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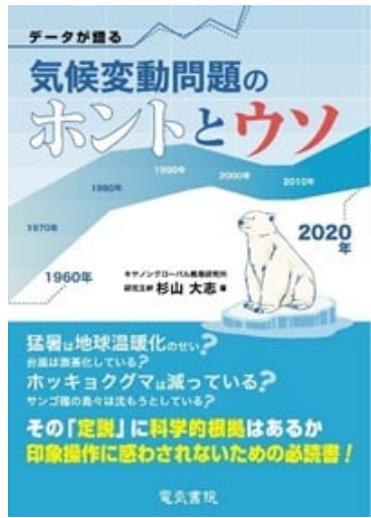
2023??24????????2022?1??  
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Posted in ???, ????? | No Comments »

# EU????????????????

?? ?? · Friday, January 9th, 2026





- HEV????????CO2????????2035????????????
- e-fuel????????????????????????????????????
- ?????????????????????????????????????

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

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?? ?? · Thursday, January 8th, 2026



Halyna Romaniv/iStock

????2026????????GX-ETS????????

**2026????????????????????????????**

????CO2????????GX-  
ETS?4????????CO2????????????????????????????????????  
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??????GX-ETS????????????????

**????????????????3????????**



????2026????GX-ETS????????????????GX-ETS????????CBAM????????CBAM????????EU????????4%??1%????0%????0%??????1%??0%????????EU????7%????9%??GX-ETS????400????EU????10%????????

**??CBAM?COP30????????CBAM????????**



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????????????GX-ETS????????????????  
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????????????????CO2????????????????GX-ETS????????

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**Hamburg rechnet Klimabilanz mit Öfen in Afrika schön, die es nie gegeben hat**



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2025?12?24?  
?????????Atmosfair  
????????2018??2020????100????  
????75,000??CO????  
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2023?5???Verra?CEO?15????David  
Antonioli????????????Verra????????CO2????????  
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CEO????????????Verra????????  
???Verra????????5????????

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ETS????????CO2????????

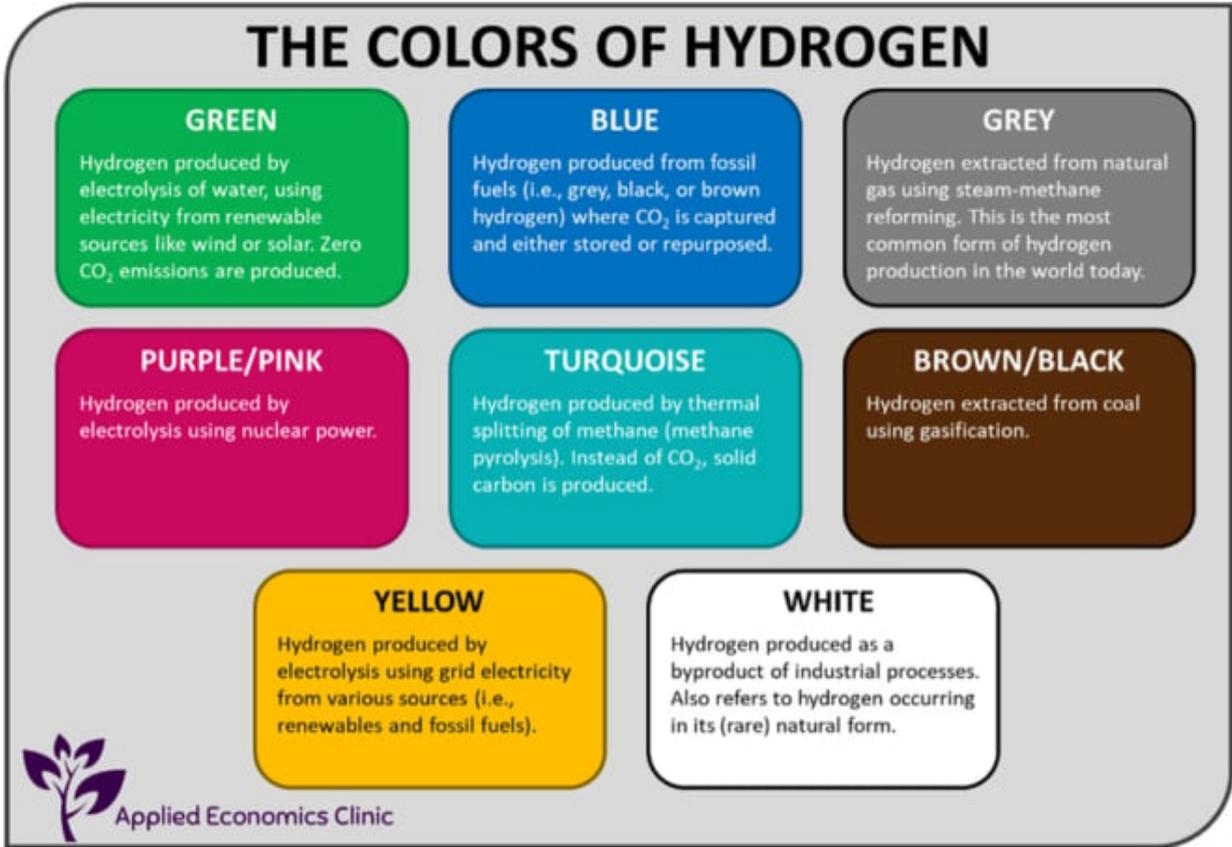
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Posted in ???, ???, ????? | [No Comments »](#)

