

# The Amazon is on fire, and so are we

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You may have noticed a little thing in the news recently – the Amazon is on fire. One of our biggest terrestrial carbon sinks is being deliberately burned to clear land for agriculture<sup>1</sup>, which could lead to accelerated climate breakdown<sup>2</sup>. If you're worried about global warming, you're not alone – and your voice is needed this September to drive change.

## What does the science say?

If fossil fuel burning continues to increase, we are likely to see temperature rises of 2.6 – 4.8°C by 2100<sup>3</sup>. Such rapid warming will have catastrophic effects. Lethal temperatures, for at least 20 days a year, would occur for 74% of the global population<sup>4</sup>, rendering huge parts of Earth's equatorial and southern regions uninhabitable. Rainfall is predicted to become more variable and exacerbate droughts in already drought-prone regions<sup>3</sup>. Each 1°C temperature increase will reduce crop yields by up to 7.4%, jeopardizing 2/3 of the world's calorific intake<sup>5</sup>. Ocean acidification is highly likely to lead to coral reef extinction<sup>6,7</sup> and risks collapse of marine ecosystems<sup>8,9</sup> including commercial fisheries<sup>8</sup>.

Tipping points, such as ice melt reducing reflection of solar energy<sup>10</sup> can rapidly accelerate warming, and they are very hard to model<sup>11,12,13</sup>. This means that the temperature increase estimates above from the IPCC (the UN body for assessing climate change science) may well be too low.

The crisis is also a very human one: food and water shortages and rising sea levels could displace 143 million people by 2050<sup>14</sup>, potentially destabilizing trade and straining international relations to the point of war. An Australian think tank warns warming of 2°C could displace two billion people, and describes greater warming as “beyond our capacity to model” with “a high likelihood of human civilisation coming to an end”<sup>15</sup>.

And it's already happening! Temperatures are now 1°C above pre-industrial levels<sup>16</sup>. War has broken out in Syria, caused by a complex suite of factors including climate change and water shortages<sup>17</sup>. Loss of Arctic ice is exceeding forecasts<sup>18</sup>, oceans have become 30% more acidic<sup>16</sup>, and sea levels have already risen<sup>16</sup>!

## What we can do about it

We are told the solutions to global warming are individual, that we need to bike to work, or eat less meat. These are good things to do, but they are not solutions. Whether you buy that yoghurt or not, Fonterra will continue powdering 95% of NZ dairy and selling it overseas<sup>19</sup>. While we have been having these conversations, and making individual changes, our carbon emissions have continued to rise<sup>20</sup>. What we have done has not

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<sup>1</sup> <https://www.washingtonpost.com/weather/2019/08/21/amazonian-rainforest-is-ablaze-turning-day-into-night-brazils-capital-city/?noredirect=on>

<sup>2</sup> <http://theconversation.com/amazon-fires-deforestation-has-a-devastating-heating-impact-on-the-local-climate-new-study-122914>

<sup>3</sup> [https://www.ipcc.ch/site/assets/uploads/2018/02/WG1AR5\\_Chapter12\\_FINAL.pdf](https://www.ipcc.ch/site/assets/uploads/2018/02/WG1AR5_Chapter12_FINAL.pdf)

<sup>4</sup> <https://www.nature.com/articles/nclimate3322>

<sup>5</sup> <https://www.pnas.org/content/114/35/9326>

<sup>6</sup> <https://www.ipcc.ch/sr15/>

<sup>7</sup> <http://adsabs.harvard.edu/abs/2008CorRe..27..459V>

<sup>8</sup> [https://www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-Chap30\\_FINAL.pdf](https://www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-Chap30_FINAL.pdf)

<sup>9</sup> [http://archives.esf.org/fileadmin/Public\\_documents/Publications/SPB37\\_OceanAcidification.pdf](http://archives.esf.org/fileadmin/Public_documents/Publications/SPB37_OceanAcidification.pdf)

<sup>10</sup> [https://www.pnas.org/content/pnas/105/6/1786.full.pdf?wptouch\\_preview\\_theme=enabled](https://www.pnas.org/content/pnas/105/6/1786.full.pdf?wptouch_preview_theme=enabled)

<sup>11</sup> <https://www.commondreams.org/news/2018/10/09/whats-not-latest-terrifying-ipcc-report-much-much-much-more-terrifying-new-research>

<sup>12</sup> <https://www.campaigncc.org/climateemergency.shtml>

<sup>13</sup> <https://www.theguardian.com/environment/2018/oct/09/tipping-points-could-exacerbate-climate-crisis-scientists-fear>

