

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



small smiles/iStock

????2030????????4?1????56????1????100????48??
????

????2025????150????3????50????10????500????
????

????

????

????

????

????OCI
NV?9????OCI????
????Volkswagen AG????

????SA??
????

????BASF????

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

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



halbergman/iStock

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

8?16??

??3.5????????????Build Back
 Better(?????)????????????????????????????????????10????7370????????4370????????????????????????3690
 ?????52??

??
 ???1????????????????????????????????
 ??

??2030????????2005????????????????40????????????????
 ???CO2????????????????????2030????25????????????
 ???

??50?52????????????????????????????
 ?????????????????10?12????????????????????????

??
 ?????????????????6??
 ?????????????????

??

?? or EU????????????????

??3??3????????????44????2020????????????????????2
????????????15????????EU????????????????????????????8????3????????

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

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

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

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

??
??EU??

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

????????????????20??EU????????????????????
??
????????????????

??
????

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

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

?? ?? · Sunday, September 18th, 2022

????????????????1??103????????????????2????????????



??2005??
???Wikipedia

CNN???????????



??1??1????????????????????????????????
??

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



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

???KYODO????????J??
????????????????????????????????

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

2006??60????????????????????

2010??



??

??
??
??????

??9????????CO2????????????
????????????????????????????????????

??2????????IPCC????????
????????????????

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

????????????????????????????????????10????????????????????
??

??10????????????????????
????????????????????????CO2????????????

????????COP????????????COP????????????????????
????????????????COP????????????COP????

????????????COP????????????????????
????????????????????????????????

??NGO????????
????????????????????

??11????????????????
????????????????????????????

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

????????????????1960????????????
????????????

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

????????????2050????????21????
????????

????????CO2????????COP????CO2????????CO2????

CCS

CO2

12 CO2

10 15 CO2

FIT

13 CO2 CO2

(EV) EV

CO2

2050

14

3

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

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

?

Posted in ???, ????? | No Comments »

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

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



igorartmd/iStock

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

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

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

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

20????????????????????????????

??

??

??

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

??

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

??

??

??

??

??

??

??

??
?????

??

??

?



herraez/iStock

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

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

??40%????
??????????

??2.5????????????
??????????2.8??????????3.8??????

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

??

??????????????1973??

??

??

Posted in ???, ?? | No Comments »

??21????????????????ESG????????????

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

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

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

?????ESG??



LumerB/iStock

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

8?23????????????????????????ESG????????????

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

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

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

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

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

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

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



????CO2??2030????1000?kW????????????
????????????????????

??253????????????????
??
????????????????????????????

??LNG????10????????????????????????????
??8?26????

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

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

??10????????????????????????????
??
????????????????

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

????9?5????????????????????????????????3????????2????4????????????????????????????
??

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

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

??
????????

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

????????????14????????

?? ? · Saturday, September 3rd, 2022



ayhan turan/iStock

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

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



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

????????????????????????????????QR??
????????????????????????????????????

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

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

CO2 CO2 150 ppm

1 30 0.2 0.3

2 IPCC

3

3 80 60

HP 10 1950 60 1993 30

4 CO2

1000

() CO2

5 CO2 CO2

NHK

??6????????????????????
????????CO2????????1850????????????????????

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

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

??
??

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

????????????????170????2000????42????????????????CO2????????????????
????CO2??CO2????????????
?

??
??

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

?

??

???

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

Posted in ???, ????? | No Comments »

