



28.4?14.7?6.9?4.7?3.2?2.1?1.8?3.7?

3.2?12?12?0.003?

10?100?2025?GDP?2010?

12?

2050?CO<sub>2</sub>?1.5?

1.5?

CO<sub>2</sub>? i) ii) iii)

2021?2030?2030?1kW h?8.2?11.8?

LCOE?LCOE?J.P.

LCOE? i) ii) iii) LCOE? 5?10?

LCA? 1 0?

CO<sub>2</sub>?

21?ESG? 10?350?ESG?

ESG?

JP?CEO?





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?1??1.5??2030?46????????????????2050????????????????????1.5??  
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?1.5??ASEAN????????1.5????????????????????????????????  
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?2????????????????2000??4????????????????????????  
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??kwh??29?36????????????  
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?100????????????????????????????

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

## ????????ESG????????????

?? ?? · Thursday, September 29th, 2022

2050????????????2030?CO2??ESG????????  
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small smiles/iStock

????2030????????????4??1????????????56??????1??????100????????????48??  
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????????????????????2025????????????????????????????????????150????????????????  
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Posted in ???, ????? | No Comments »

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?? ?? · Saturday, September 24th, 2022



halbergman/iStock

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8?16??

??3.5????????????Build Back  
 Better(?????)????????????????????????????????????10????7370????????4370????????????????????????3690  
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??2030????????2005????????????????40????????????  
 ???CO2????????????????????2030????25????????  
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??50?52????????????????????????????????  
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## 米インフレ抑制法の気候変動対策支出内訳

(¥140/\$)

	億ドル/10年	億円/10年
グリーン電力投資・生産税控除	1,603	224,420
再エネ	651	
CCS	32	
原子力	300	
技術中立	621	
クリーン燃料税控除	234	32,760
クリーン自動車税控除	155	21,700
自家用車(最大\$7500/台)	89	
商用車	36	
郵便公社	30	
クリーン製造業税控除	403	56,420
多排出事業者向け補助金	95	13,300
建築物グリーン化補助金	453	63,420
農業再エネ化支援	126	17,640
気候対策農業支援	153	21,420
その他	293	41,020
	<b>3,515</b>	<b>492,100</b>

(7月27日CBO分析ベース:成立法とは異なる)

出典: 電力中央研究所 上野貴弘氏レポート <https://criepi.denken.or.jp/jp/serc/discussion/22007.html>

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EU??

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**?? or EU????????????????**

??3??3????????????44????2020????????????????????2  
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Posted in ??????????, ??, ?? | No Comments »

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

?? ?? · Sunday, September 18th, 2022

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CNN??????????



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2010????????????????????????????????????

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??BBC????????????IPCC????????????????????????????

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??9????????CO2????????????  
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??10????????????????????  
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CCS

CO2

12 CO2

7 10 15 7 CO2

FIT

13 CO2 CO2

(EV) EV

CO2

2050

14

3

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Posted in ???, ????? | No Comments »

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

?? ?? · Thursday, September 15th, 2022



igorartmd/iStock

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20??

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?????EU?????????2??15?????????????????10?????????

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??????Fertilizers Europe?????????EU????????????????????????????????????

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herraez/iStock

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CEO????????????????????????????????

??40%????  
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??2.5????????  
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Posted in ???, ?? | No Comments »

## ??21????????????????ESG????????

?? ?? · Saturday, September 10th, 2022

ESG??  
????????????????????SDGs??2015????  
????ESG????????????

????????????????SDGs??ESG????????????????????????????????SDGs????????????????  
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?????ESG??



LumerB/iStock

8?16????21????????????SEC????ESG????????????SEC????????????  
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8?23????????????????????ESG????????????

8?24????????????????????????????????10?350????????????6????????13??  
????????????ESG????????????????

????13????????????????

??13????????????  
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 ?????????????????????????????????????

????????????10????????????BNP????????????UBS ?????????

????????????????????????8?24????????????????????????????????1000??  
????????????

350????????ESG????????????????????UBS????????????

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audioundwerbung/iStock

??6????????????????????LNG????????????????  
??LNG??  
??LNG????????????????

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8?23??EU?????  
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??2025????????????????????

