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??9???????
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Posted in ???, ?? | No Comments »

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

?? ?? · Friday, June 12th, 2026

nicolas_/iStock

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CO2???IPCC?5?????????????2?????????????????????0.2???2.0??????????????????

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?????CO2???????????????????1.93????2024????GDP???1.73??????????????????

????CO2?????=CO2????????????????????????????????GDP??0.49????????????????????????????????????1.16?????

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

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??????CO2?????????????????????????????????1???????????GDP?1.7??2????????????GDP?0.2%??2%????????????????????

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

2026?5?26???

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? Coalition??????????????CLINTEL???IPCC????????????????????????

????IPCC??????ECS??CO????????????
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???IPCC??

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??devil’s
advocate??
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Posted in ???, ????? | No Comments »

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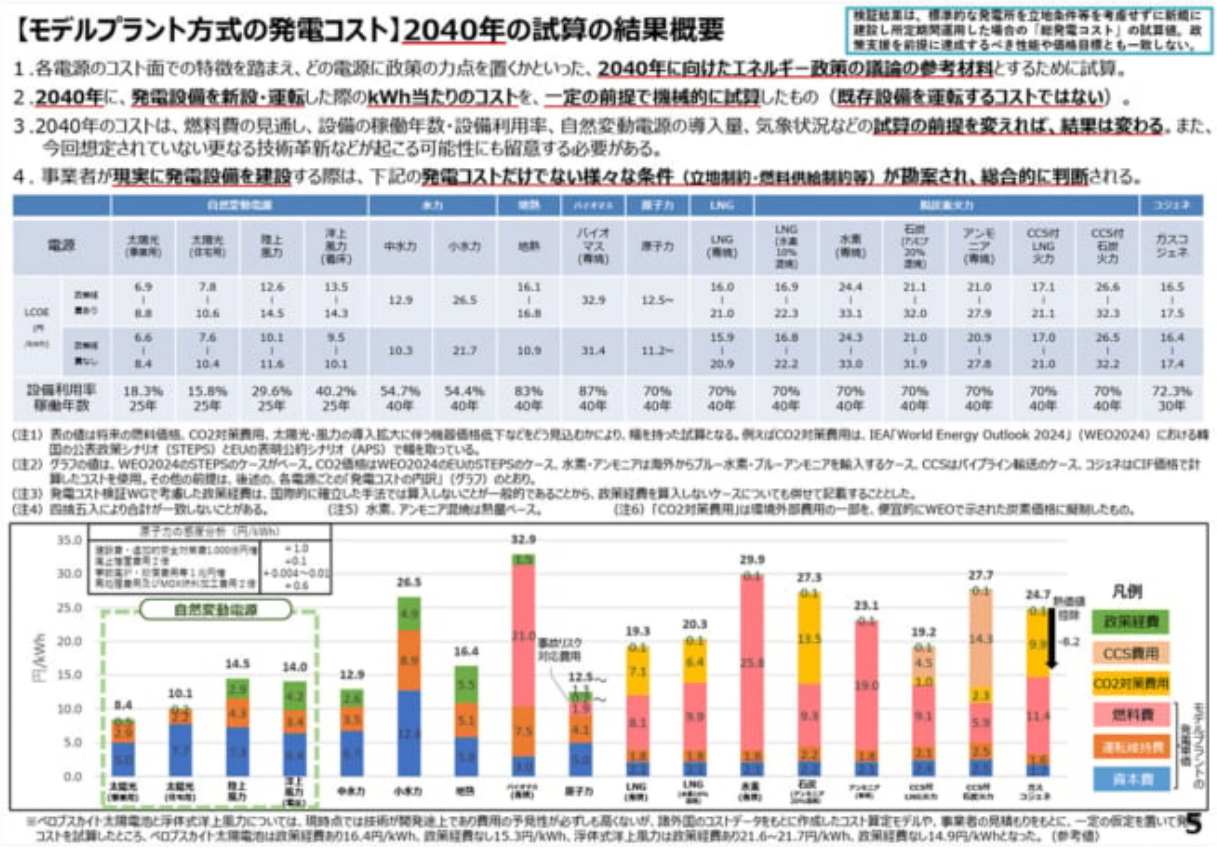
?? ?? · Tuesday, June 9th, 2026

Osamu Ito/iStock

??????????????2040???2040?????????[21?]?



?1??????????????2040?????????????
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??CIGS????????????????????????????[??]
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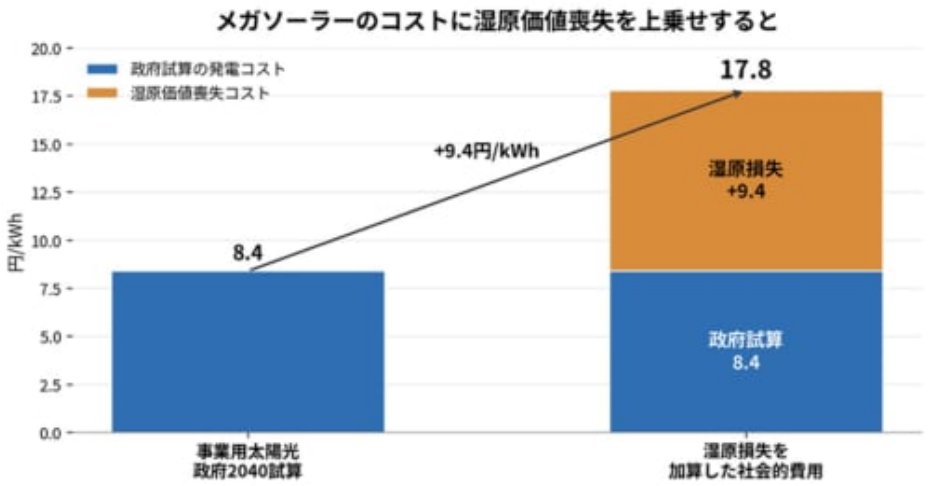
???1ha???0.67MW??????12????????????????????????70.4?kWh/ha/????????????????????????????
??????9.4?/kWh????