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?? ?? · Wednesday, January 7th, 2026





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??CAPEX????????OPEX????????????????????????????????????

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

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?? ?? · Tuesday, January 6th, 2026





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

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?? ?? · Tuesday, December 30th, 2025

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??2025?4??12?25?????????  
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**??????VLS???**

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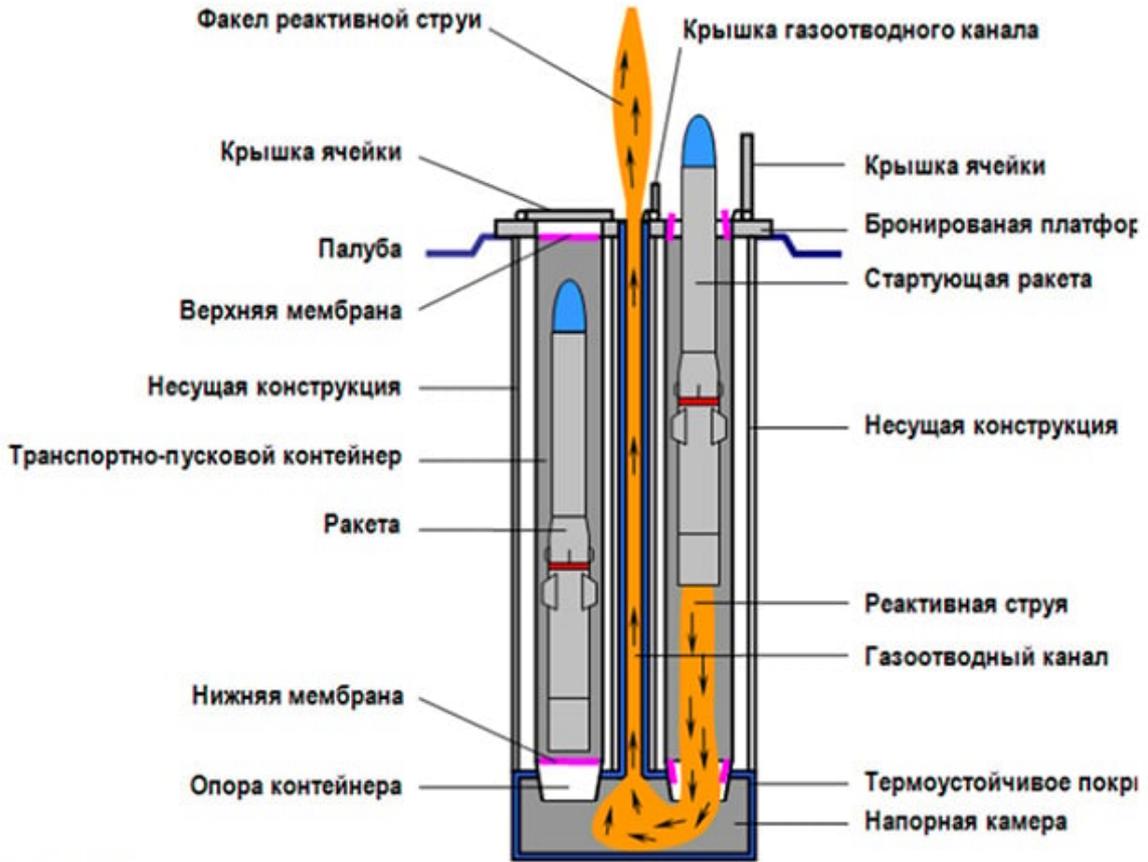
??????????????SLBM?VLS? ?????????????????

