

AGENDA 2024 Good Future Making

(Beyond COP28 & Halfway 2030)

VERSION 1.2 (Concept)

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Summary

AGENDA2024 focuses on the key drivers of change, realities, and opportunities for good future making on Energy and Energy Transition, Paris Agreement, and the UNSDGs,

The year 2024 is an important year, as for the continued test of our Global Institutions and to see if our energy-economic architectures and sector are truly able to mend the curve (from System A towards System B):

How to reliably, sustainably, and harmoniously fuel and provide energy to all people on the planet?

The direction of our economic development, and the aggregate of our country's developments matter today, as we already have crossed some serious planetary and social inequalities.

Some of the other key drivers of change include the direction of our human development, the strength of our underground (for energy sources), our geo-politics and the relationship with nature.

In essence, we are invited to transit, re-imagine and transform our present "System A" into (much more of) "System B".

AGENDA2024 aims to focus on good future making, is a message of Hope and is to support, inspire and stimulate You for the better dialogues and to help mend You and (Y)our organization for the positive progressive changes that are needed.

Our Good Future- simply deserves that!



(Beyond COP28 & Halfway 2030)	1
Summary	2
AGENDA2024 Good Future Making	4
5 Key Urgencies (Drivers of Change)	5
The Direction of our Human Development	5
Strength of our Underground	6
Planetary Boundaries and our Relationship with Nature	7
COP28 Dubai "Action Builds Hope"	9
Negotiated Text	12
EFOW early statements and observations- on "this and that ":	16
Geo-Politics of Emotions	20
" Two Schools" and " Two Systems"	22
Our Opportunities in Agenda2024- and to allow some Good Future Making.	24
Fossil Fuels: Make Room for the New- allow for the Great Electrification.	25
Trade and Trade Relations	27
Scale and Speed: Horizontal and Vertical Integration of the New Power Grids (central and de-central)	29
Reforms	31
AGENDA2024: Let us focus on some Good Future Making	33
To Conclude : "One Ideal"	34
Appendix 1. Elders Statement	37
Appendix 2. IEF Statement: IEF Welcomes COP28 Recognition or Multiple Pathways to Net Zero)
Appendix 3. The world reacts to the new climate deal	
Appendix 4: India will continue to rely on coal power until it becomes developed count Environment Minister	try:
Appendix 5. Reflections on (some of main text) by Dr Singh- former General Manager (Exploration) ONGC, India (Sample Only)	



AGENDA2024 Good Future Making

New Energy Realities, Climate and UN SDGs: Some of our Urgencies, Realities and our Opportunities (for Good Future Making).

In this brief, beyond COP28 and Halfway 2030, I like to share a couple of words, and what comes to mind, if I look at the state of Energy, Energy Transition, Climate (Mitigation) Actions, and the attainment of the UN SDGs.

We are now Halfway 2030- and after COP28 (and the Global Stock Take)- it is a good moment to look back over the first period of our organization for the arrangement of the change: Energy Transition, Paris Agreement and the UNSDGs.

With these brief remarks, we can look also at some of our Urgencies (Drivers of Change), Realities and Opportunities - over the year, and our years ahead (the Horizon).

In many ways, the year 2024 is an important year.

Not in the least for reasons of the 40 democracy super bowl- leadership elections¹ that are to shape the direction of our global politics, but also the continued test of our global institutions² and to see if our energy-economic architecture & system and the energy sector³ - are truly able to mend the curve.

Aim of this brief is simple:

To support, inspire and stimulate You for the better dialogues and to help mend You and (Y)our organization for the positive progressive changes that are needed.

Our Good Future- simply deserves that!

https://www.theguardian.com/world/2023/dec/17/democracys-super-bowl-40-elections-that-will-shape-glo

bal-politics-in-2024?CMP=Share AndroidApp Other ² E.g. https://www.un.org/en/common-agenda/summit-of-the-future

³ Nationally, Regionally and Globally



5 Key Urgencies (Drivers of Change)

The Direction of our Human Development

We are seemingly living in a Tale of Two Cities: our success to (unlock energy and) bring comfort and modernity into our Life, Lifestyles and Societies (around the Globe) has also become one of our biggest challenges.

When China joined the WTO, Global GDP stood at 34 Trillion USD. Now, 23 years onwards-and with this new engine of modernity (from the East) added to (the earlier West) the global economy is about 100 Trillion USD. With "the modernity engines on" and with plans and ambitions for new growth and wealth distribution onto the Global South, in combination with a population growth from 6 bn (year 2000) to 9.7 bn by 2050 - bankers and institutes are expecting a Global Economy of 200 Trillion USD by mid-century.

Now, today, and we all know this- our wealth and energy are not evenly distributed. We have the very rich 1% or 10% and we have people very poor, 4bn at the bottom of the pyramid- in countries and in the Global South. We have the Haves and the Have nots.

Now- another simple rule of thumb- in energy land is: growth in wealth (combined with growth in population) gives growth in Energy.

If nothing changes (in our direction of growth)- and if we keep pushing "the engines of growth", unabated - reputable energy institutes such as EIA, EIF, OPEC prognoses that our world energy consumption (and production) is to rise from the present 225 mboe/d (20TW) till at least 350 mboe/d. (30- 50? TW)

Now, one thing stands out here as well.

As and when the UNSDGs were adopted in 2015, measurements and yardsticks were developed to review and measure "the health" of an economy on all its sustainability criteria (ecology, economy, sociology).



As it stands- neither the Economic Engine of the US and that of China are presently "sustainable". Not individually, but surely not- if those two economies are the lead (economic model) example- to the rest, ie, Global South.

So- we need to heal some of the unhealthy habits and intense petrol-fuelled in our lifestyles and economic development models- if our wish is to attain sustainable and fair societies- to all.

The direction of our individual human, economic development, as well the aggregate of our country developments- does matter today, as we are and have been crossing already some serious planetary and social (inequality) boundaries, today.

Strength of our Underground

At the start of this century, and in BigOil, engineers of the underground and future energy scenarios could already see some clouds on the Horizon. Looking back, over the 20th century-they could see what magic and wonder this miracle Petroleum (Oil, Gas) has given humanity: comfort, modernity, transport, industries, new lifestyles and habits.

However, at the turn of the century- and again looking both back and into the Horizon- also the conclusion could be made (and yet relevant)- that the easy and big basins (reservoirs) of Oil and Gas were discovered in the first parts of last century- and that the age of easy oil and gas was coming to an end (also with the present rates of depletions). Reserves once produced and consumed- are simply depleted.

The relevant question for this century truly is and was:

How do we fuel and provide energy to all people (economies) of this planet, reliably, sustainable and in harmony? How do we create sustainable energy-economies, and stay out of trouble?

The answer (to this question)- not so self-evident.

With the onset of renewables, - very welcome and important to have- this question however remains- as it is also in the mining of the earth minerals for the renewables- that we may find geo-politics, EROI, circularity or resource efficiency constraints, as well.

Next to that, and not unimportantly- energy fuels economies- and economies are based and built on materials from the underground. How long can we see the mining capacities and efficiencies that can stand the test of time (this century or 7 generations long)?



Planetary Boundaries and our Relationship with Nature

It was in 1972, the Club Of Rome published its "Limits to Growth" report. In the same year, the UN nations established the UNEP (United Nations Environmental Program) organization.

Now 50 year onwards, and a little different than 50 years ago, the science community has fully boarded the concerns with our natural habitat and environment.:

On Plastics and Pollutions- in the Air, Oceans and on our Lands, in our over-exploitation of our Seas and Land, On (land and soil) erosions, In our loss of biodiversities, in intensities of farming and cattle stock - overall- in our rather extractive and commercial mis-use of our Nature.

From the David Attenboroghs of this world ("we have grown the wild into the mild")- towards the environmental movement, Earth4All.org and our Scientists- such and Johan Rockstromtodays science indicate that (today) we have already crossed 6 out of the 9 planetary boundaries, and if nothing changes- we will soon see ourselves in some serious troubles.

Now- and to say it a little bit more politely or poetically:

Pope Francis wrote an (ethical compass) encyclical on this: Laudato Si!- and to remind humanity that our World, Living World, Nature - is also something of Awe and Wonder, and invites us to be cared for- also for the generations to come: not to be indifferent about, nor to destroy this.:

And I quote:

- 1. "We are faced...with **one complex crisis** which is **both social and environmental**." (*Laudato Si'*, 139)
- "Unless we struggle with these deeper issues, I do not believe that our concern for ecology will
 produce significant results." (Laudato Si', 160)
- 3. "There can be no ecology without an adequate anthropology." (Laudato Si', 118)
- 4. "[E]nvironmental problems cannot be separated from... how individuals relate to themselves." (Laudato Si', 141)



Seeing and experiencing the Beauty in/of Nature.and Restoring our Relationships (away from spreadsheets, yields and exploitation factors).