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

?? ?? · Thursday, September 1st, 2022



vchal/iStock

IRENA J.P.Morgan

IRENA

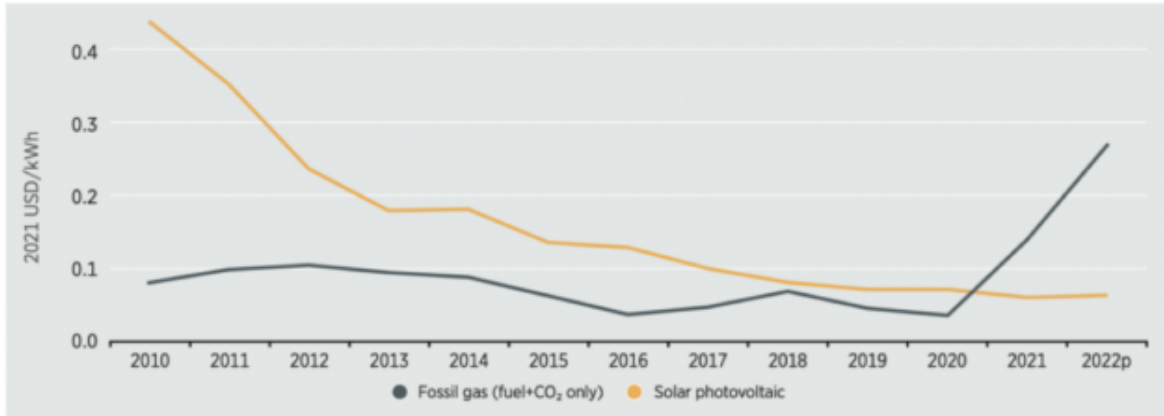
2022 13 IRENA 2021

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

IRENA

- 2021 163GW LCOE G20
-
-

Figure ES.3 The weighted average LCOE of utility scale solar PV compared to fuel and CO₂ cost only for fossil gas in Europe, 2010-2022



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

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

??

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

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

12th Annual Energy Paper | J.P. Morgan Private Bank (jpmorgan.com)

????????????????????3???????????

- ???
- ???
- ???

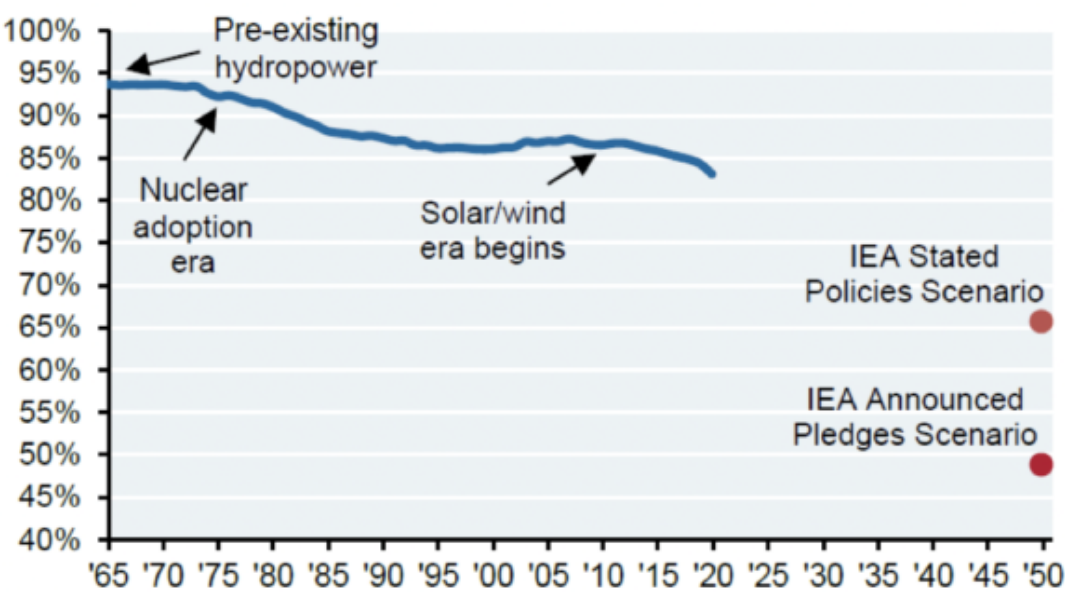
?2050??????

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.

???????