VLS????????????????????360°????????????????  
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????VLS??????Mk41?

©Wikipedia



AdmiralHood, vladfotki.narod.ru

Mk41?????????????  
©Wikipedia

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??30????????????????????????????????????QOL????????????????  
??3??????????????????????

1960????????????USS??84?19????????

????????????????????????USS????????????2014?1???6????????????140????????????





2025????????????????????CSIS????????????????????3????????1??2????????????????????  
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### Lights Out? Wargaming a Chinese Blockade of Taiwan

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CSIS??LNG?  
????10??12????????40??45????????????146????????????????????????????????????  
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Posted in ??????????, ??? | No Comments »

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?? ? · Wednesday, December 24th, 2025



da-kuk/iStock

COP30??CCS????????????????????  
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??EU??  
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??Breakthrough Institute ?”Greenwashing with Chinese  
Characteristics” ???

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

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?? ?? · Wednesday, December 17th, 2025

??GFANZ????????????????????????????????????  
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**Mark Carney’s fossil fuel pivot bewilders climate experts and business leaders**

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

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?? ?? · Wednesday, December 17th, 2025



- ???????800?1,000??

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- ???R410A?GWP?2,088?
- ???R32?GWP?675?

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- ?0.6 kg?????????

3. CO????????

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

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- ?????10?
- ?????????????????25?

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???	0.6 kg
GWP??R410A?R32?	1,413
?????	25?
???	$0.6 \times 1,413 \times 0.25 \approx 212 \text{ kg-CO}_2$

???1????0.21???CO????????

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

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

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?????	R410A ? R32	?1,000
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?????????	??????????	1,000?3,000

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??????????	?????????	1,000?1,500
??		8,500?18,000

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### 5. CO????1???????????

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?????	8,500?18,000?
CO????	?0.21 t
?????	?40,000?85,000??t-CO?

### 6. ??????????????

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??R410A????????????????R32??

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

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?? ?? · Tuesday, December 16th, 2025

