

ADRI-
CitizenWatch
virtual Townhall
Nov. 11, 2021

9:00 AM - 11:30 AM (MANILA TIME) | 11 NOVEMBER 2021 (THURSDAY)

ENSURING POWER SUPPLY SECURITY FOR A SUSTAINABLE ECONOMIC RECOVERY



Opening Remarks
PROF. DINDO MANHIT
President,
Stratbase ADR Institute



Keynote Address
SEN. SHERWIN GATCHALIAN
Chairperson, Senate
Committee on Energy



Closing Remarks
ORLANDO OXAES
Lead Convenor,
CitizenWatch Philippines



Speaker
MR. JOSE ALEJANDRO
Adviser for Energy and
Power, Chair of Utilities,
Philippine Chamber of
Commerce and Industry



Speaker
MR. ERNESTO PANTANGCO
Chair, Energy Committee
of the Management
Association of the
Philippines (MAP)



Speaker
MR. ROMY BERNARDO
Vice Chairperson,
Foundation for
Economic Freedom



Speaker
MR. MENELEO CARLOS, JR.
Chairman Emeritus, Power
& Energy Committee,
Federation of Philippine
Industries, Inc.



Speaker
MR. NONOY OPLAS
President, Minimal
Government Thinkers;
Non-Resident Fellow,
Stratbase ADR Institute



Speaker
ATTY. TERRY RIDON
Convenor, Infrawatch PH;
Non-Resident Fellow,
Stratbase ADR Institute



Speaker
ATTY. VICTORIO DIMAGIBA
President, Laban
Konsyumer, Inc.



Speaker
PROF. LOUIE MONTEMAR
Convenor, Bantay Konsyumer,
Kuryente, Kalsada (BK3)



Moderator
MR. PACO PANGALANGAN
Executive Director,
Stratbase ADR Institute

Blackout-friendly RE and high fossil fuel prices: Europe experience and lessons for the Philippines

Bienvenido S. Oplas, Jr.
President, Minimal Government Thinkers
Columnist, BusinessWorld, "My Cup of Liberty"
Non-resident Fellow, Stratbase-ADRI



Minimal
Government
Thinkers

<http://funwithgovernment.blogspot.com>

Europe's energy crisis: A switch back to coal is on the cards

► UK among nations facing a 'bleak winter' with consumers at risk of being unable to heat their homes



Europe

Power costs could force metal producers from Europe - Eurometaux

Reuters

Coal keeps lights on at COP26 as low wind strikes again

Wednesday 3rd November 2021 | John Constable

LAS VEGAS
REVIEW-JOURNAL

NEWS LOCAL SPORTS BUSINESS OPINION CRIME ENTERTAINMENT

EDITORIAL: Renewable power fuels Europe's energy crisis

Bloomberg Green

Starved of Gas, European Electricity Producers Snap Up Coal

By Isis Almeida, Javier Blas, and Anna Shiryayevskaya
September 25, 2021, 2:16 AM GMT+8

- A cargo traded at \$200/ton in spot market, highest since 2008
- Coal burn is a headache for politicians before climate talks

Rob Davies and
Joanna Partridge

Wed 6 Oct 2021 19:00
BST



UK Energy Suppliers Face 'Massacre' Amid Soaring Gas Prices

By Tsvetana Paraskova - Oct 21, 2021, 9:00 AM CDT

- More than a dozen power suppliers in the UK have exited the retail energy market in recent weeks

AL Premium

BusinessDay

NATIONAL POLITICS ELECTIONS COMPANIES ECONOMY BUSINESS

Becalmed wind energy sector has UK turning to coal

Lack of windy weather over the past two weeks has cut output from 11,000 turbines, which account for more than 20% of power generation

