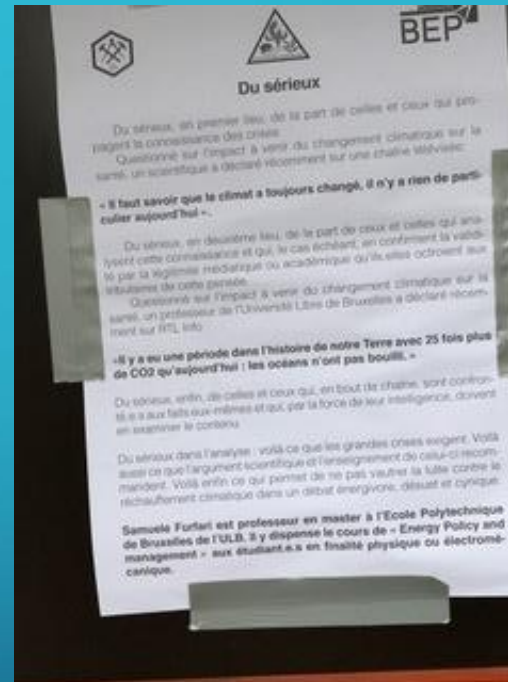


The EU's misleading decarbonisation and its geopolitical consequences.

Prof. Samuel Furfari
EU senior official (retired)

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All data is in the public domain, mainly available from Eurostat or the Energy Institute.



What is energy?

Work $\equiv$ energy

$$W = \vec{F} \times \vec{d} \quad W = \int \vec{F} \cdot d\vec{u}$$

[1 Joule = 1 Newton x 1 mètre]

d (m)



F (Newton)



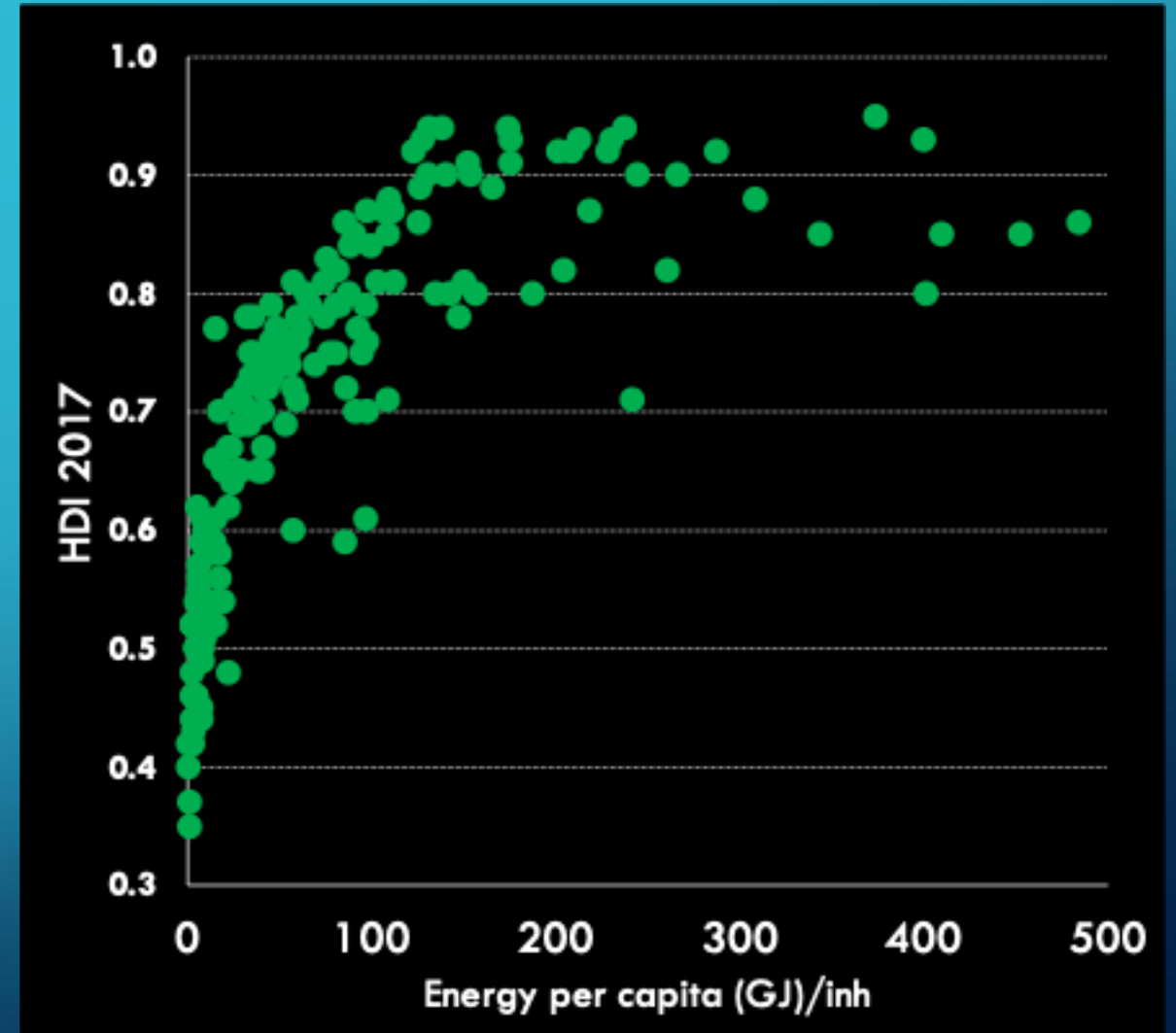
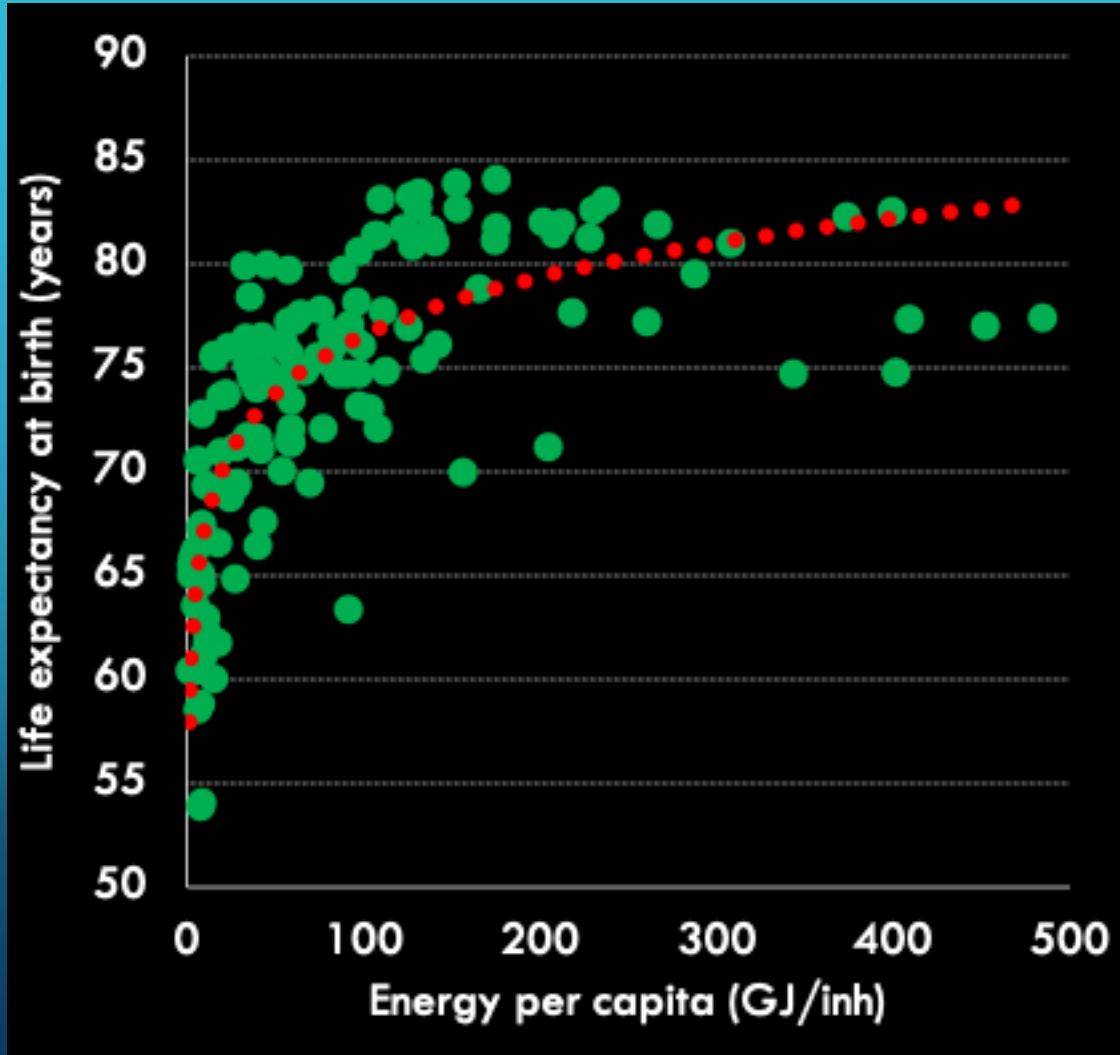
Energy, the foundation of the EU



‘There will be no future for the Community without cheap and abundant energy.’

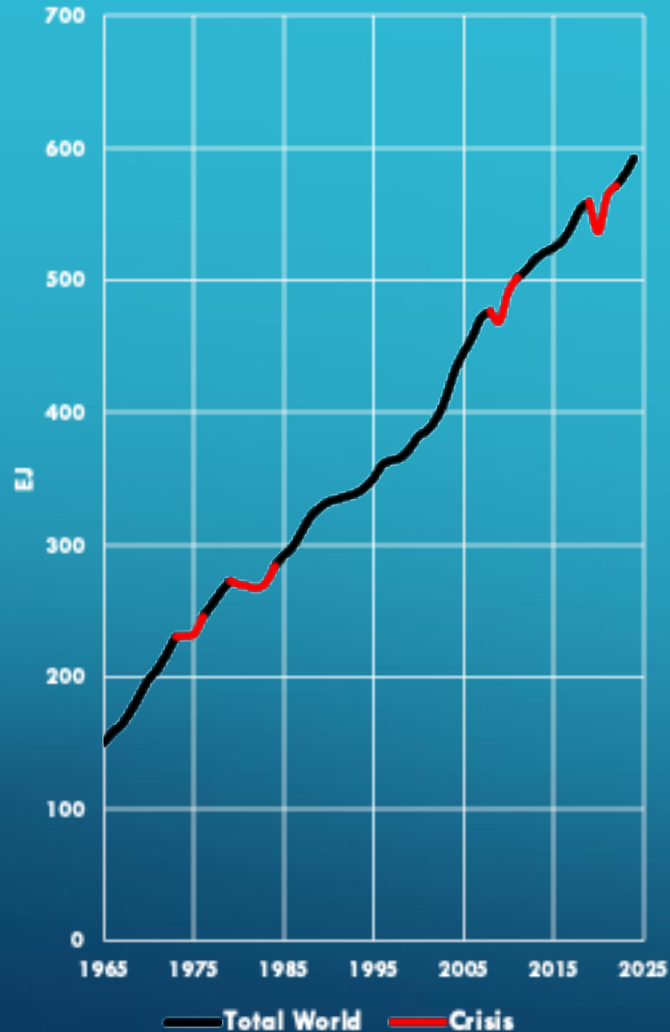
Messina, 2 June 1955

Energy is work and, therefore, life and quality of life.

