

A View on Permanent Climate Change [post IPCC Synthesis Report, March 2023] Some Conclusions

References

- A. Video by UN Secretary-General António Guterres, Davos, 20 March 2023
- B. IPCC ARS Synthesis Report, 20 March 2023
- C. A View on Permanent Climate Change, M.R. Flint, 24 July 2020.

What the Secretary-General of the UN has said

On 20 March 2023, the UN Secretary-General, António Guterres, released the video speech shown in Box 1 at Annex A. His statements followed presentation of the Intergovernmental Panel on Climate Change (IPCC) AR6 Synthesis Report on Climate Change.¹

His speech is very alarmist, as may be seen from statements like:

- Humanity is on thin ice — and that ice is melting fast.
- The climate time-bomb is ticking.
- It starts with parties immediately hitting the fast-forward button on their net-zero deadlines to get to global net-zero by 2050.
- No new coal, the phasing out of coal by 2030.
- Ceasing all licensing or funding of new oil and gas.
- Stopping any expansion of existing oil and gas reserves.
- We must move into warp speed climate action now. We don't have a moment to lose.

Unfortunately, the Secretary-General's speech, supposed based on the findings of the IPCC climate change Synthesis Report for 2023, is more evangelic than based on the facts presented in the reports. Some detailed research shows that there seems to be a serious disconnect between the S-G's speech and the IPCC reports.

The speech implies that the world can be powered by renewable energies alone – there is no mention in the speech of the real role of nuclear energy, currently existing or in the future.

Perhaps one could expect such a speech from a long-time socialist politician like Mr Guterres, who, among other things was the socialist Prime Minister of Portugal at one time.

Essentially, the Synthesis Report says several things:

- Since the 2018 report, greenhouse gas emissions are still rising and that human activity is clearly responsible. World emissions currently (2019 in the report) 50 Gt CO₂eq² per annum.
- The concentration of greenhouse gases in the atmosphere (excluding water vapour) is continuing to rise, as would be expected. In April 2023, CO₂ concentration was 422.6³ parts per million (ppm), compared to 413 in 2020.
- What has been done collectively by nations so far to counter the increase has not been enough.
- The Average Global Surface Temperature (Tw) is now about 1.1°C above pre-industrial levels (actually 0.95-1.09-1.2).
- Graphs of output from simulation modelling would indicate that the temperature (Tw) could reach the IPCC limit of 1.5°C by about 2035, 10 years sooner than expected only three years ago.
- Limiting global warming to 1.5°C requires heavy and immediate reduction in emissions. The volume of greenhouse gases produced each year by human activity needs to be reduced by 50% by 2030 for the average surface temperature rise since pre-industrialisation is to be kept to the target of 1.5°C. Emissions must reduce from the current 53 to 23 Gt CO₂eq pa to meet 1.5°C.
- Dire consequences are predicted for increased frequency severe weather events, changing regional climates droughts and precipitation; rising sea levels; detrimental effects on coral reefs; disruption of

¹ <https://www.ipcc.ch/report/ar6/syr/resources/press>

² Gt CO₂eq – Gigatonnes of CO₂ equivalent (combined quantum of CO₂, methane and nitrous oxide)

³ Mauna Loa observation

livelihoods; more people dying of heat exhaustion; greater risk of food and water shortages and disease; loss of species and more.

- The lower 50% of socio-economic populations will be most affected by climate change and are the least able to counter it. Deaths due to droughts, floods and storms are predicted to be 15 times higher in vulnerable regions

Comments on what the Synthesis Report Says

Predictions in the report for temperature (Tw) and for global greenhouse gas emissions (GtCO₂eq⁴) are confusing. In the very first part, the Summary for Policymakers - “Observed Warning and its Causes” gives the pre-industrial baseline as 1850-1900 but talks of a temperature (Tw) increase of 1.1°C in 2011-2020. Figures for temperature and total emissions are being given for 2019. Where are the figures for 2020-2023?

A few samples:

- Graphs show a sharp increase in emissions from 15 to 50 GtCO₂eq during the years 1950 to 2023 (73 years), ie at 0.421 Gt pa. It would appear that basic conclusions of the report are based on simulation modelling, yet temperature and emission figures cited are hardly consistent. See Table 1 below.
- Temperature (Tw) has been rising proportionately also since 1950, but no actual equation is offered. It has risen from 0.1°C to 1.1°C during the period 1950-2023 (73 years); being an average of 0.01369°C per annum.
- The dire consequences of climate change and the ill effects on the lower 50% of socio-economic populations, as predicted by the report are somewhat alarmist and would appear to be drawn from the many graphs of the various effects of the increase in temperature (Tw) (implying climate change) provided by the latest computer simulations.⁵
- A most important conclusion of the Report is that emissions must reduce from the current 53 to 23 Gt CO₂eq pa **by 2030** to meet 1.5°C.