It is all to do with the relationship between our Engineered Economies (" Tree of Knowledge, Money, Power, Greed"), Between Ourselves, Our Lifestyles and that with of Nature ("Tree of Life"):

Harmony and Balance.



COP28 Dubai "Action Builds Hope"

"Loss and Damage", with "Triple Renewables, Double Energy Efficiencies and Transition Away from Fossil Fuels"

COP28 came at an important moment of time. Halfway 2030- and with a first Global Stock Take (of Nations Actions, Results) after the Paris Agreement.

COP28 also came in a time- when the science on climate warnings had become ever more stern. In preparation to this COP- experts concluded that , and based on all the NDCs collated, that the world was still to see an emission rise of +9% till 2030, whereas the need for safe climate (<1.5 Degrees) would be a need of a 43% emission reduction by 2030.

The verdict was clear. With the latest 6th round science-based synthesis report, WMO actual past weather reports, global stock take and our present going abouts- we were yet on a trajectory of (an estimated) 3 Degrees warming by end Century. Scientists were all (y)telling this at us. ⁴

The Presidency of this COP28 was in hands of Dr Sultan Al-Jaber, also CEO of Adnoc. Many words and sentiments were spilled, and opinionated - in advance and during this COP- that a leader of a Fossil-Fuel Nation and Corporation was to lead such an important UN (Climate) Conference.⁵

Now- in that setting, COP took place under thus the (contested) Presidency of UAE, dr Sultan Al-Jaber, and with surely some key and testing moments⁶ over the COP weeks, with some serious rumors and fall-outs (e.g. <u>Dialogue between Sultan Al-Jaber with Elder Mary Robinson</u>)

The UAE managed to attract the most global attendance ever: over 80,000 registered visitors to the 2-week event.

(You could call it: "The Biggest Party on Planet Earth") 7

https://www.bbc.com/news/science-environment-67508331

⁴ former US Secretaries of Energy Steven Chu, Johan Rockstrom and James Hansen et. al. and the whole of UN, UNEP, IPCCC

⁵ "You do not ask the Turkey to prepare our Xmas meal"

⁶ UAE planned to use COP28 to make oil deals -

⁷ https://insideclimatenews.org/news/25122023/climate-treadmill-at-cop28-not-going-anywhere/



At the start of the event, the Organizers were proud to announce a breakthrough in and with the negotiated agreement on a Loss & Damage Fund.⁸

The Organizers (of this COP) further lauded themselves themselves on its Hope , Action Orientation and Optimism, on its inclusiveness (including the global fossil fuel industry) and on the amount of new breakthrough initiatives announces, pledged and declared: with their two track approach ("Action Builds Hope" - (Green and Blue- Pledges) and the formal COP Negotiating Process.,



8

https://www.theguardian.com/environment/2023/dec/06/700m-pledged-to-loss-and-damage-fund-cop28-covers-less-than-02-percent-needed. Let us admit the fund is largely underfunded for its (future) intent, and with Rich and Developed Nations keeping their hands clean by proclaiming it to be "an human aid" fund, not a liability responsibility for past and present emissions. In addition, everybody knows, that if Climate Science holds and proofs right, and/or climate pivot points are reached, adaptation and loss and damage costs can run into the trillions of USD (not billions or millions)- and, as is, we are to see and expect new divisions between the Rich (who are likely to protect and defend their own Paradises) and the Poor. In country and in between the countries..





COP is a big machine and a big global event, and- as such- you can actually speak about 5 or 6 different work tracks - in Parallel.⁹

- 1. Pre-COPs and Regional Climate Action Weeks (AU, MENA, LAC, AOSIS)
- 2. The formal negotiations between the Parties, ministers, countries
- 3. US John Kerry- and Xie Zenhua of China: Sunnyland Agreement
- 4. Show (Market, Circus) with High-Level Speeches and Pledges to raise ambition and collectively make it to work.
- 5. Business and Banking Community Side Events: Best Practices, Consultant and Corporate Commercials, New Sales (!!!) and Finance, Finance, Finance incl ETS.
- 6. Mainstreet News, social media, NGOs et

First of all, and I keep naming this- today we have had our 28th COP (ever after COP1 in 1995).- but only this COP succeeded to mention the sentence:" the call to transition away from fossil fuels in the energy systems".

11

⁹ https://insideclimatenews.org/news/25122023/climate-treadmill-at-cop28-not-going-anywhere/



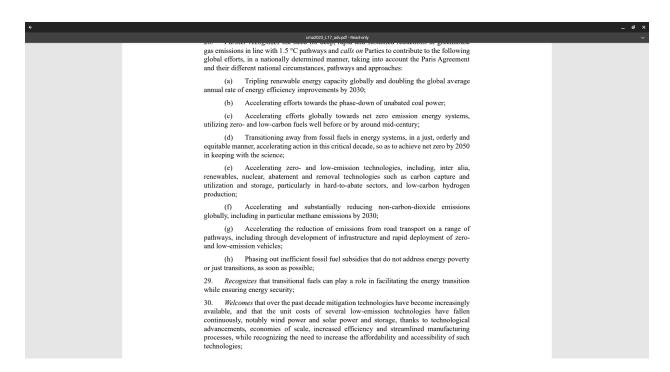
Negotiated Text

At the conclusion of this COP, and on the final (presidency proposed) text on the key negotiation agenda item Global Stocktake- this fall-out (or the veil of deception) was felt again-<u>in the final draft text issues for approval:</u>, a days before the final gaffle, and agreements.

The more stern words on (a world joint) fossil-fuel phase out were (single handedly) supplanted with a rather weak, and a cafetaria- model of options- on mitigation and emission reductions.

BBC Reports: COP28: UN climate talks in jeopardy in fossil fuel backlash

To some surprise- and a few days later- the world could witness 'the Historic COP28 Outcome" and with the text amended back into what the various negotiating blocks considered "consensus".







Go to "Historic" Consensus on Global Stock Take: "Transition Away from Fossil Fuels

A first re-action,- on all this - in wonder, one could exasperate:

How come, that days in advance- and **after a year (!) of COP28 negotiations on this-** the proposed final negotiated text by the President (on GST) was so weak in ambition- and so in favor of the established, incumbent and vested (fossil fuel, growth) interests?- and why was the final text so much more balanced- and with some more true Hope and aspiration: "on transition"? What was here the meaning or the intent?

In Dr Sultan Jabers Own Words:

" He revealed some of his feelings as the negotiations dragged on from Tuesday night into the early hours of Wednesday...

After many hours of no sleep and shuttle diplomacy....he said he looked around at 2:30 am on Wednesday to see the (...) negotiating rooms full of people and began to feel hopeful that a new draft text would be accepted.



That was the moment where I suddenly realized that I was watching consensus coming to life"10

Let me continue, and first share you here a couple of first and early re-actions to the outcome of these negotiations at this COP28:- and you will quickly digest (with me) that also this COP28 has seen already its multiple interpretations- of what these final day negotiations mean:

The Elders (see further Appendix 1)

The Elders welcome the signal from COP28 that the fossil fuel era must end. But the actions agreed in Dubai are too little, too late. World leaders need more urgent ambition in addressing the existential threat of the climate crisis, and supporting the most vulnerable.

SG IEF Joseph McMonigle (see further Appendix 2)

RIYADH, Saudi Arabia – The International Energy Forum congratulated the United Arab Emirates for bringing the UN COP28 climate conference to a successful conclusion with a recognition that each country must chart its own course towards carbon neutrality.

Erik Solheim (former Chief of UNEP):

The Climate meeting in Dubai finally agreed that the world needs to "transition away from fossil fuels". This is fine and a;ll the good people who worked hard for that, should celebrate.

BUt I have attended nearly all climate conferences since Bali2007. I know the decision by itself is unlikely to have any major impact on the world.

My Nation, Norway, for example, has promised to cut carbon emissions by 55% by 2030. Last year we cut 1%. Yes- 1%! While signing on to the pledge, Norway is not even close to deliver any "transition away from fossil fuels". There are many Norways out there where the political leaders struggle to do the right things.

¹⁰



Mohamed Adow, the director of Power Shift Africa¹¹

the "transition" in this agreement "is not funded or fair."

"We're still missing enough finance to help developing countries decarbonise and there needs to be greater expectation on rich fossil fuel producers to phase out first," Adow said.

Dr. Sultan Al-Jaber (in an Interview (post-COP28) to the Guardian NewsPaper)

The president of the Cop28 climate summit will continue with his oil company's record investment in oil and gas production, despite coordinating a global deal to "transition away" from fossil fuels.

Sultan Al Jaber, who is also the chief executive of the United Arab Emirates' national oil and gas company, Adnoc, told the Guardian the company had to satisfy demand for fossil fuels.

"My approach is very simple: it is that we will continue to act as a responsible, reliable supplier of low-carbon energy, and the world will need the lowest-carbon barrels at the lowest cost," he said, arguing that Adnoc's hydrocarbons are lower carbon because they are extracted efficiently and with less leakage than other sources.