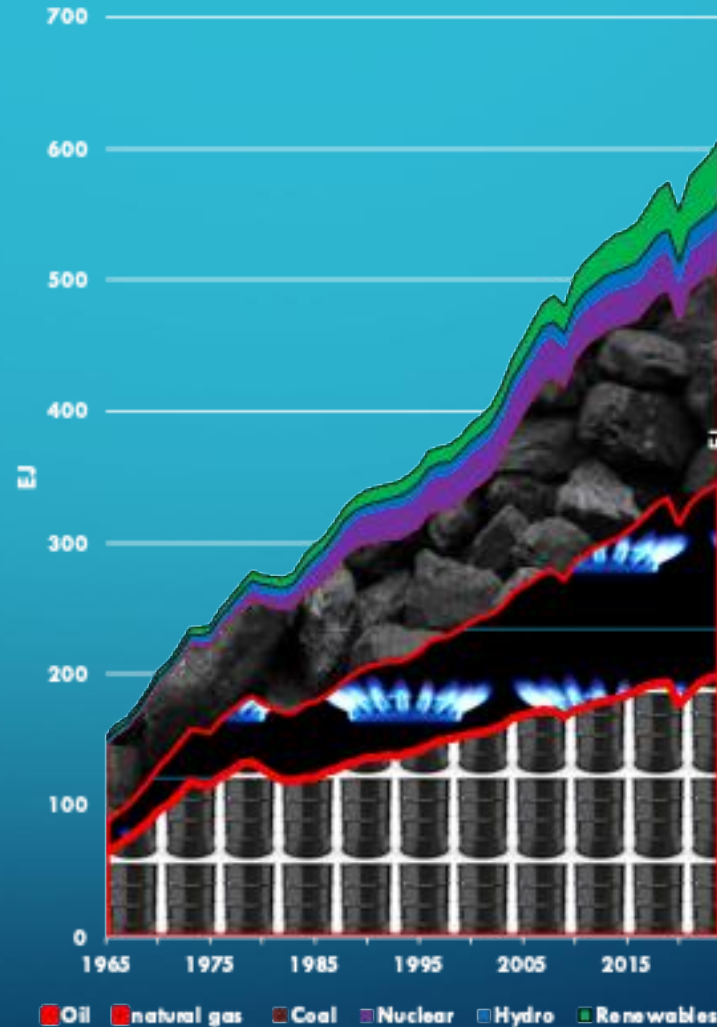


Growing demand for all forms of energy

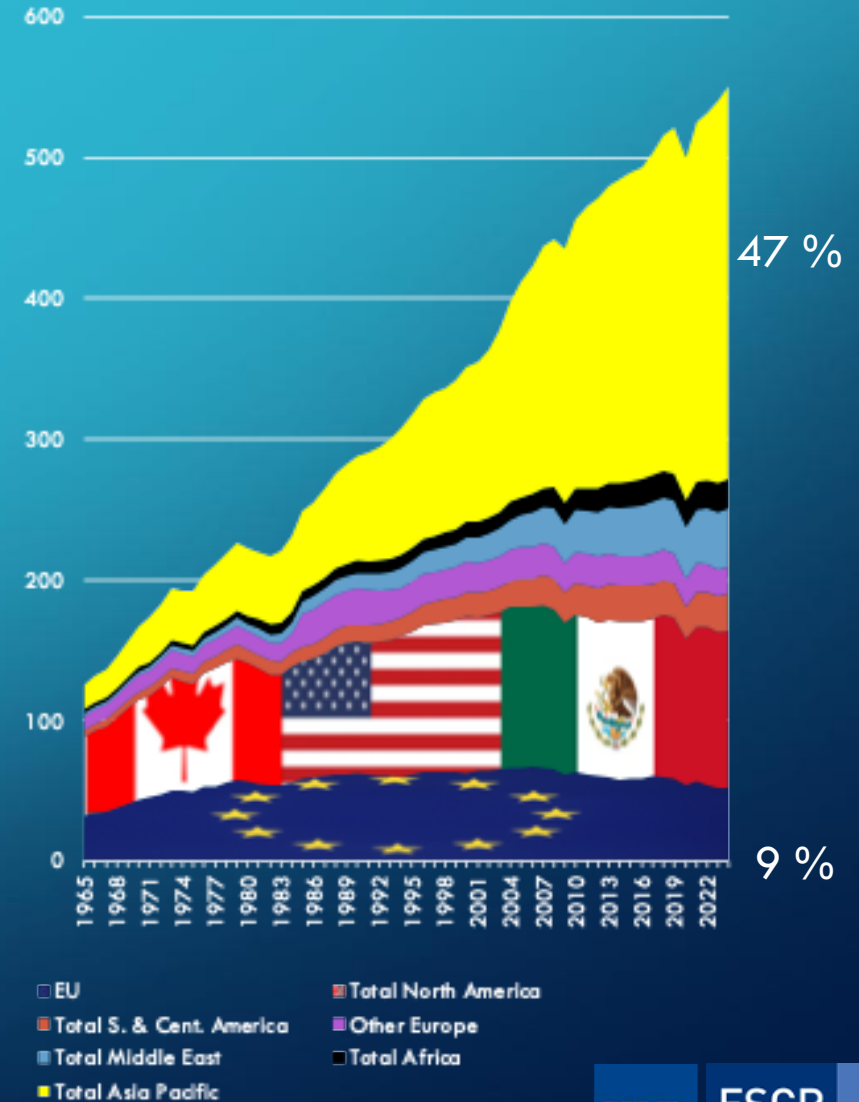
Total global primary energy demand



Primary energy demand by fuel



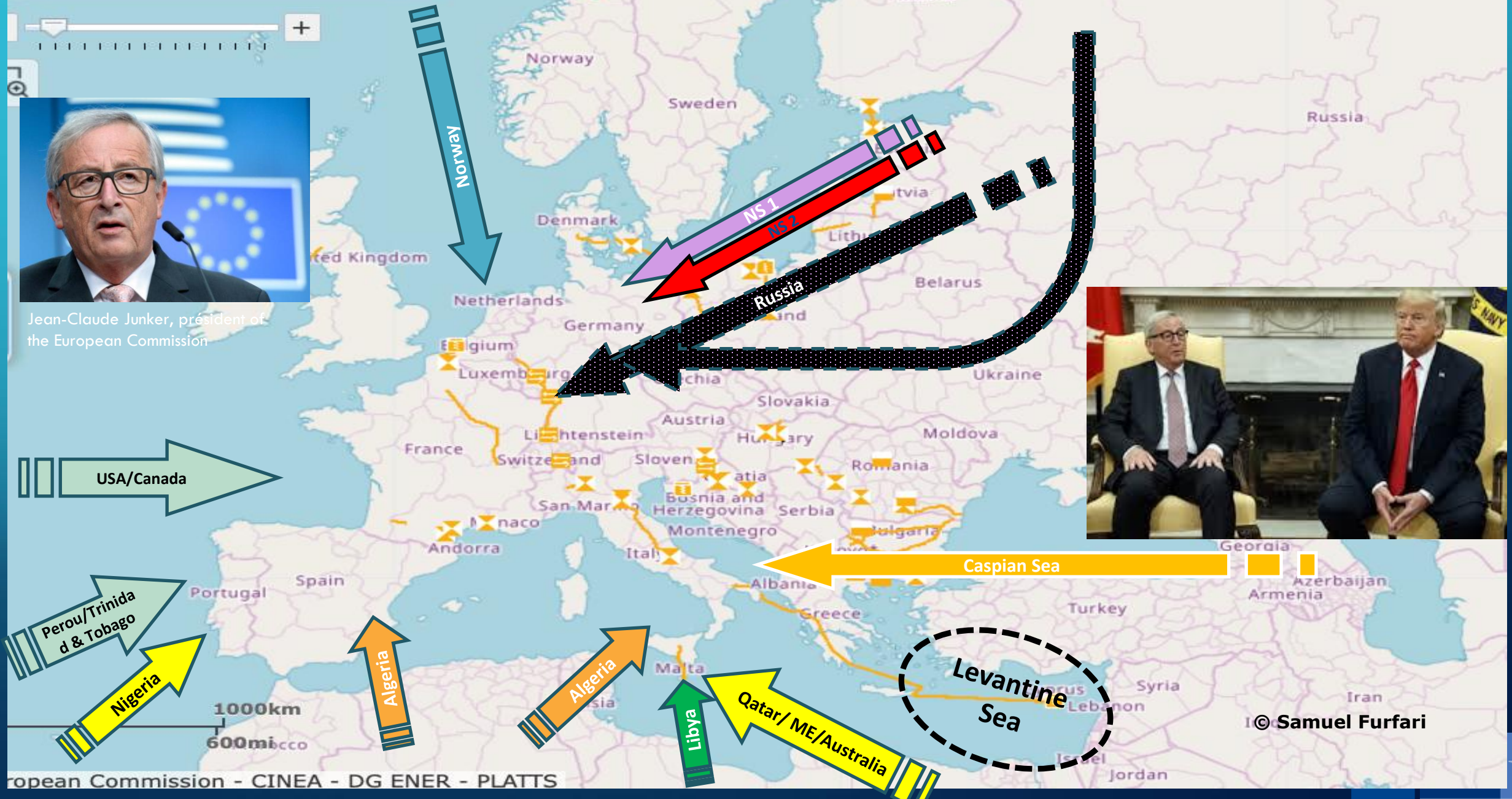
Primary energy demand by region



The EU was creating a competitive single gas market



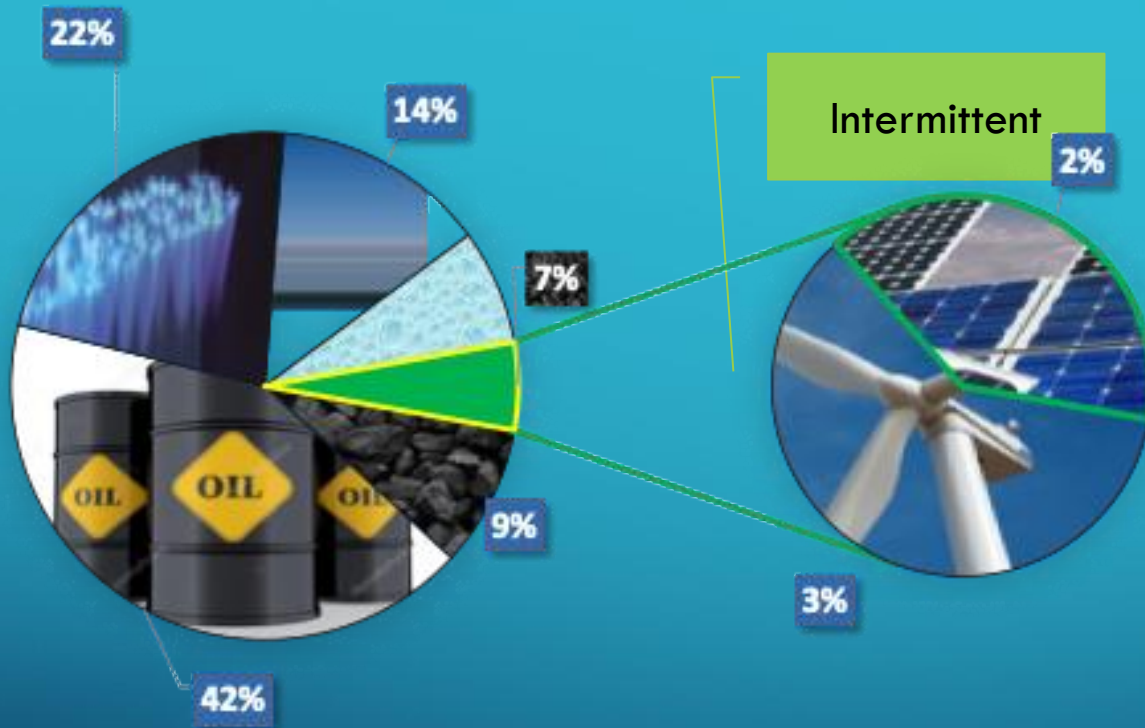
Jean-Claude Juncker, président of the European Commission



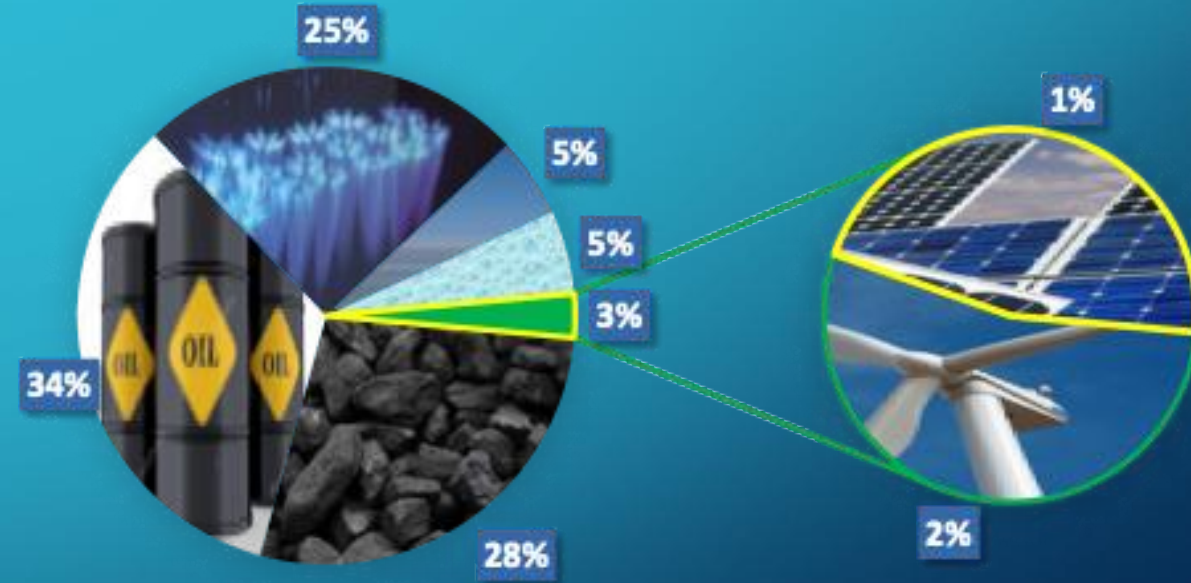
© Samuel Furfari

Primary energy consumption in the EU and worldwide

UE 2024



Mundo 2024



Fossil energy: EU 75%, world 87%

Fossil gas 'has no viable future', EU's Timmermans says

By Frédéric Simon | EURACTIV.com 26 mars 2021 (updated: 19 avr. 2021)



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**MITSUBISHI
HEAVY**



A growth model
centred on fossil
fuels is simply
obsolete

EC President Von der Leyen tells Davos
countries of future 'don't need oil and gas'