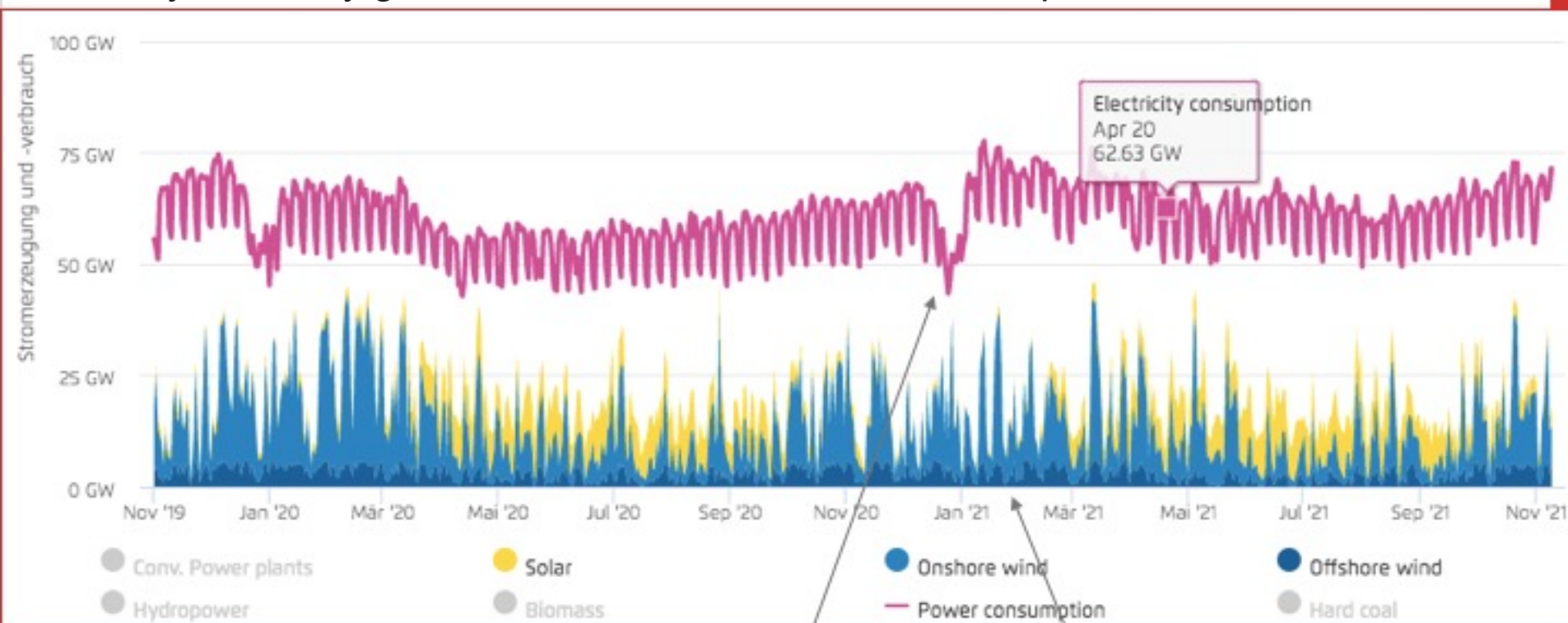
18 SEPTEMBER 2021 - 11:26 By RACHEL MORISON

UK industry could face shutdowns as wholesale gas price hits record high

Steel, chemicals and fertiliser industries warn of difficult winter unless government takes emergency action



Germany electricity generation from solar-wind vs consumption, Nov. 2019-Nov. 2021



https://www.agora-energiewende.de/service/agorameter/chart/power_generation/01.11.2019/09.11.2021/today/

Germany, Europe's largest econ., the home of BMW, Benz, Bosch, Siemens,... huge industrial products needing stable predictable power now tinkering with unstable unpredictable solar-wind. Huge gap bet consumption and these two intermittents, to be covered by coal, gas, nuke, some hydro, biomass.

European Power Grid Narrowly Misses Widespread Blackout As Frequency Drops Suddenly

By P Gosselin on 10. January 2021

<https://notrickszone.com/2021/01/10/european-power-grid-narrowly-misses-widespread-blackout-as-frequency-drops-suddenly/>

Germany's 'Green' Energy Failure: Germany turns back to coal and natural gas as millions of its solar panels are blanketed in snow and ice
Tech News | Startups News

“Energy prices, climate spending and NGCP”, Oct 18, 2021

<https://www.bworldonline.com/energy-prices-climate-spending-and-ngcp/>

TABLE 1.

Commodities with high global price hikes YTD as of Oct. 15, 2021

Commodities	Unit	Prices Oct. 15	YTD Sept. 24	YTD Oct. 15	Category
TTF gas (EU)	Euro	93.65	267.4%	389.7%	Energy
UK gas	GBP	234.36	219.1%	315.5%	Energy
Lithium	CNY/ton	181,000.00	254.8%	289.2%	Metals
Coal	\$US/ton	240.00	124.8%	198.1%	Energy
Soda Ash	CNY/ton	3,500.00	111.8%	161.2%	Industrial
Propane	\$US/gal	1.48	97.7%	128.9%	Energy
Natural gas	\$US/MMBtu	5.42	103.9%	113.4%	Energy
Molybdenum	\$US/kg	45.00	96.8%	91.5%	Industrial
Oat	\$US/Bu	660.25	59.5%	83.0%	Agricultural
EU Carbon Permits	Euro	59.44	92.4%	81.7%	Index
Solar Energy Index	\$US	419.73	-12.3%	-10.1%	Index
Wind Energy Index	\$US	352.83	-5.7%	-7.2%	Index

[HTTPS://TRADINGECONOMICS.COM/COMMODITIES](https://tradingeconomics.com/commodities)

Year to date (YTD) or from end-2020 to Oct 15 price changes:

TTF/EU gas 390% or nearly 5x, UK gas 316% or 4x +, Coal 3x, Propane 2x +.