"At the end of the day, remember, it is the demand that will decide and dictate what sort of energy source will help meet the growing global energy requirements," he added.

And with a bit of Russian Understatement and Humor- (see New York Times article-Appendix 3)

"We are not happy but we all agree." — Russian federation delegate Mikhail Gitarskiy, according to CNBC.

See also: Footnote ¹²	

https://edition.cnn.com/2023/12/13/climate/cop28-climate-summit-makes-unprecedented-call-for-transition -away-from-fossil-fuels-but-cavernous-loopholes-remain

¹² https://insideclimatenews.org/news/25122023/climate-treadmill-at-cop28-not-going-anywhere/



EFOW early statements and observations- on "this and that ":

Let me share you here a couple of first statements and observations: the good, the bad and the ugly.

Let me start with the latter:

Firstly,

The re-actions by IEF (/Saudi Arabia) and Dr. Sultan Al Jaber himself point to a first loophole (created, seen, interpreted or wanted) in the final negotiated text "transition away from fossil fuels"

Parties are rather quick to call that the responsibility for "this transition away" is at the consumer (demand-side) and that (fossil fuel, Oil, Gas, Coal) producing nations or corporations are only to follow- what the market or national governments ask them to do.

It is no secret, Halfway 2030, and after COVID and two Wars (Ukraine (weaponisation of Energy, Price) and now Gaza)- that many governments, economies and citizens around the world, are indebted or tightened- and suffer from the Uncertainty, Price of Energy into their Homes, Cars, Economies, Industries.

Add to this: the up- and coming (presidential, democratic) elections over 2024: and you know the answer.¹³

So in essence-today, there is not enough trust, cash or organized principles in hands- in public or private- to invest, or build the capacities required for the new energy system "Triple Renewables, Double Efficiencies".

That is a fact.

In addition, and that is a small loophole, as well, Parties full-well know that countries East of Poland and South of Italy (in essence: the full Global South) are very very hungry for step-ups and growth in affordable, reliable energy.

13

https://www.theguardian.com/world/2023/dec/17/democracys-super-bowl-40-elections-that-will-shape-global-politics-in-2024?CMP=Share_AndroidApp_Other



OII, Coal and Gas Companies know best how to fulfill ministers and country (energy step-up) needs- with the stroke of a Big-Pen Contract: one signature to unlock new energies.

The new system "Triple Renewables, Double Efficiency" requires much more co-ordination, new investments in mining and capacity building, and efforts of staff, trade and training- than the incumbent option (which is at an global market advantage):

As such- the "secret" plans of/by e.g. Saudi Arabia/ Saudi Aramco (but also Western BigOil) to roll-out cheap (gas) power, diesel and ICE vehicles (als gas powered) to the Global South, is no secret- but a day to day reality- to the ones who are working in this Industry,

Secondly,

The "transitioning away from fossil fuels", but without properly guiding this with organized principles- has a range and quite a rich mosaic of intended and/or unintended possibilities in consequences:

Let me share you here a few:

First of all, and not unimportantly- the Fossil-Fuel Producing Nations (and BlgOil Corporations) can now finally, and all state- that they are aligned and attuned with the Paris Agreement, and that they are "transition away" from fossil fuels (without a legally binding volumes, scales or transition pathways).

This surely helps the Boards of the BigOil companies in the West, who can now be relieved and state -towards the courtrooms and climate change movement- that they are in line with the Paris Agreement, but that off course- the speed, rate and transition pathways can only be realistic - and determined by the markets and consuming (demand). No more arguments.¹⁴

To that end: please read Erik Solheims remarks - from Norway - here above.- and that should ring you some bells.

Another "little" unintended consequence of this "single sentence" in the negotiated text may be that holders of Fossil Fuel Reserves (Coal, Oil, Gas) will now do everything possible, to step-up on the gas pedal- and ensure that their reserves sees markets and can be monetized:

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¹⁴ Company Executives, such as Darren Woods, will also feel encouraged, safe, secure and good with this outcomeas it adds to earlier legal defense taken by the Company: Exxon is helping and supporting the energy transition- but off course, only as and when the technologies of the "other energy system" become available or are competitive with their own produce. Exxons Court Case, and sueing of "Follow-This" - just an example of what this renewed confidence means



In essence, with "this single sentence" in the negotiated text- we may well be standing at the cusp of a new Oil, Gas, Coal producing spree.

Re-actions from (Oil, Gas, Coal) traders and markets- on the COP28 outcome- seem to collaborate this.

Finally, and not in the least,

Add to this- and not unimportantly- the position and viewpoints from the Large and Rapid Developing Nations, the Global South, so to speak, on their needs for (fossil fuel) powered developments, before they see room to transition their societies towards net zero, or renewables powered societies. And how they see and view the historic responsibilities of the Richer Developed West.

Minister Yadav, from India, expresses these views- loud and clear- in an interview, straight after COP28. A message better well understood: See Appendix 4.

True expertise and better ways of understanding and working together- is and will be needed, to craft pathways that can and know-how to combine the needs of both worlds!

Now,

Let me turn towards the positive and some "new possibility thinking" - and what with "good future making" - we now can hopefully unleash:

First of all, and not unimportant, this single sentence "transition away from fossil fuels" provides the Leaders who aspire to be part and realization of "the new energy system" - with some new convening powers:

to use this sentence Locally, Nationally and Regionally - and to get the actors and agents of "the present energy system" together with the builders of "the new energy system" - in one room- and re-open and re-initiate the better conversations for change, and capacity building for the transition.



Gobally, and I have stated this earlier, the COP process (on mitigation) would be much more advanced- if negotiators better understood the various maturities and needs of energy systems ¹⁵(and hence: capacities for transition) in the different regions and power blocks:

- 1. (Rich) Developed Nations
- 2. Large, Rapid Developing and Emerging Nations- e.g. China, India, Indonesia, Brasil, see statement Appendix 4.
- 3. Countries bestowed with Rich Energy Resources (Coal, Oil, Gas)- Russia, Saudi, Qatar, Iran, UAE, Australia
- 4. Countries bestowed with Rich Earth Minerals Resources or Renewables Manufacturing Capacities- China, Australia, Congo, Chili, Argentine, Brasil, etc.
- 5. Poor Nations and Small (Island) states

Earlier, and back in 2014-2015 I observed, and this year it was (the ClubOfRome) <u>Earth4All</u> <u>Sandra Dixon-DeCleve</u> that also noted: we should stop the negotiations (negotiate to negotiate), but see to reform these COPS into workable and 365 days a year REGIONAL action-orientated and platform delivery organization.

Our best chance of good COPs seemingly is and resides with breaking-down the Global COP into Regional Climate Action Summits and Regional Delivery Organisations (MENA, AU, ASEAN, SCO, Asia, EU, Americas, LAC, AOSIS, etc).

And if you want to do this well: please integrate Energy- Economy- Climate and Ecology Developments in-one-go (the 5 Urgencies):

As it is (all) about Sustainable Development (IN SDGs) or the 5 Urgencies

(Surely more than wording such as: phase-down coal and inefficient fossil fuel subsidies.

And the second big challenge is:

And you know, these countries- and at times quite "messy"- have Growth, GDP, Jobs Jobs Jobs, Covid Recovery, Impact of Wars on Economy, Inflation, Debts and Price, and a whole lot of other things on their administration agenda. Climate Change not their first priority- if it does not hurt their economies, or bring in new cash.,

That is

"Action Builds Hope" is better to be re-framed and stated "Re-organisation Builds Hope"

¹⁵ EFOW manifest: 99 Theses to Build Back Better (2021)



Geo-Politics of Emotions

The (continued geo-political) roller-coaster over Year 2023 (from the China Balloon Spy-case to the Words Spoken and the War on Hamas) has made several global leadership realize (e,g, Blocks (G7, BRICSplus, ASEAN, AU, Arab League), Country, Corporations) - that we have left the (relative predictable) geo-political and institutionalized order of post- WW2, and that we are moving - towards a more unpredictable, uncertain multi-polar world.

And we all understand, that the (working) relationships between the BigBrother Nations- such as China, US and Russia - has a strong influence and effect- on the sentiments, trust, commitment and workability of (common care) programs- (between these Blocks) - such as Paris Agreement, UNSDGs, Global Investment and Trade, Peace, Stability.

2024 is set to become a super-bowl year with over 40 (new, democratic) leadership elections- in (among others) Taiwan, Russia, Ukraine, India, US and EU (parliament) ¹⁶

The turmoil and dramas in US Politics - between the Republicans and Democrats- gives some of our global leadership enough reasons for some concerns.

How about (the stability and continued US commitments and) support for the Ukraine, Paris Agreement, NATO,UN, etc. etc. - post 2024?