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

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

????????EV??  
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??CO2????????????????????????  
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????CO2??2030????1000?kW????????????  
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??253????????????????  
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??LNG????10????????????????????????????  
??8?26????

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??10????????????????????????????  
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????9?5????????????????????????????????3????????2????4????????????????????????????  
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??EU????????????????????  
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Posted in ???, ?? | [No Comments](#) »

## ????????????14????????

?? ? · Saturday, September 3rd, 2022



ayhan turan/iStock

????5??3???????

????7????????????????14???



??????372?????2420????????????????????176?????1650????????????????????

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????????1958?2022?4?????CO2????????????????????????

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ppm??

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??1????????????????????????????  
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??2?IPCC????????????????????  
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??3????????????????????????????????????  
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??3????????????????????  
??????80?60????????????????????????????????????

????????????????????????????????HP????????????????????????????10??1950?60????????????1993??  
????30??  
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??4????CO2????????????????????  
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????????1000??  
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??5????CO2????????????????????  
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NHK??  
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??6????????????????????  
????????CO2????????1850????????????????????

??CO2????????????????????  
??100????????????????????2?3  
mm????????????????????

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

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??7????????CO2????  
????CO2????????????????????CO2????????????????

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Posted in ???, ????? | No Comments »

### ????????LCOE????????

?? ?? · Thursday, September 1st, 2022



vchal/iStock

IRENA J.P.Morgan

**IRENA**

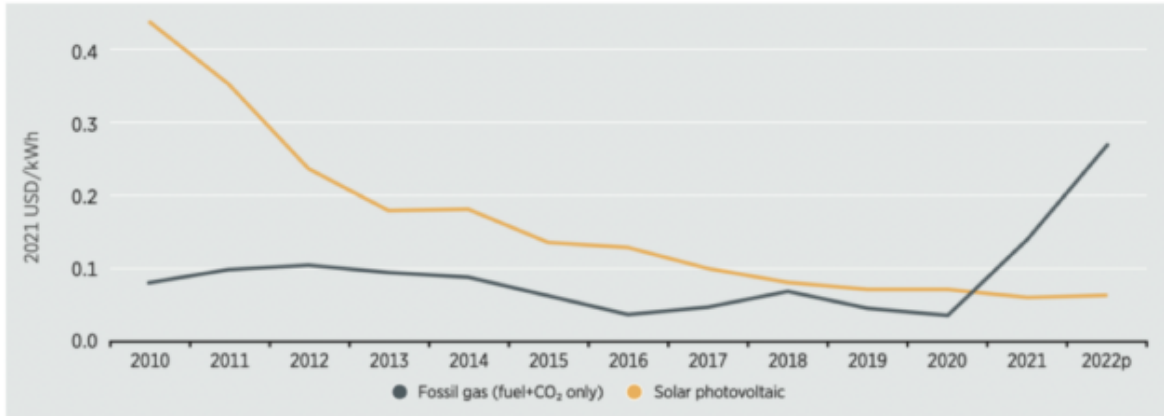
IRENA 2021

**Renewable Power Generation Costs in 2021 – Executive Summary (irena.org)**

IRENA

- 2021 IRENA 163GW LCOE G20
- IRENA
- IRENA

**Figure ES.3** The weighted average LCOE of utility scale solar PV compared to fuel and CO<sub>2</sub> cost only for fossil gas in Europe, 2010-2022



?????2021?8?????????????2030????????????????????

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**2. J.P.Morgan?????**

?????5?J.P.Morgan????????????????????