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

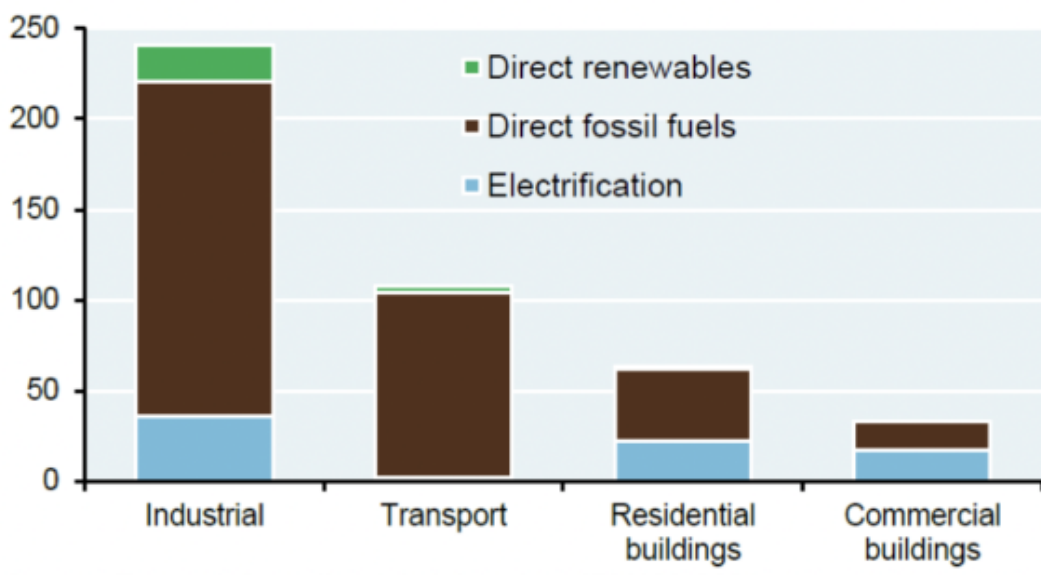
LCOE??i)???????????????????????????? ii)????????????????
iii)??

?????????

??

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



???
 ??????????200?????????11??
 ???

??????? 8? Reuters?

?????????????????????COP?????????1997??COP3????????????????????????????COP3?1997??12?????????
 ?????????????????????????????

COP??
 ?? ???

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

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

???1.5????????????????????????????NDC?????????????????5?????????
 ?????????????????????????

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

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

???CO₂????????????????CO₂????????????????????????????
 ?????????????????????????COP??

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

2?????COP27??
????????????????????????????????

Posted in ??, ???? | No Comments »

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

?? ?? · Sunday, August 28th, 2022



marrio31/iStock

????????

8?24????2?GX(????????????)????????

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

- ?????????????
- ?????????????????????????????
- ?????????????????????????????
- ?????????????????

?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"> 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) 	<ul style="list-style-type: none"> 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
 イギリス	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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
 フランス	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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
 オランダ	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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
 韓国	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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

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

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

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

?????????(SMR)

????

?????

????ABWR????????????6?7????????2????????5????????????BWR????????????????
????????????????????????????

??ECCS????????????????
??

??

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

??APWR????????????????????3????
??ABWR????????????

SMR?????7?kW??

????????????????2029????????????????????BWRX-300?2030????????????

????????????????????2030????????

??SMR????????????

????????????????????3????????????SMR????????SMR????????????????????????????

????????????????????SMR??1????
??????SMR????????????

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

????????????????????????300??1000????????
????????????????????

??1??
????????????????????????

????????????????????3??
????????????????????

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

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

?? ?? · Friday, August 26th, 2022



Naeblys/iStock

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

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

??EV????????????????????????????????
60????CO₂????????????????

????????????????????????????????????EV????????????????CO₂????????????6????12.5?km????????????????????????
?10??20????????????????EV??

??

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

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

??1????????????????????
??

??

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

??2????????????????????????????????????
????????????