???2040??



注：政府2040年モデルプラント方式の事業用太陽光8.4円/kWhに、環境省積上げケースの湿原価値喪失9.40円/kWhを加算。出所：発電コスト検証WG（2025）、環境省（2014）、杉山（2026）より作成。

?2????????????????????????
?????2040??9.4?/kWh????

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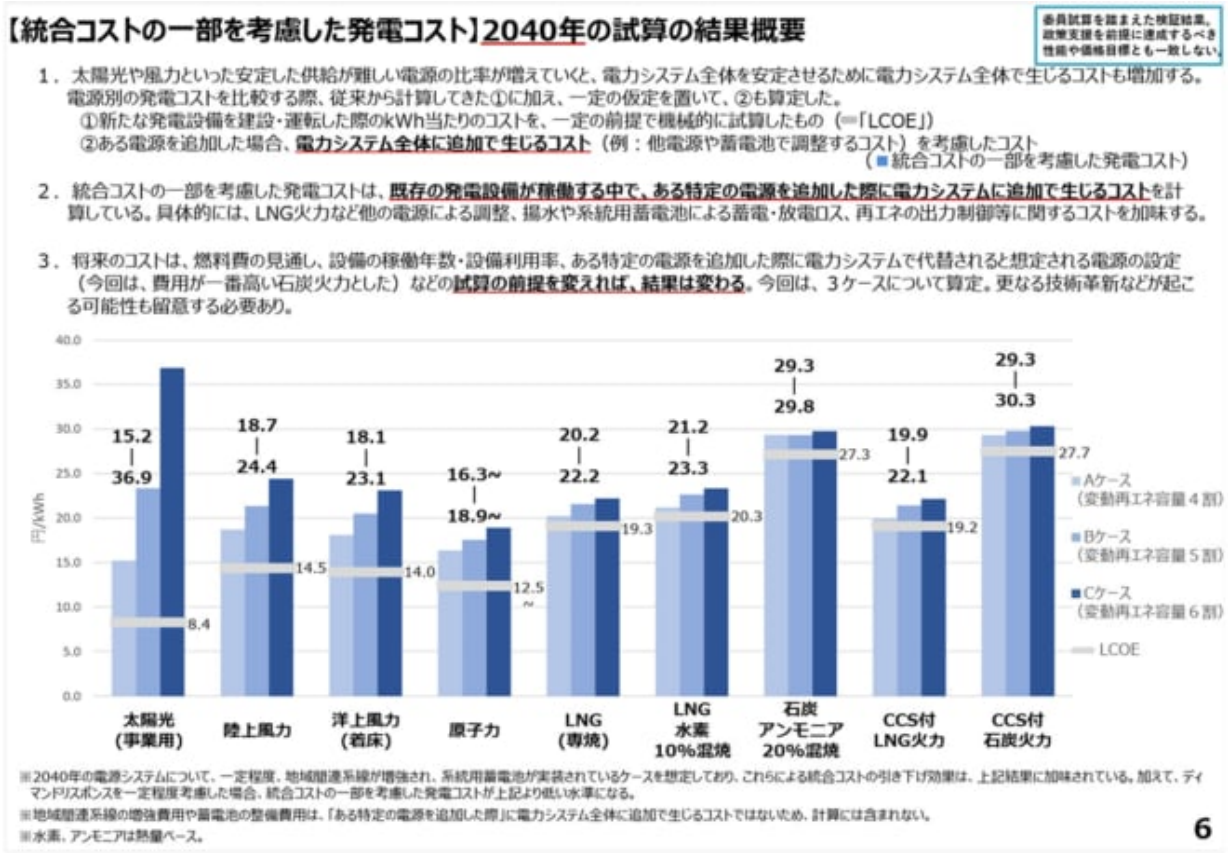

?3??????????????????
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- ?1?????????????????2025??????????????????????7?2?6??
- ?2???????2026??????????????????????CIGS Working Paper Series No. 26-006J?2026?5?29??
- ?3?????2014??????????????????????????

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

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?? ?? · Thursday, June 4th, 2026

Aree Sarak/iStock

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???????NRC????1986???[33]?

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NRC???60?????????????100????????????????????????
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?1,840??U???

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??6????????2.5?
?????10?15?????????????????????????[77]?

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I A E A ? ? ?

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

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?? ?? · Wednesday, June 3rd, 2026