YTD price changes by Nov. 11, 8:30am: TTF gas 256%, UK gas 226%, coal 97%,...

Solar-wind energy index remain negative, meaning unattractive despite Glasgow mtg.

Solar and wind energy index remain negative, lower than end-2020 levels, unattractive.

TABLE 2.

Climate adaptation and mitigation expenditures of Philippine government, P Million

Department	Acronym	2020	2021	2022
Public Works and Highways	DPWH	152,216	240,508	190,336
Transportation	DOTr	--	--	40,319
Agriculture	DA	12,772	19,503	23,996
Environment and Natural Resources	DENR	6,474	9,228	9,900
Government owned corporations	GOCCs	5,276	4,500	9,520
Allocations to Local Government Units	LGUs	3,505	4,776	4,416
Social Welfare and Development	DSWD	--	1,618	1,642
Science and Technology	DOST	1,200	1,162	935
Energy	DOE	122	284	855
State universities and colleges	SUCs	--	--	690
National Defense	DND	17	25	562
Agrarian Reform	DAR	280	301	301
Information and Communications Technology	DICT	732	334	--
Labor and Employment	DOLE	751	--	--
Trade and Industry	DTI	502	--	--
Other departments and agencies		100	125	1,041
TOTAL		183,947	282,364	284,513

SOURCE: DBM, BUDGET OF EXPENDITURES AND SOURCES OF FINANCING (BESF) 2022, TABLE B.21.

While waiting for portion of \$100 B/yr climate money from rich countries, COP20 in Paris in 2015, PH govt doing big climate spending on its own: P184 B 2020, P282 B 2021, P284 B 2022.

Many agencies jump into climate bec. huge funding allotted yearly.

NOT included here: (a) climate spending of LGUs as they have other sources of revenues, and (b) Climate Change Commission (CCC), P118.7 M in 2020, P150.5 M in 2021, P145.4 M 2022.

“ADB’s kill coal plan, government corporations, and power transmission”, Sept 13 2021
<https://www.bworldonline.com/adbs-kill-coal-plan-government-corporations-and-power-transmission/>

TABLE 1.

Coal consumption, GDP size, and their expansion from 1990 to 2019

Country	Coal consumption, Exajoules			Expansion 2019 over		GDP size, \$ Billion			Expansion 2019 over	
	1990	2000	2019	2000	1990	1990	2000	2019	2000	1990
China	22.08	29.56	81.79	2.8	3.7	397	1,206	14,341	11.9	36.2
India	4.59	6.88	18.60	2.7	4.0	327	477	2,871	6.0	8.8
Indonesia	0.14	0.55	3.41	6.2	23.8	138	179	1,120	6.2	8.1
Philippines	0.04	0.17	0.73	4.4	16.3	51	84	377	4.5	7.5
Vietnam	0.09	0.20	2.07	10.5	22.2	8	40	330	8.3	40.1
Germany	5.51	3.57	2.25	0.6	0.4	1,599	1,949	3,862	2.0	2.4
Italy	0.61	0.52	0.28	0.5	0.5	1,169	1,147	2,005	1.7	1.7
UK	2.72	1.54	0.22	0.1	0.1	1,194	1,661	2,833	1.7	2.4
Poland	3.28	2.35	1.86	0.8	0.6	62	172	596	3.5	9.6
Turkey	0.67	0.94	1.76	1.9	2.6	208	274	761	2.8	3.7

SOURCES: BP STATISTICAL REVIEW OF WORLD ENERGY 2021, IMF WORLD ECONOMIC OUTLOOK 2021, AUTHOR COMPUTATIONS

CN, IN, ID, PH, VN expanded coal cons. 4x to 24x from 1990-2019; GDP expanded 8x to 40x.
 DE, IT, UK shrank coal cons., 0.1x to 0.5x from 1990-2019; GDP expansion only 1.7x to 2.4x.
 Poland and Turkey keep their coal cons. high, GDP expansion 3.7x to 9.6x from 1990-2019.