15 May 2023,
EU Parliament, Brussels



The EU energy policy since the war of 2022

No mention at all of
nuclear anergy

Importing from Ukraine
| electricity, H₂

More wind and
more solar PV

Energy efficiency |
buildings, Heat pumps

Hydrogen

More non-Russian
gas

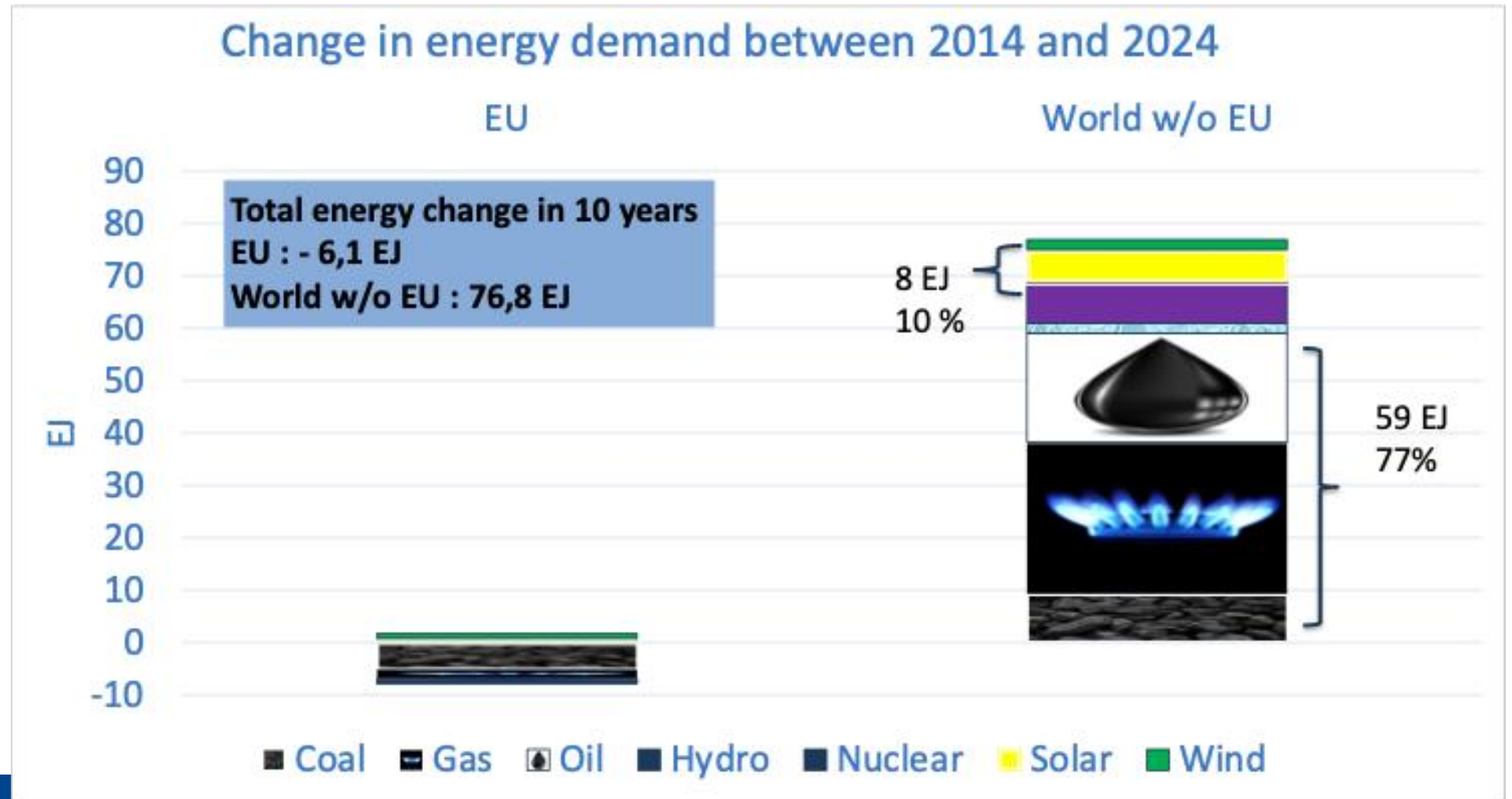
REPower EU
May 2022

- €300 billion in financing
 - €72 billion in the form of grants
 - €228 billion in loans