MicroPixieStock/iStock

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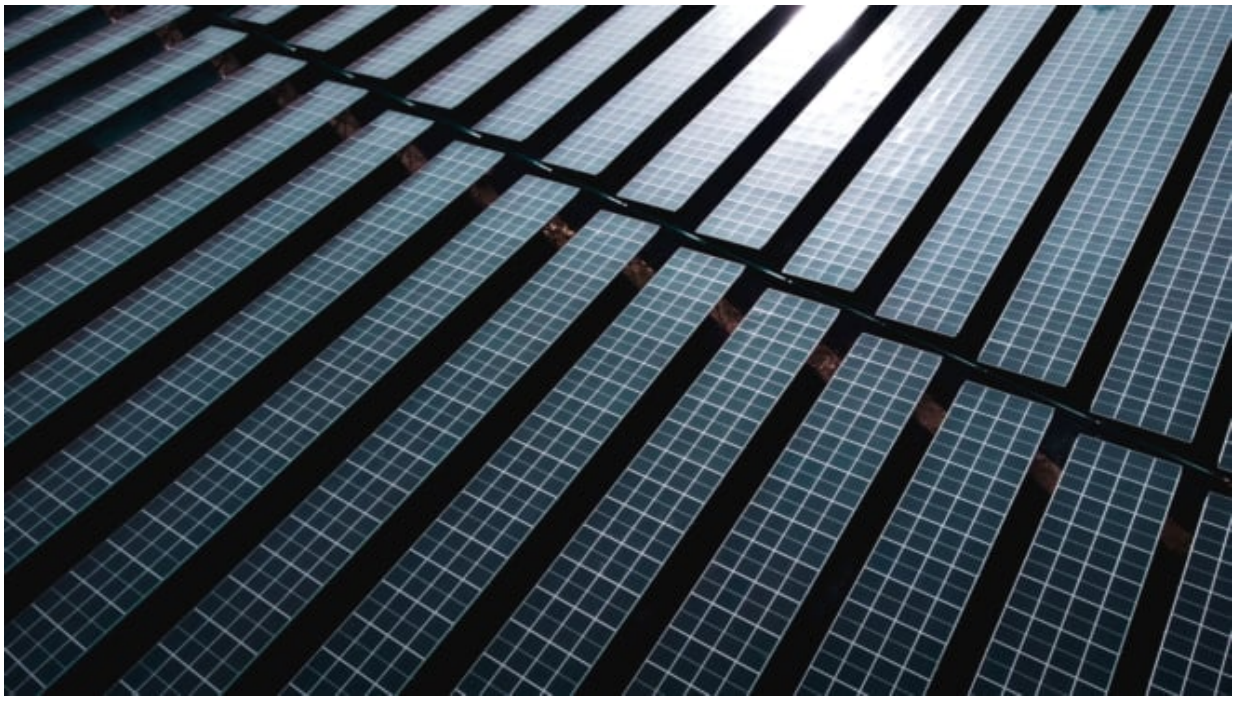
ESG????????????????????????

?? ?? · Monday, June 1st, 2026



chayakorn lotongkum/iStock

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2022???2023??????
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P C B
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??ESG?S????????????????????????????SD
Gs?ESG??

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?????2023??????????????????????pp109-151

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??????2026??ESG?SDGs?????????????????????????NPO???????????
??????2026??????????????????????NPO???????????

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

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?? ?? · Sunday, May 31st, 2026

takasuu/iStock

????2030??????????????ZEH??????????????????

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9.6?????????????4???7????????

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??5??????????????????????????27.8GJ????????????17.4??????????????????LP??????????????6.2
7?/MJ???????

??6.1GJ????1.3GJ????
8.9GJ?????????16.3GJ????

ZEH????????????????????????????????20%??6?ZEH?????
????BEI?0.8???????

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????????ZEH????????????????????????????????20%????????????????????????????????????20%??
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?????ZEH??20%??????????????????????????????3.26GJ?
??????????6.27?/MJ?????????????????2.0??????????????

??????ZEH????????40??70????????????????????

??	???????????	20%?????????	40???????	70???????
????	16.3GJ/?	?2.0??/?	?20?	?34?

????????23?????????4.6??2????????

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??????????????????????????20.7GJ?????????????11.1GJ??????????????????????????????????????

???????????????20%????????????????????????

???	??	??	??	??	20%?????????	40???????	70???????
??	8.9GJ	1.4GJ	10.4GJ	20.7GJ	?2.6??/?	?15?	?27?
??	2.9GJ	1.0GJ	7.2GJ	11.1GJ	?1.4??/?	?29?	?50?
??	6.1GJ	1.3GJ	8.9GJ	16.3GJ	?2.0??/?	?20?	?34?

??????????????????????????70??????????????27?????

???????40?????29??70?????50??

??????????70??????

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????????????????????????????????7.6GJ????20%?????????????1.0????????

?????40???????????????42??70?????73?????

????	???????????	20%?????????	40???????	70???????
??????	7.6GJ/?	?1.0??/?	?42?	?73?
?????	9.8GJ/?	?1.2??/?	?33?	?57?
??????	16.7GJ/?	?2.1??/?	?19?	?33?
?????	18.9GJ/?	?2.4??/?	?17?	?30?
????????	22.2GJ/?	?2.8??/?	?14?	?25?
???	32.0GJ/?	?4.0??/?	?10?	?17?
????	16.3GJ/?	?2.0??/?	?20?	?34?

??70??????????17?????

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??33.8GJ????20%??????????????4.2??????

???????11.8GJ?????7.3GJ??????

??	???????????	20%?????????	40???????	70???????
???	33.8GJ/?	?4.2??/?	?9?	?17?

??	???????????	20%?????????	40???????	70???????
??	25.4GJ/?	?3.2??/?	?13?	?22?
????	14.9GJ/?	?1.9??/?	?21?	?37?
??	14.8GJ/?	?1.9??/?	?22?	?38?
??	11.8GJ/?	?1.5??/?	?27?	?47?
??	7.3GJ/?	?0.9??/?	?44?	?76?
????	16.3GJ/?	?2.0??/?	?20?	?34?

??????40?????9??70?????17????????????????????????????40?????27??70?????47???????????40???
??44??70?????76?????

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- e-Stat??????CO2???????? ??5??????7-1-1????????????????????????
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Posted in ???????????, ???, ????? | No Comments »

2026??????????? ? 2027?????????????

?? ?? · Saturday, May 30th, 2026

RBFried/iStock

???3???

https://agora-web.jp/archives/260327143206.html

> ??CO2?1?????????????????
> ????????????????**?????**??
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https://agora-web.jp/archives/260417210224.html

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JERA?????????????????CO2???????? – ??????

https://www.nikkei.com/article/DGXZQOFD226O10S6A520C2000000/

> JERA?22???
> ???????????CO2??????????????????????????????????10????CO2?????????1????????
> ???2000???????CO2???????

