## UNFCCC Climate Treaty State of Article 2 the Objective, Article 3 Party action

Only one Earth science
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ARTICLE 2. Objective: "stabilize greenhouse gas atmospheric concentrations at a level that would prevent dangerous human interference with the climate system... limit global warming to well below 2°C preferably 1.5°C". 12

For 1.5°C limit CO, emission tonnes to 345

For 2°C limit CO<sub>2</sub> emission tonnes to 345

On actions 1.5°C is emitted in 3 years 67

On actions 2°C is emitted in 17 years 67

STATE OF ARTICLE 2. There is no progress only regress, dangerous atmospheric destabilization and thus global warming are accelerating. <sup>8 9</sup>

1.

OC

Global warming emitted now

IPCC 83% (best) likelihood 10

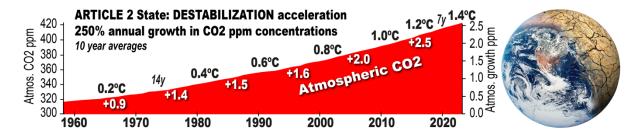
1,000 days +0.1°C ▼ 10 days +0.01°C ▼

E

EVERY DAY global warming increases about <u>0.0001°C</u> - caused by <u>115 million</u> tonnes of daily CO2 emissions, 42 Gt/y.

**The global greenhouse gas emission "clocks"** (top above) are moving at a blistering rate, 1,300 tonnes per second, 5 million tonnes per hour, 42 billion tonnes CO<sub>2</sub> per year increasing 1.1%. <sup>4</sup> They are counting down the remaining tonnes in IPCC's 83% (best) likelihood CO<sub>2</sub> budgets to limit global warming to 1.5°C and 2°C. <sup>3</sup> On global policies and actions dangerous 1.5°C will be emitted in just 3 years, disastrous 2°C in only 17 years. <sup>67</sup>

**The global warming "clock"** (above) shows the best estimate of emitted global warming now on IPCC's 83% likelihood CO<sub>2</sub> budget. As a result of 115 million tonnes of daily CO<sub>2</sub> emissions, global warming is increasing about one ten-thousandth of a degree every day; in 10 days 0.001°C, in 100 days 0.01°C, in 1,000 days 0.1°C, and in about 30 years on current policies and actions a catastrophic 1°C more global warming will be emitted, 2.4°C. 8910



The graph above shows Article 2 "greenhouse gas atmospheric concentrations" <sup>8</sup> which should be stabilized to realize the objective, "prevent dangerous interference". The opposite is happening.

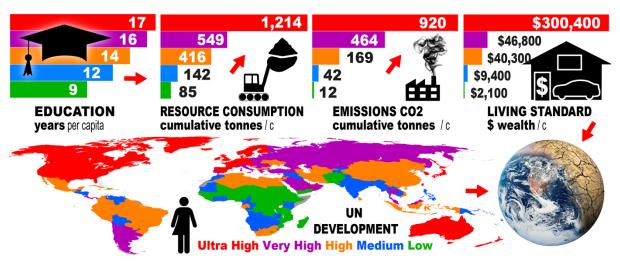
It is most often reported that that climate "actions are not enough... we must do more... progress is insufficient". This is not correct. The graph shows that there is no "progress"; there is "regress": In 50 years, atmospheric greenhouse gas concentrations are <u>destabilized</u> at an everaccelerating rate, from an annual increase of +0.9 CO<sub>2</sub> ppm (10 year average 1972) to +2.5 (10 year average 2022), 2.5 times more. 8

It follows that the rate of global warming has also increased: compared to fifty years ago it now takes about <u>half the time</u> to increase one tenth of a degree. Nothing <u>effective</u> is being done to stop further "dangerous interference with the climate system". <sup>9</sup>

In 1970 global warming was a harmless **0.2**°C, and on current policies and actions, IPCC's 83% (best) likelihood CO<sub>2</sub> budget for **1.5**°C will be emitted in only 3 years, disastrous **2**°C in just 17 years: this means that in one 81 year lifetime, global warming will have increased **10 times.** <sup>5679</sup>