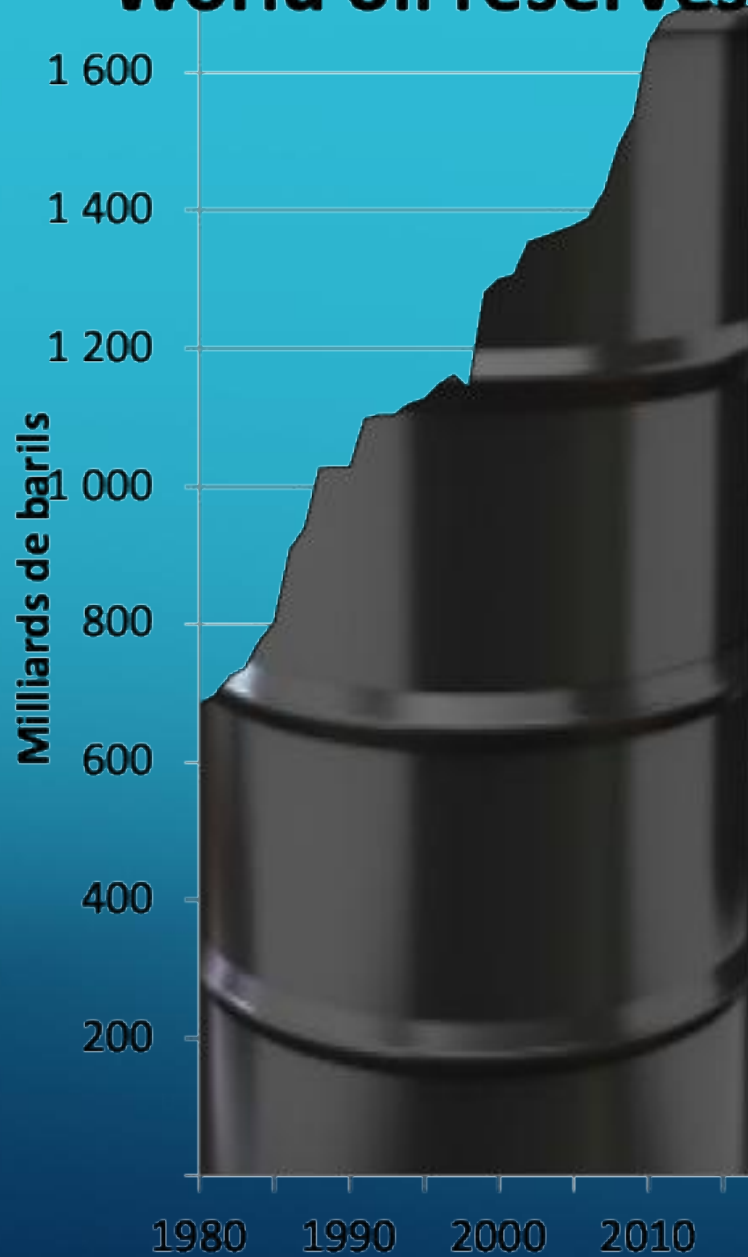


Addition, not transition

Worldwide fossil fuel is growing 7.3 time more than new energy



World oil reserves

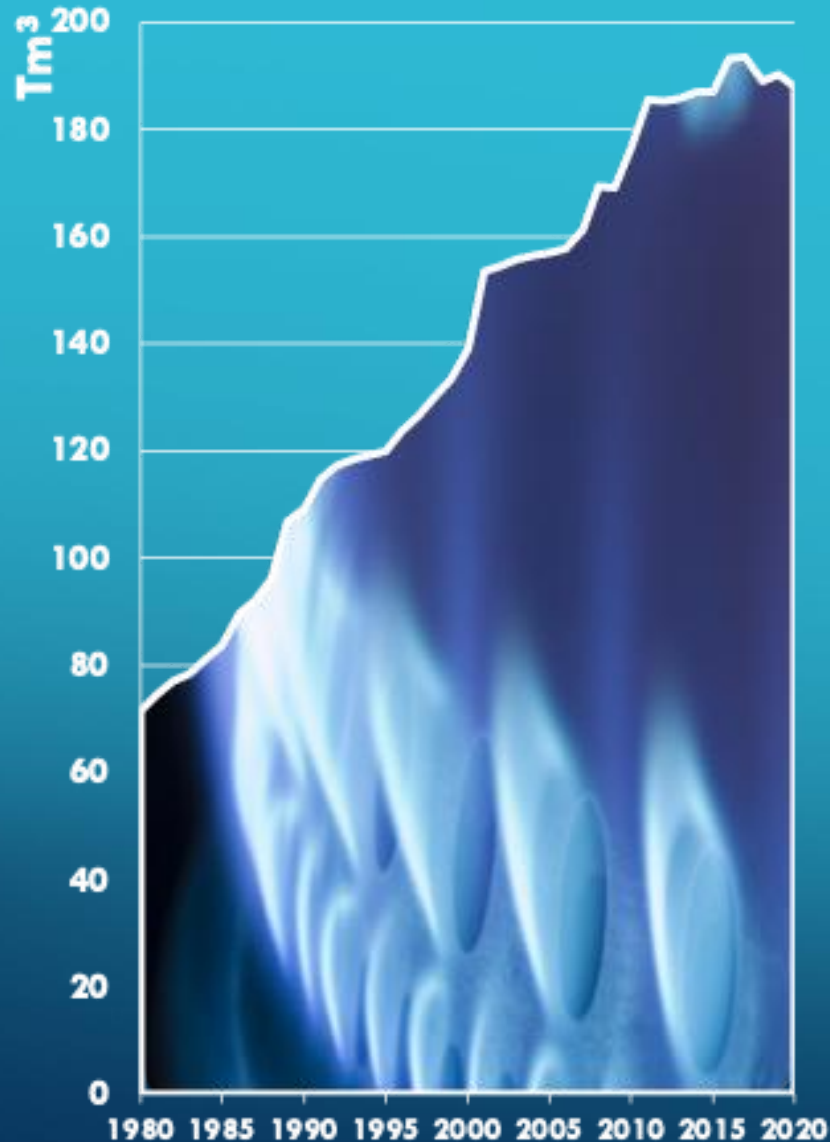


SAMUEL FURFARI - ESCP

BP data



Natural gas, the future of energy



Abundant

Available

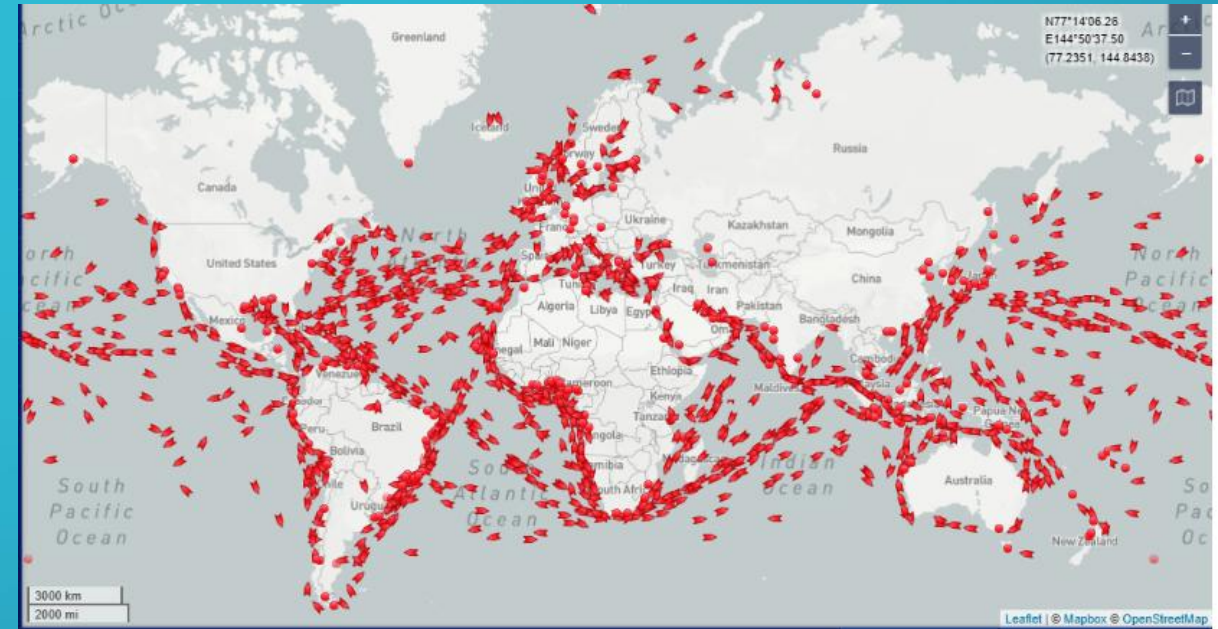
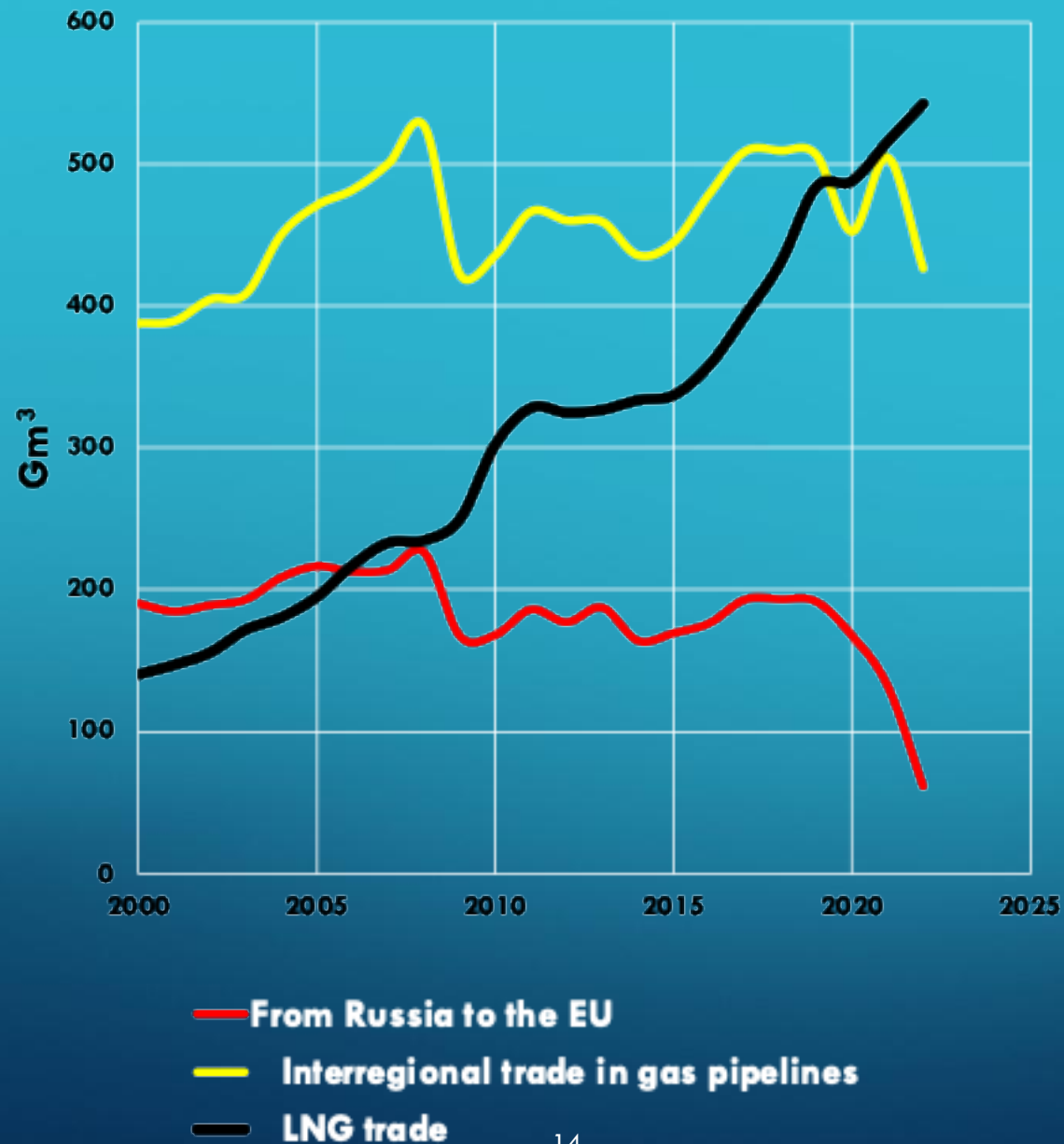
Clean

Cheap

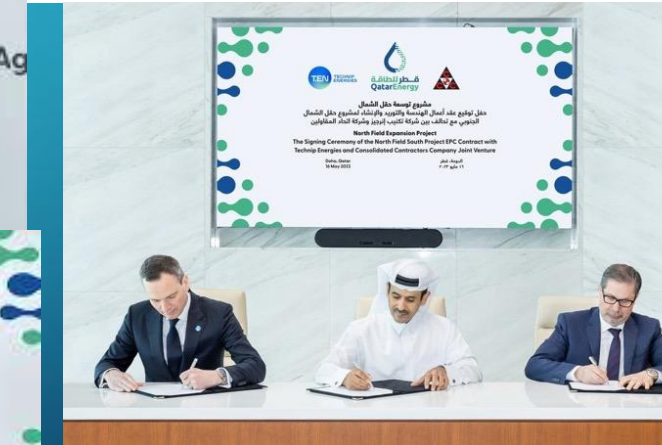
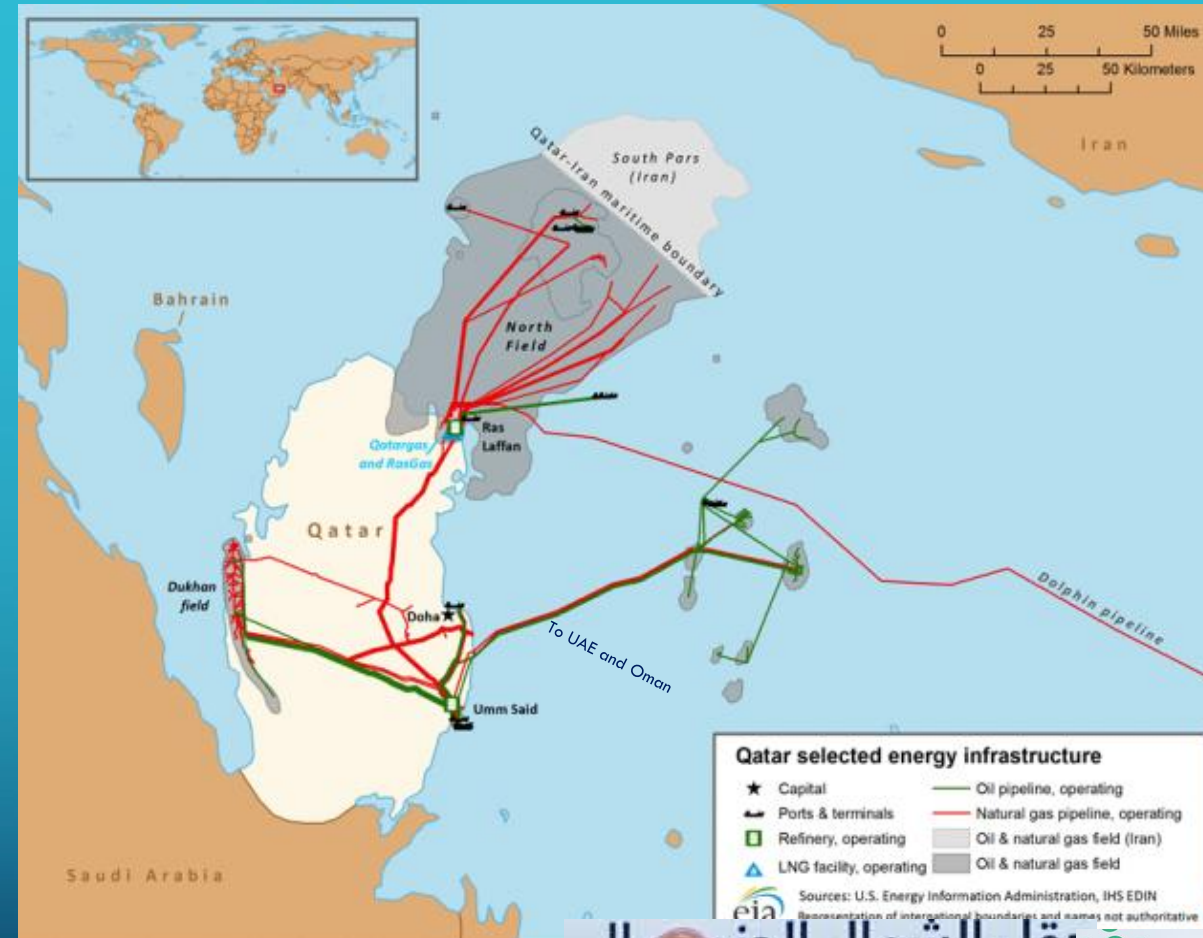
All uses

Geopolitics

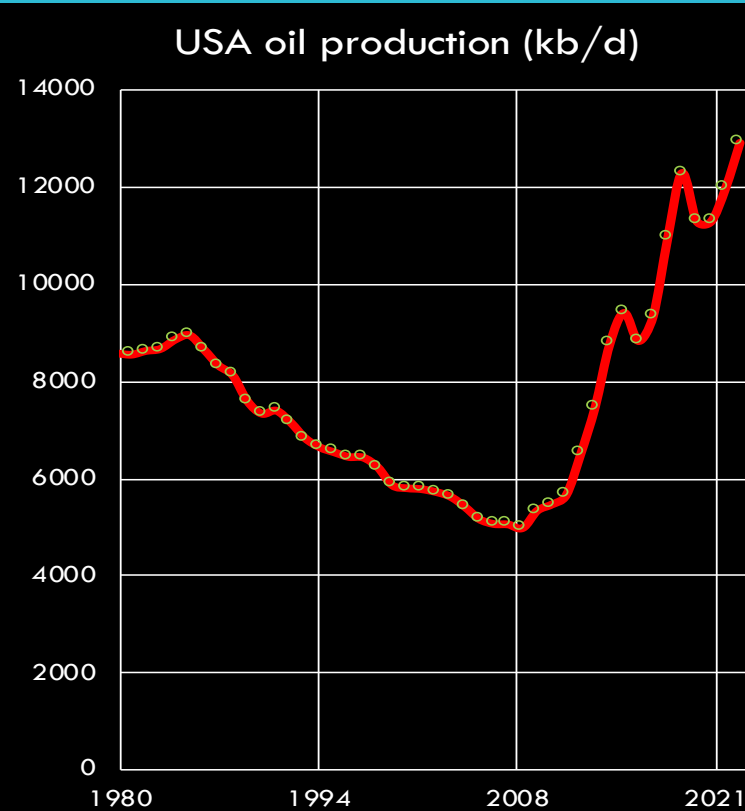
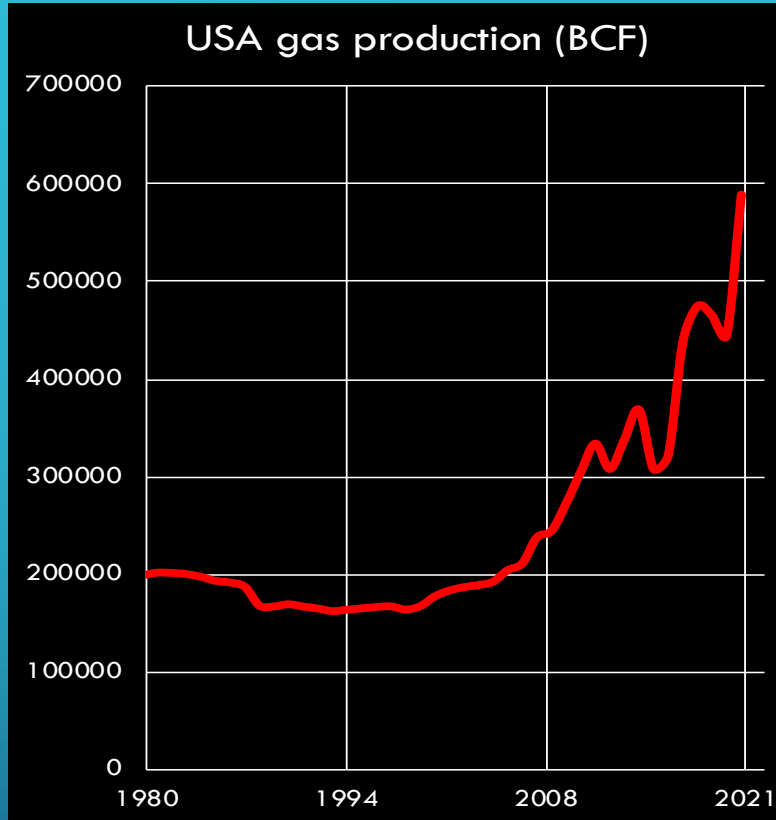
LNG trade has surpassed pipeline trade.



Qatar: the Saudi Arabia of gas



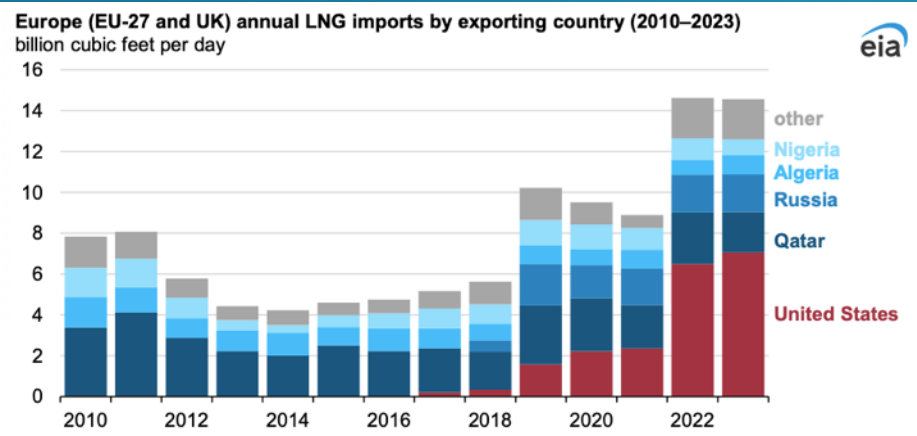
The real energy transition



Georges Mitchel



Chris Wright





IEA: renewables set to meet world's power demand by 2030

Led by China, world expected to add more than 5.5TW of new capacity between this year and end of decade



Fatih Birol, executive director IEA. (Photo: Dean Calma / IAEA / Flickr)



Chris Wright Says IEA Is Now on the Table

PROXIMATELY \$5.8 MILLION BUDGET, AS REPORTED FOR 2024, OF THE AGENCY'S TOTAL FUNDING.