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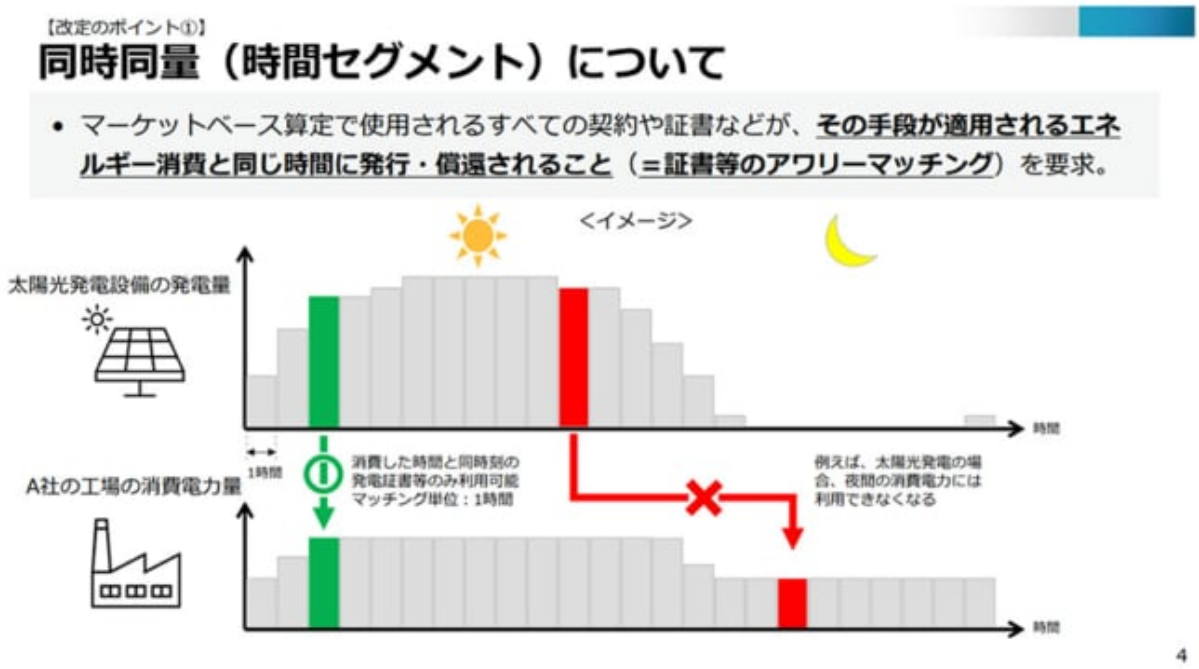

???????GHG Protocol?Scope2???????????????

GHG??1?????????????????
??1kWh???????????????????????

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GHG???????????2027??2027????????
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Posted in ???, ????, ????? | No Comments »

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?? ?? · Friday, May 29th, 2026

Rawpixel/iStock

2026?5?1??????????????????????2030????????????????????????

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??LCOE??

??Carbon Symbiosis????????????????????????????????????

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

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?? ?? · Friday, May 29th, 2026

bymuratdeniz/iStock

2024?2??290????????????????????????

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

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?? ?? · Thursday, May 28th, 2026

nzphotonz/iStock

5?26??????????????????????????????

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adventtr/iStock

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2023??UAE??????????COP28????????????????????????????????????2025?11????????????COP30????????????????????85??????????????

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- COP??
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- ??44???????
  ??????????1997?????????1998????133??????47????????????????????????????????
  ??????????????????????????????

- ???????????IEA??
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- ??2030????????2045???????
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- ?2????2027?2??
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2023??COP28?????????????????????GST????28??????????????????8????????????????????????????
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Posted in ???????????, ???, ????? | No Comments »

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?? ?? · Saturday, May 23rd, 2026

jxfzsy/iStock

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Wikipedia??

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1993????????2026??????????????????30??
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Posted in ???, ???????? | No Comments »

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?? ?? · Thursday, May 21st, 2026

mesh cube/iStock

??????????????????AEI?American Enterprise Institute??????????Roger Pielke Jr.????????”Renewables” are not Renewable???????????????3???

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??????????????????????????????1GWh???????????7??????????????5????????????1.7????????
??1GWh????????2?????????????1.8????
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??????1GWh??????1.8????????0.8??????????????????0.3????????0.2??????????????????[??]?

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????????10?13???????????25?30????????????????????????????2?2.5?????????????????????1
GWh???0.8?1.2??

??energy
intensive????????????????CO2????????hard to
abate??
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????Pielke??

??2000???2024??CO2????????????????????
??2000??400????????????????????CO2????2023?????4.7?????
???2024???5???????????????

?2025????????????3???
??????????????CO2??

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????????60????????????????????????????

??2010??
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IEA?STEPS?????????????2050?????????????????????????????????????2030??2050?????????????????
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e???????????

?????????????IEA?NZE????????2050???CO2????2030?????
?15.4????2050?????????????40?????????????????2?????????????CO2?????????????

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???IEA?NZE??????????2030???????????????630GW???390GW????????????1200GW???????
??CO2???????????????

???**2030???4??????
??CO2????????????**??????

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??25?40???????????
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“?????????????????????????????CO2????????” ????????????????????????????????????

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

?????????????????IPCC????