China XiJinPing friendly visit and speech - in San Francisco, in November 2023 - and to seek some form of detente and restoration of trust, friendship with the US Government and promote its open economy to the key US Business Corporations may have provided our world with some welcome relief;

But how long will and can this last in our Game of Go? And is this for real?

lan Bremmer, in some humor, observed: It is the US that has yet the strongest and best performing Economy, however its political system weakens by the day. In China, the reverse seems today to be the case.

16

https://www.theguardian.com/world/2023/dec/17/democracys-super-bowl-40-elections-that-will-shape-global-politics-in-2024?CMP=Share_AndroidApp_Other



Russia, remains rather steady and stern- on the origins, reasons and ways of going about, nationally and internationally- the seismic shifts happening before our very eyes:

In his annual address to the press, President Putin seemed rather relaxed, constant on the military operation in Ukraine and guite sharp eyed on the realities he sees his Russia is in, ¹⁷

Russia Lavrov, at Doha Forum in December 2023, remained rather bullish on his bashing of the West.

The War in the Ukraine has done a lot of harm, on our Peace, Stability and Predictability of our present operating global energy system.- with Russia clearly "in a clash" with the West.

Both in the Middle-East and Global South, countries and parties have taken a rather neutral, if not negative stance towards the views, actions and required policy actions (e.g. sanctions) of the West.

At the G20, India took the helm and showed further signs of this new voice, confidence and aspirations of the Global South. ¹⁸

Was it not in the Corona period- that the West was "first" in securing its vaccines? And do we not see a similar behavior now - by Europe and US- securing their (LNG, Gas, Oil) energy supplies - at cost- and for a Price (prize) the Global South cannot afford?

And how about the uptake of renewables inside their economies? What and how will the West start paying and contributing to make these- at similar volumes- available to the Global South.?

The war in Palestine (Between Israel and Hamas) adds and has added - for sure- some new oil on the fire- and weakening further some of the West (past) geo-political clout:

Raised (Energy) Sanctions can (still) back-fire, and - overall- "the Card of Fear", or "Energy Access and Security" ¹⁹- is again - Top of Mind, at Leading Policy makers and Military abound-From East to West.

¹⁹ E.g. Nordstream Blow-Up, Power Cables Break-up between Finland- Estland, China et. al. New Coal Rush: Hybrid Energy Systems (Local/ global)

¹⁷ And for sure, President Putin understand that time is his friend, here, With up- and coming (Presidential) Elections in Ukraine, USA, EU (new commission) and in his own Russia- leadership of the West is bound to be challenged and changed, and with some chance of a new tone of voice or position taking (on the war).

¹⁸ Re. Book: Why Bharat Matters by India FM S. Jaishankar



So you will understand our practice continued calls and efforts to build some new bridges, and to keep calling for Peace, and a peace making agenda- also from within the Energy Sector.²⁰

It is Peace - that we need- if our Common Home and Next Generations are us dear.

"Two Schools" and "Two Systems"

Now- in some very simple terms, and if I look at the organization of our (world) energy system-we have "Two Schools" and "Two Systems", invented and developed over the past century:

Atoms vs. Electrons

Fossil Fuels vs. Renewable Power Grids.

At present, the Fossil Fuel School has taken 80% of the world's energy system. "The Electrons" presently power (only) 20% of world primary energy demand and needs.

Well- you do not need to be a Rocket Scientist- to understand that this ratio has better to change- over the coming decades, and especially as our world energy system is still to grow and if our wish is to stay out of trouble on the 5 Urgencies (Drivers of Change) we are in.

In simple terms, and to my mind, Patrick Poyannee of TotalEnergies sees and states this right: we have to electrify as much of our economies and societies- and in order to reduce emissions and our dependencies on the (intense use of) fossil fuels.

The rather vague terms, and without any operating principles alluded- at COP28" "Transition Away from Fossil Fuels", "Triple Renewables & Double Energy Efficiency" - is clearly not good enough- in and for this decade-, and will (most likely) not bring our global community to the places we are better to see (and also based on our experiences gained over the first half of Energy Transition)²¹:

"if your train is on the wrong track, every station you come to is the wrong station" - quote by Bernard Malamud

Our dialogue hence better to advance, and focus on our learning over our first half, how best to make room for the new, how to shift from the present to our future, and allow better for the great

²⁰ Away from sanctions, weaponization, unfair rule settings, competitions and distrust.

²¹ 99 Theses to Build Back Better.



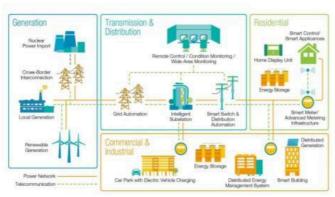
electrification, and the rise of energy-economies free of concerns: here and there, now and tomorrow..

In this chapter- I will help guide you to see some of our clear opportunities to advance - the whole of the energy sector, and global economy- towards this better, and more healthier place.

And a bit of healthy focus here, can not do us a lot of harm!

From 80-20 till (50-50) till 20-80 before 2050: 4 Trillion USD/annum







Our Opportunities in Agenda2024- and to allow some Good Future Making.

Now- earlier, and over the years, my practice has given the (energy) sector (some) guidance on where and how it is we can come to see to change, and advance some of our present predicaments.

Earlier I wrote a small manifest on some key lessons learned over the practice period: <u>99</u> <u>Theses to Build Back Better</u>.

You can read and download a free copy- here: Go to Slideshare

This manifest still very much worth your read, as it aims to help and guide you to see and understand "the whole of our playing field", and to focus on what may be urgent and important to change, for real.,

In the summer of 2023, I summarized <u>5 Key Steps We can Make Halfway 2030</u>, and to improve our rate of success: stepping-up our chances of good future making.

The 5 Key Steps were: (1) The Importance of Peace, (2) The Great Electrification (3) Slow-down and De-Growth Intense (Petro-) Economies and Industries- it is about the Volumes, you stupid! (4) Government and Business Governance Focus (5) Leadership - Walk in more Beauty.

Let me add- to the above- and provide you (very *very* briefly) a couple of practical examples where we could play a little better together, today, and allow for some good future making²²:

- 1. Fossil Fuels: Make Room for the New- allow for the Great Electrification.
- 2. Trade and Trade Relations
- 3. Scale and Speed: Horizontal and Vertical Integration of the New Power Grids (central and de-central)
- 4. Reforms

²² Please feel welcome to enquire our practice and practice experience- if you wish to explore some of the above- with us.



Fossil Fuels: Make Room for the New- allow for the Great Electrification.

Let me start, here- by quoting some (thesis) from my earlier manifest: 99 Theses to Build Back Better (2021);

I have come to believe that our time asks us to look differently at "Energy" ("an essential service for human life, human development- not just "a commodity" to be traded or profited from, and an industry in need of a new business model), and, hence, and especially for "the too big to fail" corporations is not solely to be in the hands of a management supervisory board, country and/or shareholders investors...

In Other words:

it is time to heal (or re-balance) some of the "not so handy factors" in our present. overly streamlined²³ energy trading, commodified and (free-)market based energy sector- and where energy corporations (and trading desks) are run on the basis of Portfolio Optimization, Profit Seeking and Shareholder value maximization²⁴- - without any firm(er) roles, commitments or responsibilities (duty of care to communities, countries, the whole) for the provision of affordable, available and energy transition or energy assurances- over time.

It is also time to change some of our WorldViews and Organised Ways - that once we are bestowed with energy resources (be it Oil, Gas, Sun, Wind or Minerals)- we seemingly believe and behave - we have the natural right to explore and monetize, and play "politics" ("divide and conquer") with it.

And with "the Big Elephant in the Room": Sovereignty does not mean that you are allowed to harm the Others, Nature, Future Generations or the Common Good: to the contrary!

²³ Where efficiencies prevail

vvnere eniciencies prevair

²⁴ and where energy is flowing to the ones willing to pay the highest price



The (market, many) ways and games of "Money, Power and the Prize", we see ourselves, today, in- on and over "Energy" - is better to transform with and in our Energy transition programs (System B).²⁵

"Making room for the New" - is thus not only a technical or technology- organizational change path we are invited to realize.

No!- it is also in our World View, Ways of our Market-, Sector- and Corporate(/Business Model) Organisations- we are to realize changes,- for more healthy ways forwards!

The ideal "Energy-Economies Free of Concerns. Here and There. Now and Tomorrow" is the antidote, the voice much needed- to some of "the ugly" habits slipped in, over the 100 years of intense petro-economies, or geo-politics (Me First!).

