

# **Submission to the Executive Committee**

## **Background**

At the last Club of Rome (CoR) AGM, in November 2017, Jorgen Randers and Ian Dunlop hosted a workshop on their proposal for the CoR to focus its efforts on an emergency initiative to address climate change. Their proposal was based on the following considerations:

- Human-induced climate change represents an immediate and existential threat to humanity.
- An emergency response is essential if the threat is to be reduced.
- Any successful response should seek to achieve clearly defined objectives with appropriate government regulation. The "free market" cannot solve the problem in isolation.

Some 40 members participated in the Workshop. The outcomes were:

- Nobody questioned the necessity of giving priority to the climate challenge.
- All agreed that any action must be ethically-based, with due consideration for the poor and future generations.
- There was some disagreement with the proposal to meet the climate challenge through one
  or two focused actions, such as banning investment in new fossil capacity or a fossil ban
  plus meaningful action in agriculture and forestry. Action on a variety of fronts was
  preferred.
- The need to pursue Carbon Capture and Storage (CCS) was emphasised, not just because CCS can reduce emissions significantly in the short term (next 20 years) but because it is needed in the long run (the century from 2050) to extract CO2 from the atmosphere.
- Some argued that the CoR message would be more easily understood if it described how various actions would influence global temperatures and the consequences (like sea level rise and extreme weather), rather than offering a carbon budget/equilibrium perspective, on the grounds that people do not realise how soon major upheavals are likely.

At the end of the 90 minute session there was complete support for the proposal to develop a **Climate Emergency Initiative**.

This refined proposal document, to which is added a second initiative, on economic and social reform, was submitted for discussion at the Executive Committee (Excom) on 29/30<sup>th</sup> January 2018 where it received broad support. It is now being sent to the membership for a vote, with the following question:

Should the Club of Rome make emergency action to address climate change its priority objective for the next 5-10 years, linked to complementary reform of the economic and social system?"

\*\*\*Please answer this question on the last page of this document and send it back or send a short message directly to thomas.schauer@clubofrome.net\*\*\*

## The Climate Challenge

Climate change is driven primarily by human carbon emissions from fossil fuel combustion, industrial agriculture, and land clearing, superimposed on natural climate variability. It is happening faster and more extensively than previously anticipated.

Beyond the damage caused by the gradual warming and rise in sea levels, scientists have long been concerned about the existence of "tipping points", thresholds beyond which non-linear positive feedback mechanisms will greatly accelerate the rate of change. If these tipping points are reached, the resulting higher temperatures are likely to prove irreversible within common human time-frames, forcing generations to live in a greatly degraded world.

The risks of such self-reinforcing feedback mechanisms are already visible. With Arctic winter temperatures up to 20°C above normal levels, sea ice melt is accelerating, reducing the ice volume even more. It is already lower than at any time since humanity evolved into its present form. Rising methane emissions from melting permafrost are creating another feedback-loop, accelerating the melting of the southern edge of the permafrost. These changes are causing instability in the Northern Hemisphere's jet-stream, resulting in widespread, and often counter-intuitive, temperature variability in many places, for example recent extreme cold in the Eastern US.

If the Greenland and Antarctic ice sheets continue to melt at current rates, sea levels will rise by around another half a meter this century, possibly much more, and certainly by more in the following 500 years. The Antarctic Larsen ice shelf and several West Antarctic glaciers are showing signs of disintegration due to the warming Southern Ocean.

With global average surface temperatures continuing to rise, consistently breaking previous records, coral reefs around the world, not least the Australian Great Barrier Reef, are dying. Some traditional terrestrial carbon sinks, such as the world's rainforests, are also showing signs of becoming carbon emitters.

The change in climate is creating a warmer, wilder and wetter world, resulting in the violent hurricane season in the Atlantic and Gulf of Mexico in 2017, as well as extreme heat and flooding in South Asia and the Middle East, and a winter bushfire emergency in California. None of these events are exclusively the result of human carbon emissions, but they will increase in frequency, extent, and severity with the rising concentrations of greenhouse gases in the atmosphere.