**12th Annual Energy Paper | J.P. Morgan Private Bank ([jpmorgan.com](http://jpmorgan.com))**

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- ???
- ???
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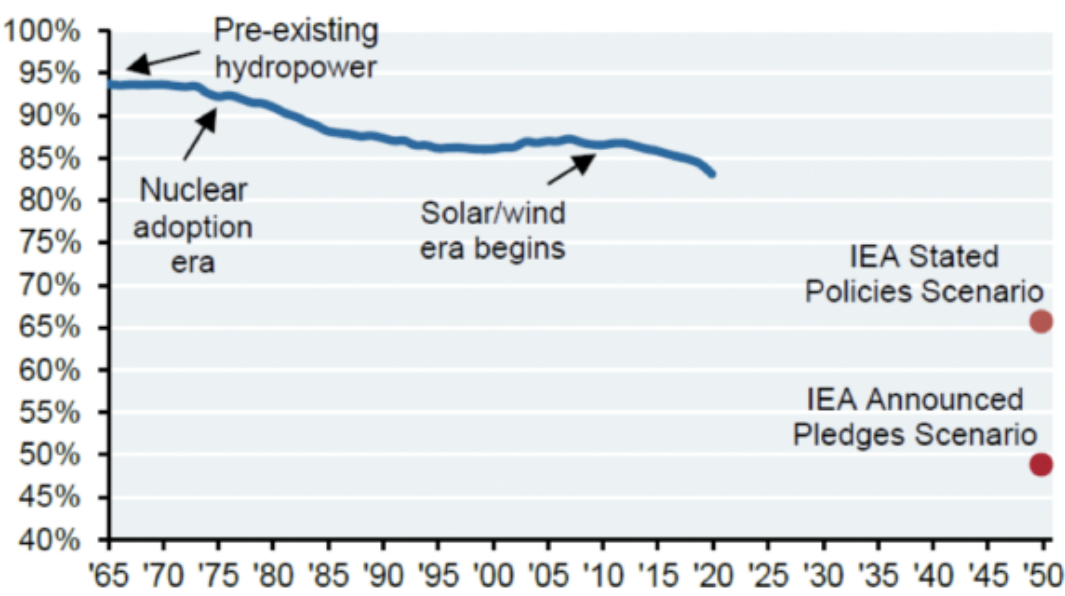
**?2050??????**

**IEA?????????????????????????????2050?????????????66?????**

???10?????????????????????????????  
?????????????????70???

### The world uses fossil fuels for ~83% of its energy

% of global primary energy consumption from coal, oil and nat gas



Source: BP Statistical Review of World Energy, IEA, JPMAM. 2021.

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????????????LCOE??LCOE????????????  
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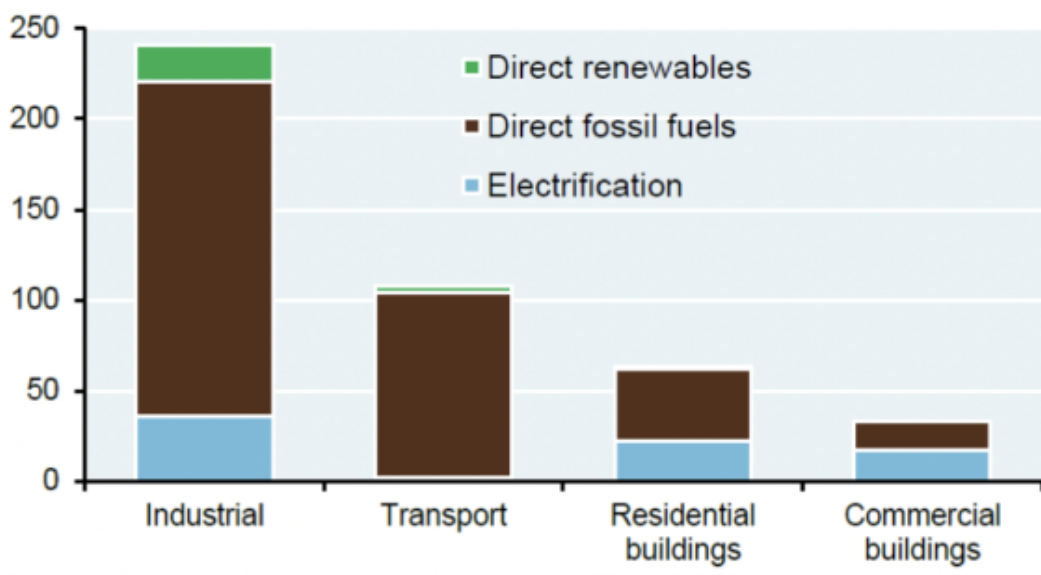
LCOE??i)????????????????????????  
iii)??

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### Low levels of electrification in global industry and transport

Quadrillion BTUs of final energy consumed by sector



Source: Energy Information Administration, JPMAM. 2021.







imagedepotpro/iStock



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????????????200????????11??  
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??????? 8? Reuters?