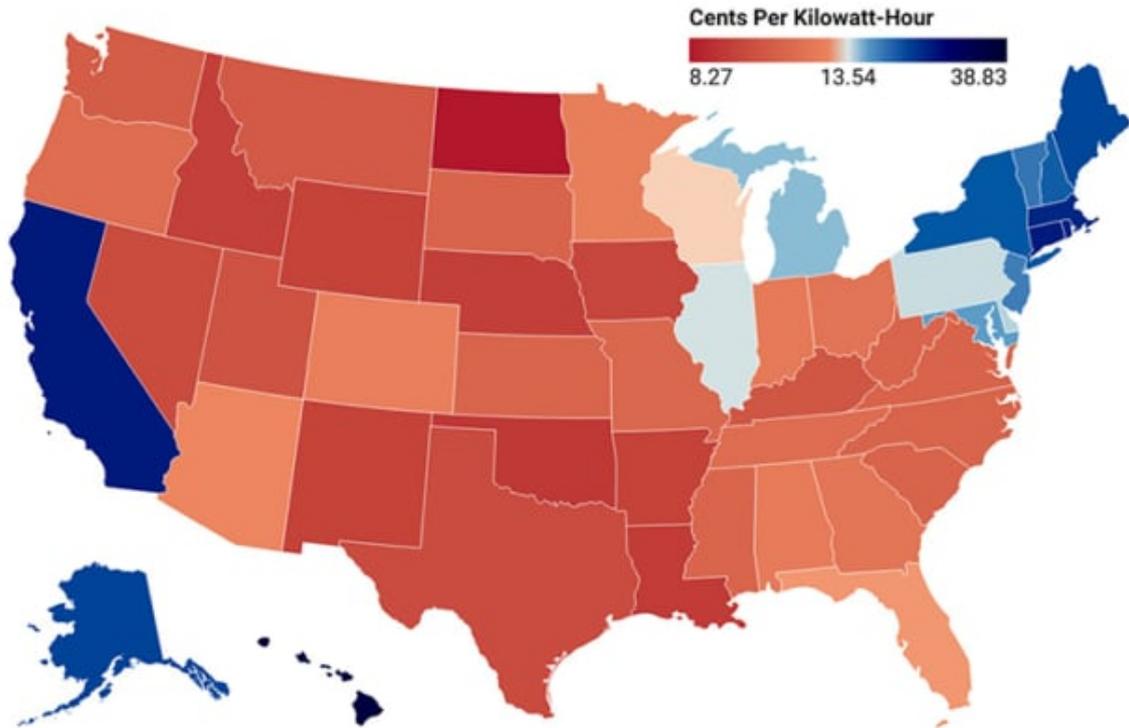


standret/iStock

??Energy Bad Boys??Institute for Energy Research?IER????????????????????

### FIGURE 1: STATE ELECTRICITY PRICES VS. U.S. AVERAGE

Blue colors indicate electricity costs are above the national average, red colors show costs are below the national average.



All-Sectors Electricity Prices from the U.S. EIA January 2025 -August 2025  
 Map: Always On Energy Research and Institute for Energy Research • Source: U.S. Energy Information Administration •  
 Created with Datawrapper

Figure 1. Liberal states tend to have higher electricity rates than conservative states, largely due to state energy policies.