Figures taken from the Synthesis Report are shown in Table 1, Annex B.

The source of these figures may be buried somewhere in the IPCC working group papers but one may expect and suspect that they are somewhat inflated and contradicted by data available from reliable sources on the Internet. As one example:

- “Global energy-related CO₂ emissions grew by 0.9% or 321 Mt⁶ in 2022, reaching a new high of over 36.8 Gt⁷, whereas the Report says 41.4Gt. This not a big difference, but it is a bigger value.

Note in Table 1 the concentration levels of CO₂ in the atmosphere for 2019, 2020 and April 2023 at 410, 413 and 422.6 ppm.⁸ These figures are from the Mauna Loa observatory and accepted by authorities as the most accurate available. The increase is close to linear at about 3.15 ppm pa.

General Comments

There has always been controversy about the validity of the surface temperature (Tw) measurements around the globe, which is a very serious matter, considering that it is the claimed increase in this temperature, in association with a implied cause and effect relationship (but only a correlation) with rising greenhouse gas emissions that is the claimed cause of climate change (permanent change presumed). For example, there are differences between readings from traditional mercury thermometers (analogue) and modern sensor/electronic meters at the same location and satellite readings. Locations are chosen in too many hot

⁴ GtCO₂eq = Gigatonnes of CO₂equivalent

⁵ See Reference C for a discussion on the validity of computer simulation, especially of the most complicated system in the world, namely the naturally chaotic atmosphere (in the true sense of the word.). Appendix 2 to Annex E to “A view on permanent climate change”. Thus, the validity of claims is still dependent on the validity of the computer simulation models used, which have been severely criticised by some other leading climatologists, the bases of criticism being the built-in weaknesses of all such models, ie validity of the myriad assumptions made, of the equations formulated by the scientists, and of data (initialising and otherwise) input to the model.

⁶ Mt = Million of tonnes

⁷ <https://www.iea.org/reports/CO2-emissions-in-2022>

⁸ ppm = parts per million

spots which give corrupting readings. The vast majority of sensors are concentrated in North America and Europe. Thus, there is considerable discussion about temperature readings being deliberately rigged are re-jigged to give false elevated readings, in favour of a climate change scenario.

Even today (April 2023), the Australian Bureau of Metrology (BOM) has been accused of re-jigging temperature readings to reflect a climate change situation, ie that the BOM is being activist instead of being neutral in its important role of providing accurate weather statistics.

Given that temperature (T_w) has risen from 0.1°C to 1.1°C during the period 1950-2023 (73 years); being 0.01369°C per annum, at this business-as-usual rate, 1.5°C could be reached within 30 years⁹, ie by 2053. Note that the estimate far exceeds the 2035 date implied by Reference B and even better than the date of 2045 determined in 2020 by Reference C. All data about climate change needs to be treated with caution as to validity.

The Report says that emissions must reduce from the current 53 to 23 Gt CO₂eq pa to meet 1.5°C . Although there appears to be some downward trend in world emissions, it certainly is not enough so far to meet such a demanding target. In fact, there is virtually no hope of reducing emissions so far without the major intervention of the biggest emitter China and the potentially great emitter that is India. These two countries which currently account for 35%¹⁰ of the world's population will determine what happens to world emissions, consequent surface temperature (T_w) changes and any resultant permanent climate change.

Thus, on that point, the policies of the Labor and Greens Parties in Australia, on renewable energy and determination to destroy the wealth-creating fossil-fuel industry and exports, with Australia at only 1.1% of world emissions, are considered by this writer as completely misguided. Australia should do its bit, which it has been doing in reducing emissions at a responsible rate over the past 15 years, and better than most countries. Singling out Australia as a bad apple by the UN and even by our Labor government, aided and abetted by the Greens, is totally disingenuous.

As commented in 2020 at Reference C, it would appear that the world is still facing a 'perfect storm' of several possible existential threats over the next 50 years or so, given the pressures of an ever-growing world population, nationalistic threats, religious intolerance, rapidly advancing technology, zealous pursuit of renewable energy, a quasi-religious belief in climate change and the ever-perverting effect of social media, let alone the real risk of permanent climate change. Above all, the threat of global warming and consequential climate change should be kept well in perspective.