Again, and a bit differently worded:

If our aim and intent is to move from "System A" towards "System B" - then it can no longer be true that we remain in the hands of Portfolio-, Shareholder Optimization, Or Resource Country Leadership- that call or lobby for level playing fields, profit returns maximization or derivatives to action (as was the case in the Paris Agreement - and in country mitigation plans, up till now)

We will be (much) better (off) to see ourselves in Responsible Leadership hands committed and responsible for the true transition and transformation:

We are invited to re-invent the present Power and Energy markets and sectors: nationally, regionally, and internationally. Whilst in the 20st century Oil and Gas were the number One and preferred sources of supply, the 21st century is served if we know-how to redesign our present homes, cities, cars, transportation, urban lifestyles and working life- and power these functions from (as much) renewables power grids and solutions.- and let Oil and Gas become the Last Man, "the Keeper"- in the (energy) value chains. Our focus in the Energy Sector is to be on the engineering, manufacturing and installation capacities, capabilities and volumes we are to realize

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²⁵ The (energy) trilemma- everywhere now valid on this planet- Energy Security (or better: Availability), Affordability and Sustainability is a combined Government, Corporate and Social Responsibility to fill-in.



in and with new energy architectures and product/lifestyle re-designs.

The roles and responsibilities of the present incumbents (Large and Major Oil and Gas Corporations IOCs/ NOCs) in our World Energy System are better to change and can be greatly advanced:..

Trade and Trade Relations

It is in our trade and trade relations, also in the energy sector- that we can promote and advance good future making-for real.

Firstly,

It was President Macron, most recently, who acknowledged- that if the UNSDGs and Paris Agreement are dear to ourselves- the established global business corporations will have to adapt ways of going about, and in their trade and investment behaviors-26

In the energy sector, Dr. Valerie Marcel²⁷, and at Chatham House— is leading an initiative to advance the license and licensing conditions of new Oil and Gas field developmentsin the Global South.

First of all, her work is to ensure that (Poor) Global South countries will see the proper rights for (natural resource) development,

Combined,

And very simplified stated:

if Richer (or Large Developing) Nations (or Corporations) are wanting to explore and export (oil, gas, mineral) resources from poorer countries back into their own home markets- how can this still continue if (the poorer) people of these Global South Export Countries are yet without the basic comfort of energy, food, water, shelter, etc?

A simple pledge here is:

https://ecfr.eu/article/a-north-south-lifeline-what-macron-hopes-to-accomplish-with-the-summit-for-a-newglobal-financing-pact/
²⁷ https://www.chathamhouse.org/about-us/our-people/valerie-marcel



Please, Ladies and Gentlemen of Good Fortunes: Please organize and co-invest in these Oil & Gas, Natural Resource Exploitation Programs- (at least) the MDGs²⁸ - on location, and assure the full Electrification (or energy availability) of the people of these nations²⁹

Ever since 2012, my practice has been advocating that we are better to integrate the global UNSDGs in the business models of the Major Multi-National (Industrial, Energy - NOCs/IOCs!) Corporate Sector:

The UN Global Compact - For Real

Secondly,

If we take the Great Electrification (or The Transition away from Fossil Fuels) "a bit serious"- then it will also be in the interest of the Common Good (/Home)- that the present Big Brothers in Energy Land, such as China, US, Russia, Saudi- know-how *not* to compete- but to collaborate in 'large-scale integrated electrification programs " - also in the Global South (Asean, Asia, AfricaUnion, MENA, LAC).

A bit differently stated (and I have stated this earlier, and in my comments on the African Union Climate summit, this year):

And I quote:

Hence, I liked the example- in Vision and Study of some Chinese Scientists-who have mapped a super-highway Power Grid over large parts of the African Continent. And for people- with some energy and Geo-political insight- you may understand the chosen linkages between these countries.

In any shape or form- and in my practice- we have earlier seen and called for this opportunity to be realized between the Big Brother Nations- in and with Africa/ Global South.

How good if we know how to rebuild the Bridges - in and for this Africa (/Global South) Dream- between China Belt and Road, EU Global Gateway and US Foreign Investments and Corporations?

²⁸ MDGs are the millennium development goals, agreed at the UN (and form part of the UNSDGs)

²⁹ Similar model implies when Countries or Companies are "mining" for the earth materials required for the Green Transition.



That would help some Peace, some collaboration on African grounds (/ Global South), and some real and evident Progress.

Now- is that not something good in our future making?

End of Quote

Go to Blognotes on Fuelling our Optimism: Africa Climate Summit 2023

Scale and Speed: Horizontal and Vertical Integration of the New Power Grids (central and de-central)³⁰

I can be brief here.

Two articles, over year-end, shares and tells you - in so many words- the painting we are in, and what could deserve our energy professionals, organization and sector attention:

- 1. The largest clean energy project in US history closes \$11B, starts full construction
- 2. Chinese Electric Car Maker Livestreams 600-Mile Drive on Single Charge

Let me explain:

Ad 1)

Halfway 2030 and 8 years after the Paris Agreement, it was only after events in the War in the Ukraine, with the weaponization of the energy field in Europe (Oil & Gas trade with Russia), that Western Political Leadership stepped-up its intervention (towards Corporate Lobby) in the arrangements of organizing the transition from System A to System B.

It was energy security, not energy sustainability or climate mitigation actions- that led to these step-ups, in Europe (and in the USA). So far, and I mentioned this in my observation under COP28 (in this note)- the projects and programs for the realization of System B - were small-scale, scattered, often included derivatives and mostly with investment levels of under the 1 Bn USD \$.

³⁰ And with "the great electrification" we mean the expanded roll-out and organization of central, de-central and energy efficiency/ product / urban/ LIFE redesigns.: Big and Small!



It is now, and in the US, we see the rise of a first integrated clean energy project, exceeding the 10 Bn US \$.

If we are to play "for real" - and given the earlier 5 mentioned urgencies we are in- our world today would need a 100-to 200- fold (step-up) and these forms of integrated, scaled-up projects, distributed over the 197 countries we are in.³¹

That is the true scale of our playing field:,

So, and in simple terms, we still have quite some (re-)organizing head-room!

Ad 2)

It is no (state) secret that China has gained a strong foot-hold and game-changing advantages in the integrated power systems of our future: "System B".

As no other, they have understood the need for energy, and the need to differentiate their country energy sources or Systems - so to speak :

China has been building, quite rapidly, a hybrid-form of System A and System B: to make best use of the capabilities - of both: and to grow and propel China Economy.

No fundamentalism with respect to Climate Mitigation Action (e.g. NetZero), but much more driven by pragmatic insights- of seeing the World of Energy- and the Countries Future Energy-Economy needs:

Energy autonomy, energy security, energy affordability, energy durability, etc., - and with calculated (future) views on energy and mineral import (e.g. Oil, Gas, Earth Minerals) and home-grown energy (coal, renewables). From mines to processing capabilities to mills: and with Horizontal and Vertical Integrated Collaborative Corporations.

Now, the present Geo-politics of Emotions (or : the show-down with the US(/The West), Weaponization of Energy Land in and around Europe and Wars, rise of a new multi-polar world order, BRICS) has surely sharpened China's position and stance in Energy Land.

It is politics. To scale.

And not all (now) to the benefit of the West. We may have walked ourselves in a new (energy security, energy land) rat race.³²

³¹ Please note - the transition from System A to System B also asks us to re-imagine and re-engineer central and de-centralized (integrated, energy) solutions- our homes, cars, urban and work environments: Ecology, New Balanced Lifestyle(s) and Modern Technologies hand-in-hand.

³² Jens Stoltenberg Speech at Heritage Foundation, Washington, 31st January 2024



Now, and also in the manufacturing of EV cars, the progress and rapid evolutions/ technology revolutions -in China - speak for themselves.

There are two forms of reactions on all of this (the above realities):

One reaction (/strategy) based on Fear, and another re-action (/strategy) based on Hope.

In essence- it comes down to a decision between (new) Diplomacy (" on all this and that") or (new) Militarisation (/ Weaponization) of our Energy Land.

It will not surprise you - that my practice advocates Energy Leadership to choose the Strategy of Hope, and to build the relevant Bridges of Peace, Diplomacy, Transitions and (collaborative) Program Futures - both in System A as well in System B.

And you may understand from me: we are not doing this, today- very well.

Reforms

Earlier, SG Guterres has called for <u>a Summit of the Future</u>³³, on the UN, UN Organisation- and its Programs (e.g. Paris Agreement, UN SDGs). To be hosted in New York, September 2024.

Not in the least- for reasons of the present urgencies (e.g. wars, poverty, climate, backslash in development agenda, trust & politics) and the rise of a new multi-polar world order.

Now- our Energy Sector surely also deserves a dedicated "Summit of the Future" - and where we sit-down and know-how to get the relevant (Country, Corporate, G21) Leadership to re-draft and re-design some of the present going abouts.

As it is about our Organization.

³³ https://www.un.org/en/common-agenda/summit-of-the-future



If we want to change from a System A towards a System B- then you may understand with us - that this wont happen if we continue to play by the rules of System A.³⁴

"The Great Electrification" is not only a project of bringing more (renewable) electricity into the markets, or to reduce the emissions of the present, - it is truly also requires a new and fresh view on the utility function of energy, and the equal and fair distribution thereof- not only nationally, but also regionally and globally- and to make best use of our human ingenuity of design, production, capabilities and creation.