ARTICLE 3. "Parties should protect the climate system... in accordance with their common but differentiated responsibilities and respective capabilities... developed country Parties should take the lead". 12

STATE OF ARTICLE 3, The Parties who lead are 12% of humanity causing 50% of climate change, they are not reducing emissions by responsibility and capability, not protecting the climate system, less developed nations follow risking social-economic collapse. 411 12 13



The Article 3 graph above shows UN development groups' per capita education, natural resource consumption plus CO<sub>2</sub> emissions (a consequence of energy use) which together produce the desired living standards (home, car, etc.). 411 12 13 14

UN Ultra High developed nations (*red*, *UNDP Human Development Index value above 900*, *basically UNFCCC's Annex II Parties*) are the most educated, healthiest, wealthiest and set the standards for all countries <sup>11</sup>

Ultra High are just 12% of humanity with an extraordinary 64% of global wealth causing 50% of climate change emissions and 37% of nature destroying consumption 4 11 12 13 14. In the 50 years of science warnings, they have increased consumption and are **not** reducing emissions meaningfully. 4 14

To realize desired Ultra High living standards (\$300,400 per person wealth, 17 years of education, 81 years of life expectancy), the basic commitment of all **less developed** nations, 88% of humanity, is that they will raise their consumption and emissions to the extremely high, completely unsustainable standards set by Ultra High (1,210 tonnes consumption and 920 tonnes emissions). 4 11 12 13 14 15 In this

Ultra High are leading relentlessly accelerating greenhouse gas emissions and natural resource consumption trends toward massive global shortages of all the essentials for life – food, water, energy, medicines, shelter – risking hundreds of millions dead, billions displaced from lands rendered uninhabitable, social-economic collapse, no one safe anywhere. <sup>16</sup> 17

To protect the climate system, nations' responsibilities, capabilities and development must be known by Parties and the public now.

Found nowhere else comprehensibly, here are the required ARTICLE 3 Parties' UN data:

Development	Responsibilities			ARTICLE 3			Capabilities			
UNFCCC PARTY DATA  UN development per capita	CO2 tonnes SINCE 1850	CO2 tonnes CURRENT per year	CO2 TRENDS 5 years avg / yr	PLEDGE % / yr 2024 to 2030	2°C 83% likely, % / yr now onward	1.5°C 83% likely, % / yr now onward	EDUCATION expected years	LIFE expectancy years	INCOME \$ per year	WEALTH \$ (LIVING STANDARD)
ULTRA HIGH developed	920	12.6	-1.0%	-4.8%	-17.6%	-9t / cap	16.7	80.8	\$54,000	\$300,400
VERY HIGH developed	464	7.7	-0.1%	-1.1%	-9.4%	-54.5%	16.2	75.4	\$29,300	\$46,800
HIGH developed	169	5.5	+1.8%	+0.1%	-6.3%	-29.1%	14.2	74.7	\$15,200	\$40,300
MEDIUM developed	42	1.6	+2.8%	+3.1%	-1.1%	-6.0%	12.0	67.4	\$6,400	\$9,400
LOW developed	12	0.5	+3.9%	+3.2%	+1.5%	-1.1%	9.5	61.3	\$3,000	\$2,100
1 Switzerland	364	14.0	-3.1%	-4.6%	-19.3%	-12t / cap	16.5	84.0	\$66,933	\$555,700
2 Norway	515	8.5	-2.1%	-1.6%	-10.3%	-66.1%	18.2	83.2	\$64,660	\$302,700
3 Iceland	460	9.8 *	+0.1% *	-8.6%	-13.1% *	-1t / cap *	19.2	82.7	\$55,782	\$381,700
189 Niger	2	0.1 *	+6.0% *	+2.9%	+5.5% *	+1.7% *	7.0	61.6	\$1,240	\$610
190 Chad	3	0.1 *	-0.1% *	+6.1%	+3.7% *	+1.5% *	8.0	52.5	\$1,364	\$570
191 South Sudan	4	0.2 *	+1.2% *	+0.8%	+3.6% *	+1.0% *	5.5	55.0	\$768	