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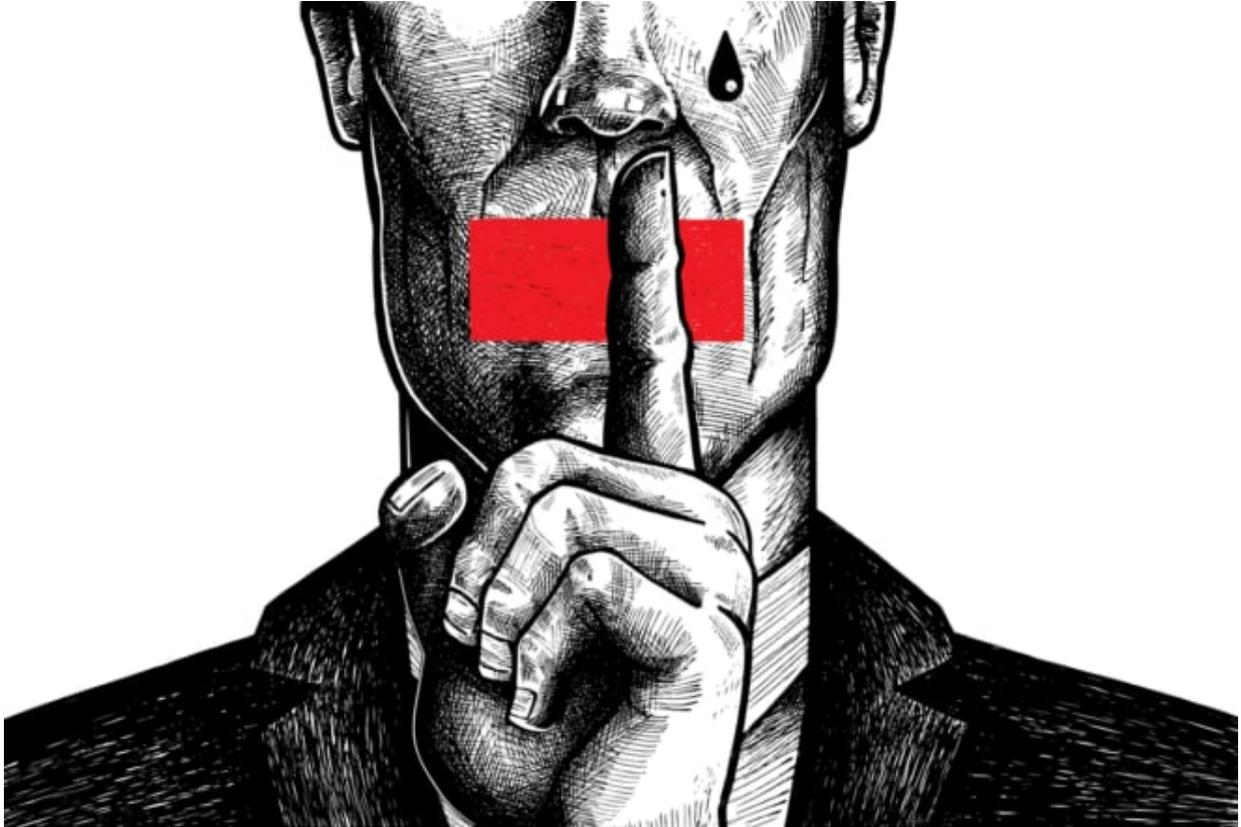
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?? ??? ?? · Monday, December 15th, 2025



Man\_Half-tube/iStock

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2025?10?23????N????????????????????????????????4?????????

?????72????????????????????????????????2018???  
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??1????????????X??10?????????????

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utschland  
erwacht????????????????????????????????????“wake”????????????????????????????????????  
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????? taz “wake” “Deutschland erwache!”

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1 2 X

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2021 45 4

YouTube

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Posted in ???, ?? | No Comments »

?????2027????????????????????

?? ?? · Monday, December 15th, 2025



Pavel Vorobev/iStock

?????2027????????????????

**?????2027?????2????????????????????**

??2????????????????????10????????????????20????????????  
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**????????????10??1????????????????17?**

??10??2.8kW????????????1?????????????

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- 2027????????????????87????????????
- 2027????????????????100??????????

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????????????????12.5??????JIS????????????????????167kWh????????????EP????????????????B?????????  
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17????????????????????10?15??

?1?????????10?? ?

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???????	115,280?	239,800?	?? 124,520?
???????	913 kWh/?	746 kWh/?	? 167 kWh/?
????????EP?			43.06?/kWh
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**????????????????????160?**

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- ??????????9???????
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????????????????????1????????????????????????????900????????????????158???160????????????????????????????2??

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

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???????	90,640?	230,899?	?? 140,259?
????????JIS?	717 kWh/?	594 kWh/?	? 123 kWh/?
???????			0.278*
???????			?34 kWh/?
?????1?????			26.08?/kWh
???????			?887?/?
???????			?158?

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????????????JIS?????18????????????3?????10????????????1?????????5?????JIS?????0.28? 5/18????????????????????

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17????????????160??

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sankai/iStock

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Jr.??OECD??  
??NGFS????????CO2??  
NGFS??

??NGFS????????????????????ESG???????????????