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COP??????????????????????  
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COP????26????????????????????????COP????????????????2015??COP21????????

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????CO<sub>2</sub>????????????????????

COP????????????????26????????????????????????????????????

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???2030?????5800????????????????

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Posted in ??, ???? | No Comments »

### GX????????????????

?? ?? · Sunday, August 28th, 2022



marrio31/iStock

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8?24?????GX(????????????????)????????

????????????GX????????????????????????????????4????

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?6??26????





©Westinghouse Electric Corporation.

Current Plants) safety by design (passive safety)  
AP1000 ESBWR  
ATMEA EPR APWR ABWR  
AP1000

ABWR APWR ATMEA

ABWR APWR ATMEA

ABWR APWR  
ABWR 6 7 3 11

ABWR ABWR

4 3 4 PWR APWR  
APWR safety by  
design ATMEA

Posted in , | No Comments »

Friday, August 26th, 2022

GX

ABWR APWR ATMEA

7 10

	【新規建設に向けた方針等】	【既設炉の運転延長に向けた方針等】
 アメリカ	<ul style="list-style-type: none"> <li>エネルギー省「革新的原子炉実証プログラム」等 2 炉の建設支援、8 炉型の研究開発支援 (2020) 老朽石炭火力をSMR等で置換可能と分析 (2022)</li> </ul>	<ul style="list-style-type: none"> <li>運転期限なし (40年+20年単位延長) 現時点で80年までの運転延長認可は6基 さらに9基について審査中</li> </ul>
 イギリス	<ul style="list-style-type: none"> <li>ジョンソン首相「エネルギー安保戦略」(2022/4) 2050年までに発電割合を25%に、24GWの導入 1基/1年に建設ペース加速へ、支援を抜本拡充</li> </ul>	<ul style="list-style-type: none"> <li>運転期限なし (10年ごとに安全審査) 2035年に40年となるサイズウェル原発で 20年延長を検討中</li> </ul>
 フランス	<ul style="list-style-type: none"> <li>マクロン大統領「新規原子炉計画」(2022/2) 2050年へ大型革新軽水炉14基を建設・検討 建設・運営主体の電力会社EDFを完全国有化</li> </ul>	<ul style="list-style-type: none"> <li>運転期限なし (10年ごとに安全審査) 56基中20基が40年超運転へ 運転延長も対象にグリーンファイナンス検討中</li> </ul>
 オランダ	<ul style="list-style-type: none"> <li>新連立政権「政策協定」公表 (2021/12) 新たに2基を建設する方針を表明</li> </ul>	<ul style="list-style-type: none"> <li>運転期限は法律で規定 (期間のルールなし) 60年運転認可済の原発の再延長方針を表明</li> </ul>
 韓国	<ul style="list-style-type: none"> <li>尹大統領「エネルギー政策の方向性」(2022/7) 2030年原発割合30%以上、国内2基建設等</li> </ul>	<ul style="list-style-type: none"> <li>運転期限なし (10年ごとに安全審査) 既設炉の継続運転手続きの迅速化を表明</li> </ul>

?????????GX?????????

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??3?????ABWR??  
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??ABWR????????????

SMR?????7?kW??

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**??SMR????????????**

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

**?2035????????EV????????????????**

?? ?? · Friday, August 26th, 2022



Naeblys/iStock

2025????1000????????????????????????????EV????????????????????????????

????2035????????EV????????????????????????

??EV????????????????????????????  
60????CO<sub>2</sub>????????????????

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?10??20????????????????EV????????????????????????????????????

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????????????IEA??2040????????6????????????????????????  
??3????????????4?3????????????

??35????????????50?  
70????????90????????????????

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6??2022????3????????  
????????EU????????????????????

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

# 1.5????????????????????

?? ? · Thursday, August 25th, 2022

??Wedge  
Online??

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????????????NGO?1.5????????????????????????????????????1.5??2050????????????????2030??45?????  
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??2030????????????2030??45????????????????????????

??1.5????????????????????????????????  
everybody's business is nobody's business ??????????