?? ?? · Monday, May 18th, 2026

Arkadiusz Wargu?a/iStock

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> ????2100????????
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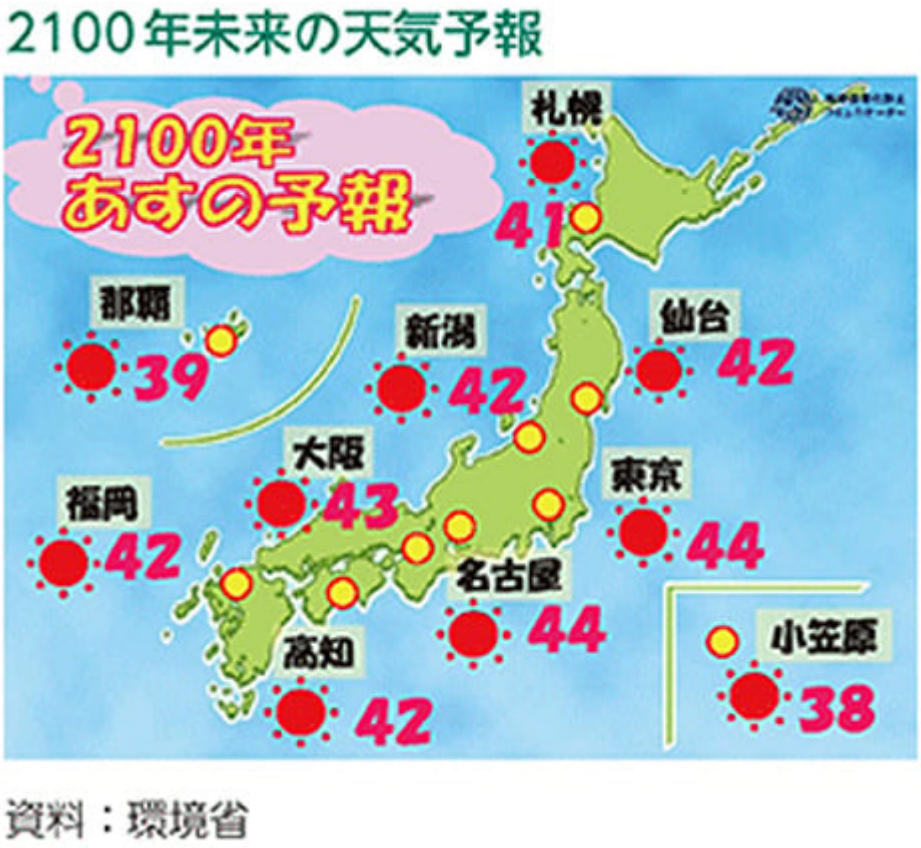

??SSP5-8.5?????????8.5??????????CO2????????????????????????????

?????????IPCC??????????????????

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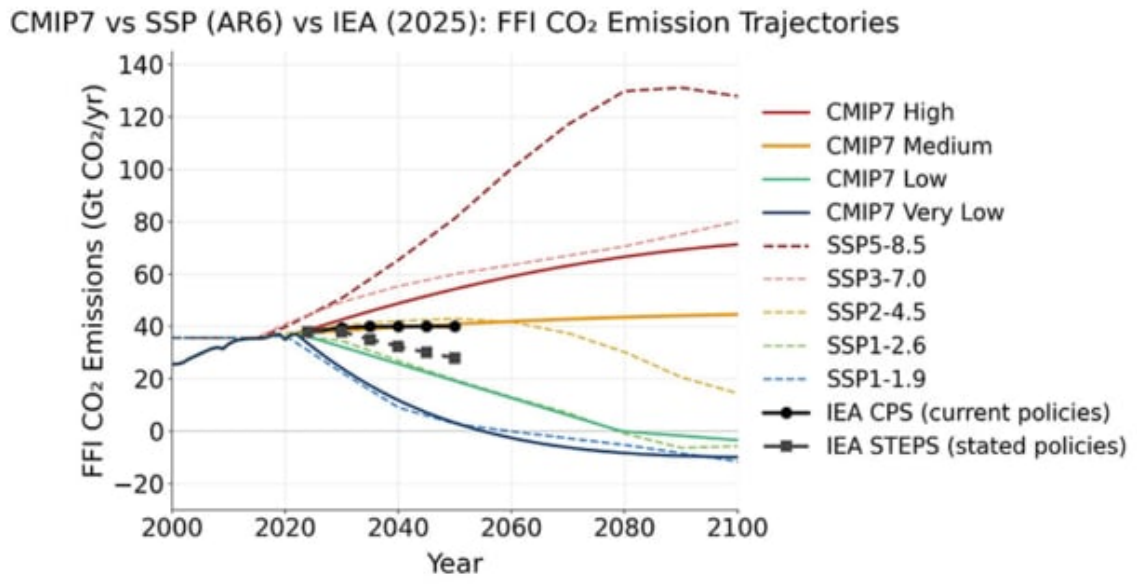
> ??????????????????Van Vuuren??VVetal26?7??

> ?21??CMIP6????????SSP5-8.5???????**???**???????????

???8.5??????????????????????

?1????????????????????????IPCC????????????CMIP7??????????????2100?????????80 GtCO2/yr??8.5??????????????130 GtCO2/yr ????????



Source: CMIP7 ScenarioMIP (Van Vuuren et al. 2026); RCMIP v5.1 SSP harmonized emissions; IEA World Energy Outlook 2025.
Produced at the direction of Roger Pielke Jr. at The Honest Broker on Substack.

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High-Level Policy Uses of RCP8.5, SSP5-8.5, and SSP3-7.0