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

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

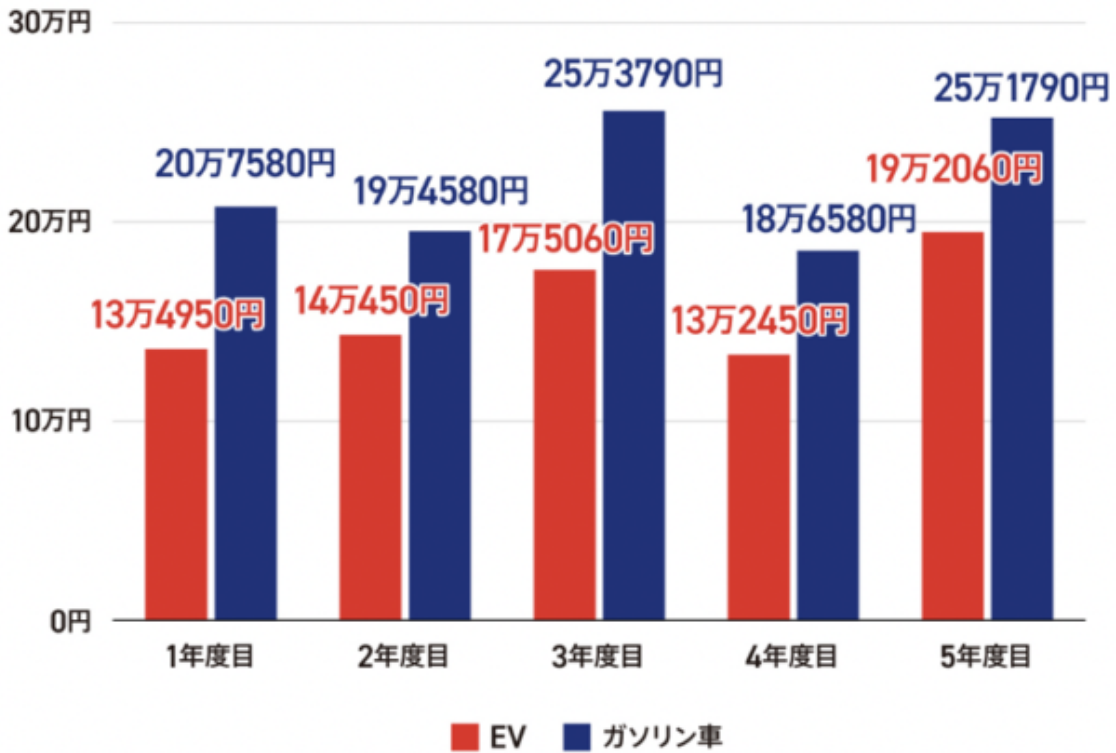
Posted in ??????????, ??? | No Comments »

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

?? ? · Thursday, August 25th, 2022

??Wedge
Online??

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



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

???TEPCO

????????CO₂????????EV????????

????????ICV????????EV????????2????????2??
????

??EV??
?CO₂????????