It is very interesting that the Synthesis report does not mention the increasing world population even though it clearly states that global warming is due to human activity. The increasing population (from the current eight billion to an estimated 12 billion) will most probably prove to be the determining factor to any permanent climate change.

Sound familiar?

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April 2023

⁹ $((1.5-1.09)/0.01369 = 29.9$

¹⁰ $2.4\text{billion of } 8 \text{ billion} = 35\%$

SECRETARY-GENERAL ANTÓNIO GUTERRES ON CLIMATE CHANGE

Box 1

Video by UN Secretary-General António Guterres, Davos, 20 March 2023¹¹

Secretary-General Calls on States to Tackle Climate Change 'Time Bomb' through New Solidarity Pact, Acceleration Agenda, at Launch of Intergovernmental Panel Report

Dear friends, humanity is on thin ice — and that ice is melting fast.

As today's report of the Intergovernmental Panel on Climate Change (IPCC) details, humans are responsible for virtually all global heating over the last 200 years.

The rate of temperature rise in the last half century is the highest in 2,000 years.

Concentrations of carbon dioxide are at their highest in at least 2 million years.

The climate time-bomb is ticking.

But today's IPCC report is a how-to guide to defuse the climate time-bomb.

It is a survival guide for humanity. As it shows, the 1.5°C limit is achievable. But it will take a quantum leap in climate action.

This report is a clarion call to massively fast-track climate efforts by every country and every sector and on every timeframe.

In short, our world needs climate action on all fronts — everything, everywhere, all at once.

I have proposed to the Group of 20 [G20] a Climate Solidarity Pact, in which all big emitters make extra efforts to cut emissions and wealthier countries mobilize financial and technical resources to support emerging economies in a common effort to keep [the goal of] 1.5°C alive.

Today, I am presenting a plan to super-charge efforts to achieve this Climate Solidarity Pact through an all-hands-on-deck Acceleration Agenda.

It starts with parties immediately hitting the fast-forward button on their net-zero deadlines to get to global net-zero by 2050, in line with the principle of common but differentiated responsibilities and respective capabilities, in light of different national circumstances.

Specifically, leaders of developed countries must commit to reaching net-zero as close as possible to 2040, the limit they should all aim to respect.

This can be done. Some have already set a target as early as 2035.

Leaders in emerging economies must commit to reaching net-zero as close as possible to 2050 — again, the limit they should all aim to respect.

A number have already made the 2050 commitment.

This is the moment for all G20 members to come together in a joint effort, pooling their resources and scientific capacities as well as their proven and affordable technologies through the public and private sectors to make carbon neutrality a reality by 2050.

Every country must be part of the solution. Demanding others move first only ensures humanity comes last.

The Acceleration Agenda calls for a number of other actions.

Specifically: No new coal, the phasing out of coal by 2030 in Organisation for Economic Co-operation and Development (OECD) countries, and 2040 in all other countries.

Ending all international public and private funding of coal.

Ensuring net-zero electricity generation by 2035 for all developed countries and 2040 for the rest of the world.

¹¹ <https://press.un.org/en/2023/sgsm21730.doc.htm>

Ceasing all licensing or funding of new oil and gas — consistent with the findings of the International Energy Agency.

Stopping any expansion of existing oil and gas reserves.

Shifting subsidies from fossil fuels to a just energy transition.

Establishing a global phase down of existing oil and gas production, compatible with the 2050 global net-zero target.

I urge all Governments to prepare energy transition plans consistent with these actions and ready for investors.

I am also calling on CEOs of all oil and gas companies to be part of the solution. They should present credible, comprehensive and detailed transition plans in line with the recommendations of my High-Level Expert Group on net-zero pledges.

These plans must clearly detail actual emission cuts for 2025 and 2030, and efforts to change business models to phase out fossil fuels and scale up renewable energy.

This acceleration has already started in some sectors, but investors now need crystal clear signals.

And all Governments need the assurance that business leaders will help them deliver on extra efforts — but Governments must also create an enabling policy and regulatory environment.

Shipping, aviation, steel, cement, aluminium, agriculture — every sector must be aligned with net-zero by 2050, with clear plans including interim targets to get there.

At the same time, we need to seize the opportunity to invest in credible innovations that can contribute to reaching our global targets.

We must also speed-up efforts to deliver climate justice to those on the frontlines of many crises — none of them they caused.

We can do this by: Safeguarding the most vulnerable communities and scaling up finance and capacities for adaptation and loss and damage.

Promoting reforms to ensure multilateral development banks provide more grants and concessional loans and fully mobilize private finance.