Jurisdiction / Institution	Policy document / programme	Year	Scenarios used	Application
United States	NCA4 (2018) and NCA5 (2023)	2018, 2023	RCP8.5; SSP5-8.5	Statutory national impact assessment (GCRA)
United Kingdom	UKCP18 / CCRA3 / CCRA4	2018-2025	RCP8.5; SSP5-8.5; SSP3-7.0	National adaptation planning and risk assessment
European Union	EU Adaptation Strategy COM(2018)738; JRC PESETA	2018	RCP8.5 + SSP5	EU-wide impact projections and policy analysis
Germany	KWRA 2021; Federal Climate Adaptation Act	2021, 2024	RCP8.5	Precautionary; underpins federal adaptation law
Canada	Canada's Changing Climate Report	2019, 2021	RCP8.5	National assessment; building-code climate inputs
Australia	ESCI, NARCliM1.5; National Climate Risk Asmt.	2020-2024	RCP8.5	Federal/state risk; financial-disclosure standard
Japan	Climate Change Adaptation Plan; S-18 Project	2021-ongoing	RCP8.5; SSP5-8.5	Statutory impact assessment under Adaptation Act
Netherlands	KNMI'14 / KNMI'23 scenarios; Delta Programme	2014, 2023	RCP8.5; SSP5-8.5; SSP3-7.0	National flood, water and spatial-adaptation planning
Tokyo Metropolitan Gov.	Tokyo Climate Change Adaptation Plan	2019, 2021	RCP8.5	Sub-national adaptation planning (population ~14m)
NGFS (140+ central banks)	NGFS Climate Scenarios, Phases IV-V	2023-2024	NGFS Hot House World	Reference framework for central-bank stress testing
European Central Bank	Economy-wide CST; 2022 Supervisory CST	2021-2024	NGFS Hot House World	Stress test of 112 European banks; SREP capital guidance
Bank of England	Climate Biennial Exploratory Scenario (CBES)	2022	NGFS Hot House World	Stress test of UK banks and insurers (30-year horizon)
Reserve Bank of New Zealand	2023 Climate Stress Test ("Too Little, Too Late")	2023	NGFS Hot House World	Stress test of 5 largest NZ banks (~90% of bank loans)
US Federal Reserve	Pilot Climate Scenario Analysis	2023	NGFS scenarios	Pilot exercise with 6 largest US banks
Banque de France (ACPR)	30-year climate pilot stress test	2021	NGFS Hot House World	Stress test of French banks and insurers
World Bank	Country Climate & Development Reports; CCKP	ongoing	SSP5-8.5; SSP3-7.0	Climate diagnostics for 100+ client countries
FAO	Global Climate Risk Datasets	2022	SSP5-8.5	Agricultural and food-security risk maps
US EPA	EnviroAtlas "Changes Over Time"	2024-25	RCP8.5; SSP5-8.5	Federal regulatory and analytical baseline

Sources: NCA4/NCA5 (USGCRP); UKCP18 / CCRA Adaptation Reporting (Defra/CCC); EU COM(2018)738; UBA KWRA 2021; CCCR (ECCC/NRCan); ESCI / NCRA (DCCEEW); MOE Japan; KNMI; NGFS Phase IV/V; ECB OP No. 281; Bank of England CBES; RBNZ CST 2023; Federal Reserve Pilot CSA; Banque de France/ACPR; World Bank CCKP and CCDRs; FAO Global Climate Risk Datasets; US EPA EnviroAtlas. Produced at the direction of Roger Pielke Jr. at The Honest Broker on Substack.

??8.5??Van Vuuren??????????????????????????????????????

8.5??

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Posted in ???, ????? | No Comments »

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?? ?? · Sunday, May 17th, 2026

y-studio/iStock

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Posted in ???, ????? | No Comments »

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?? ?? · Friday, May 15th, 2026

shironagasukujira/iStock

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2026?5???

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調達区分	割合	数量（万 kL/年）	備考
国内製油所での原油精製（国産）	約 40%	約 1,356	原油の約 10%がナフサとして分離
中東からの直接輸入	約 40%	約 1,356	UAE・クウェート・サウジアラビア等
中東以外からの輸入	約 20%	約 678	米国・オーストラリア等
合計	**100%**	**約 3,390**	

??????????????95%??????????????????????????????1,356?kL????????????????????????????8????????????????????????????

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CO????????????????????????????? ?Gf° ? ?394 kJ/mol?????FTS????????????????????????RWGS?CO? + H? ? CO + H?O?????CO???????CO????????????????????????CO????????????????????CO??????????????????????????????

???RWGS????????FTS??????????????50?60%??

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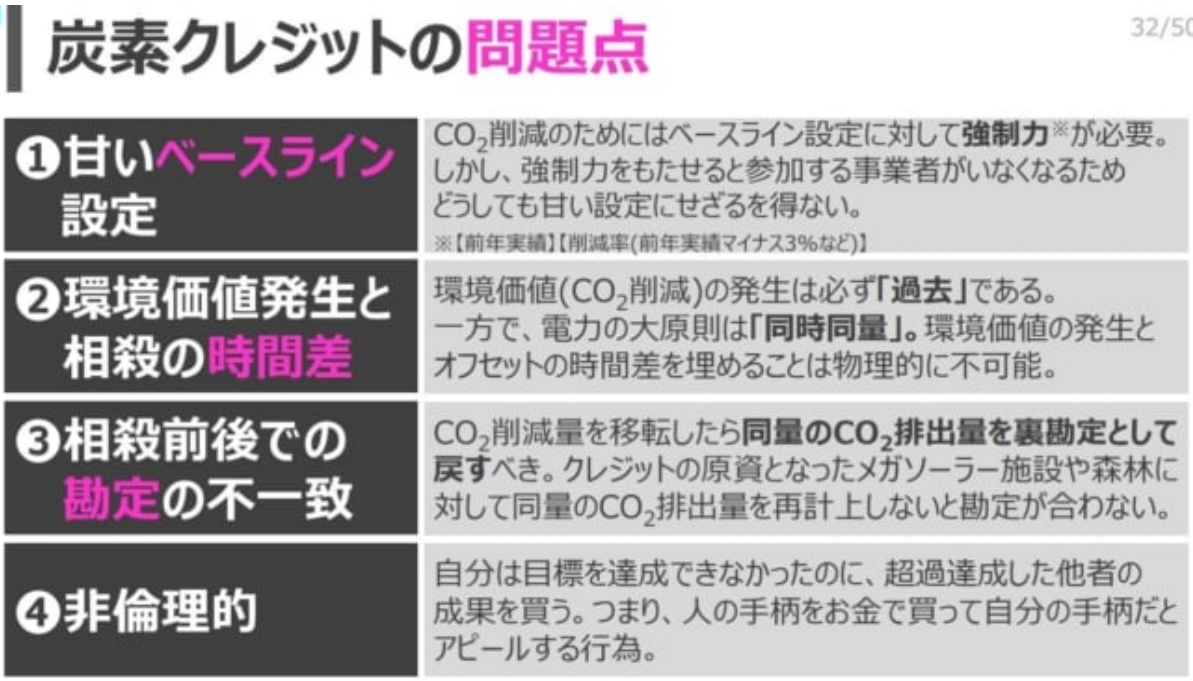
ESG??????????? | ?? | ??????????????

