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The Club of Rome Climate Emergency Plan

What does "climate emergency" mean?

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Introduction

At its 50th anniversary meeting in Rome on October 2018, the Club of Rome (CoR) identified an emergency response to climate change as a key strategic priority, and subsequently adopted a Climate Emergency Plan, to be launched before end-2018 in partnership with a wide range of organisations.

The term "climate emergency" is coming into more general use as the existential nature of the climate warming threat is becoming widely recognised, both in the scientific literature and in the broader public domain. In September this year in a speech in NewYork, UN Secretary General António Guterres described climate change as "the defining issue of our time", representing "a direct existential threat" to humanity.

"Climate emergency" has two broad applications:

- As a problem statement, signifying a state of growing and/or future crisis or threat. Evidence of that threat, may be found in the report What Lies Beneath: The understatement of existential climate risk (https://www.breakthroughonline.org.au/publications)
- As a solutions statement, signifying a particular societal response to the crisis or threat, which in general terms may be characterised as similar to the response by governments to events such as extreme natural disasters, and to overwhelming threats to a society, such as war and the establishment of a wartime mobilisation and economy. "Climate emergency" signifies a specific societal mode and should not be conflated with terms such as "stronger action", "greater urgency" which lack specificity as to the mode of response.

It is the latter, "climate emergency" as a solutions statement, that is the purpose of the CoR Plan, and which this Briefing Note addresses by providing an overview of what constitutes emergency mode, as an aid to developing sound strategy and policy.

Natural disasters and emergency threats

Many of us have experienced emergency situations such as wildfires, floods or hurricanes/cyclones where, for the duration, nothing else matters as much as responding to the crisis. If we want to survive, or help others effectively, we don't rush thoughtlessly in, but focus on a plan of action, implemented with thought and all possible care and speed to protect others and get to safety. Everyone chips in, with all hands on deck.

An emergency is a threat to people, property and/or society that has the potential to overwhelm. It could be a natural disaster, a financial system crisis, a pandemic, a food—water crisis, a nuclear meltdown, war or climate damage.

The challenge is to stop the problem escalating out of control and return to safety. In responding, failure and tradeoffs are not an option, because the consequences are so grave.

Action is time sensitive, because delay in responding leads to escalation and increased damage and cost.

Emergencies may be of short, medium or long duration, and their geographical impact may be local/regional, national or global.

Wildfire: local, short-duration emergency

For natural emergencies, such as forest fires, emphasis is placed on anticipating how severe an event could be, not just middle-of-the road projections. People are educated about those high-end risks, and appropriate responses such as preparing property and evacuation plans. Government agencies are expected to be honest about the threats and what needs to be done.

The response is coordinated by government. Where emergency situations are of a familiar type, plans are made well in advance for labour, equipment and logistical capacity adequate to the task. The affected population is mobilised for firefighting, support services, care of the vulnerable, and other tasks. Communities are informed and consulted.

As the event materialises, some "business-as-usual" functioning of the affected community may be suspended: schools and other facilities closed, transport rerouted, dangerous activities prohibited, and volunteers take leave from their work.

Mostly, there is political bipartisanship to do "whatever it takes" and no effort or resources are spared.

War economy: national, long-duration emergency

Many of the same approaches apply to mobilisation at times of conflict. Whilst wars are terrible events, how nations mobilise when their very existence is in doubt gives insight into responding to grave threats. Like a natural emergency, plans are made for the worse that could happen, the population is mobilised in an all-out effort, and generally there is bipartisanship.

To deal with an unfamiliar emergency, it is often necessary to undertake "crash programmes" to create new capabilities. Iconic examples of such programs have been the Manhattan Project (through which the US developed the nuclear bomb) and the Apollo Program (to get astronauts to the moon). In some cases, the emergency has been so demanding that the whole economy has had to be mobilised to new purposes.