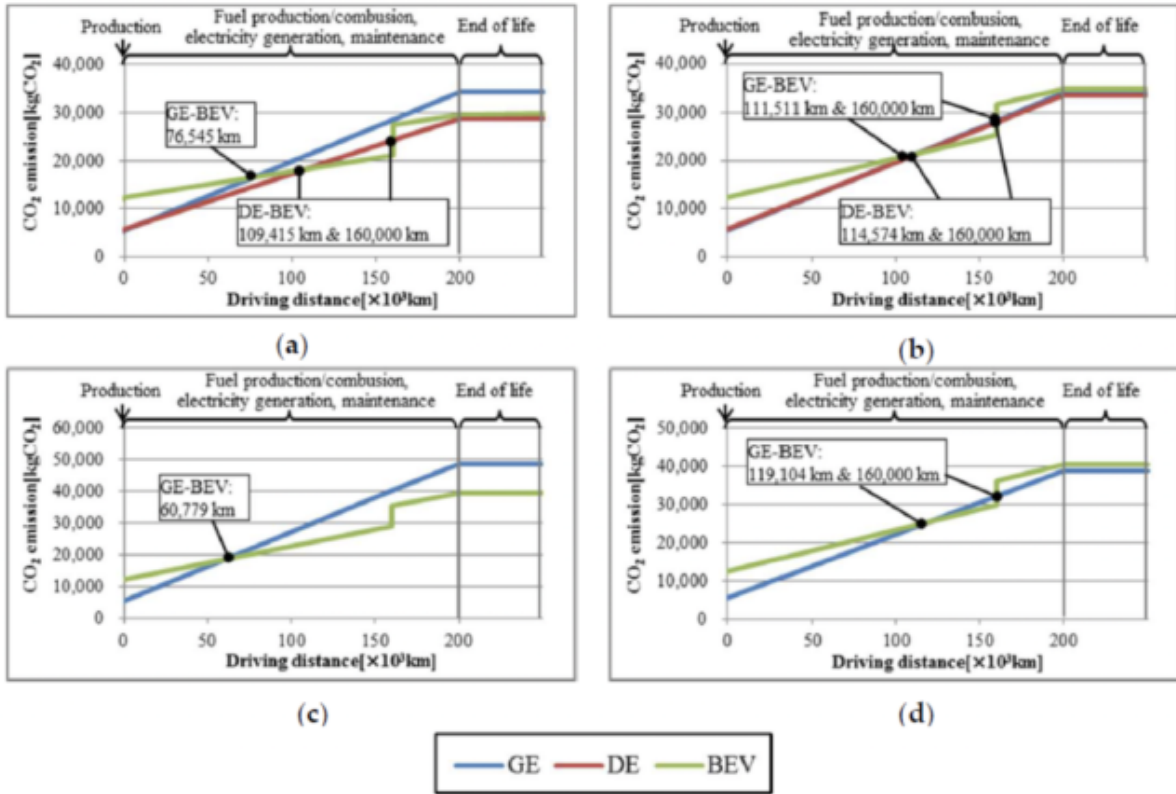
????EV????????CO₂????????????????????????????????ICV????????EV????????

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

????????????????????????40????30????????????????CO₂????????EV????????
??125,000km????????13,500km????EV????????29????????60,000km????????
?EV????????????????????????????????EV????????????????

???2019

????????????????????GE????????DE????????BEV????CO₂????????BEV?CO₂????
177kg- CO₂/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?CO₂?BEV?CO₂?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?GE?

8?16?km?1?km?EV?8?EV?70?100?CO₂?

EV?8?BEV?CO₂?2035?EV?550?EV?

CO₂?EV?

???

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

ESG??????????

?? ?? · Sunday, August 21st, 2022



Pict Rider/iStock

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

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



SEC?5?ESG??

SEC????ESG??
??



??MFA????????????????

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

??

???

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

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



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



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

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

????????????????CSR????????50????????????????????????????200??300????????????????
????????????200??300??ESG????????????????
????????????????????????????

????????????????ESG????????????????????????????ESG????????????????????????????XX????
????????????????????????????ESG????????????????????????????????????ESG?G????????
????????????????????????????

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

?

?SDGs????????????????????????????????

Posted in ????, ?? | No Comments »

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

?? ? · Saturday, August 20th, 2022

1 (CO2
?
?
?
?

?

?

?

?

?

14B?

B CO2

?

?

1 2 3 3

?

100

?

PART

?

?

??????????

????????????????????5????????????????????40?kWh????????????????????8?10??Die
Zeit????????????????5??
????????????????????6??

??1????????8?14??die
Welt??
????????????????????????????

??
??

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

??2022????????
??

??50????????????????????????
??CO2??
??
?????

??5????????
????????????????????1??
???

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

??

Posted in ???, ?? | No Comments »

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

?? ?? · Sunday, August 14th, 2022

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

??
??



Highwaystarz-Photography/iStock

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

???????????? : ????

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

????????????????GDP?2??
??

??
??LED????????????????

??PPA?Power Purchase
Agreement??
??

??
??