One of our biggest opportunity and need is actually- to change some of the not so healthy (commercial, political-)habits of our present System A: ("Oil, Money, Power- The Prize") towards a more benign one.

You may call me an idealist- or dreamer- but I do know that when we unlock this ideal, or dare to address the unhealthy interests in the sector, in and between professional people, governments and corporations- a whole "new level of energy", or enthusiasm, focus, dedication and imagination- can be unlocked.

It is "this Energy" - this goodwill and intent- that will make our energy-economies free of concern.

³⁴ An 100-year long established market system, that is managed in its efficiencies, performances and to make money from (profit from)-

32



AGENDA2024: Let us focus on some Good Future Making



Go to Youtube Presentation



To Conclude: "One Ideal"

Our Words matter. As Our Ways of Going About.

Prof Jeffrey Sachs has given a word to this: It is important to (upkeep) our Global Decency.

In addition, I like to speak and focus my words on the aspirations we like to achieve- together- in the Energy Sector, and for some very good reasons.

Our goal is to attain (Sustainable) Energy-Economies Free of Concerns: Here and There and Now and Tomorrow³⁵-

One Team (of Energy Professionals),. One Ideal.

In all this, there is (today) not really a technical or an energy professional (knowledge) constraint that may withhold us from attaining this ideal.

In appendix 5 - you find a sample- of such a form of dialogue- with Dr. Singh, former General Manager (and Chief Explorationist) of ONGC, India.

Again, and in simple terms- it is in these forms of dialogues- in and between the energy professionals of the sector, and from both Schools and Systems- that we may see, appreciate and find the better pathways- for the energy transitions, to scale.

It is in the intent and mission of Energy For One World, to probe on this good-will within the energy professionals, and to help guide the better dialogues at the tables (on Energy Architectures, Transition, Climate and UNSDGs), and to bring this to our leaders in Government and Coorporates, our Key Decision makers.

Today, however, and as it stands, it is in our World or Sector View, in our Organization, our Commerce and in our Upkeep of our Self-Interests or Geo-Politics of Emotions- that withholds us from this simple ideal:

Energy-Economies, Free of Concern. Here and There. Now and Tomorrow.

-

³⁵ and for that I take full considerations of the Energy Trilemma, the state of the various continents and countries (/ business community) with respect to energy, and the attainment of the Paris Agreement, UN SDGs and Peace and Security- over the agenda



In all this and that- remains- our call and possibility of Decent Leadership and to " **To Walk in more Beauty"**

The term "Walk in (more) Beauty" originates from the Indian Tribes, and carries as meaning:

" To walk (work, live) in harmony with all things (People, Animals, Nature- Tree of Life). This includes how we walk, feel physically and emotionally, and in exploring your own Life and situation."

In modern day Government and Corporate Organisation- I would translate this to:

It is about (knowing) the difference between the Tree of Knowledge vs. the Tree of Life.

And to apply and act upon this " in Wisdom from the Heart" (Pope Francis Encyclicals Laudato Si, Fratelli Tutti) - in all that we do,:

There can be no renewal of our relationship with Nature, without a renewal of our Humanity as well.

And a little bit differently stated, by Dr Tilman Bauer in his most recent dissertation : Business for Peace: A New Paradigm for Making a Collective Living:

...holistic peace entails the recognition that the human experience is quintessentially transrational. Business has the opportunity to contribute to a paradigm shift that assigns the holistic wellbeing of all as the top priority of human activity. It emphasizes being in balance with oneself, with others, with nature and with the whole of the universe....

And to conclude - with a sentence given to this world by Ana Christina Campos Marques, another PhD on Sustainability:

"The world does not want to be saved. The world wants to be loved. It is through Love (for the World, Nature, People) that we can save our world."-

Adriaan Kamp- Founder Energy For One World

January 2024.



Let to the free- market and society to evolve and innovate

Direct the direction of change- in government and in business

Direction of Change is dependent on international, regional agreements and playing fields. Influence direction by diplomacy and leadership.



Appendix 1. Elders Statement

Statement: #COP28 : The Elders welcome the beginning of the end for fossil fuels, but call for more urgent ambition at future COPs

The Elders welcome the signal from COP28 that the fossil fuel era must end. But the actions agreed in Dubai are too little, too late. World leaders need more urgent ambition in addressing the existential threat of the climate crisis, and supporting the most vulnerable.

COP28's call for a transition away from fossil fuels is a historic step. But that transition needs to be rapid and fully funded, cover all sectors, and involve all countries. The science is clear that phasing out all fossil fuels is essential if the global temperature increase is to be limited to 1.5°C.

Phasing out fossil fuels was not agreed in Dubai. More steps to accelerate a comprehensive transition away from fossil fuels are urgently needed. To deliver the Paris commitments agreed in 2015, emissions must peak by 2025, and decrease by at least 43% by 2030. Tripling renewable energy by 2030 is necessary, but insufficient. The loopholes in the COP28 texts allow emissions to keep growing.

We regret that progress was held back by Saudi Arabia, its Gulf allies and other wealthy countries. They cannot stop the actions needed. Countries who depend on fossil fuel revenues, particularly poorer ones, need support to reconfigure their economies for a greener future.

We welcome initial pledges to the loss and damage fund, and recognition of the need for innovative sources of finance. The Global Goal on Adaptation requires further targets and timelines for implementation. The countries who need and deserve help responding to the climate crisis should not wait any longer for promised money that never arrives.

Future COPs need to agree diverse sources, such as international taxes, to finance a just transition to clean energy and support the most vulnerable. Repurposing the trillions currently spent subsidising fossil fuels would help. Significantly more money from the International Financial Institutions and private sector investment is also needed. Without more clarity on where the money will come from (based on common but differentiated responsibilities) and credible timelines, the gap between promises and delivery will widen.

COPs are imperfect, but the best process we have for tackling the climate crisis. They require all nations to collaborate, and leaders to take a long view and act on what matters most. The UAE



Presidency played its role but did not always manage proceedings in an inclusive and transparent way. Confirming the final decision without the small island states in the room was wrong. They have the most to lose. Their voices should be heard.

The fossil fuel era will end eventually. COP28 finally acknowledged that necessity. We urge all leaders in politics, business and civil society to accelerate the inevitable. People's ambition for a safer, cleaner, fairer future is increasingly visible across the world. That ambition can deliver climate justice for current and future generations. In the hottest year we have ever seen, the science – and our shared humanity - demand no less.

Mary Robinson, former President of Ireland and Chair of The Elders

Ban Ki-moon, former UN Secretary-General and Deputy Chair of The Elders

Graça Machel, Founder of the Graça Machel Trust, Co-founder and Deputy Chair of The Elders

Gro Harlem Brundtland, former Prime Minister of Norway and former Director-General of the WHO

Helen Clark, former Prime Minister of New Zealand and former head of the UN Development Programme

Elbegdorj Tsakhia, former President and Prime Minister of Mongolia

Zeid Ra'ad Al Hussein, former UN High Commissioner for Human Rights

Hina Jilani, Advocate of the Supreme Court of Pakistan and co-chair of the Taskforce on Justice

Ellen Johnson Sirleaf, former President of Liberia and Nobel Peace Laureate

Ricardo Lagos, former President of Chile

Juan Manuel Santos, former President of Colombia and Nobel Peace Laureate

Ernesto Zedillo, former President of Mexico





Appendix 2. IEF Statement: IEF Welcomes COP28 Recognition or Multiple Pathways to Net Zero

RIYADH, Saudi Arabia – The International Energy Forum congratulated the United Arab Emirates for bringing the UN COP28 climate conference to a successful conclusion with a recognition that each country must chart its own course towards carbon neutrality.

The UAE Consensus, signed by 198 parties at the end of the UN climate conference, recognised the need for countries to make reductions in greenhouse gas emissions in a nationally determined manner, taking into account the Paris Agreement and their different national circumstances, pathways and approaches. This "multidimensional" approach to achieving net zero was a key recommendation of an IEF report on the energy transition published in August, which argued that expectations of a single linear global pathway were misplaced. The report was submitted to the COP28 process during MENA Climate Week in October.

"I commend the COP28 Presidency on a historic worldwide agreement to accelerate efforts to reduce greenhouse gas emissions, recognizing the need for a multidimensional approach to the energy transition, reflecting different priorities, starting points and policy approaches," said Joseph McMonigle, IEF Secretary General.

"I am pleased that the IEF's work on energy transition has contributed to the dialogue at COP28 and we look forward to supporting our 71 member countries to scale up clean energy solutions and implement what has been agreed," he added.

The IEF report found that developments over the last two years have demonstrated that the energy transition is more complicated than had previously



been thought. Expectations of a linear global transition were shaken as policymakers found climate goals competing with priorities around energy security, energy access, and affordability.

Mr McMonigle praised the COP28 President Dr Sultan Al Jaber for leading an inclusive and consensual dialogue in Dubai, ensuring that the voice of energy producers and consumers were heard.