Without change, higher global average temperatures will eventually make life less pleasant for almost all people, and extremely difficult for the many hundreds of millions of people who live on flat lands near sea level, in areas where drought will reduce food production, those who farm marginal land, and those who will be affected by floods, particularly around major rivers. Drought and forest fires will become more frequent, making the medium-term viability – at current population densities – of an increasing number of regions questionable (Mediterranean, Middle East, Pacific Islands, parts of Africa, Bangladesh, Pearl River Delta, Mekong River Delta, US Eastern seaboard & Gulf Coast, and other major Asian cities and deltas). Some islands and coastal areas, many of which are densely populated, will become submerged. This will cause extensive forced migration, with the 2016 refugee crisis in Europe emanating mostly from Syria and North Africa a precursor of what is to come.

# The Global Response so far

Responding to this challenge, the landmark 2015 Paris Climate Agreement seeks to hold global average warming "well below 2°C above pre-industrial levels and to pursue efforts to limit the increase to 1.5°C", through the voluntary action of 195 participating nations.

Unfortunately, the commitments made in Paris will not achieve this goal. Instead, they will result in warming of more than  $2.5^{\circ}$ C this century, and  $5^{\circ}$ C in the long run, making much of the world uninhabitable. Even if warming can be kept to  $+2^{\circ}$ C this century, this will still be enough to trigger the self-reinforcing melting of the permafrost over the next 500 years, resulting in an eventual  $+5^{\circ}$ C rise.

To avoid this future, something dramatic has to be done to reduce man-made greenhouse gas emissions, and to cut the concentration of greenhouse gases in the atmosphere. Emissions need to be cut faster than is profitable or cost efficient in the short term, i.e. faster than the current economic system can achieve. The official UNFCCC process will not cut emissions in time to avoid serious, potentially irreversible, damage. While this approach should not be abandoned, given that a global forum for discussion is essential and few others are available, it must be supplemented by other mechanisms. There will need to be state intervention at a level not seen since the World War II.

Though such intervention seems hard to imagine, it is possible. Between 1942 and 1944 the US shifted more than 30% of its productive capacity from ordinary consumer goods and services to military equipment. A similar transition occurred in Britain and Germany. So dramatic change in economic direction is achievable through government action, if the public supports it and the challenge is sufficiently recognised.

Despite decades of effort, however, the level of understanding on climate science among top level government decision-makers is poor. This is true of senior corporate and finance leaders too, despite the rhetoric of some around the Paris meeting calling for urgent action. While an increasing number of regulators are concerned about climate risks, initiatives still tend to focus on reactive and incremental change.

Most NGOs, with a few exceptions, also avoid serious discussion on the realities of the climate challenge, and the need for an emergency response, with many believing that little can be achieved using "scare tactics" (i.e. speaking the truth). Some fret that such an approach may exclude them from government discussions or even reduce their funding.

Similarly, as many scientific organisations are dependent on government funding, their freedom to comment publicly on the climate issue is limited. National security, defence and emergency organisations are likewise constrained from public comment and action.

Behind it all is the pernicious influence of increasing inequality globally, which is a major barrier to change as it locks in the status quo and reinforces the denialist inclinations of the political and corporate establishment

The net result is that the seriousness of the climate challenge is rarely discussed properly and the public is largely ignorant of the escalating threat.

There is therefore an urgent need for an independent and serious organisation with expertise, influence, and gravitas, which is not a traditional environmental activist, to lead public discussion and catalyse action. This is the role we propose for the CoR.

#### **Practical solutions exist**

Achieving the Paris goal of staying below +2°C is actually relatively straightforward, were there sufficient willpower, though even this target will reduce human well-being significantly. It would be much better to stay below +1.5°C. But even +2°C can only be achieved through emergency action. It cannot be achieved using today's market-based economic system, focussed on short-term profitability and cost-efficiency criteria, dominated as it is by weakly regulated global corporations.