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

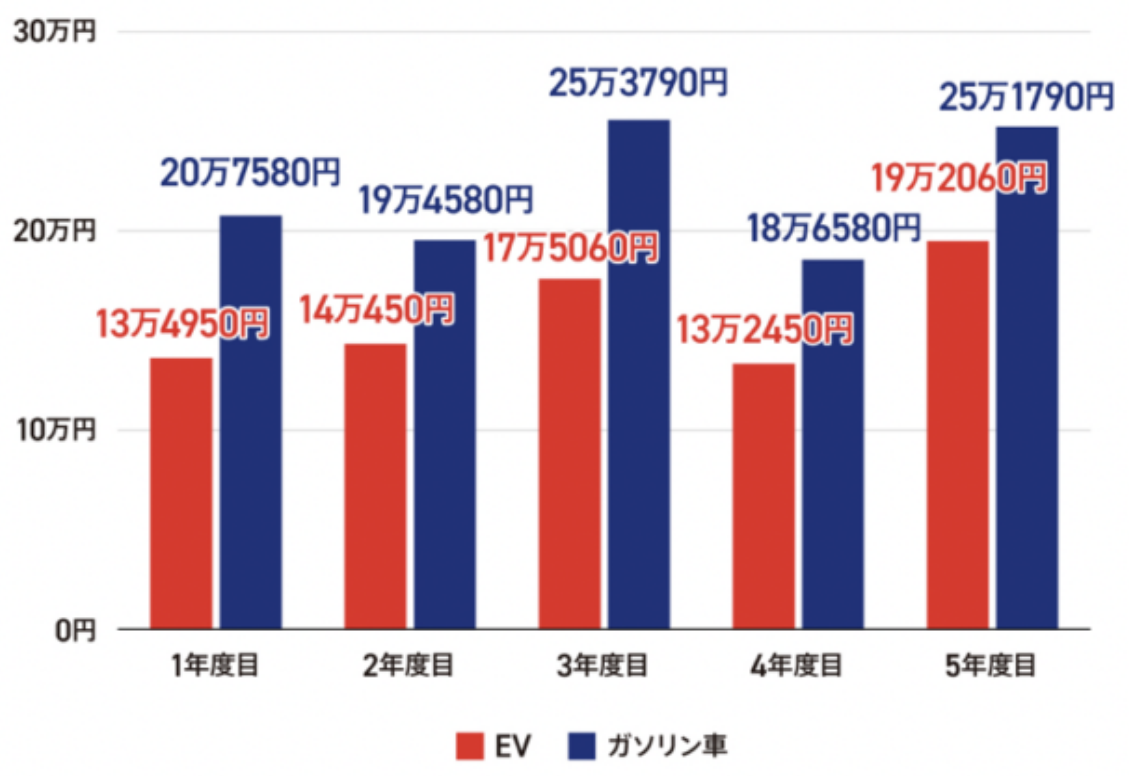
### ????????????????????

?? ?? · Wednesday, August 24th, 2022









?1 EV????????????  
 ???TEPCO

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

????????ICV????????EV????????2????????2????????????????  
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 ?CO<sub>2</sub>????????