??2???????GHG??1??????????????????????????NG??????????????????????????10????????????????????????????NG????????????????????????



ESG??????????? | ?? | ??????????????

???????GHG???????????????Amazon?Apple?GM?Schneider Electric?????????????????????????????

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??CO2????????????????????????
?????GHG??????????????????????????

???????GHG??????????????66????????????????

66???????16??????????220?????????????33,500?????????????????????4.7???????????
4,900??????300GW??

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1. Akamai Technologies
2. Amazon
3. American Honda Motor Co., Inc.
4. American Hotel and Lodging Association
5. Apple
6. AT & S Austria Technologie & Systemtechnik AG
7. BOE Technology Group Company Limited
8. BYD
9. CableLabs
10. CalBroadband
11. California Retailers Association
12. Corning Incorporated
13. Dollar Tree
14. eBay Inc.
15. FedEx Corporation
16. General Motors (GM)
17. GoerTek Inc.
18. Hewlett Packard Enterprise (HPE)
19. Hemlock Semiconductor (HSC)
20. Hon Hai
21. LENS TECHNOLOGY CO., LTD
22. Luxshare
23. LyondellBasell
24. Mars
25. Patagonia
26. Oatly
27. PTC, Inc.
28. Retail Industry Leaders Association
29. Salesforce
30. Sabey Data Centers
31. Steel Dynamics, Inc.
32. Sunwoda Electronic Co.,Ltd
33. Suppliers Partnership for the Environment (SP)
34. Trane Technologies

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35. 3Degrees, Inc
36. ACORE
37. Baringa
38. Ceres
39. EKOEnergy
40. Energy and Environmental Economics (E3)
41. Ever.green
42. Green Strategies, Inc.
43. REsurety
44. Schneider Electric
45. Stevens Institute of Technology
46. Sustainability Roundtable, Inc.
47. Tabors Caramanis Rudkevich (TCR)
48. TimberRock
49. Trio
50. WattTime

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51. ACCIONA Energia
52. Alcazar Energy
53. American Clean Power
54. Asociación de Generación Renovable (AGR)
55. Business Council for Sustainable Energy (BCSE)
56. Clean Capital
57. CleanMax
58. Clearloop
59. Fortum
60. HASI
61. ib vogt
62. Sol Systems, LLC
63. Solar Energy Industries Association (SEIA)
64. Statkraft
65. Vattenfall
66. Zettawatts

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

??????????????????UNFCCC??????????

?? ?? · Sunday, May 10th, 2026

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???????????4?30?????IEA????????COP31?????????UNFCCC????????????????????????????????
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??LCOE??FCOE??????????????????????????????????????

??FCOE??LCOE?FCOE??????????????????

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??????????????????CO??????117??????????31%??????????????????10????????2.7%????????????????????????????1??????????????????

????????2060????????????2030??????????????????2023?2024??

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COP31???????????

??????????????????????COP31???11??VVER-1200?×4????????????????????????????????????2026??????????????

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

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?? ?? · Saturday, May 9th, 2026

petesphotography/iStock

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FNN?????????

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?? ??? ?? · Thursday, May 7th, 2026

Flory/iStock

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???????1????CDU???4????????????????????20???????
??????????????????????????????36%??CDU?24%??????????12%????????????????????????18%????????
??80%?????????????????????????????????????

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??5000??????????????????????

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??????????????????7?1??????????4.2%????12,330????????????????????????????

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??????????????????????????EU????2025????????????????????????????2.4????????????????????????????22

????1??

??????????????????????3??
?????48????????CDU?????????????????????????53???

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??CDU??
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2024?????????????????5?4,300??????????????????????????????????????6?6,700?????????

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??2022?7??
??20??
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4?10??
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Posted in ???, ?? | No Comments »

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?? ?? · Tuesday, May 5th, 2026

y-studio/iStock

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??0.006????????????????????????????????????

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0.006??????????

?????????0.006????????????????????????????????????2023?????????????CO2??????????????????32.4%???12.8%????8.0%????4.9%?EU????7%????????3%??????

??????3%????????????????????????????????????IPCC??0.006?????????????

????????????????????????????10???GX?????150??????????????2050????????????????????????????????0.006???——????????????????????????????

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?????3%???????????????97%??????????????????????

????????????????????2060????????????????????2030????CO2????????????????????????2070??????????????????????

??EU??????????????????7%??????

??3%??

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?0.006??????????????????????????——??
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Posted in ???????????, ??? | No Comments »

LCOE??????????????????????????????

?? ?? · Monday, May 4th, 2026

BitsAndSplits/iStock

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???????????LCOE??

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????LCOE???——??????????????????????——??LCOE??????????????????????????????????

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??????????????????3.11??

??——?????????????LCOE?????????????EROI??????????????????????????????

1. ?????LCOE????????

??????LCOE??2030?????????8?11?/kWh??????????????????????????????????????

????LCOE????????1kWh??LCOE????????

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

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

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??——??curtailment??????????????

?????????????LCOE??????IEA?OECD/NEA??????????????????????

??20?30?/kWh?????????????????

3. ???????

??7??

??????????????????1kWh???3????????????????????????????????????LCOE????????????????????????????

4. EROI????????

??EROI??