B Pub Note, Energy Policy, Energy IEA, International News, Net Zero, News, US Energy News, Wind

Cyber Sale: Less than \$1/week



Chris Wright Has His

is a Texas-based...



Follow Author

25am EST

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Forbes
GLOBAL PROPERTIES

The US Export-Import Bank will invest \$100 billion to achieve US energy dominance.

Export-Import Bank of the United States

Export-Import Bank to spend \$100bn to achieve US energy dominance

New chief floats deals in Egypt, Pakistan and Europe as the agency backs away from renewables under Donald Trump

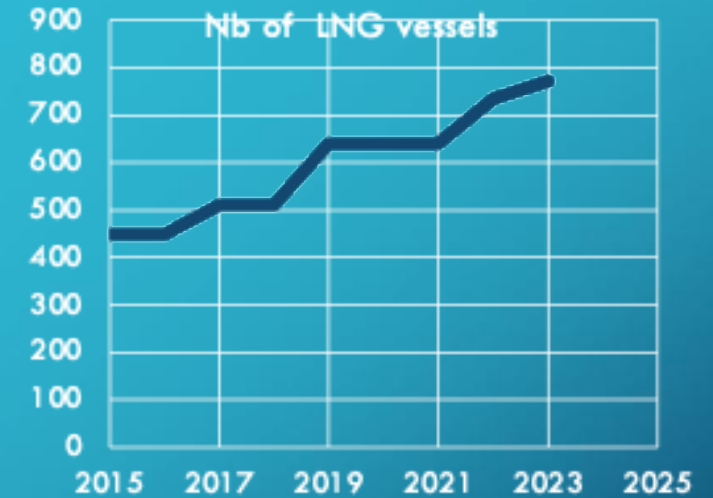
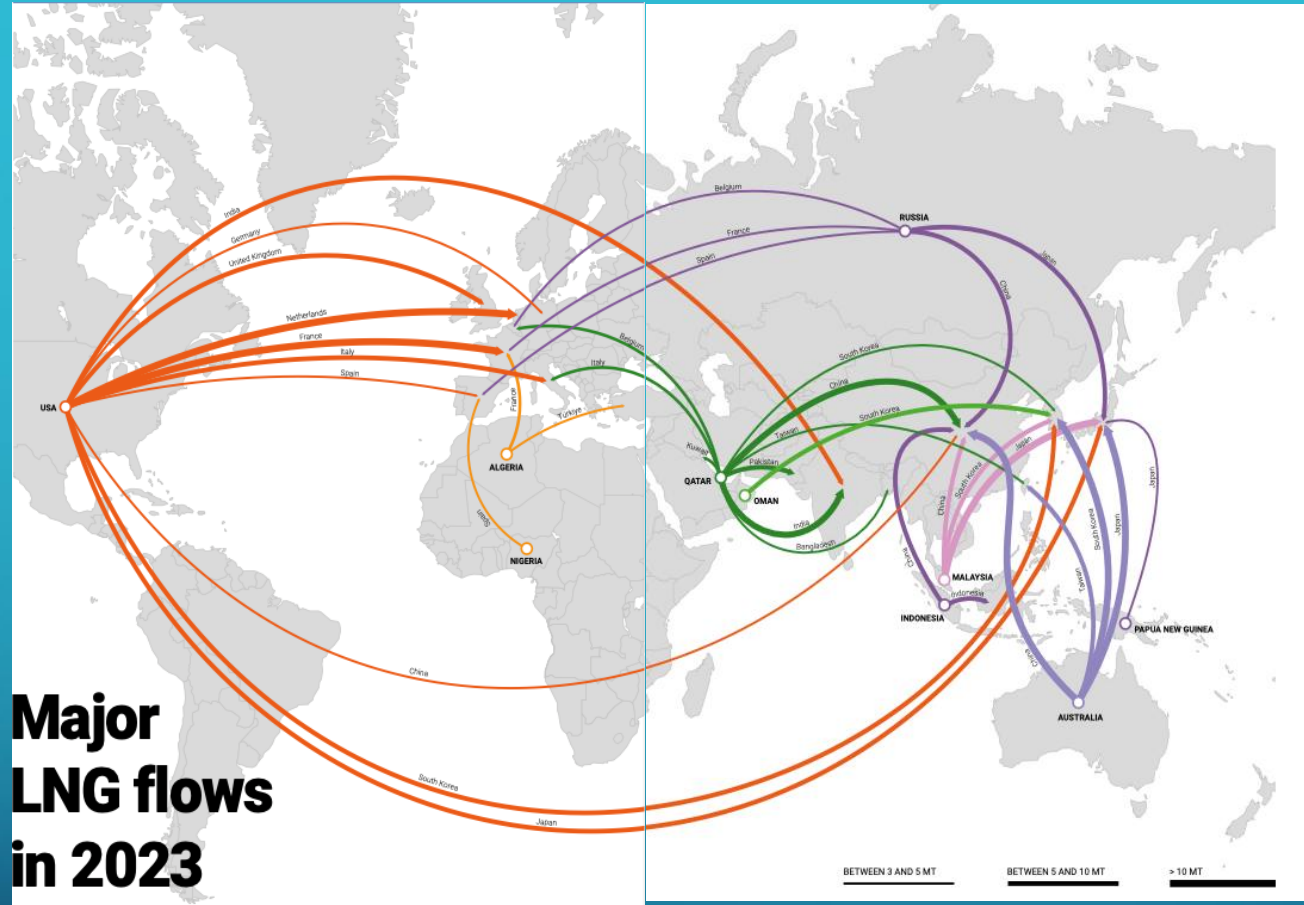


The US Export-Import Bank made a \$4.7bn loan for an LNG project in Mozambique led by France's TotalEnergies © Anadarko

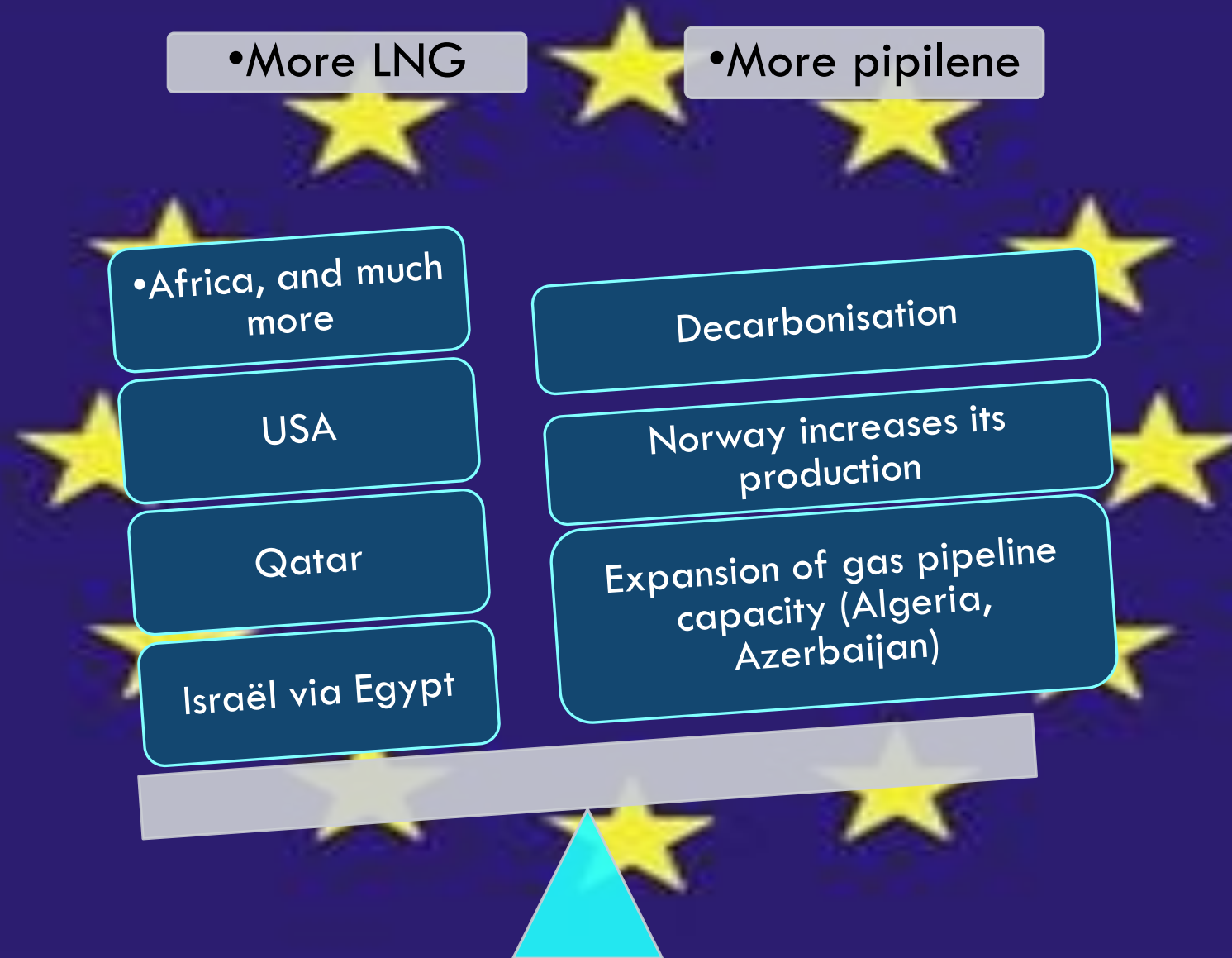
« *Its aim would be to bring 'American energy molecules to every corner of the world'...*



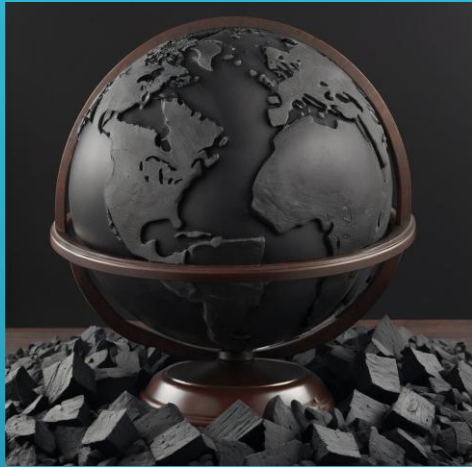
The new geopolitics of energy thanks to the freedom of LNG



The future of gas in the EU?



Coal use in China is 1.8 time the total primary energy of the EU



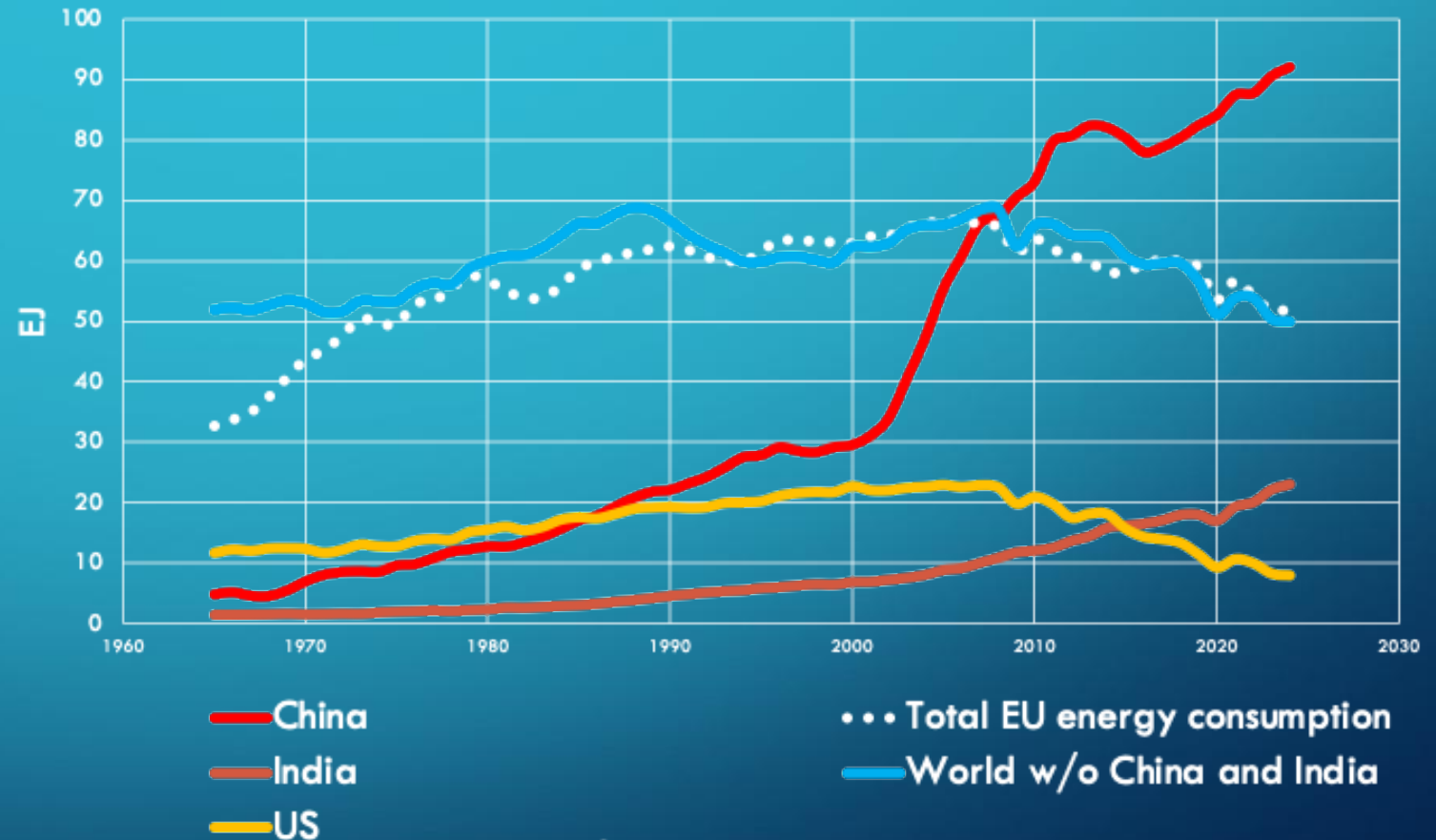
China use $\approx$ 20 time more coal than EU

(92,2 EJ : 4,7 EJ)

Coal use without China and India: 50 EJ

Total EU primary energy : 52 EJ

The consumption of coal is constantly increasing.