(All 195 Parties' data are at https://onlyoneearth.science/tables/)

The above Article 3 table provides accurate, **up-to-date per capita data** to enable citizens and governments to evaluate all 195 Parties' development, responsibilities, capabilities, for climate system protection to limit global warming to 2°C / 1.5°C:

- column #1: Parties' <u>development</u> level (education, health and wealth <u>capabilities</u>) up-to-date from the human development authority UNDP) 11,
- column #2: Parties' historic responsibility for present global warming (IPCC source) 4,
- column #3: Parties' current <u>responsibility</u> for further global warming (IPCC source) 4,
- column #4: Parties' recent actions to protect the climate system (IPCC source) 4,
- column #5: Parties' <u>pledges</u> (NDCs) expressed in percentage change per year from 2024 to 2030 (Climate Resource) 18

- columns #6 and #7 are CO<sub>2</sub> emission actions that Parties "should" take now in percentage per year to <u>limit global warming to 2°C / 1.5°C</u> by current (column #3) not historic responsibility (83% likelihood, IPCC AR6 WG1). <sup>19</sup> "Xt / cap" means a Party's current emissions are so great that to be on-limit for 1.5°C, by current responsibility they "should" remove from the atmosphere X tonnes CO<sub>2</sub> per capita in 2024. <sup>17</sup>
- column #8-11 are key capabilities, expected education, life expectancy, annual income and wealth (human development, living standards). 11 13

There should be "climate weeks" and other major activities in Ultra High developed nations - who must lead - to provide accurate, comparable, up-to-date information on responsibility and capability, and on the actual current emission and consumption reductions required to avert future socio-economic collapse.

**HERE** - <a href="https://onlyoneearth.science/tables/">https://onlyoneearth.science/tables/</a> - are all 195 nations' Article 3 data and actions, for explanations, references and more see <a href="https://onlyoneearth.science">https://onlyoneearth.science</a>.



Finally, today in 2024 humanity's **suicidal war on nature is escalating out of control:** Copernicus confirms a year of dangerous 1.5°C global warming <sup>20</sup>, natural resource consumption now exceeds 150% of the UN sustainable limit. <sup>21</sup> <sup>22</sup>

No one willfully wants to cause this wholesale annihilation of nature, what is the big picture explanation for why humanity is destroying the life support system upon which their survival, prosperity, well-being, happiness, everything depends? The answer is NOWISM. <sup>23</sup>



A half-century ago in 1972 the first UN Environmental Conference was held, almost immediately followed by an "Oil Crisis", and many more "crises" demanding immediate action. Then to now, led by the highest developed, all Governments at every development level have found that, to be and stay elected, the unbeatable election promise is NOWISM:

"We will maintain and increase your living standards now, with more cheap energy (more climate change), more cheap materials (more nature destruction) now": Everything for the present, nothing spent on the future. <sup>23</sup>

Is NOWISM really what the people want? An insecure future, desperate struggle for survival, descent to oblivion, hand-to-hand bloody battles over the last scraps of remaining food and resources?

Democracy is "the people rule", governments are "servants of the people", accurately inform the People:



To stop environmental trends to utter catastrophe, accurately inform the People to enable them to demand required responsible actions from Governments now. Maybe they will do it, maybe they won't – but fifty years of evidence shows that **if the People remain uninformed Governments will not act:** 



To citizens around the world, I say directly, we need you. Your voices – demanding bolder climate actions now – need to be heard clearly by your representatives.