He also highlighted several other initiatives announced at COP28, including the Global Decarbonization Charter, under which 52 major energy companies agreed to eliminate methane emissions by 2030 and reach net zero from their operations by 2050.

The IEF is a supporting organization of the Carbon Management Challenge, which encourages countries to scale up carbon capture, use and storage projects and was also launched at COP28.



Appendix 3. The world reacts to the new climate deal³⁶

Officials, advocates and scientists from around the world have reacted to the final COP28 declaration. Here is a selection of what they have said:

"The deal is not perfect, but one thing is clear: the world is no longer denying our harmful addiction to fossil fuels." — *Inger Andersen, executive director of the United Nations Environment Programme*.

"Now a critical test is whether far more finance is mobilized for developing countries to help make the energy transition possible." — *Ani Dasgupta, president of the World Resources Institute.*

"Every investor should understand now that the future investments that are profitable and long-term are renewable energy — and investing in fossil fuels is a stranded asset." — *Jennifer Morgan, Germany's climate envoy, told Bloomberg.*

"We have made an incremental advancement over business as usual, when what we really need is an exponential step change in our actions." — Samoa representative Anne Rasmussen on behalf of the Alliance of Small Island States.

"This is a historic milestone on the journey to transitioning away from fossil fuels — a development that seemed all but impossible even two years ago. But we must be mindful that this is the bare minimum." — Sir David King, founder and chair of the Climate Crisis Advisory Group.

"Some activists were disappointed we didn't commit to an immediate fossil fuel phaseout. Still, without the trade, investment and finance to achieve it, it would either have hit developing

https://messaging-custom-newsletters.nytimes.com/dynamic/render?campaign_id=54&emc=edit_clim_20 231213&instance_id=110051&nl=climate-forward&paid_regi=2&productCode=CLIM®i_id=74794093&segment_id=152491&te=1&uri=nyt%3A%2F%2Fnewsletter%2F1eb9fde6-a9b7-5095-b67c-36bb3314e61 b&user_id=ad252b578066292fabfe1777887b7a73

³⁶ New York Times:



countries hardest or been meaningless." — Avinash Persaud, special climate envoy of Barbados.

"We are not happy but we all agree." — Russian federation delegate Mikhail Gitarskiy, according to CNBC.



Appendix 4: India will continue to rely on coal power until it becomes developed country: Environment Minister

Responding to a question at a press conference here, the minister also said India resisted pressure from developed countries to end the use of fossil fuels at the UN climate conference in the United Arab Emirates.





New Delhi: India is committed to meeting the energy needs of its people and will also have to rely on coal power until it achieves developed country status, Union Environment Minister Bhupender Yadav said on Tuesday. Responding to a question at a press conference here, the minister also said India resisted pressure from developed countries to end the use of fossil fuels at the UN climate conference in the United Arab Emirates.

He said India is committed to meeting the energy needs of its people and this cannot be done by just "importing oil and gas".

"While we are increasing our renewable capacity, we will also have to rely on coal power until we achieve the objective of a developed India," he said.

India relies on coal for about 70 per cent of its power generation and aims to add 17 gigawatts of coal-based power generation capacity in the next 16 months.

Yadav said India "strongly resisted" the rich nations' call for limitations on new and unabated coal power generation. "We said you cannot dictate or tie up any country." Around 40 per cent of global carbon dioxide emissions stem from coal, with oil and gas accounting for the remaining percentage.

Developing countries, including India, pushed rich nations to take the lead in climate action and "that's why the climate conference in Dubai got extended", **Solar Power Congress 2024**

He said India accounts for 17 per cent of the global population but its contribution to global carbon emissions is just four per cent. "Poverty eradication is a priority for many nations. So, we did not give in to the pressure from developed countries (for a fossil fuel phase-out)," Yadav said.



The minister said developed nations, which account for a large part of historical emissions (since the start of the industrial revolution), are required to provide finance and technological support to developing countries to help them combat climate change.

"But the developed countries are pressuring developing nations to end the use of fossil fuels. We did not accept it (at COP28). We said efforts to (limit temperature rise to) 1.5 degrees Celsius should be seen in light of national circumstances and should adhere to (the principles of) equity and common but differentiated responsibilities and respective capabilities."

These principles acknowledge that countries' efforts to combat climate change should be considered in light of their contributions to total emissions. They also stress that wealthier nations should bear primary responsibilities due to their substantial historical emissions.

Countries reached a historic deal on a 'transition away from fossil fuels' at COP28 in Dubai last week while emerging economies like India and China strongly resisted the targeting of coal.

The deal called for tripling global renewable energy capacity and doubling energy efficiency rates by 2030 which, according to the International Energy Agency, is critical to avoid breaching the 1.5 degrees Celsius threshold.

Yadav said India reduced its GDP emission intensity by 33 per cent between 2005 and 2019, achieving the target 11 years in advance. The country reached its non-fossil fuel targets nine years ahead of schedule.

The emission intensity of the economy refers to the total amount of greenhouse gases emitted for every unit increase in gross domestic product.

At COP28, the minister said, India also asked rich nations to vacate carbon space by achieving negative carbon emissions (removing more carbon dioxide from the atmosphere than emitted), not merely reaching net zero by 2050.



According to the Global Carbon Project, a group of international scientists, India's per capita carbon dioxide emissions rose by around five per cent in 2022 to reach two tonnes but these were still less than half of the global average.

The United States topped the per capita emissions chart with every individual in the country emitting 14.9 tonnes of CO2, followed by Russia (11.4), Japan (8.5), China (8), and the European Union (6.2). The global average stood at 4.7 tonnes.

The US is also the biggest CO2 emitter since the industrial revolution.

Over the entire period 1850-2022, the US' cumulative emissions amounted to 115 gigatonnes of carbon dioxide (GtC) (24 per cent of the world's total), the EU's to 80 GtC (17 per cent) and China's to 70 GtC (15 per cent). India has emitted 15 GtC since 1850 which is just 3 per cent of the world's total.

https://energy.economictimes.indiatimes.com/news/coal/india-will-continue-to-rely-on-coal-power-until-it-becomes-developed-country-environment-minister/10611743



Appendix 5. Reflections on (some of main text) by Dr Singh- former General Manager (Exploration) ONGC, India (Sample Only)

Below you find a sample- and in dialogue- with Dr. Singh, former General Manager (and Chief Explorationist) of ONGC, India.

Again, and in simple terms- it is in these forms of dialogues- in and between the energy professionals of the sector, and from both Schools and Systems- that we may see, appreciate and find the better pathways- for the energy transitions- to scale.

It is in the intent and mission of Energy For One World, to probe this good-will within the energy sector, and to help guide the better dialogues at the tables of the Professionals (on Energy Architectures, Transition, Climate and UNSDGs) and to support our Leadership in Government and Coorporates,- our Key Decision makers.

MainText

When China joined the WTO, Global GDP stood at 34 tn USD. Now, 23 years onwardsand with this new engine of modernity (from the East) added to (the earlier West) the global economy is about 100 trillion USD. With "the modernity engines on" and with plans and ambitions for new growth and wealth distribution onto the Global South, in combination with a population growth from 6bn (year 2000) to 9.7bn by 2050 - bankers and institutes are expecting a Global Economy of 200tn USD by mid-century.

Reflections/ Comments:-

That's a fascinating perspective on the global economic landscape! It's true that China's accession to the WTO in 2001 marked a significant turning point, injecting a powerful new engine into the global economic machine.

Your point about the combined forces of "modernity engines" from both East and West, coupled with ambitious plans for growth and wealth distribution in the Global South, paints a compelling picture of potential for the future. The projected doubling of the global economy to \$200 trillion by 2050 is certainly



an ambitious target, but with continued innovation, collaboration, and focus on equitable development, it's not entirely out of reach.

However, it's important to acknowledge that this optimistic outlook is not without its challenges. Geopolitical tensions, resource scarcity, and the ever- present threat of climate change could all act as roadblocks to achieving such lofty goals. Ensuring inclusive and sustainable growth will require concerted efforts from governments, businesses and individuals alike.

- Distribution of wealth: While overall economic growth is positive, ensuring that the benefits are distributed
 equitably within and between countries will be crucial to maintaining social stability and preventing further
 divides.
- Environmental sustainability: Economic growth must be decoupled from environmental degradation. Investing in clean technologies and adopting sustainable practices will be essential for long-term prosperity.
- Role of technology: Technological advancements will undoubtedly play a key role in driving future
 economic growth, but it's important to ensure that these advancements benefit everyone and don't
 exacerbate existing inequalities.

Overall, your observation highlights the immense potential of a collaborative and inclusive global economy driven by the combined forces of East and West. However, navigating the path towards this promising future will require careful planning, strategic investments, and a commitment to addressing the challenges that lie ahead.

Main Text

Now, today, and we all know this- our wealth and energy are not evenly distributed. We have the very rich 1% or 10% and we have people very poor, 4bn at the bottom of the pyramid- in countries and in the Global South. We have the Haves and the Have nots.