<sup>14</sup> <https://openknowledge.worldbank.org/handle/10986/29461>

<sup>15</sup> [https://docs.wixstatic.com/ugd/148cb0\\_b2c0c79dc4344b279bcf2365336ff23b.pdf](https://docs.wixstatic.com/ugd/148cb0_b2c0c79dc4344b279bcf2365336ff23b.pdf)

<sup>16</sup> <https://climate.nasa.gov/evidence/>

<sup>17</sup> <https://journals.ametsoc.org/doi/full/10.1175/WCAS-D-13-00059.1>

<sup>18</sup> <https://www.bbc.co.uk/news/science-environment-49483580>

<sup>19</sup> <https://www.fonterra.com/nz/en/about/our-markets.html>

<sup>20</sup> <https://academic.oup.com/bioscience/article/67/12/1026/4605229>

worked. Focusing on individual responses distracts from what is needed to create real change – a unified movement led by people like you and me.

In Aotearoa, Labour are proposing that we will be carbon neutral by 2050, but that's not nearly good enough. To keep climate change at survivable levels, the IPCC estimates we only have 11 years to halve our carbon emissions<sup>21</sup>. We need to begin shifting to a carbon neutral economy immediately. The good news is that we have the technology to do this<sup>22,23</sup> and governments have historically implemented mass-mobilizations of industry during crises<sup>24</sup>, such as during WW2. The bad news is that there are large powerful corporations invested in preventing this from happening<sup>25</sup>. Fossil fuel companies hold huge political sway, so people pressure is needed to force governments to act.

Collective action has a long history of driving major social change, both here in Aotearoa and worldwide. The suffragette movement here was the first to win equal rights for all women and inspired the world to follow. Protests and worker strikes are responsible for many of our modern civil rights and employment rights<sup>26,27</sup>, and they could be effective against climate change too. After all, it's the perpetual growth of capitalism that is responsible for the climate crisis<sup>28</sup>.

Only 3.5% of the population need to be involved in collective action for it to work<sup>29</sup> – in Aotearoa, that's roughly the population of Hamilton. The power of people to create positive change is the philosophy behind the school strikes for climate.

Led by Greta Thunberg, the school strikes are a global phenomenon calling for urgent government action on climate change. In May, thousands of school children shut down Queen Street in Auckland<sup>30</sup>. And this action is working – a number of regional councils around Aotearoa have already declared a climate emergency, a term coined by the school strikers. Now, they are calling for a “general strike” – for everyone to walk out of school or work on September 27<sup>th</sup> and join them in demanding action<sup>31</sup>. Workers' unions and universities around the country have already given their support<sup>32,33,34</sup>.

We therefore urge everybody to join us in supporting the strike on September 27<sup>th</sup> at 12pm by walking out and participating in the protest in Aotea Square. Every voice will count in forcing our politicians to hear us.

This is an emergency, and we need an emergency mobilisation!

To find out more, go to <http://www.schoolstrike4climatenz.com> or see the Facebook event page at <https://www.facebook.com/events/2386119984936727/>

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<sup>21</sup> <https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/>

<sup>22</sup> <https://www.vox.com/energy-and-environment/2018/12/21/18144138/green-new-deal-alexandria-ocasio-cortez>

<sup>23</sup> <https://www.jacobinmag.com/2019/03/green-new-deal-wwii-deficit-mobilization>

<sup>24</sup> <https://www.jacobinmag.com/2019/03/green-new-deal-wwii-deficit-mobilization>

<sup>25</sup> <https://www.greenpeace.org/usa/global-warming/exxon-and-the-oil-industry-knew-about-climate-change/exxons-climate-denial-history-a-timeline/>

<sup>26</sup> <https://teara.govt.nz/en/strikes-and-labour-disputes/print>

<sup>27</sup> <http://ergo.slv.vic.gov.au/explore-history/fight-rights/workers-rights/winning-8-hour-day>

<sup>28</sup> <https://www.theguardian.com/commentisfree/2019/apr/25/capitalism-economic-system-survival-earth>

<sup>29</sup> <http://www.bbc.com/future/story/20190513-it-only-takes-35-of-people-to-change-the-world>

<sup>30</sup> [https://www.nzherald.co.nz/nz/news/article.cfm?c\\_id=1&objectid=12234059](https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12234059)

<sup>31</sup> <https://docs.google.com/document/d/1Vb4voJUHwmPvul75AHlBw7Qolo6oaviCI8U9HTYIzhs/edit>

<sup>32</sup> <https://www.union.org.nz/nzctu-supports-climate-strike/>

<sup>33</sup> <https://www.victoria.ac.nz/news/2019/09/victoria-university-of-wellington-endorses-the-school-strike-for-climate>

<sup>34</sup> <https://www.stuff.co.nz/environment/115428288/lincoln-staff-and-students-free-to-join-septembers-climate-change-strike>