Simon Stiell, Executive Secretary, UN Climate Change, 2 Feb 2024

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## References, data sources, notes

<sup>8</sup> Lan, X., Tans, P. and K.W. Thoning: Trends in globally-averaged CO2 determined from NOAA Global Monitoring Laboratory measurements. Version 2024-02

Decade	Atmospheric CO2 growth rate, 10 year annual average in ppm		
1962-1972	0.9 ppm / year		
1972-1982	1.4 ppm / year		
1982-1992	1.5 ppm / year		
1992-2002	1.6 ppm / year		
2002-2012	2.0 ppm / year		
2012-2022	2.5 ppm / year		

<sup>9</sup> NASA Goddard Institute for Space Studies, Surface Temperature Analysis (GISTEMP v4)

Decade	Temperature increase compared to	Rate of increase °C / decade		
	1850-1900, 10 year average in °C			
1963-1973	0.16			
1973-1983	0.32	0.16		
1983-1993	0.46	0.15		
1993-2003	0.66	0.19		
2003-2013	0.83	0.17		
2013-2023	1.14	0.30		

 $<sup>^{10}</sup>$  Translating CO2 emissions in temperature rise: By 1 January 2020 the remaining budget (AR6 WG1 83% likelihood) is 380 PgC for 2.4°C and 10 PgC for 1.3°C. For 83% likelihood budgets the near linear relationship between further emissions and further temperature rise is thus (380 - 10 =) 370 PgC » (2.4-1.3 =) 1.1°C or: 335 PgC » 1.0°C, or 0.0335 PgC » 0.0001°C (or 120 MtCO2 » 0.0001°C). A total of 33.3 PgC (~ 0.1°C) was emitted in the years 2020, 2021 & 2022 reducing the remaining 83% likelihood 1.4°C budget of 50 PgC on 1 January 2020 1 to 16.7 PgC on 1 January 2023 (~0.05°C), meaning the warming is about 0.05°C below 1.4°C by 1 January 2023. The temperature clock starts at 1.35°C by 1 January 2023. 2023 Carbon emission are estimated to be 11.4 PgC (~ 0.034°C), an average of 360 PgC \*10-9 per second (~ 1.077°C\*10-9), the rate at which the clock runs.

<sup>&</sup>lt;sup>1</sup> United Nations Framework Convention on Climate Change (1992)

<sup>&</sup>lt;sup>2</sup> United Nations Framework Convention on Climate Change, Paris Agreement (2015)

<sup>&</sup>lt;sup>3</sup> Intergovernmental Panel on Climate Change, 6th Assessment Report, Climate Change, The Physical Science Base (2021) WG1, Table 5.8 The assessed remaining Carbon budget.

<sup>&</sup>lt;sup>4</sup> Friedlingstein P et al, Earth System Science Data, Global Carbon Budget (2023)

<sup>&</sup>lt;sup>5</sup> Clock settings: the remaining Carbon Budget (83% probability) to limit global warming to 1.5°C / 2°C (compared to 1850-1900) is 300 / 900 by 1/1/2020. Of this **135 / 735 Gt CO2 remains by 1/1/2024** (Global Carbon Budget 2023: CO2 emissions 2020: 39.3, GtCO2, 2021: 41.1 GtCO2, 2022: 41.5 CO2 Gt, 2023 estimate 41.8 GtCO2). Clock-speed: **1,325 tonnes / second** (or 41.8 Gt / year).

<sup>&</sup>lt;sup>6</sup> Climate Action Tracker, Climate Analytics and New Climate Institute, Global Emission Timeseries, Actions & Policies (2023).

 $<sup>^7</sup>$  IPCC AR6 WG1: The remaining Carbon Budget (83% probability) to limit global warming to 1.5 $^\circ$ C / 2 $^\circ$ C / 2.4 $^\circ$ C (compared to 1850-1900) is 300 / 900 / 1,400 Gt CO2 by 1/1/2020. This does not include negative emissions or temperature overshoot. In Climate Actions Tracker's "actions and current policies" scenarios, cumulative global CO2 emissions (72%-77% of GHG) from 1/1/2020 exceed 300 Gt CO2 in 2027, 900 Gt CO2 in 2041 and 1,400 GtCO2 in 2053.