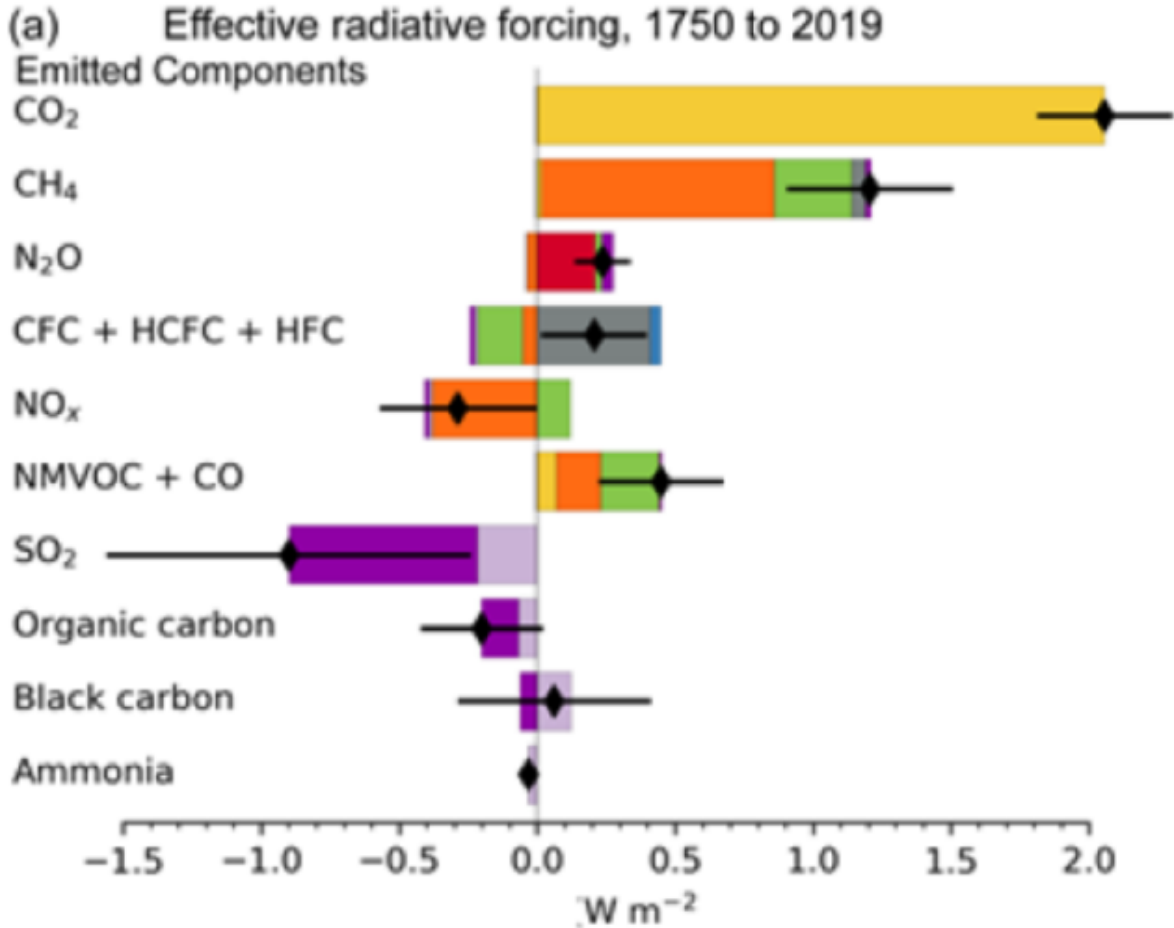
????
??

??

Posted in ???, ????? | No Comments »

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

0.24W/m²????????????40????????1W/m²????IPCC????1750????CO2????????2W/m²????
????????????



IPCC AR6 Fig. TS.15

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

?