“Energy and economic development” (July 12, 2021

<https://www.bworldonline.com/energy-and-economic-development/>

TABLE 1

Electricity generation (EG), coal generation, wind+solar generation, in terawatt-hours (TWH)

	EG, TWH		Coal, TWH		Wind + Solar, TWH		Coal share, %		Solar+Wind share, %	
	2010	2020	2010	2020	2010	2020	2010	2020	2010	2020
US	4,394.3	4,286.6	1998.5	844.1	98.6	474.9	45.5	19.7	2.2	11.1
Russian Federation	1,038.0	1,085.4	166.1	152.3	0.0	3.0	16.0	14.0	0.0	0.3
Canada	607.0	643.9	84.0	35.6	9.0	40.5	13.8	5.5	1.5	6.3
Brazil	515.8	620.1	11.7	22.9	2.2	65.0	2.3	3.7	0.4	10.5
Germany	633.1	571.9	44.5	16.7	50.3	181.6	7.0	2.9	7.9	31.7
France	569.3	524.9	262.9	134.8	10.6	53.7	46.2	25.7	1.9	10.2
Mexico	275.6	313.2	32.4	18.9	1.3	31.6	11.8	6.0	0.5	10.1
UK	382.1	312.8	107.6	5.4	10.3	88.4	28.2	1.7	2.7	28.3
Turkey	211.2	305.4	69.8	41.2	2.9	35.6	33.0	13.5	1.4	11.7
Italy	302.1	282.7	24.2	5.6	11.0	44.7	8.0	2.0	3.7	15.8
Australia	251.0	265.2	176.0	142.9	6.0	46.4	70.1	53.9	2.4	17.5
Spain	300.4	255.8	55.0	106.1	50.7	74.0	18.3	41.5	16.9	28.9
South Africa	259.6	239.5	240.5	202.4	0.1	12.2	92.6	84.5	0.0	5.1
China	4,207.2	7,779.1	3,233.6	4,917.7	50.1	727.6	76.9	63.2	1.2	9.4
India	937.5	1,560.9	643.0	1,125.2	19.6	119.1	68.6	72.1	2.1	7.6
Japan	1,156.0	1,004.8	312.7	298.8	7.9	90.7	27.1	29.7	0.7	9.0
South Korea	495.0	574.0	215.4	208.5	1.6	19.7	43.5	36.3	0.3	3.4
Taiwan	247.1	279.8	122.3	126.0	1.0	8.4	49.5	45.0	0.4	3.0
Indonesia	169.8	275.2	68.5	180.9	0.0	0.9	40.3	65.7	0.0	0.3
Vietnam	91.7	234.5	15.9	118.6	0.0	9.5	17.3	50.6	0.1	4.0
Thailand	157.6	176.4	29.8	36.8	0.1	6.8	18.9	20.9	0.0	3.9
Malaysia	125.0	159.6	49.4	89.6	-	1.2	39.5	56.1	0.0	0.8
Philippines	67.7	101.8	23.3	58.2	0.1	2.4	34.4	57.2	0.1	2.4
Total World	21,570.7	26,823.2	8,634.5	9,421.4	380.1	2,446.9	40.0	35.1	1.8	9.1

SOURCE: BP SRWE 2021, AUTHOR COMPUTATIONS

4 of 5 countries with 1,000+ TWH gen. in the world's top 6 GDP size — US, CN, IN, JP.

Coal output at at least 36% of total electricity gen. in 2020 -- also countries with high GDP gr. 2010-2019: CN 7.7%, ID 7.0%, VN 6.5%, PH 6.4%, ID 5.4%, MY 5.3%, TW 3.6%, KR 3.3%.

“Decarbonized” Europe, high solar-wind, slow gr. 2010-2019: DE 1.9%, UK 1.8%, FR 1.4%, SP 1.1%, IT 0.3%.

“Climate and coal, PSALM, NEA and NGCP”

Nov. 1, 2021

<https://www.bworldonline.com/climate-and-coal-psalm-nea-and-ngcp/>

ADB’s scheme acquire-retire-coal targeted PH, VN, ID. ADB can bully them but not China and India. China’s coal consumption so big that...

TABLE 1.

Coal consumption compared to China’s

Country	Petajoules (PJ)			Equivalent China consumption	
	1965	1990	2020	PJ	in year
US	11,607	19,217	9,203	9,569	1975
USSR/Russian Fed.	12,453	7,633	3,274		early 60s?
Germany	6,730	5,507	1,844		mid 50s?
Poland	2,490	3,284	1,669		early 50s?
Australia	727	1,600	1,689		early 50s?
China	4,791	22,084	82,270		
India	1,488	4,594	17,537	17,051	1985
Japan (JP)	2,039	3,268	4,574		1964?
Indonesia (ID)	5	143	3,256		early 60s?
South Korea (KR)	207	1,010	3,029		late 50s?
Vietnam (VN)	38	93	2,102		mid 50s?
Taiwan (TW)	125	452	1,634		early 50s?
Malaysia	1	55	1,137		early 50s?
Thailand	2	163	728		late 40s?
Philippines (PH)	2	45	728		late 40s?
ID+VN+PH	45	281	6,085	5,046	1969
JP+KR+TW	2,372	4,730	9,238	9,570	1975

SOURCES: BP STATISTICAL REVIEW OF WORLD ENERGY 2021, AUTHOR ESTIMATES.