??????Hall et al. (2014) ???????????EROI 7?10???????????14????????????

5. ?????1?2030??? ?????? ????EROI

?????????30%/40%/50%????????????????????????EROI??????????????

電源	EROI
原子力(再稼働)	75
水力	80
石炭火力	30
LNG 火力	25
風力(陸上)	18
太陽光パネル単体	12
蓄電池(リチウムイオン、LCA)	8

?????????EROI???????

?????20%?????????????30%??????20%??????40%??40%?50%??70%????

シナリオ	電源構成	蓄電バッファ	蓄電込 PV-EROI	システム加重 EROI
参考(現状)	太陽光 10%, 原子力 20%, 火力 57%他	5%	11.2	27.1
30%シナリオ	太陽光 30%, 原子力 20%, 火力 34%他	20%	9.2	18.7
40%シナリオ	太陽光 40%, 原子力 20%, 火力 24%他	40%	7.5	14.2
50%シナリオ	太陽光 50%, 原子力 15%, 火力 19%他	70%	5.9	10.0

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50%?????10.0??Hall???????????????7?10???????????????

6. ??????2?EROI???????????????

EROI??????????????????????????????????(????????????)??

項目	円/kWh
発電原価	11.0
託送料金	9.0
再エネ賦課金	3.5
小売・利益	3.5
燃料費調整	2.0
税(電源開発促進税等)	2.0
合計	31.0

????????????(31?/kWh)

????????????EROI??FIT/FIP????????????

シナリオ	EROI	発電原価	託送+系統	賦課金	その他	合計	対現状
現状(参考)	27.1	11.0	9.0	3.5	7.5	31.0 円	±0
30%シナリオ	18.7	15.9	10.5	4.5	7.5	38.4 円	+7.4 円
40%シナリオ	14.2	21.0	12.0	5.5	7.5	46.0 円	+15.0 円
50%シナリオ	10.0	29.8	14.5	6.5	7.5	58.3 円	+27.3 円

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シナリオ	月額	対現状(月)	対現状(年)
現状	12,400 円	±0	±0
30%シナリオ	15,376 円	+2,976 円	+35,718 円/年
40%シナリオ	18,397 円	+5,997 円	+71,966 円/年
50%シナリオ	23,324 円	+10,924 円	+131,088 円/年

??????400kWh???????

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

??1. ???60%????

?7??????2050????????????????????????60%??????????????????10%???14%???????????

シナリオ	EROI	電気代	月額	年負担増
50%シナリオ(基本)	10.0	58.3 円	23,339 円	+131,271 円
60%シナリオ	7.5	72.3 円	28,910 円	+198,119 円

???60%??????????????95%??EROI?7.5??????????????????????????????????????72?/kWh???3???????????20??????????

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

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シナリオ	原子力	EROI	電気代	月額	年負担増
40%シナリオ(基本)	20%	14.2	46.0 円	18,408 円	+72,093 円
原子力ゼロ 40%	0%	13.2	49.1 円	19,644 円	+86,924 円
50%シナリオ(基本)	15%	10.0	58.3 円	23,339 円	+131,271 円
原子力ゼロ 50%	0%	9.6	61.0 円	24,416 円	+144,194 円

???????EROI?????????????40%?14.2?13.2?50%?10.0?9.6????????????????????????????LNG??40%????+1.5???50%????+1.3??????????

??????????EROI??

??3. ???EROI???/?????

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- ?????????EROI=8??????????????
- ?????????EROI=15???????????????????
- ?????????EROI=4????????????????????

ケース	蓄電池 EROI	システム EROI	電気代	月額	年負担増
悲観	4	7.0	71.4 円	28,556 円	+193,872 円
標準	8	10.0	58.3 円	23,339 円	+131,271 円
楽観	15	12.5	52.3 円	20,905 円	+102,057 円

???50%????????

ケース	電気代	月額	年負担増
60%×楽観電池	62.4 円	24,945 円	+150,542 円

???60%×???????????

??????????????50%????????7,600?????9??????????????????50??????????????????70????????? ???????????????

???????60%??????????EROI=15??????????????50%?????58.3???????62.4??????????????60%? ??

??4. ???????????

シナリオ	太陽光	原子力	蓄電池 EROI	システム EROI	電気代	年負担増	月額
現状(参考)	10%	20%	8	27.1	31.0 円	±0	12,400 円
30%シナリオ	30%	20%	8	18.7	38.4 円	+3.6 万円	15,376 円
40%シナリオ	40%	20%	8	14.2	46.0 円	+7.2 万円	18,397 円
50%シナリオ	50%	15%	8	10.0	58.3 円	+13.1 万円	23,339 円
60%シナリオ	60%	10%	8	7.5	72.3 円	+19.8 万円	28,910 円
原子力ゼロ 40%	40%	0%	8	13.2	49.1 円	+8.7 万円	19,644 円
原子力ゼロ 50%	50%	0%	8	9.6	61.0 円	+14.4 万円	24,416 円
50%×楽観電池	50%	15%	15	12.5	52.3 円	+10.2 万円	20,905 円
50%×悲観電池	50%	15%	4	7.0	71.4 円	+19.4 万円	28,556 円
60%×楽観電池	60%	10%	15	10.0	62.4 円	+15.1 万円	24,945 円

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

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??????????????30?40%??????????????????????7????????????????????????????50?60%????????????????
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??????????????????????????????????50%??
????????????EROI=15????????????????????????????????????

7. ????????

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????????????????????????????LCOE?10????????????

??20%????
????EROI??????????????????????????????1.3?1.5????????????????????

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8. ??

?????LCOE??

??LCOE???????????EROI?????
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1. ???30%?????????????3.6??????????????????
2. 40%??????7???50%???13???60%???20?????????????
3. ????????????????????1.3?1.5?????????
4. ????????????????????50%??????20?/kWh??????

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