Posted in ???, ????? | No Comments »

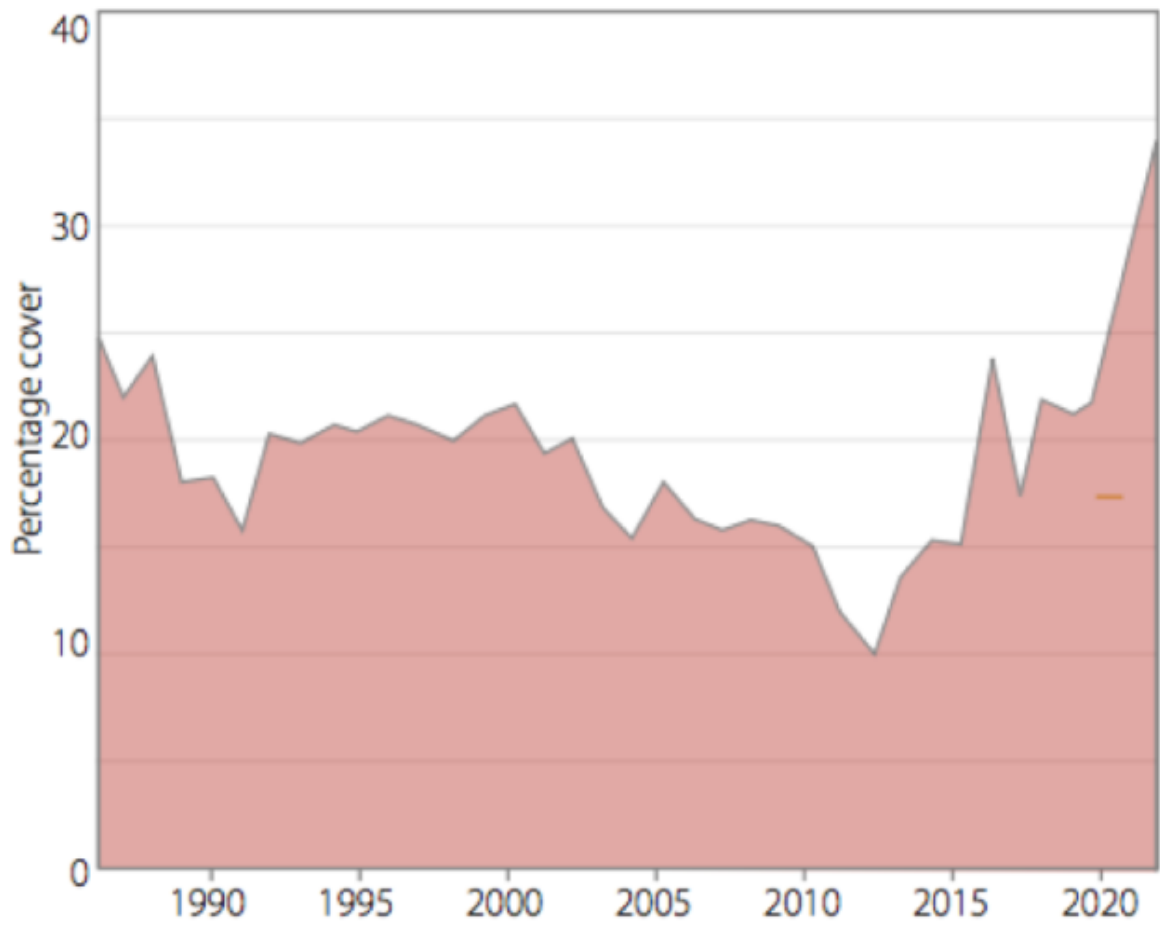
IPCC?????60????????????????????

?? ?? · Sunday, August 7th, 2022



Maerie/iStock

??



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

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

??

??
2022????5%??10%????????????????????????????
??

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

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

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

??

?????

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

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

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

?IPCC????????????????CO2????

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

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

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

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

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

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

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

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

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

?IPCC????????100????????????

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

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

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

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



Posted in ???, ????? | No Comments »

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

?? ? · Friday, August 5th, 2022



blew_i/iStock

????????????????????Q?A????????????????8?1?????

Q&A??

??

??



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

??

?? ?? · Wednesday, August 3rd, 2022

??????

????????????????10??(??)?????
????????????????????????????????2????????????????????????????1????2????????????????????????

????????????????????2011??2011?6?30????
????????2022?12?31????????17????????????????????????