Delivering on the financial commitments made in Copenhagen, Paris and Glasgow.

Replenishing the Green Climate Fund this year and developing a road map to double adaptation finance before 2025.

Protecting everyone with early warning systems against natural disasters in four years.

Implementing the new loss and damage fund this year.

The longer we wait on any of these crucial issues, the harder it will become.

In less than nine months, leaders will gather at COP28 [the United Nations Climate Change Conference] for the first global stocktake of the Paris Agreement.

They will also launch the process to prepare the next cycle of national climate plans — or nationally determined contributions — due in 2025.

These new climate plans must reflect the acceleration we need now, over this decade and the next.

By the end of COP28, I count on all G20 leaders to have committed to ambitious new economy-wide nationally determined contributions encompassing all greenhouse gases and indicating their absolute emissions cuts targets for 2035 and 2040.

The transition must cover the entire economy. Partial pledges won't cut it.

I look forward to welcoming “first movers” on the Acceleration Agenda at the Climate Ambition Summit in September in New York.

Once again, I thank the Intergovernmental Panel on Climate Change for showing the fact-based, science-grounded way out of the climate mess.

We have never been better equipped to solve the climate challenge, but we must move into warp speed climate action now. We don't have a moment to lose.

IPCC SYNTHESIS REPORT MARCH 2023 - SUMMARY FOR POLICYMAKERS – EXTRACTS

Para	Variable	Unit	Values					Notes
			Nominal [1]	Min	Max	Minus %	Plus %	
A.1.1	All causes	Year	2019	2019	2019			
	Average world surface temp (Tw)	°C	1.09	0.95	1.2	14.7	10.1	[2]
	Average land	°C	1.59	1.14	1.83	39.5	15.1	[2]
	Average ocean	°C	0.88	0.68	1.01	29.4	14.8	[2]
	Human Induced							
	Average surface temp	°C	1.07	0.8	1.3	33.8	21	[2]
	Solar and volcanic	°C	0	-0.1	0.1	10.0	10.0	[2]
	Internal	°C	0	-0.2	0.2	20.0	20.0	[2]
A.1.3	CO2 concentration							
	2019	ppm	410					[3]
	2020	ppm	413					[3]
	2023	ppm	422.6					[3]
	Rate pa (2019-2020)	ppmpa	3					
	Rate pa (2019-2023)	ppmpa	3.15					
A.1.3	GHG Concentration (2019)							
	Ratio GHG to CO2		1.353					[4]
	GHG 2019	ppm	555					
	GHG 2020	ppm	559					
	GHG 2023	ppm	572					
A.1.4	GHG World Emissions							
	GHG Emiss 1990	GtCO2Eq	32.0					
	GHG Emiss 2010	GtCO2Eq	52.5					
	GHG Emiss 2014	GtCO2Eq	49.4					[5]
	GHG Emiss 2019	GtCO2Eq	59.0					
	GHG Emiss 2023	GtCO2Eq	53.0	50	57	6.0	7.5	
	CO2GHG World Emissions							
	CO2 Emiss 1990	GtCO2	23.7					
	CO2 Emiss 2010	GtCO2	38.8					
	CO2 Emiss 2014	GtCO2	36.5					[5]
	CO2 Emiss 2019	GtCO2	43.6					
	CO2 Emiss 2022	GtCO2	41.4					[6]
	CO2 Emiss 2023	GtCO2	39.2					
A.2.1	Sea level rise (human activities)							
	1901-2018 (117Y)	mm	200					
	1901-2018 (119Y)	mmpa	1.71					
	1901-1971 (70)	mmpa	1.3					
	1971-2006 (35)	mmpa	1.9					
	2006-2018 (12y)	mmpa	3.7					
	1901-2018 (117Y)	inch	7.9					
	1901-2018 (117Y)	inchpa	0.066					
	1901-1971 (70)	inchpa	0.051					
	1971-2006	inchpa	0.074					
	2006-2018 (13y)	inchpa	0.145					
Notes								
1	Above 1850-1900 in 2011-2020. Why talk in decades instead of to the current year							
2	Note the quite wide range in the distributions, indicating lack of confidence, even though the IPCC claims high confidence in these figures							
3	Mauna Loa readings							
4	Indicates warming effect of including methane and nitrous oxide emissions .. Ratio of GtCO2eq to GtCO2 -is 1.353.							
5	Figures determined in Table F12 of "A View on permanent climate change ", M.R. Flint, 24 July 2020.							
6	Interpellated figure							