A "whatever it takes" attitude means that government plans and directs the nation's resources and capacity towards building up the war effort. This can be done at amazing speed. After the surprise Japanese attack on the US Pacific fleet at Pearl Harbour in 1941, the US economy was transformed from the world's largest producer of consumer goods to world's largest producer of military goods in a year. Government directed the whole war effort, but business boomed as the national economy grew quickly. The proportions of national economies dedicated to the effort in World War II were staggering. Military outlays in 1943 as proportion of total economy were: USA 42%; UK 55%; Germany 70%; and Japan 43%. Japan's percentage reached about 70% in 1945.

With so much directed toward the war effort, non-essential consumption was curtailed (for example, increased taxation and the sale of savings programs such as "war bonds"), whilst the basics for everyone were guaranteed. During World War II, rationing of some essentials was accepted by the population because such action or sacrifice was understood fair and necessary. The wartime speed and scale of action was made possible by the huge intensity of the motivation driven by fear and, to some degree, hope for a better world to come.

Rapid economic transitions

In the case of climate change, we need to go one step further and change not only what the economy produces, but also how it produces. Here, the experience of Japan, the Asian tiger economies and, more recently, China is instructive. For example, in two decades, South Korea transformed itself completely from being a poor agricultural economy to a middle-income, world-competitive manufacturing economy. These changes came with very high human and environmental costs, but they demonstrate that programs to transform the organisation of production can be implemented quickly. The challenge for climate emergency action is to figure out how to transform the physical economy very fast without the high human and environmental cost.

Emergency mode

An "emergency declaration" demonstrates that the government rates the problem as very serious, that priority will be given to resolving the crisis, that we are all in the crisis together and that, officially, "business as usual" and "reform-as-usual" no longer applies. **Table 1** provides a comparison of "normal" and "emergency" modes.

Some characteristics of emergency mode are:

• Clarity of purpose

In a forecast natural disaster such as floods or wildfires, one clear goal is to save all human life. With climate warming, the purpose of emergency action is to protect all people, societies and ecosystems. This is not the case with the present climate policymaking processes, which arbitrarily debates how much death, destruction and ecosystem collapse should be tolerated. An example of this is the use conventional economic use of discount rates (a la William Nordhaus) which underplays the costs and impacts of future events..

Risk management

An emergency response starts by fully assessing all the risks and potential damage, especially the "high-end" and existential risks which would be devastating for human societies. Special precautions that go well beyond conventional risk management practice are required if the increased likelihood of very large climate impacts are to be adequately dealt with. International and national climate policymaking has not adopted this approach; rather it has exhibited a preference for conservative projections which ignore the real risks to which we are exposed.

• Full and frank communication

Emergency mode is a whole-of-society effort which requires an aware and motivated population. In most cases it also requires political bipartisanship. A supermajority (perhaps 70% or more) of support may be needed to enable very large-scale and very rapid action, otherwise social conflict can derail the change process. A supermajority level of support is likely to be possible in the face of a catastrophic climate change threats, with fear of loss being the most powerful motivator.

A full and frank discussion and broad understanding of the threat, the response and what that means for the society is critical is building and maintaining active commitment across the community. By contrast, international policymakers, most governments, and much of the non-government sector, so far have failed to clearly articulate and communicate the full risks and the responses adequate to the threat.

Highest priority

An emergency identifies a task as the highest priority of the society for the duration of the emergency, to which sufficient resources will be applied in order to succeed. Recently, Prof. Will Steffen, lead author of the "Hothouse Earth" paper, told *The Intercept* in an interview published on 14 August 2018 that "Getting greenhouse gas emissions down fast has to be the primary target of policy and economics (with) something 'more like wartime

footing' to roll out renewable energy and dramatically reimagine sectors like transportation and agriculture 'at very fast rates'."

To be effective, a government climate emergency programme needs to be able to maintain society's focus on delivering effective action (the whole job) with adequate priority, whilst also being a comprehensive and integrated programme of actions using project management methods suitable for large-scale and fast economic restructuring, involving huge complexity.

• Government leadership.

All fast, large-scale transformations are characterised by strong government leadership in planning, coordinating and allocating resources. This response is backed by sufficient administrative power to achieve a rapid response that is beyond the capacity of the society's normal functioning. Only national government has society-wide capacity to plan, direct resources, develop labour skills, provide funding from taxation, manage savings and investments, coordinate innovation efforts, and set a regulatory framework for effective emergency action. To do this, the prevailing neoliberal ideology (privatisation, deregulation, lower taxes, less government spending, and so on) must be suspended even where societies see it as the preferred approach for managing the economy in normal times.