Coal cons. of PH + VN + ID combined in **2020** of 6,028 Petajoules (1 PJ = 277.78 GWH) was near China’s 5,046 PJ in **1969** and 6,947 PJ in 1970.

Even JP + KR + TW coal cons. 9,238 PJ in 2020, and US’ 9,203 PJ also in 2020, equiv. to CN’s 9,570 PJ in 1975 → **ADB selective bullying and double talk.**

WORLD

To Strike a Climate Deal, Poor Nations Say They Need Trillions From Rich Ones

Industrialized countries were already struggling to pay earlier commitments to help with clean-energy development and other infrastructure needs. Now the cost of buying cooperation has skyrocketed.

COP26

Money for poor countries must rise tenfold, says UN

Wealthy countries are falling way below what is needed, expert body warns

Bloomberg Green

Politics

India Holds Back on Climate Pledge Until Rich Nations Pay \$1 Trillion

The world's most populous country says it will use the money to build out renewable energy by 2030.

By [Akshat Rathj](#) and [Archana Chaudhary](#)

November 10, 2021, 8:04 PM GMT+8

Green

Africa Wants \$1.3 Trillion Annual Climate Finance as Rich Nations Miss Target

By [John Ainger](#) +Follow

November 4, 2021, 5:23 PM GMT+8

Outrage after 400 VIP jets converge on climate summit

By [Emily Smith](#)

November 1, 2021 | 3:01pm



Glasgow: The Stampede To Mass Poverty...120 BILLION Tonnes Of Materials For Wind Turbines By 2050?

By [P Gosselin](#) on 3. November 2021

Share this...



Commentary by [Fred F. Mueller](#)