**2025 GPIF ????????????????????? ESG ???????????????**

GPIF?2024??4????????NGFS Phase 4  
Scenarios????????????????????????????2023??  
GPIF????????????????3????????????????4????? Net Zero  
2050????????PnL????????????4????????????????????

**MUFG?Climate Report????????2025**

????????NGFS????????????????????Net Zero 2050?Delayed  
Transition?Current Policies????????????????

**????????TCFD?TNFD???? 2024**

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at-Risk (CVaR)????????????  
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**SOMPO????????????????2024**

??NGFS????????????  
??MSCI????????CI  
imate Value-at-Risk?CVaR????????????????????

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

??GPIF????????????????????ESG????????????????????????????????????  
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**GPIF????????????????**

GPIF??ESG??  
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?? ? · Thursday, December 11th, 2025



Stadtrate/iStock

2025?11?29??blackoutnews????????????????????600????????????????????

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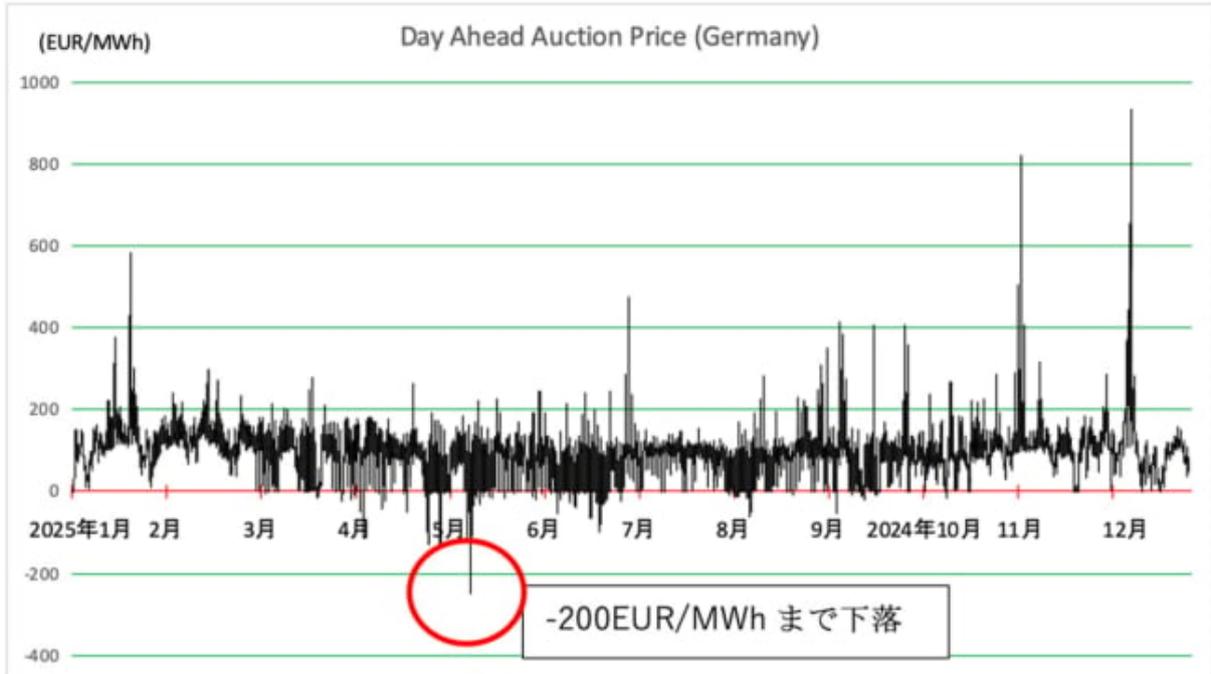
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????????“600??”?????

?1??2024?10??2025?9??1????????????????????????????????150EUR/MWh????????????3??9  
????????????????????????????????



?1????????????????2024?10??2025?9??

????5?11??12??15????????????????????????????????-200  
EUR/MWh????????1????????????????????????????????569????????