????????????????????3????????????????????????????



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

????????????????18??

????????38????????????????????



??
????????????3??

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

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



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

??Wikipedia

??

????????????????50????????????????1??
??

????????2???

?EU??????

????7?6????????????????????EU??
????????????????????EU????????2023?1?1????????????????????????????
????????????????????????



??????????

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

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

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

2022??????????????3????????????????????????????????????

??? ?2???

1. **????**——??12?18????????????2022????
??????????
2. **????**——3????2022????????????????2019??
??
??

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

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

??

??9????????????
????????????????????????????????????

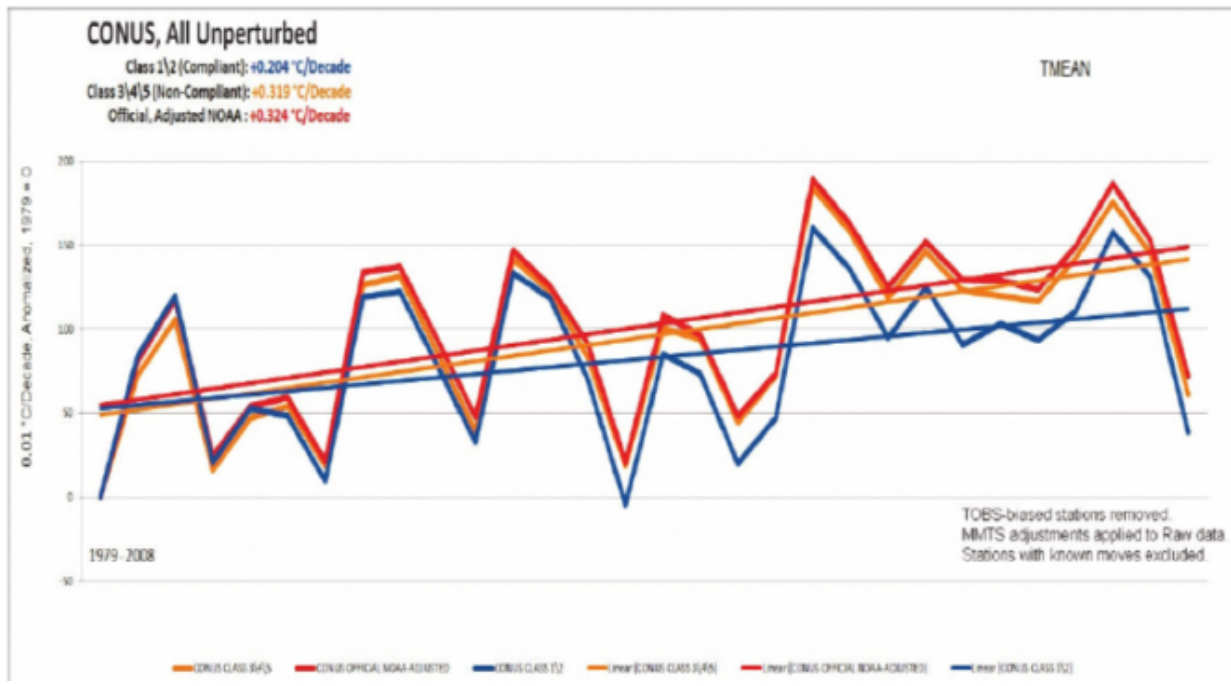
????????????????????????????????7????10????8????????????????????????????????
????????????????

27??????GX????????????????????????????????????GX????????????????????
????????????????



Figure 8: Top: placement of CRS in parking lot at University of Arizona Atmospheric Sciences Department on July 21, 2007. Lower left: detail at ground level of CRS placement on July 21, 2007. Lower right: detail at ground level of CRS after removal on November 23, 2007. Source: Warren Meyer, Bob Thompson.

????????NOAA????????10????0.324????????????????????????????????
 ???
 ?????CRN=1,2 ?????????????10????0.204????????????????????6????????



????????????????????????(US Climate Reference Network)????????????????????????2005??
 ??????????????