© S Furfari, data Energy Institute, June 2025

18:33 Mardi 9 avril

Post



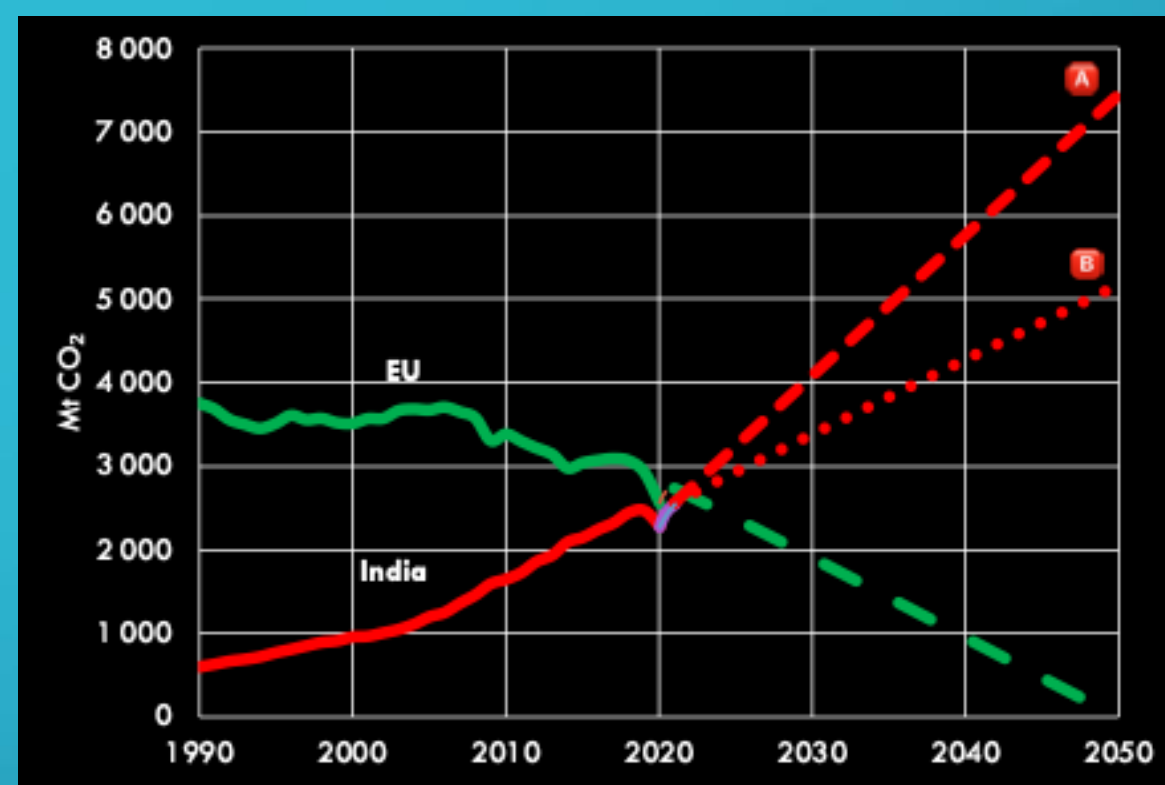
Narendra Modi ✓
@narendramodi

A remarkable feat!

Crossing 1 Billion Tonnes in coal and lignite production marks a h milestone for India, reflecting our commitment to ensuring a vibrant coal sector. This also ensures India's path towards Aatmanirbharta in a vital sector.

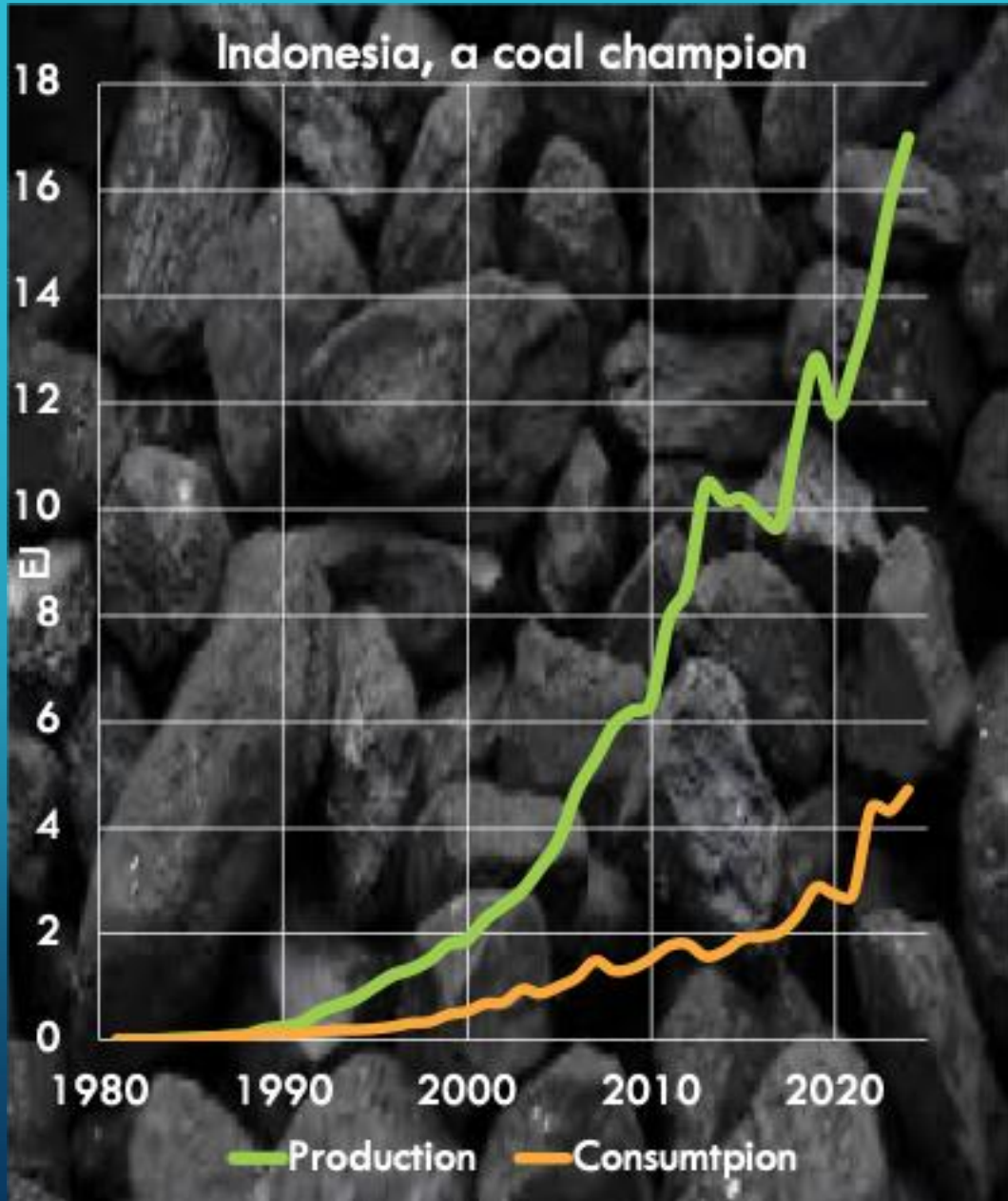
Pralhad Joshi (Modi Ka Parivar) ✓ @JoshiPralhad · 1/04/24

For the first time ever, India's coal and lignite production has crossed 1 Billion Tonne. Owing to favourable support from the Govt resulting in capacity expansion, coal+lignite production has grown by more than 70% over the last 10 years.



Atmanirbharta Atmanirbhar Bharat, which translates to "self-governing India", is a phrase that Indian Prime Minister Narendra Modi and his government have used and popularized in relation to the country's economic development plans. This is an overarching concept for the Modi government's plans for India to play a bigger role in the global economy and become more efficient, competitive, and resilient.





Indonesia Shelves Decarbonization for Prosperity and Security

By [Vijay Jayaraj](#)
October 30, 2023



WORLD

U.S., Allies Announce \$20 Billion Package to Wean Indonesia Off Coal

Indonesia, the world's biggest coal exporter, will see its power-sector emissions peak seven years sooner than current projections, say U.S. officials

By [Ed Ballard](#) [Follow](#) and [Jon Emont](#) [Follow](#)

Updated Nov. 15, 2022 at 10:05 am ET

Decarbonisation !



Photograph: Eric Feferberg/AFP/Getty Images

The future —
— of European
competitiveness



Energy insecurity

The organised destruction of the EU's competitiveness

Samuel Furfari

Delivering the Clean Industrial Deal for the 2040 climate target

Green deal

Clean deal

Flexibility

Greater flexibilities across sectors

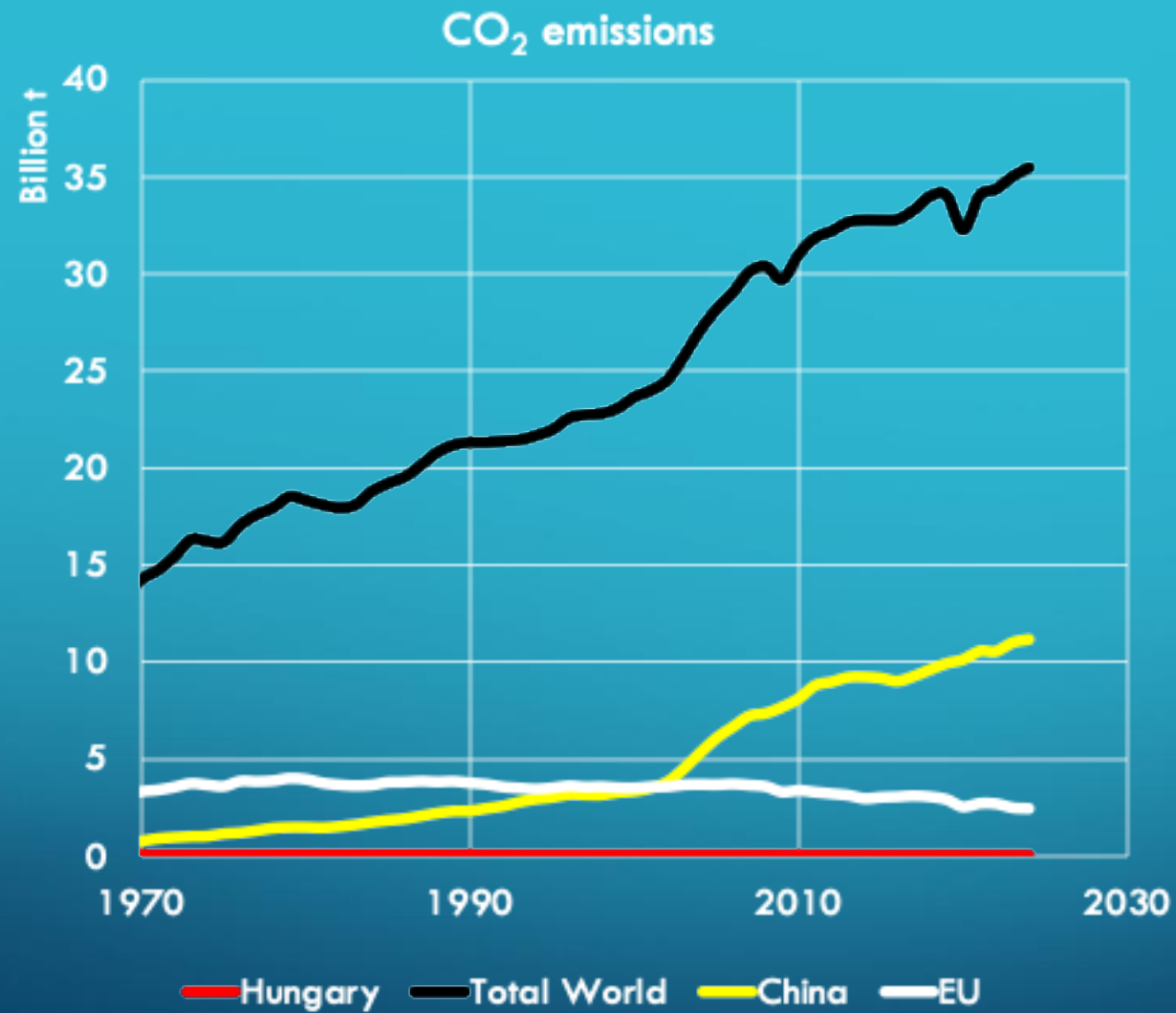
simplification of the Carbon Border Adjustment Mechanism (CBAM)

international credits starting from 2036

Clean Industrial Deal State Aid Framework

https://ec.europa.eu/commission/presscorner/detail/en/ip_25_1687

Trends in global and EU CO₂ emissions



Data : Energy Institute, 2023

Party to the UNFCCC	% increase since adoption of the UNFCCC
World	+65
Latin America	+90
Africa	+111
Non-OECD	+153
Turkey	+216
Pakistan	+175
Indonesia	+464
India	+379
China	+373
Vietnam	+1758
USA	-8
EU	-30
Hungary	- 32

Hungary = 0,1% of global emisions

from 1992 à 2024 : World : +65% , EU : -30%

Whom is emitting CO₂ ?