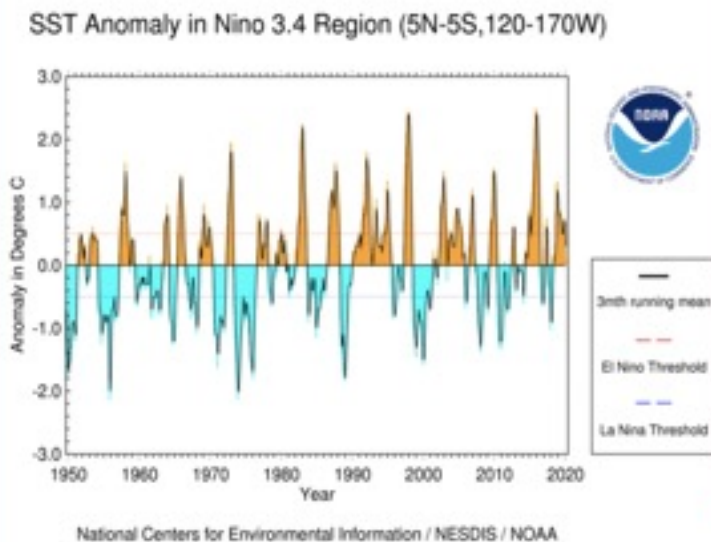
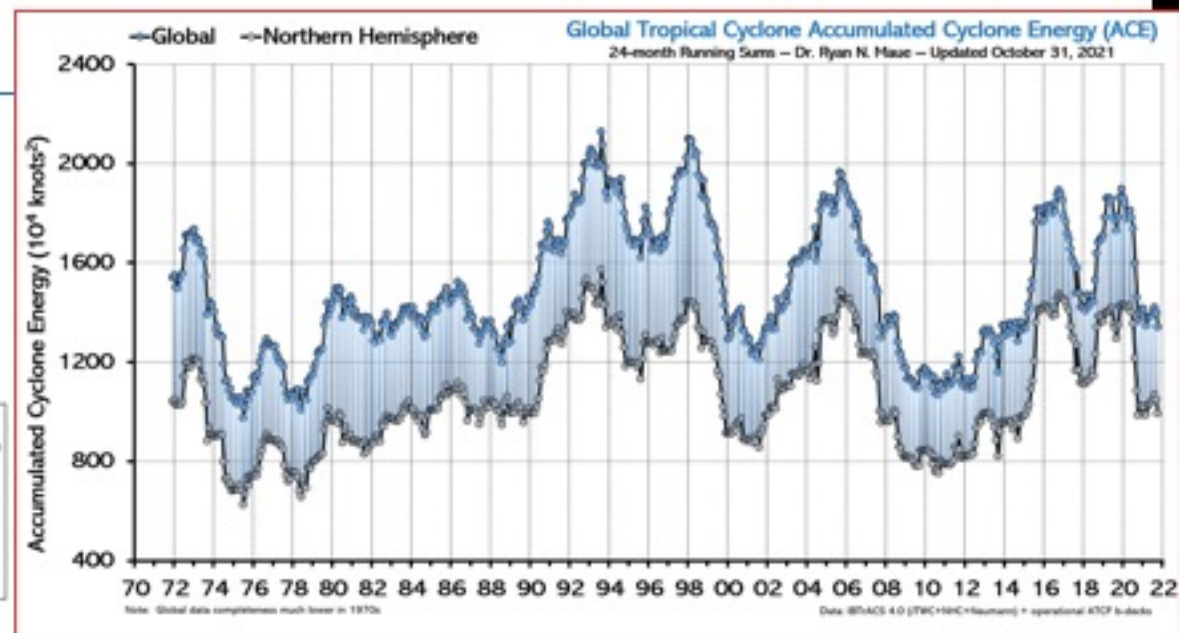
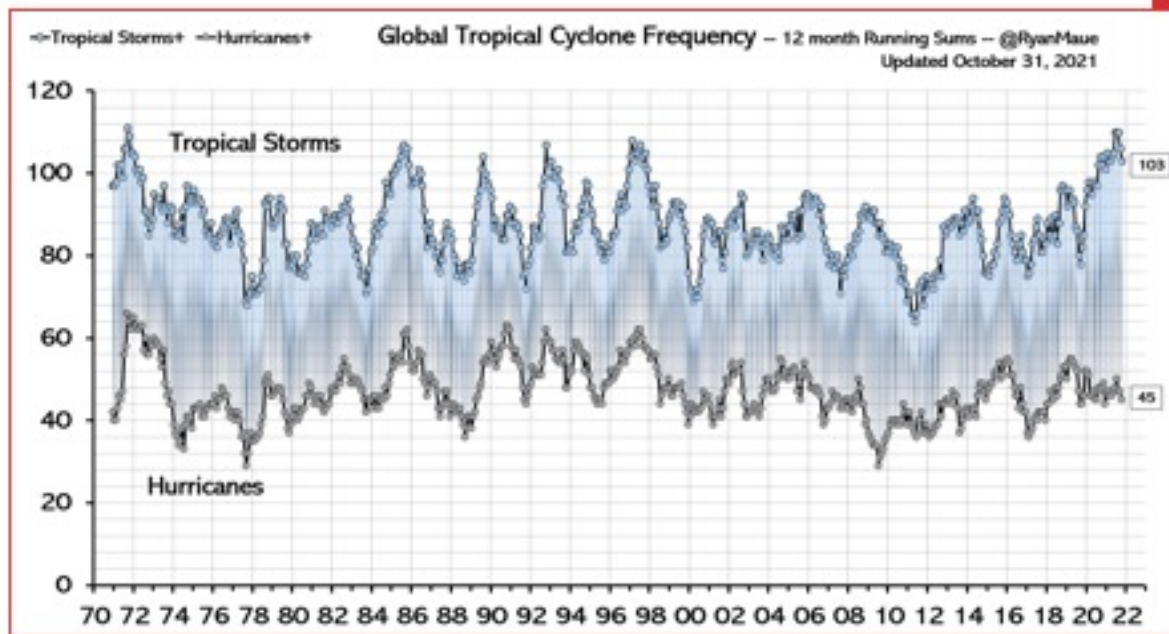
FLOP 26



THE ENDLESS SEARCH FOR THE HOLY GRAIL OF COP CLIMATE CONFERENCES GOES ON

No climate crisis.
No climate emergency.

1. Tropical cyclones today not “more frequent” than decades ago.
2. Strength/energy of tropical cyclones (ACE) not “stronger” than decades ago.
3. El Nino not “stronger/ more frequent” than La Nina.



Source: Dr. Ryan Maue, <http://climatlas.com/tropical/>

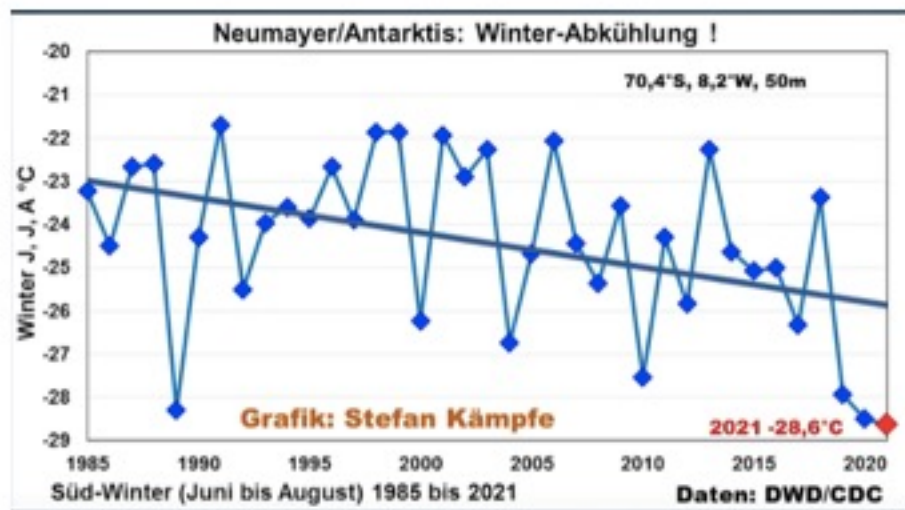
4. Sea ice in the Arctic are melting... and growing. Every single year, no exception.