To succeed, humanity must make a rapid transition from a fossil fuel dependent economy to a low-carbon electrified economy based on solar, wind, hydro and biomass. This transition would eliminate two thirds of currently projected human greenhouse gas emissions. If accompanied by changes in agricultural practices, land management and clearing – saving water and fertilizer, shifting from beef and lamb to pork and chicken, and increasing soil carbon sequestration – the increase in the average global temperature could be brought back to below +1.5°C by the end of the century (excluding any unexpected impact of tipping points). The technologies to achieve such a transition already exist and are getting cheaper. It is not just a question of technology, however. There is also a need for new thinking on the role of the state, to reframe of the role of the market and for societies to take a different approach to the problem of inequality.

So far, the "green shift" has been painfully slow, largely because it runs counter to the dominant economic paradigm, where growth maximisation and short-term profitability override the growing climate threat to human viability. When seen from a lifecycle perspective, when the damage caused by greenhouse gas emissions is properly accounted for, low-carbon alternatives are already cheaper than new investments in fossil capacity. Without an effective system of carbon pricing and the removal of explicit public subsidies, however, fossil fuels have a huge cost advantage—especially in the short term. This increases resistance to change from powerful fossil fuel interests and ideological climate deniers.

Fortunately, the barriers to change are weakening. It is increasingly difficult for climate change denialists and vested interests to brush aside the reality of climate induced disasters, which last year in the US alone cost more than \$300 billion. The global cost, socially and economically, of those disasters already far outweighs the price of the necessary disruption to the fossil fuel industry, a fact which is becoming ever more obvious as the number and impact of extreme weather events rise. Investors, shareholders, and regulators are increasingly demanding transparency from companies on their climate risks and are divesting high-carbon stocks.

While the market can still play an important role in fixing these problems, it will need to be guided by a regulatory framework which supports low-carbon and other societal interventions on a large scale. Subsidies for fossil fuel industries must be eliminated, with financial support offered to the poor during the transition. The economic playing field will also need to be rebalanced through regulation, taxation, and targeted subsidies to encourage investment in low-carbon solutions, halt fossil fuel expansion, reduce inequality and speed the orderly closure or reform of fossil dependent industries.

# Proposed role for the Club of Rome

Having defined the "world problematique" in 1972, the Club is today confronted with the challenge of responding to the climate crisis, knowing that much of what was said in *The Limits to Growth* was right, but was ignored, and that the time for incremental action has long passed. This has led to debate within the CoR as to its role and purpose, with many CoR members calling for greater focus and a new mission.

The Club's Statutes state that its purpose is "--- to act as an independent global catalyst of change --- to identify the most crucial problems which will determine the future of humanity; through integrated, and forward-looking analysis, to evaluate alternative scenarios for the future and to assess risks, choices and opportunities; to develop and propose practical solutions to the challenges identified; to communicate the new insights and knowledge derived from this analysis to decision-makers in the public and private sectors and also to the general public; to stimulate public debate and effective action to improve the prospects for the future."

Unless climate change is addressed as an absolute priority on an emergency basis, the equitable and sustainable future to which the Club aspires will become unattainable as rising social chaos and conflict will make solutions to humanity's wider failures impossible to achieve. The climate crisis is the logical focal point for the Club's future activities

The proposed **Climate Emergency Initiative** reflects this reality and offers a logical and evolutionary strategic pathway for the Club, allowing it to reclaim its role as "the conscience of the world".