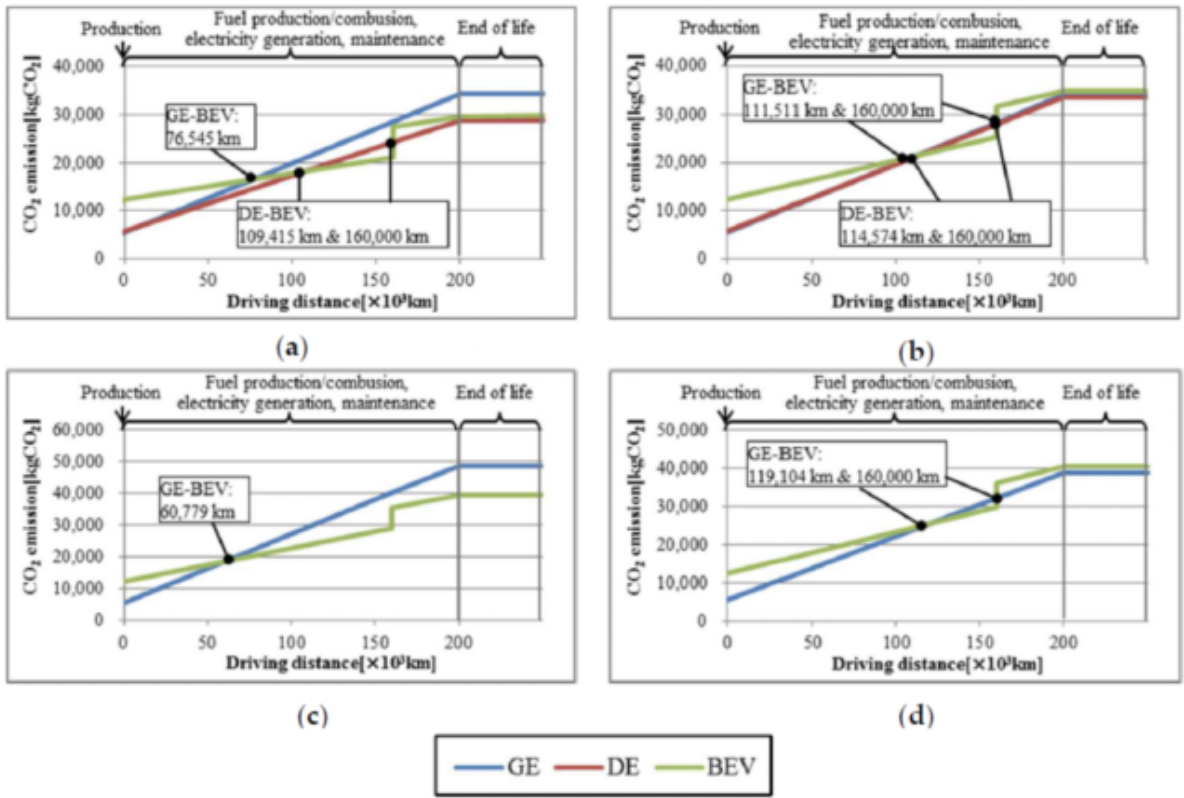
???EV????????CO<sub>2</sub>????????ICV????????EV????????

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

????????????????40????30????????CO<sub>2</sub>????????EV????????  
 ??125,000km????????13,500km????????EV????????9????????60,000km????????  
 ?EV????????????????EV????????

???2019

????????????????GE????????DE????????BEV????CO<sub>2</sub>????????BEV?CO<sub>2</sub>????  
 177kg- CO<sub>2</sub>/kWh??GE?DE?BEV????????DIP: Distance of Intersection Point????



2 CO2 emissions during life cycle for GE, DE, and BEV.

(a) EU; (b) Japan; (c) US; (d) China

GE?DE?BEV?CO<sub>2</sub>?BEV?CO<sub>2</sub>?BEV?

(a)EU?DIP?109,415km?BEV?DE?109,415km?16?km?16?km?BEV?

(b)DIP?111,511km?BEV?GE?16?km?BEV?

(c)GE?DIP?60,779km?BEV?GE?

8?16?km?1?km?EV?8?EV?70?100?CO<sub>2</sub>?

EV?8?BEV?CO<sub>2</sub>?2035?EV?550?EV?

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

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



# ESG??????????

?? ?? · Sunday, August 21st, 2022



Pict Rider/iStock

????????????SEC????????????????????

## [FT]????????SEC?ESG????????



SEC?5?ESG??

SEC????ESG??  
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??MFA????????????????

?????MFA?SEC?????ESG?????????????????????ESG????????????  
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?????SEC?????ESG??

**?SEC?ESG?????????????????**



?????????SEC?25?ESG??  
?????????????ESG?????????????ESG?????????????????????????????



ESG??SEC?????????????

ESG??SDGs?????????  
????????????????154??CO2??  
??????ESG????????????????????

????????????????CSR????????50????????????????????????????200??300????????????????????  
????????????200??300??ESG????????????????????  
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ESG??SEC????????????????????????????  
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?? ? · Saturday, August 20th, 2022





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?? ?? · Thursday, August 18th, 2022



artJazz/iStock

2021?8??2030????????????????????????????????LCOE?Levelize  
d cost of electricity??