5. Sea ice in Antarctica are melting... and growing. Every single year, no exception.

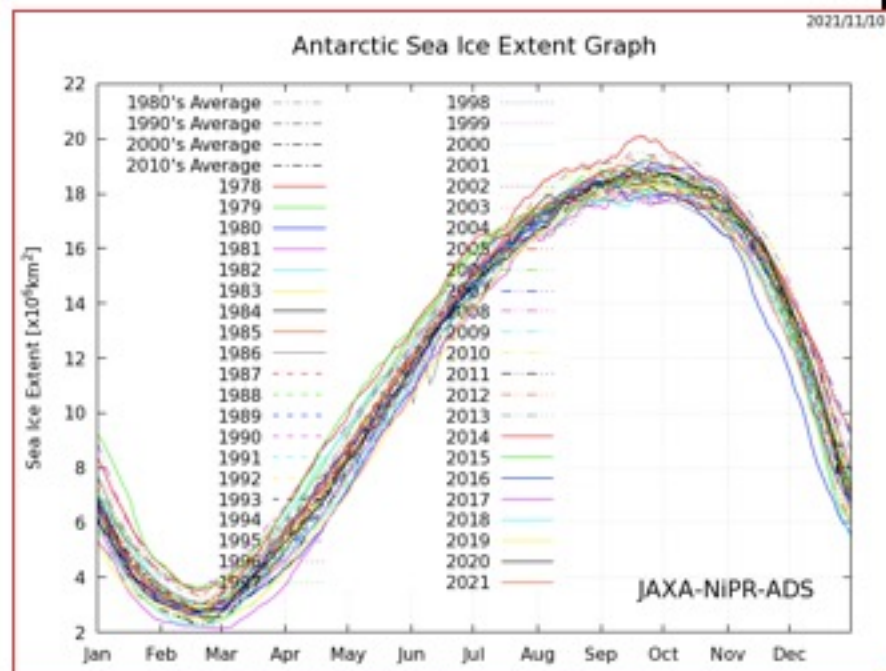
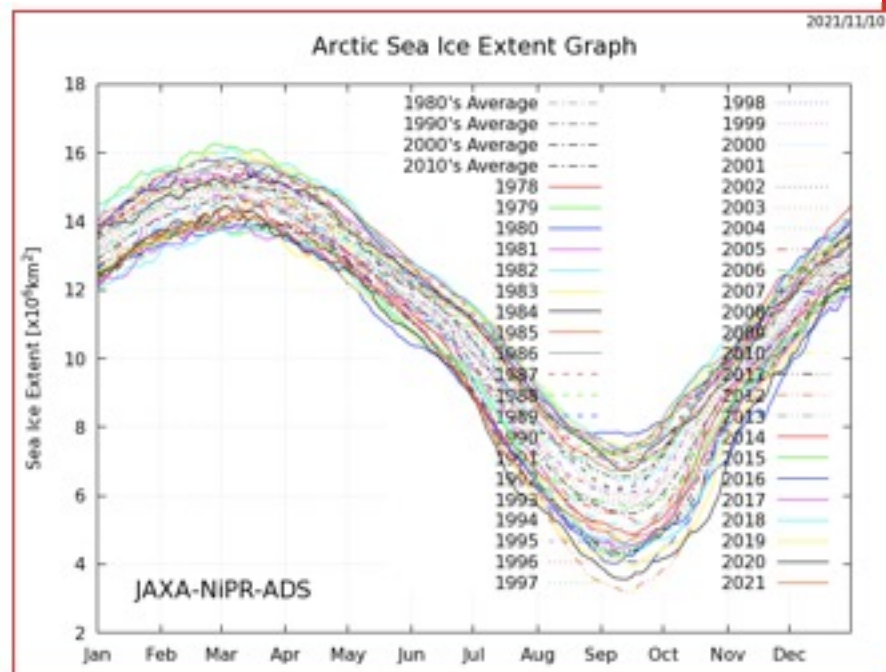
It is a lie to say that sea ice just melting, not growing, leading to "huge rise sea level."