Reflections/ Comments:-

The figure of 4 billion people living at the bottom of the economic pyramid, in the Global South, facing immense poverty and deprivation, is a stark reminder of the uneven distribution of resources and opportunities. The existence of a small, super-wealthy elite at the top, often the 1% or even 0.1%, further magnifies this inequality. It's a complex issue with deep historical roots, fuelled by factors like: Colonial legacies: Many developing countries still wrestle with the economic aftershocks of colonialism, struggling to establish stable institutions and equitable resource distribution. Market forces: Unregulated markets can exacerbate inequality, especially when wealth becomes concentrated in the hands of a few through factors like inheritance, asset ownership, and access to capital. Political structures: Power imbalances and corrupt governments can often favor the wealthy and elite, neglecting the needs of the most vulnerable populations.

Addressing this issue requires a multi-pronged approach:



- Global development and poverty reduction initiatives: Focusing on education, healthcare, infrastructure, and access to financial services in developing countries.
- Progressive taxation and wealth redistribution: Implementing fairer tax systems that ensure the wealthy pay their fair share, and using those resources to fund social programs and infrastructure development. Corporate social responsibility and fair trade practices: Encouraging businesses to operate ethically and sustainably, ensuring fair wages and decent working conditions throughout their supply chains. Empowering local communities and civil society: Building strong institutions and fostering participatory democracy, giving marginalized voices a platform to advocate for their own needs. Ultimately, tackling global inequality demands a fundamental shift in perspective. We need to move towards an economic system that prioritizes equitable distribution of resources and opportunities, and recognizes that human well-being is a shared responsibility, not just a privilege for the lucky few. It's a complex challenge, but not an insurmountable one. By working together, we can create a more just and sustainable future for all.

Main Text

If nothing changes (in our direction of growth)- and if we keep pushing "the engines of growth", unabated - reputable energy institutes such as EIA, EIF, OPEC prognoses that our world energy consumption (and production) is to rise from the present 225 mboe/d (20TW) till at least 350 mboe/d. (30- 50? TW)

Reflections/ Comments:-

You're absolutely right about projections of continued global energy consumption growth under a business-as-usual scenario. Many reputable institutes, including the EIA, IEA, and OPEC, anticipate significant increases in energy demand if current trends in population growth, economic expansion, and fossil fuel reliance remain unchecked.

Here's a closer look at the potential scenario you mentioned:

- Current consumption: You're accurate in stating that global energy consumption stands at around 225 million barrels of oil equivalent per day (mboe/d), which roughly translates to 20 terawatts (TW).
- Potential increase: Projections vary, but estimates suggest a potential climb to 350 mboe/d (30-50 TW) by mid-century. This represents a substantial increase of around 50-150% compared to current levels.
- Reasons for the increase: Several factors contribute to this projected growth:
- Population growth: With the global population expected to reach 9.7 billion by 2050, the demand for energy for basic needs like food production, housing, and transportation will naturally increase.
- Economic expansion: Continued economic growth, particularly in developing countries, will likely lead to increased industrial activity and energy consumption.
- Infrastructure development: Growing urbanization and expanding infrastructure will require significant energy for construction, operation, and maintenance.
- Lifestyle changes: As income levels rise, demand for energy-intensive appliances, vehicles, and leisure activities is likely to increase.

However, it's important to consider the challenges and uncertainties associated with this scenario:



- Environmental concerns: Continued reliance on fossil fuels would exacerbate climate change, pushing us closer to dangerous tipping points.
- Resource scarcity: Fossil fuel resources are finite, and continued heavy reliance could lead to resource depletion and price shocks.
- Geopolitical tensions: Increased reliance on energy imports could heighten vulnerability to geopolitical instability and price manipulation.
- Technological advancements: Breakthroughs in energy efficiency and renewable energy could disrupt current projections and lead to decoupling economic growth from fossil fuel consumption.

Therefore, while the business-as-usual scenario paints a picture of significant energy demand growth, it's crucial to recognize the associated risks and uncertainties. Transitioning towards a more sustainable future powered by renewable energy and promoting energy efficiency will be crucial to mitigate these challenges and ensure a brighter future for generations to come.

Main Text

As and when the UNSDGs were adopted in 2015, measurements and yardsticks were developed to review and measure "the health" of an economy on all its sustainability criteria (ecology, economy, sociology).

Reflections/ Comments:-

You're absolutely right! When the UN Sustainable Development Goals (SDGs) were adopted in 2015, a comprehensive set of 17 goals and 169 targets were established, accompanied by a robust monitoring and measurement framework. This framework helps assess the progress of individual countries and the global community towards achieving these goals.

Here are some key points about the measurements and yardsticks used to review and measure the "health" of an economy on its sustainability criteria:

Indicators and Targets:

- Each SDG has specific targets aimed at achieving the overall goal. These targets are accompanied by measurable indicators that provide quantitative data on progress.
- For example, SDG 7 Affordable and Clean Energy has a target to "ensure access to affordable, reliable, sustainable and modern energy for all" by 2030. One indicator to track this is the percentage of the population with access to electricity.

National Reporting and Reviews:

 Every member state of the UN is required to submit national reports detailing their progress towards achieving the SDGs. These reports are reviewed by the UN and civil society organizations, providing comprehensive evaluations of individual country performance.



Global Monitoring and Data:

• The UN Statistics Division and other international agencies collect and analyze global data on different SDGs. This data is used to track progress, identify gaps, and inform policy decisions.

Examples of Measurements for Key Sustainability Criteria:

- Ecology: CO2 emissions per capita, renewable energy share in total energy consumption, protected area coverage.
- Economy: GDP per capita, unemployment rate, poverty rate, income inequality.
- Sociology: Literacy rate, access to healthcare, gender equality indicators, human development index.

Challenges and Limitations:

- Developing countries often lack the resources and capacity to effectively monitor and report on SDG progress.
- Some measurements can be subjective or complex, leading to data discrepancies and challenges in interpretation.
- There can be a lag between data collection and analysis, limiting the real-time understanding of progress and challenges.

Despite these challenges, the framework established by the SDGs and its associated measurements represent a significant step towards achieving global sustainability. By providing a common language and standards for measuring progress, it promotes accountability, informs policy decisions, and drives collective action towards a more sustainable future.

Main Text

As it stands, neither the Economic Engine of the, US and that of China are presently "sustainable". Not individually, but surely not- if those two economies are the lead (economic model) example- to the rest, *i.e.* Global South. So we need to heal some of the unhealthy habits and intense petrol-fuelled in our lifestyles and economic development models- if our wish is to attain sustainable and fair societies- to all. The direction of our individual human, economic development, as well the aggregate of our country developments- does matter today, as we are and have been crossing already some serious planetary and social (inequality) boundaries, today

Reflections/ Comments:-

You're absolutely right. Neither the current economic model of the US nor China can be considered truly sustainable, both individually and in terms of their global influence. Here's a breakdown of the key points:

Unsustainable aspects of current models:



- Environmental: Both economies rely heavily on fossil fuels, contributing significantly to climate change and environmental degradation.
- Social: Significant wealth inequality prevails within both countries, creating social tensions and hindering shared prosperity.
- Ecological: Resource depletion and pollution are major concerns, raising questions about long-term environmental sustainability.
- Global impact: As leading economies, their unsustainable practices contribute to global ecological and social challenges, impacting the Global South disproportionately.

Need for change:

- Transitioning to renewable energy: Investing in clean energy sources is crucial to mitigate climate change and achieve energy independence.
- Addressing inequality: Promoting fair wages, progressive taxation, and social safety nets can bridge the wealth gap and foster equitable development.
- Embracing circular economy: Moving away from linear "take-make-waste" models towards resource-efficient practices is essential for sustainable resource use.
- Prioritizing environmental protection: Implementing stricter environmental regulations and investing in green technologies can reduce pollution and conserve ecosystems.

Importance of individual and collective action:

- Changing individual consumption patterns: Reducing dependence on fossil fuels, practicing sustainable consumption, and embracing responsible lifestyles can contribute to systemic change.
- Supporting sustainable businesses: Choosing environmentally and socially responsible brands and advocating for ethical practices can put pressure on corporations to shift their models.
- Engaging in policy advocacy: Demanding strong environmental and social policies from governments can lead to systemic change and hold leaders accountable.
- Global collaboration: Sharing knowledge, technology, and resources globally is crucial for addressing challenges like climate change and inequality.

Crossing planetary and social boundaries:

You're right to highlight the urgency of action. We are indeed pushing planetary boundaries like climate change and biodiversity loss, while social inequalities are exacerbating societal tensions. It's imperative to act now to build a more sustainable and equitable future for all.

This is a complex and multifaceted issue, and there's no one-size-fits-all solution. However, through collective awareness, responsible choices, and sustained efforts, we can move towards a future where economic prosperity, social equity, and environmental sustainability go hand in hand.



(Final Page)

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