????????????????????600????????????????????????????

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????????????????????????70EUR/MWh????????????????????????“????????”??????

????2????????????renewable power????????????????????????????





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?? ?? · Wednesday, December 10th, 2025



Sunshine Seeds/iStock

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??AI?????????  
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 ???AI  
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**Energy Dominance** – Restoring American energy dominance (in oil, gas, coal, and nuclear) and reshoring the necessary key energy components is a top strategic priority. Cheap and abundant energy will produce well-paying jobs in the United States, reduce costs for American consumers and businesses, fuel reindustrialization, and help maintain our advantage in cutting-edge technologies such as AI. Expanding our net energy exports will also deepen relationships with allies while curtailing the influence of adversaries, protect our ability to defend our shores, and—when and





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

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?? ?? · Sunday, December 7th, 2025



wildpixel/iStock

925??

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2024?????2????????????????????????

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Jr.??OECD??NGFS?????  
????CO2??NGFS????????????????????  
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????NGFS????????????????????

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Posted in ???, ????? | No Comments »



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**COP30????????10????1.5????**

????COP30????????????????????????????????COP????

????????????1??2017?21?  
????????????2020?11????1????????????3????????<sup>21</sup>????????????  
????COP????????????????????

????????????1????????????COP30????????????  
????????3????COP33?4????????

????????????COP????????????????????????????  
????????<sup>22</sup>????????????????????????????

????????????USCIB????????????COP????????  
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**EU????????????**

????????COP??1.5????????????E  
U????????

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????????COP30????????

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**CBAM????EU?“?”**

??EU????1??EU????CBAM????  
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OP????

????2028????3????28????COP????  
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CBAM????Business  
Europe????CBAM????COP????  
????WTO????WTO????CBAM????COP????  
????COP????CBAM?COP????

# EU??????????10?????

????????COP????????????????????EU??  
????????????CBAM????COP??3????????????  
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??EU??  
??EU????????????COP??

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?1????????????2019??11????????????????1????????????????????2020?11????  
?2??

Posted in ???, ????? | No Comments »

# ???? vs ?????????????????????????

?? ??? · Thursday, December 4th, 2025



Trifonov\_Evgeniy/iStock









???1????????????????????????????????????35?230?50kg????????????????

?3????????????????????8,100????????????????????????????243?405????????????????????  
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?577????2024????????????????????????1?4,000??1??????

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2030?2050????????????????????????????7????????????????????????????  
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- ?1????????????????2023?
- ?2????????????????
- ?3?Beautiful Chart????????????2000??2023????????
- ?4?100?kW?????1????????21??????
- ?5????????IEA?2024????????WEO 2024??

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

2026????????????????????

?? ?? · Tuesday, December 2nd, 2025



ThomasVogel/iStock

2026??

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2025?2????????????CDU?CSU????????SPD????????????????????????

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AfD??

	???	AfD
???????	52%	24%
?????????	40%	26%
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????????????CDU?CSU?208??SPD?120??????328??630??52????AfD?152????24?????????INSA????  
2025?11????BILD????????CDU?CSU??24.5??SPD??15.0??????11??AfD??26????????????CDU?CSU?SPD?  
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RN????????????????????????EU??  
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2024????????????NFP????????Ensemble????????RN????????????????????????????  
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	?????Ensemble?LR?	?????RN?
???????	34%	25%
?????????	27%	35%
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2024??  
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??Reform

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Reform UK??

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???????	63%	1%
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????????????2025????????????Poll of Polls????????????20??Reform UK?30????????20????????

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COP30??????

11?15??22????????????COP30????????????20??COP????????COP30????????????

**COP30??????**

COP30??2025????????10????????  
????????80????????????????????????????????1992????????????????????????

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**??4?????????**

COP28????????????????COP29????????????NCQG????????????????????COP30????????  
?GGA????COP29????????????????UAE????????????????2??COP????????????COP?  
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????????COP????????????????????COP????????????????24????????????????  
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????????2?1??