• Focus on physical transformation

More than anything else, climate emergency mobilisation is about the transformation of the physical economy at great speed, delivering an integrated package of solutions for a safe-climate economy, zero emissions and large-scale carbon dioxide drawdown. Emphasis is also given to critical research and development of solutions to close the gap between what is needed for effective protection and what is currently possible.

Fairness

We now face large-scale climate disruption: either planned by way of an emergency transition to restore a safe climate, or unplanned chaos because social and physical system failure will inevitably occur as warming intensifies. This dislocation requires a focus on equity — both internationally and within the nation — so that the burden of transformation is shared in a reasonable manner. Without a sense that the emergency and the changes are both fair and necessary, the public mandate for such change is unlikely to be built or maintained. The good news is that even if a climate emergency were to be declared at a time of economic health, the tasks are so challenging — building a zero-emissions economy, taking carbon out of the air, and finding the means to cool the planet — that every scrap of productive capacity will be required.

Conclusion

With very few exceptions, the present responses to global warming are within the "normal mode" of response (see Table 1). Most governments have not been brutally honest with themselves, and their communities, about the new climate data and its consequences, or about the severity and proximity of the consequences if present trends continue. Necessary targets and goals are being severely compromised, while the speed of our response is hopelessly inadequate, and will result in global warming worsening and moving beyond our capacity to construct practical responses.

We are not devoting the necessary resources to solving the problem, whether it is research and innovation, planning for a rapid transition, or scaling up production. Not only has failure become an option; it has also become the norm. On all objective measures the world is going backwards: emissions are rising at an increasing rate, events signalling more dangerous changes in the environment are occurring faster than expected, and positive feedbacks are beginning to kick in.

The present emissions path consistent with national commitments under the Paris Agreement are a path of more than 3°C of warming, and up to 5°C of warming when carbon cycle feedbacks, which are now being activated, are

taken into account. Yet national security analysts say that just 3°C and a half-metre sea-level rise may well be enough to create "outright chaos" internationally, senior scientists say 4°C is likely "Incompa/ble with an organized global community... likely to be beyond 'adaptation'... high probability of not being stable" and similar sentiments. The World Bank maintains that "There is no certainty that adapta/on to a 4°C world is possible."

Prof. Hans Joachim Schellnhuber has recently warned that "Climate change is now reaching the end-game, where very soon humanity must choose between taking unprecedented action, or accepting that it has been left too late and bear the consequences."

In short, although it is the greatest threat in human history, global warming is not being treated as an emergency. That has to change rapidly, with widespread understanding and acceptance of what "climate emergency action" really means.

Table 1: Comparing normal mode and emergency mode

Normal mode	Emergency mode
Crises are constrained within business-as-usual mode.	Society engages productively with crises, but not in panic mode.
Political media management and 'politics as usual'	The situation is assessed with brutal honesty.
No urgent threat is perceived.	Immediate, or looming, threat to life, health, property, or environment is perceived.
Problem is not yet serious	High probability of escalation beyond control if immediate action is not taken.
Time of response is not important	Speed of response is crucial.
The crisis is one of many issues	The crisis is of the highest priority
A labour market is in place	Emergency project teams are developed, and labour planning is instituted.
Budgetary 'restraint' is shown.	All available/necessary resources are devoted to the emergency and, if necessary, governments borrow heavily.
Community and markets function bas usual.	Non-essential functions and consumption may be curtailed or rationed
A slow rate of change occurs because of systemic inertia.	Rapid transition and scaling up occurs.
Market needs dominate response choices and thinking.	Planning, fostering innovation and research take place.
Targets and goals are determined by political tradeoffs. There is a culture of compromise.	Critical targets and goals are not compromised. Failure is not an option
There is a lack of national leadership, and politics is adversarial and incremental	Bipartisanship and effective leadership are the norm.