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Santje09/iStock

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?? ?? · Sunday, August 14th, 2022

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Highwaystarz-Photography/iStock

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<https://www.pref.kanagawa.jp/osirase/0502/kouhyou/2015j/2015j0124-2.html>

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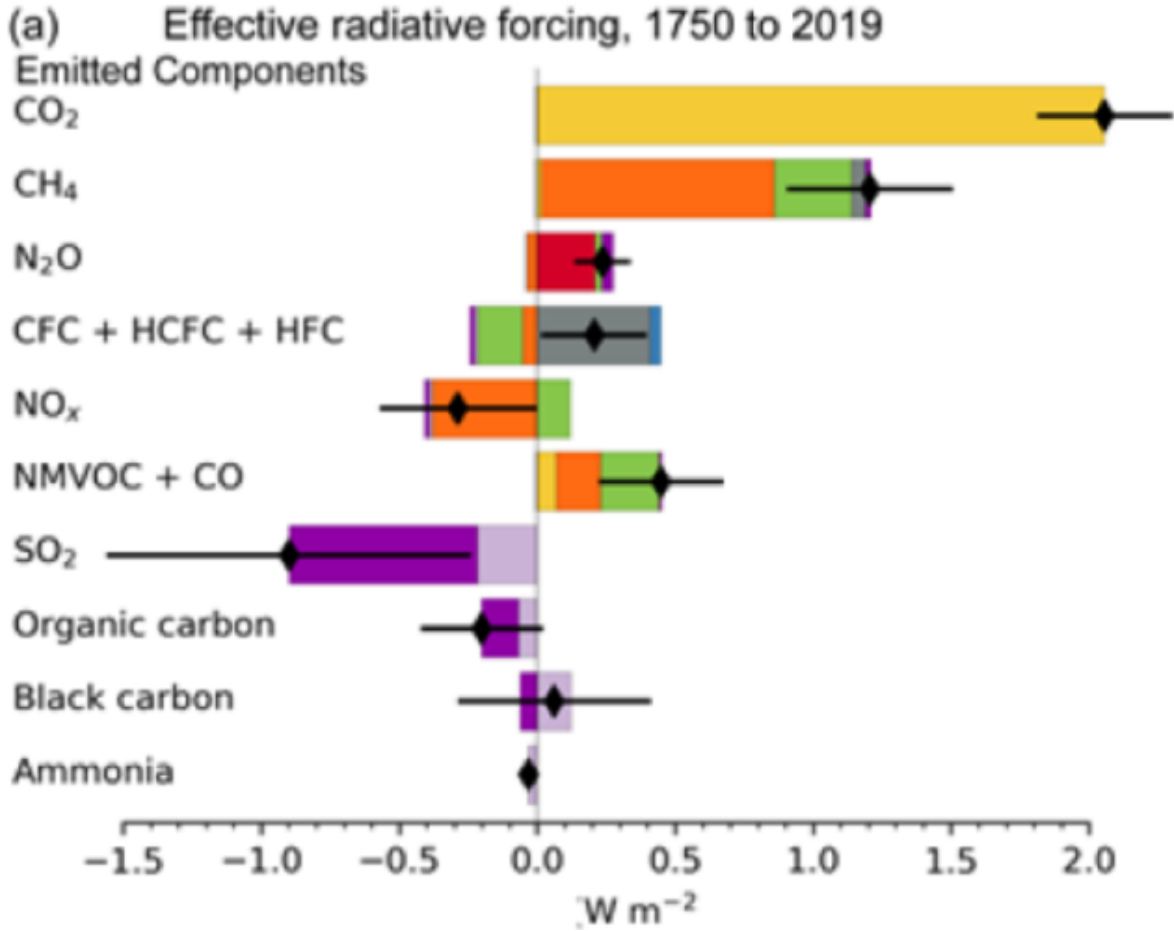
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decades. Nature Climate Change, 7(6), 432–436.