The Club should adopt a complementary, two-pronged, strategy:

- 1. **Climate Emergency Initiative.** The CoR should take an activist approach to climate change, built around three principles:
  - Human-induced climate change is an immediate and deepening existential threat.
  - An emergency response is needed if that threat is to be reduced.
  - There is an imperative for strong government action to shift priorities away from an emphasis on conventional GDP growth and the excessive profitability of global corporations, towards securing the well-being of people, their communities and the survival of other species.
- 2. **Big Picture Initiative.** The Club should advocate and promote a more equitable and sustainable economic system, and take an active role in the necessary transition, building on several existing projects.
  - Rather than focussing on increasing GDP, the economic system should seek to improve human well-being everywhere, while respecting the bounds of nature. Humanity needs to reduce its ecological footprint which will require significantly reducing non-essential material consumption, freely sharing beneficial technology, caring for Earth, and radically redistributing returns to secure material sufficiency, well-being, and happiness for all within the limits of nature's regenerative capacity. In addition to a strong role for government, it will require creative citizen leadership to rebuild essential relationships of community and to hold both governments and corporations accountable to the shared long-term interests of Earth's people and natural systems.
  - In the rich world, economic policies will need to emphasise a sharp reduction in the ecological footprint with the challenges of inequality and unemployment addressed primarily through redistribution of work, income and wealth.
  - Poverty alleviation within the developing world must be an essential focus, but built
    on a recast economic model in line with the above principles. Unfortunately, the
    developing world will probably bear the brunt of climate change impact, at least
    initially, which underlines the need for emergency action and the two-pronged
    strategy proposed.

The Club has a unique opportunity to utilise its distinctive assets and history and to lead in the transformation of public thought and action. The **Climate Emergency Initiative** sets the imperative for immediate action. The **Big Picture Initiative** frames the longer-term systems transition. Together, the two initiatives have a compelling power that neither can muster alone.

Though it has limited financial resources, the CoR has an extraordinary pool of intellectual resources and high public credibility, with influential connections throughout the world and the ability to attract broad public attention as well as bring suitable partners on-board.

Given its mandate, its 50-year history, and its independence from vested interests and the institutions that bear major responsibility for this crisis, the Club has the ability to articulate and lead a campaign for emergency climate action, and to integrate this with ideas for a radical social and economic transition.

Our distinctive contribution resides in our historic role in drawing attention to the unresolvable conflict between perpetual GDP growth and the limits of a finite Earth; and in the distinctive intellectual breadth and influence of our membership drawn together by a shared commitment to moving humanity towards a better future, that exists in balance with Nature.

These initiatives offer an opportunity for the Club to become something it has not been for many years—a true community of intellectual activists—each with significant constituencies and initiatives—who understand the conflict between endless economic growth and a finite planet and who look to one another as respected, trusted, and valued colleagues bound by a common cause that is far greater than their individual agendas.

As the priorities of most CoR members are already aligned with one or both of the two proposed initiatives, this is not a call to CoR members to change priorities. Rather, it is a call for them to reach out to one another as allies and resources to pursue more effectively the cause that originally drew them to Club.

## Partnerships will be needed

Effective action on the climate emergency will require the cooperative action of many organizations and hundreds of millions of people. To leverage its approach therefore, the CoR should work collaboratively with partners from:

- national communities;
- activist groups and progressive NGOs;
- governments, particularly local & city;
- progressive businesses, insurance providers, and institutional investors;
- the military; and
- concerned international institutions (IEA, OECD).

The objectives of each partnership will inevitably vary. But we should seek partnerships and develop action plans that advance rapid decarbonisation beyond the capability of the free market and move the public debate away from an incremental change mindset to acceptance of the need for emergency action.

#### **Next steps**

We believe that making climate change and reform of the economic and social system the central policy objectives of the Club is the logical strategic pathway, which builds on past achievements.

This shift cannot be made without the consent of members. If there is broad support, the next step is for the Club to develop a detailed plan for each Initiative and begin exploring possibilities for collaboration with other institutions.

Accordingly, we ask you to respond to the following question before March 1, 2018:

social s	ystem?"	
•	Yes	
I	No	
(	Comments (including on why you voted as you did):	

Should the Club of Rome make emergency action to address climate change its priority objective for the next 5-10 years, linked to complementary reform of the economic and