91 COP29 NCQ  
G91

NCQG 2030 3 NCQG

2 EU CBAM  
CBAM EU  
WTO

6 COP30

1.5 COP30 1.5  
NDC EU NDC

?????

4

4 COP30

1167 overcome dependence on fossil fuels<sup>11</sup>

EU 83 1.5 COP28 LMDC

17 18 Global Mutirão: Uniting humanity in a global mobilization against climate change<sup>33</sup>

91 NDC NDC BTR progressively overcome dependency on fossil fuels

21<sup>34</sup>

4

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- [NCQG](#)
- [2025](#)
- [2025](#)

?????

- [64](#)
- [2028](#)

1.5?NDC???

- [CMA7](#)
- [CMA6](#)

?????

- [???](#)

EU? No deal is better than bad deal?

10? COP? 23?

COP? I see no objection?

2030? COP31?

Point of Order?

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COP30???

COP30? COP28? GST? 28?

overcome dependency on fossil fuels

COP28 COP29 NCQG COP30

GIA UAE

1.5

COP

COP affordability

AI energy transition energy addition

1 ADIPEC COP28 AD NOC 1.5 2050

ADIPEC COP

2021

COP 9 2035 3 NDC

COP29 NCQG COP30

1.5

1.5

2028 1.5

<sup>82</sup>

1.5

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?1?Speech by President Lula at the opening of the COP30 Leaders' Summit in Belém, Pará

?2?83 Countries Join Call to End Fossil Fuels at COP30

?3?[https://unfccc.int/sites/default/files/resource/DT\\_-cop30-01.pdf](https://unfccc.int/sites/default/files/resource/DT_-cop30-01.pdf)

?4?[https://unfccc.int/sites/default/files/resource/Mutir%C3%A3o\\_cop30.pdf](https://unfccc.int/sites/default/files/resource/Mutir%C3%A3o_cop30.pdf)

?5?[https://unfccc.int/sites/default/files/resource/cma2025\\_L24\\_adv.pdf](https://unfccc.int/sites/default/files/resource/cma2025_L24_adv.pdf)

?6?COP30: Closing Ceremony | UN Climate Change

?7?UAE's Sultan Al Jaber Opens ADIPEC 2025 with Powerful Call for Pragmatic Energy Policies | AQ1B

?8?Three tough truths about climate

Posted in ???, ????? | No Comments »

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?? ? · Thursday, November 27th, 2025



CHUNYIP WONG/iStock



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??2016??pdf??????

**The Feasibility of a “Hydrogen Society”**

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????????CO2??CO2????????????????????????????????????  
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Posted in ??????????, ??? | [No Comments »](#)

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?? ?? · Thursday, November 27th, 2025



Khanchit Khirisutchalual/iStock

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COP30??  
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• CO????????????

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

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• ?????????????

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

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????Carbon Symbiosis?——????

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# Energy × Sector Matrix: Best-fit Applications

Sector	Electricity <small>(Renewables)</small>	Oil	Gas	Nuclear
Transport	⚠️ EV only	✅ Main source	✅	❌
Industry	⚠️	✅	✅	⚠️
Heating	⚠️	⚠️	✅	✅
Chemicals	❌	✅	✅	❌
Everyday Products	❌	✅	⚠️	❌

✅ Best Fit   ⚠️ Limited   ❌ Not Suitable

Takeaway: Energy Wisdom = Choosing the best-fit energy for each sector.

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

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?? ?? · Wednesday, November 26th, 2025



sommart/iStock

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[https://www.pveye.jp/eye\\_sight/view/5101/](https://www.pveye.jp/eye_sight/view/5101/)

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**EU strains to defend carbon levy as trade tensions engulf COP30**

<https://www.politico.eu/article/eu-carbon-border-adjustment-mechanism-trade-tariffs-cop30-india-china/>

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