0.24W/m<sup>2</sup>????????????40????????1W/m<sup>2</sup>????IPCC????1750????CO2????????2W/m<sup>2</sup>????  
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IPCC AR6 Fig. TS.15

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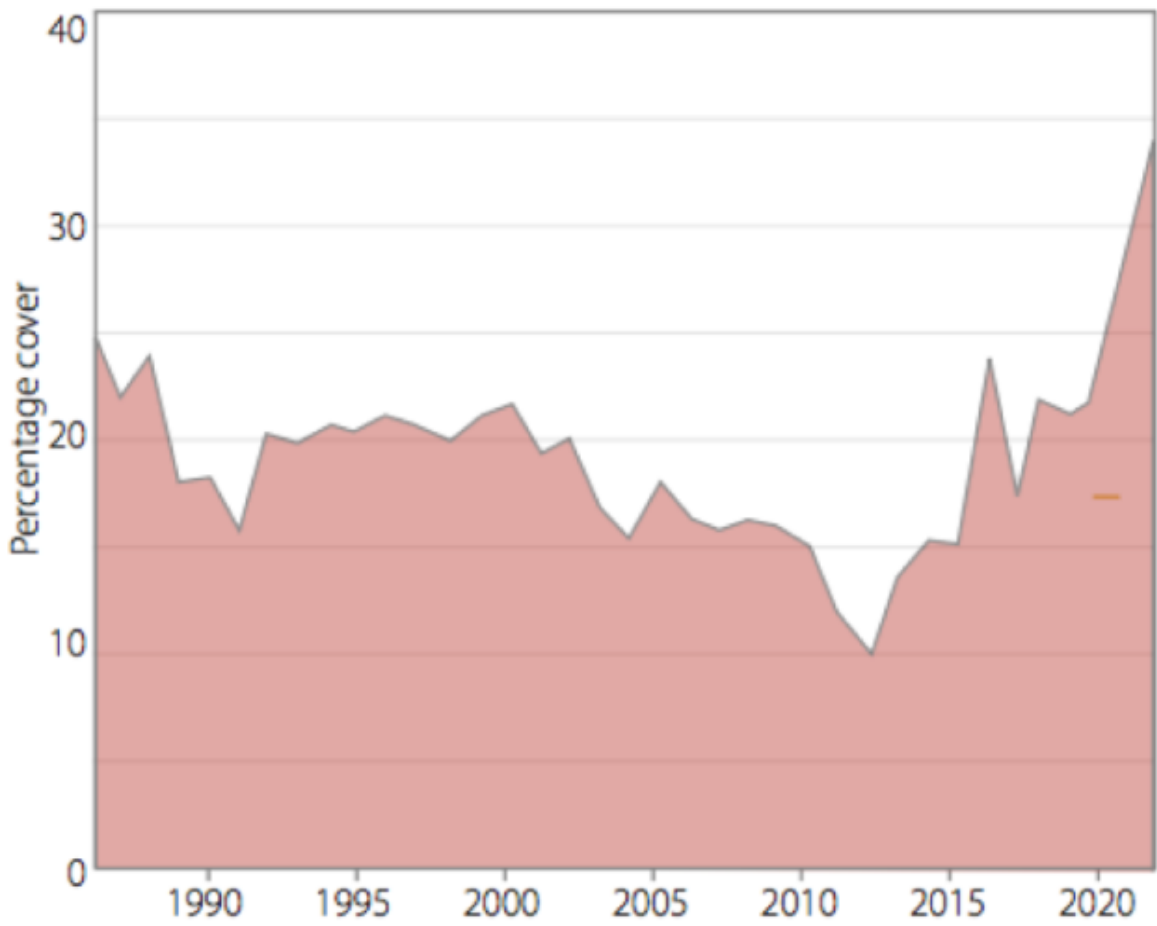
# IPCC?????60????????????????????

?? ?? · Sunday, August 7th, 2022



Maerie/iStock

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2022????5%??10%????????????????????????????  
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Without significant changes to the rates of disturbance and coral growth, coral cover in the central and southern regions of the GBR is likely to decline to 5–10% by 2022. The future of the GBR therefore depends on decisive

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# Great Barrier Reef is damaged beyond repair and can no longer be saved, say scientists

By Helena Horton  
29 May 2017 • 1:17pm



*Helena Horton, Daily Telegraph, 29 May 2017*

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?? ? · Friday, August 5th, 2022









blew\_i/iStock

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Q&A??

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?? ?? · Wednesday, August 3rd, 2022



HowardPerry/iStock

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