Région/ Country	CO ₂ energy emissions	Population	t CO ₂ / capita	% of the world
	(million t)	(millions)		
World	35500	8240	4,3	100%
China	11200	1425	7,9	31,5 %
USA	4619	347	13,3	13,0 %
India	2953	1429	2,1	8,3 %
EU	2484	450	5,5	7,0 %
Africa	1400	1400	1,0	1,4 %
France	254	69	3,7	0,7 %
Hungary	39,1	9,6	4,1	0,1 %



Ministry of Power



Need to shift Climate Change Narrative from Total Emissions to Per Capita Emissions of each country: Union Minister for Power and New & Renewable Energy

Once the global South starts controlling the narrative, the world will be a much fairer place: Union Power and NRE Minister R. K. Singh

“Citizens need to come together and build new frameworks to address the climate crisis”: Tata Trusts CEO at 22nd Darbari Seth Memorial Lecture

प्रविष्टि तिथि: 25 AUG 2023 8:01PM by PIB Delhi

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=1952260®=3&lang=2>



Oil and gas
are a 'gift of
God'



Drill Ilham,
drill

COP 15, Copenhagen, 2009







Tropical Forest Forever Facility (TFFF) fell short of its \$25 billion initial target, raising only \$6.6 billion in pledges, a failure

- given the conference was held in Brazil's humid Amazon forest
- The personal engagement of Luiz Inácio Lula da Silva



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[FRANCE](#) [AFRICA](#) [INTERNATIONAL](#) [CULTURE](#) [SPORTS](#) [SCIENCE & TECHNOLOGY](#) [ENVIRONMENT](#)

Brazil greenlights oil drilling in sensitive Amazon region

Rio de Janeiro (Brazil) (AFP) – Petrobras said Monday it had received a license to drill for oil near the mouth of the Amazon River, enraging environmentalists who said the move would undermine Brazil's hosting of UN climate talks next month.

Issued on: 20/10/2025 - 21:56 Modified: 20/10/2025 - 23:33 ⌚ 3 min





THE TASKS OF THE COMMUNITY

Article 1

By this Treaty the HIGH CONTRACTING PARTIES establish among themselves a EUROPEAN ATOMIC ENERGY COMMUNITY (EURATOM).

It shall be the task of the Community to contribute to the raising of the standard of living in the Member States and to the development of relations with the other countries by creating the conditions necessary for the speedy establishment and growth of nuclear industries.



Samuel Furfari

The Truth About the COPs

30 years of illusions

Samuel Furfari

Préface de Carlo Ripa di Meana
Ancien Commissaire européen à l'environnement
Ancien Ministre italien de l'environnement

La vérité sur les COP

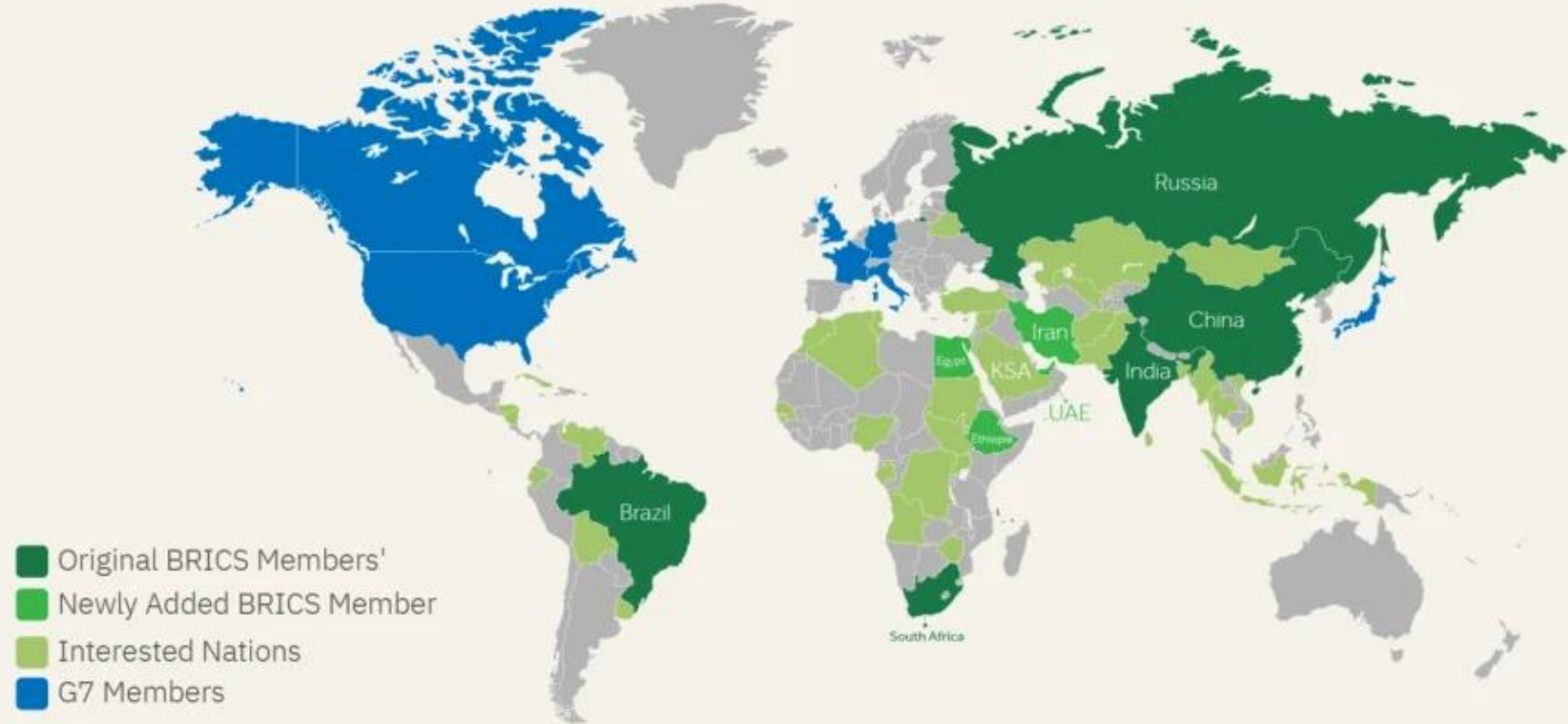
Trente ans d'illusions



L'ARTILLEUR

Building a New World "Brick by Brick"

Rising Powers vs. Established Order



	Oil (Gt)	Gas (Tm3)	Coal (Bt)
Potential of the BRICS	84,4	70,6	494
No BRICS	160.0	117.5	580
World	244,4	188,1	1074
% BRICS	35 %	38%	46%

Changes are coming...

Ecologie



Activistes devant l'entrée de la COP30, le 10 novembre.

United Nations Climate Change COP30 BRASIL AMAZONIA

#COP30

UN CLIMATE CHANGE CONFERENCE NOVEMBER 10-21, 2025

SAMUEL FURFARI

“Une COP tous les ans, cela n’a pas de sens”

Samuel Furfari a suivi toutes les COP en tant qu'expert de la Direction générale de l'énergie à la Commission européenne. Il dénonce, dans son livre choc, les illusions engendrées par ces sommets qui ne changent rien aux émissions de CO₂.

Propos recueillis par Charles Jaigu

La 31^e COP s'est ouverte au Brésil. Les précédentes ont-elles servi à quelque chose ?

Très peu ! Au risque d'avoir l'air d'un vieux combattant, je dirais que les États n'ont pas attendu les COP pour prendre conscience d'un double problème : la crise de l'énergie et le réchauffement climatique. La crise pétrolière des années 1970 a donné le coup d'envoi. Les ingénieurs ont depuis lors cherché avec acharnement des solutions de remplacement. J'ai moi-même été embauché à la Commission européenne pour cette raison, dans les



Samuel Furfari, ex-fonctionnaire européen, est l'auteur d'une vingtaine d'ouvrages sur l'énergie.

années 1980. Mais personne n'a trouvé ces solutions, en dehors de celles qui existaient déjà : le nucléaire et l'hydroélectricité, ce qui est déjà beaucoup. Ni l'hydrogène, ni l'éolien, ni le solaire n'ont été capables de se substituer aux énergies fossiles, contrairement à ce que nous ont fait croire les marchands de sable.

Vous abordez la question à partir d'un problème spécifique : la hausse du prix de l'énergie et la rarefaction des réserves. Les écologistes mettaient en avant le réchauffement climatique.

Il y a une différence importante. Notre réflexion était pragmatique.

44/ Le Figaro Magazine / 21 novembre 2025



National Security Strategy

of the United States of America

November 2025



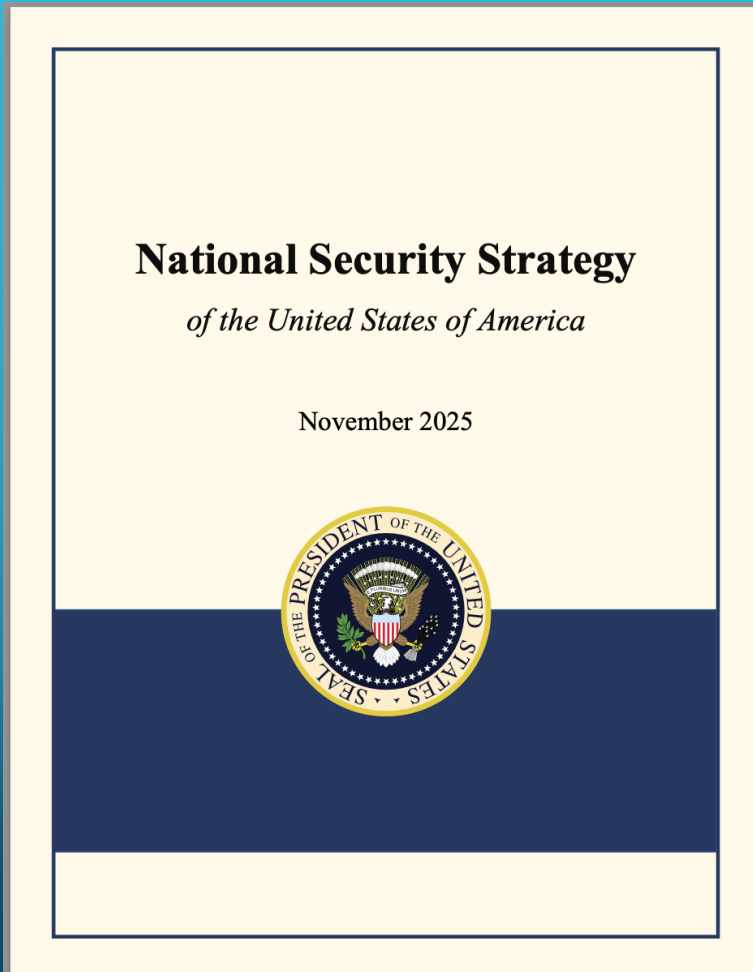
We reject the disastrous “climate change” and “Net Zero” ideologies that have so greatly harmed Europe, threaten the United States, and subsidize our adversaries.

P 14

European Decadence

"[Europe's] economic decline is overshadowed by the real and darker prospect of the disappearance of civilisation. Among the more significant problems facing Europe are the activities of the European Union and other transnational bodies that **undermine political freedom** and sovereignty, migration policies that are transforming the continent and creating conflict, **censorship of free speech** and repression of political opposition, the collapse of birth rates, and the loss of national identities and self-confidence.