 $<sup>^{11}</sup>$  United Nations Development Programme, Human Development Index (2022) Ultra High Developed (red on map): HDI > 0.900, Very High Developed (purple on map): HDI 0.800-0.900, High Developed (orange on map): HDI 0.700-0.800, Medium Developed (blue on map): HDI 0.550 – 0.700, Low Developed (green on map) < 0.550

<sup>&</sup>lt;sup>12</sup> United Nations World Population Prospects 2022 revision

- <sup>17</sup> Kemp L. et al. Climate Endgame: exploring catastrophic climate change scenarios. Proceedings National Academy of Sciences (2022) Vol. 119 No. 34.
- <sup>18</sup> Meinshausen, M., Lewis, J., Gütschow J., Self, A., Burdon, R., Pflüger, M., and Lai, Y., (2023), NDC factsheets 01 December 2023
- $^{19}$  The remaining Carbon Budget (83% probability) to limit global warming to 1.5°C / 2°C (compared to 1850-1900) is 300 / 900 GtCO2 by 1/1/2020, or 260 / 960 GtCO2 by 1/1/2021, the year the IPCC WG1 updated budgets were published.

Land-use emissions are about 12% of total CO2 emissions and therefore 88% of the budget is allocated to fossil fuels and industry, 228 / 756 GtCO2 for 1.5°C / 2°C. Divided equally among humanity the per capita limit by 1/1/2021 is 29 tonnes CO2 for 1.5°C and 96 tonnes CO2 for 2°C.

With 960 million people, Ultra High developed nations' CO2 budget was 27 / 91 GtCO2 for 1.5°C / 2°C by 1.1.2021. As of 1.1.2024 UHD have exceeded their 1.5°C budget by 8 GtCO2 and should now remove this plus all they still emit. Only 55 GtCO2 remained of their 2°C budget, and UHD CO2 emissions must be reduced 18% per year to avoid exceeding their 2°C budget.

With 1.2 billion people Low developed nations' carbon budget was 34 / 114 GtCO2 for  $1.5^{\circ}$ C /  $2^{\circ}$ C by 1.1.2021. As of 1.1.2024, 33 / 112 GtCO2 remained, and LD CO2 emissions be reduced 1% / can increase 1.5% per year to avoid exceeding their 1.5°C /  $2^{\circ}$ C budget.

- <sup>20</sup> Copernicus Climate Service, Monthly Climate Bulletin January 2024: "12-month average over 1.5°C above preindustrial".
- <sup>21</sup> UNEP International Resource Panel (IRP), Managing and conserving the natural resource base for sustained economic and social development, 2014. "Limit natural resource consumption per capita to 7 (6-8) tonnes per year by 2050", this is the equivalent of a total of 68 gigatonnes per year (expressed as "1 Earth" consumption).
- <sup>22</sup> United Nations Material Flow Database (2023 update): Extraction and consumption of natural resources increased from 30 billion tonnes in 1970 (*» "0.4 Earth"*) to 102 billion tonnes in 2023 and 104 billion tonnes in 2023 (104 Gt » "1.5 Earth").
- <sup>23</sup> "Nowism: maintain and increase living standards now, with more cheap energy, more cheap materials now. Everything for the present, nothing for the future" is an original concept of Only one Earth science.

<sup>&</sup>lt;sup>13</sup> Credit Swiss, UBS AG, Global Wealth Databook 2023

<sup>&</sup>lt;sup>14</sup> United Nations Environmental Programme, International Resource Panel, Global Material Flow database (2023)

<sup>&</sup>lt;sup>15</sup> As an example: Government of India. National Action Plan on Climate Change (2008): "India is determined that its per capita greenhouse gas emissions will at no point exceed that of developed countries..."

<sup>&</sup>lt;sup>16</sup> United Nations Secretary General's remarks to High Level Opening COP 27 (2022) "We are in the fight of our lives. And we are losing. Greenhouse gas emissions keep growing. Global temperatures keep rising. And our planet is fast approaching tipping points that will make climate chaos irreversible. We are on a highway to climate hell with our foot still on the accelerator... Humanity has a choice: cooperate or perish. It is either a Climate Solidarity Pact – or a Collective Suicide Pact."