6. Antarctica experience coldest half-year since measurements began 60 tears ago.

No climate crisis. No climate emergency.



<https://notrickszone.com/2021/11/09/temperature-bottom-falling-out-antarcticas-coldest-half-year-since-measurements-began-60-years-ago/>



<https://wattsupwiththat.com/reference-pages/sea-ice-page/>

“Growth and long-term energy supply”, August 16, 2021

<https://www.bworldonline.com/growth-and-long-term-energy-supply/>

TABLE 2.

Existing capacity, power generation in gigawatt-hours (GWH), Committed and Indicative power projects in the Philippines

	Installed Capacity 2020 MW	Generation 2020 GWH	Computed capacity factor	Committed MW 2021-2027	Indicative MW 2021-2032
Coal	10,944	58,176	60.1%	3,821	4,440
Oil-based	4,237	2,474	6.7%	438	537
Natural gas	3,453	19,497	64.4%	2,400	4,700
Renewable Energy	7,617	21,608	32.4%	1,053	23,896
Geothermal	1,928	10,757	63.7%	116	296
Hydro	3,779	7,192	21.7%	222	6,125
Biomass	483	1,261	29.8%	61	95
Solar	1,019	1,373	15.4%	655	12,614
Wind	443	1,026	26.4%	—	4,765
Total	26,286	101,756	44.2%	7,713	33,574

SOURCES: DOE POWER STATISTICS 2020, DOE PRESENTATION IN CONGRESS JULY 30, 2021; CAPACITY FACTOR ARE AUTHOR COMPUTATIONS.

Indicative projects, bulk of 33.57 GW increase will come from solar, hydro, and wind. Problems someday as intermittent unstable and low output solar-wind will require non-cheap batteries, will push up power generation and transmission prices, grid must get more ancillary services (AS).

Generation Mix Jul to Sept 2021

TYPE	July-2021		Aug-2021		Sep-2021	
	GWH	%	GWH	%	GWH	%
COAL	4,052	56.9%	3,903	54.3%	3,847	53.9%
NAT. GAS	1,572	22.1%	1,592	22.2%	1,541	21.6%
GEO	761	10.7%	787	11.0%	761	10.7%
HYDRO	315	4.4%	685	7.7%	672	9.4%
BIOMASS	69	1.0%	61	0.9%	61	0.9%
OIL-BASED	186	2.6%	74	1.0%	87	1.2%
WIND	48	0.7%	82	1.1%	38	0.5%
SOLAR	123	1.7%	137	1.9%	129	1.8%
TOTAL	7,125	100%	7,184	100%	7,184	100%

Generation mix in Luzon-Visayas grids, 2021

Generator Type	November 2021*		July-Nov. 9, 2021	
	GWh	Percent	GWh	Percent
Coal	2,054.7	62.8%	18,262	57.8%
Natural Gas	594.5	18.2%	6,189	19.2%
Geothermal	295.5	9.0%	3,344	10.3%
Hydro	153.6	4.7%	2,521	7.5%
Biomass	39.7	1.2%	313	1.0%
Oil-Based	34.6	1.1%	488	1.5%
Wind	54.2	1.7%	294	1.0%
Solar	45.8	1.4%	550	1.7%
TOTAL	3,273.5	100.0%	31,961	100.0%

Source: Independent Electricity Market Operator of the Philippines (IEMOP)

*From Oct. 26, 2021 to Nov. 9, 2021 only

RE law of 2008 (RA 9513) took off late because wind-solar developers lobbied for high Feed in tariff (FIT) rates or guaranteed price for 20 years.

Now 2021 and wind-solar only produce 2.7% of total generation and “save the planet” movement wants us to rely on this blackout-friendly energy source.

Blackout economics is for the lazy and socialists. Not industrious and dynamic people.

Conclusions

1. Europe experience: Coal is the past, RE is the present, and frequent blackout is the future.
2. PH experience: Blackout is the past (esp. 1990-91), coal is the present (56-57% of total electricity generation yearly), and sustained growth would be the future.
3. But wind-solar (only 2.5-3% of PH total gen.) is endlessly pushed and coal is endlessly attacked, intermittent RE pushers want Blackout econ., Degrowth econ.
4. No climate crisis. No climate emergency. Climate change is true but it is cyclical and natural, nature-made, not “man-made”. Pushing intermittents and ease out reliable fossil fuels are tools of ecological central planning, not dynamic growth.
5. Climate alarm leads to climate extortion. Each UN COP meeting leads to more alarm, that leads to bigger climate money being expected from rich countries. \$100 B/year for all developing countries in Paris 2015, now in Glasgow 2021 developing countries now want trillions per year.
6. We should push for more fossil fuels in energy generation plus nuclear. Europe's blackout economics, degrowth economics, are clear lessons for us.