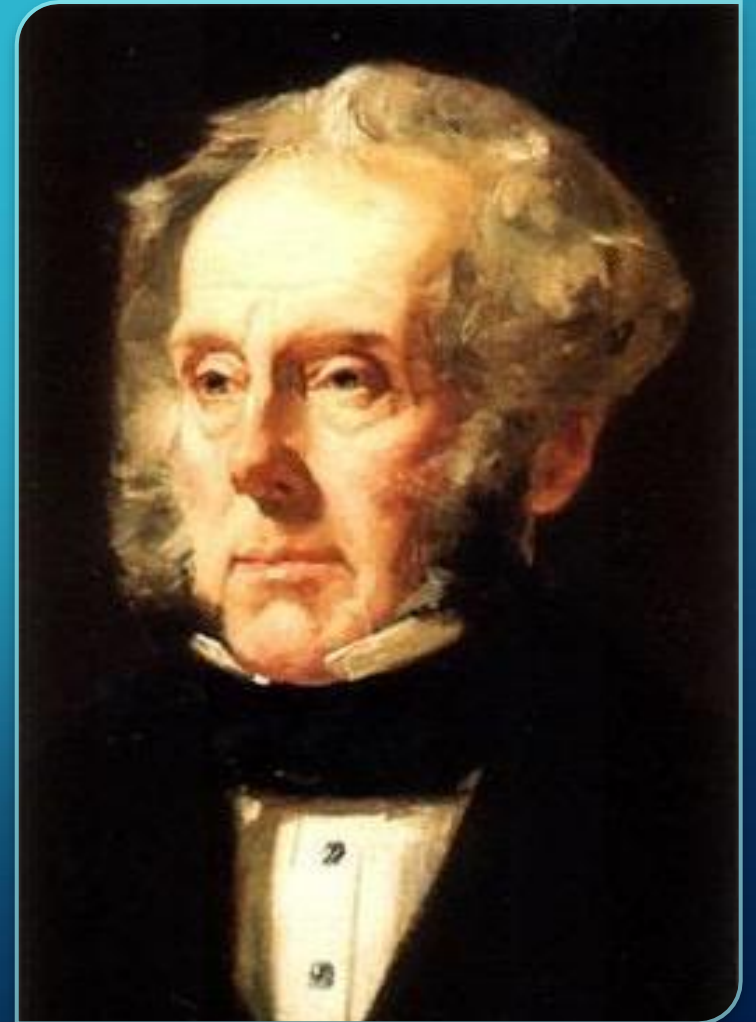
If current trends continue, the continent will be unrecognisable in 20 years or less. (...) **We want Europe to remain European**, to regain confidence in its civilisation, and to abandon its failed strategy of regulatory suffocation."



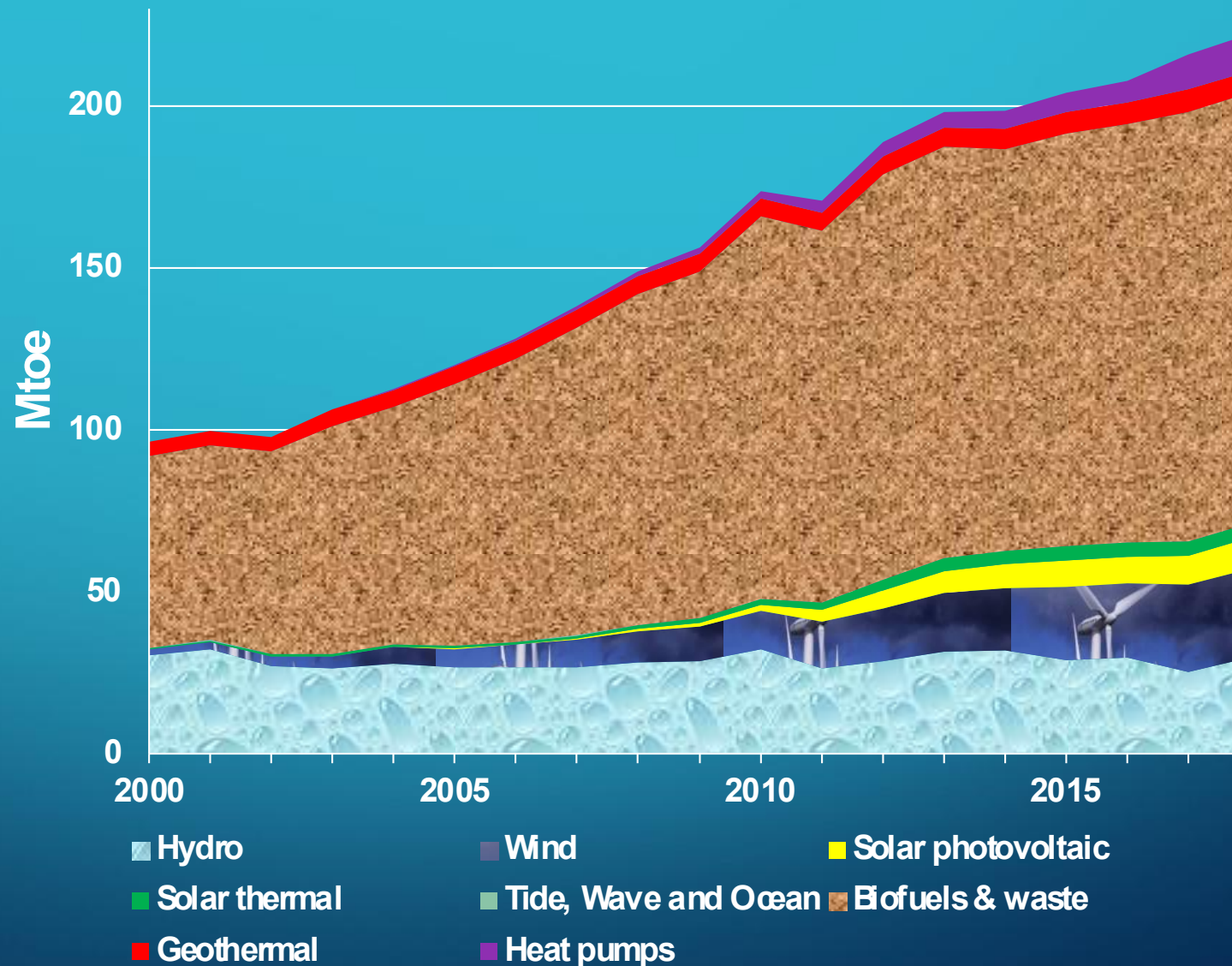
In geopolitics, there is no morality

We have no eternal allies nor perpetual enemies. Our interests are eternal and perpetual, and it is our duty to pursue those interests.

Lord Palmerston, Foreign Secretary of Great Britain and then Prime Minister (1784-1839)

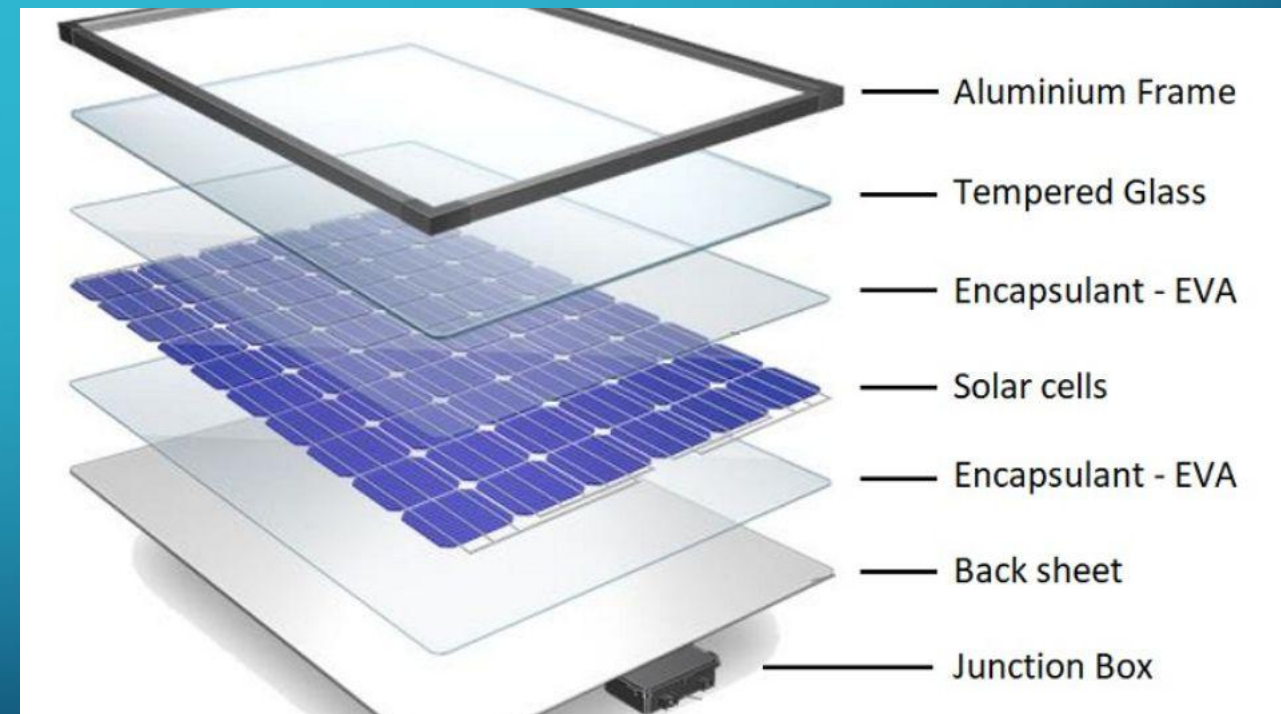


Development of "renewable energy" in the EU



If You Want 'Renewable Energy,' Get Ready to Dig

Building one wind turbine requires 900 tons of steel, 2,500 tons of concrete and 45 tons of plastic.



EVA = ethylene vinyl acetate



BUSINESS

‘The hydrogen economy is blooming’ – European Commission President Ursula von der Leyen

This week, the EU is launching its first auction of the European Hydrogen Bank



Von der Leyen to continue prioritising green hydrogen in second five-year term following re-election

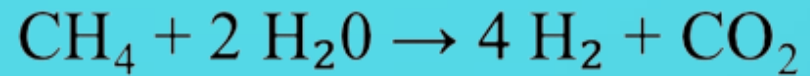
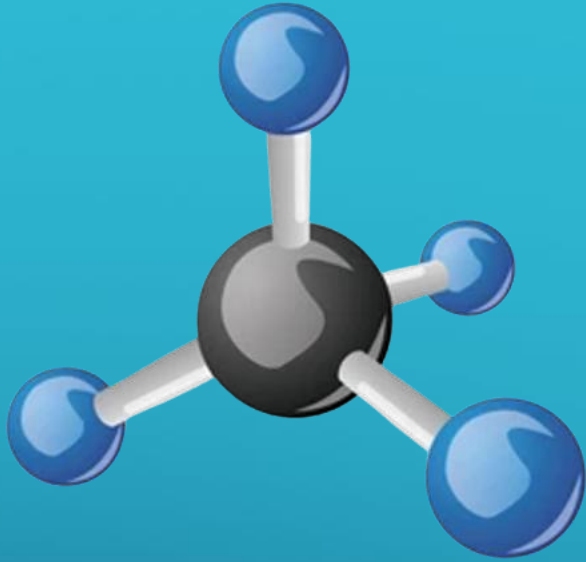
Newly re-elected European Commission president vows to launch Clean Industrial Deal in first 100 days



Copyrighted Material
Samuel Furfari



Why are the 130 million tonnes of H₂ produced almost exclusively from methane conversion?

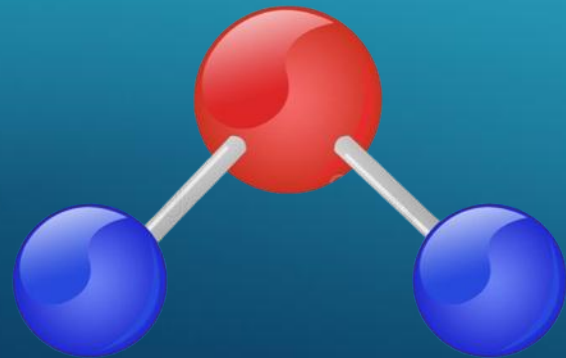


$$\Delta H = -164.7 \text{ kJ}$$



$$\Delta H = -285.8 \text{ kJ}$$

$$\frac{4 \times 285.8}{164.7} = 6.9$$



Key role of Russia thanks to its very cheap gas price

- Leader in H₂
- Leader in ammonia
- Leader in fertilizer





Burning hydrogen is like
burn a Louis Vuitton handbag to
produce heat

EUROPA UNITA PER IL PROGRESSO E PER LA PACE

"Finalmente le frontiere
in Europa vengano
abbassate e si abbia
una Comunità solida
e una libera circolazione
sia per le persone
sia per le cose
e soprattutto per il lavoro
DE GASPERI



Roma, 25 marzo 1957

FIRMA DEI TRATTATI

THE TASKS OF THE COMMUNITY

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It shall be the task of the Community
to contribute to the raising of the standard
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in the Member States and to the development of relations
with the other countries by creating the conditions
necessary for the speedy establishment and growth of
nuclear industries.

<https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:12016A/TXT&qid=1700135847292>

Energy addition, not transition: fossil fuels remain the bedrock of progress

