Australia: Climate change, the Garnaut report, and the profit system

Patrick O'Connor 17 September 2008

No social order is ever destroyed before all the productive forces for which it is sufficient have been developed, and new superior relations of production never replace older ones before the material conditions for their existence have matured within the framework of the old society. Mankind thus inevitably sets itself only such tasks as it is able to solve, since closer examination will always show that the problem itself arises only when the material conditions for its solution are already present or at least in the course of formation.

Karl Marx, Preface to A Contribution to the Critique of Political Economy (1859)

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The Labor government's Garnaut Climate Change Review has effectively concluded that within the existing international political and social framework, dangerous and potentially irreversible global warming is inevitable.

The assessment was made in the review's supplementary draft report, released on September 5 and titled "Targets and Trajectories", which examines potential global and Australian greenhouse gas emissions targets. It followed Professor Ross Garnaut's comprehensive investigation of available climate science, extensive economic modelling, and an assessment of the state of post-Kyoto international negotiations.

Garnaut admitted that the only feasible atmospheric greenhouse gas concentration target is 550 parts per million (ppm) carbon dioxide equivalent. Australian targets will be set on this basis, with a 10 percent greenhouse gas emissions reduction from 2000 levels by 2020 and an 80 percent reduction by 2050. These targets will largely be achieved through carbon trading and related "market" mechanisms. (If there is no firm post-Kyoto international agreement, then the 2020 target will be reduced to 5 percent)

By Garnaut's own extraordinary admission, the 550 ppm target merely "keeps open the possibility of avoiding high risks of dangerous climate change". Much of the 49-page supplementary report—issued ahead of the final report's release later this month—details the expected environmental, social, and economic impact. With a 550 ppm atmospheric carbon concentration, average world temperatures will rise by 2.2 degrees Celsius by 2050 and by 2.5 degrees by the end of the century, according to the "best estimate". But the real impact may be even more severe, with the "upper end of the *likely* range" being a temperature rise of 2.7 degrees by 2050 and 3.2 degrees by 2100.

These changes in the earth's climate will have potentially catastrophic consequences. At the upper end, Garnaut concluded that 39 percent of the world's species would be at risk of extinction, there would be a 77 percent likelihood of "initiating irreversible melt of the Greenland ice sheet", and an 87 percent mortality rate of tolerant coral species. The report concluded bluntly: "The 550 strategy would be expected to lead to the destruction of the Great Barrier Reef and other coral reefs".

The potential melting of the Greenland ice sheet (which would almost certainly be preceded by the melting of the entire Arctic ice cap) also points to the threat of reaching "tipping points". Ice sheets reflect approximately 90 percent of the sun's radiation; if they melt into the ocean, far more heat is subsequently absorbed, which in turn leads to more ice melting. Referring to this and other potential "feedback loops", Garnaut stated: "Together, these effects result in strong non-linearity through time of expected economic impacts from climate change, and even greater non-linearity for the loss of eco-systems, and the risk of abrupt and irreversible climactic changes."

Garnaut continued: "[T]he 550 strategy would leave the world, and Australia, open to larger risks of exceeding threshold temperature values, even if these 'tipping points' cannot be known in advance with certainty".

The supplementary report also briefly canvassed the international implications. A 2007 study conducted by the Washington-based Center for Strategic and International Studies included a scenario of "severe climate change", with temperatures in 2040 rising by 3.1 degrees above pre-industrial levels. After noting that this increase "is not far above the top end of the likely range by 2050 [in the 550 ppm strategy]", Garnaut cited the report's conclusions: "Nations around the world will be overwhelmed by the scale of change and pernicious challenges, such as pandemic disease. The internal cohesion of nations will be under great stress ... both as a result of dramatic rise in migration and changes in agricultural patterns and water availability. [There will be] flooding of coastal communities around the world."

Garnaut stressed that his analysis was based on a sober assessment of the latest scientific evidence. "To point to the devastating impact of temperature increase for this century, and of significant further increases next century, and to the possibility that such increases would leave both global and Australian welfare at the end of this century lower than at the start, is not to be alarmist," the report pointed out. "It is simply to recognise the reality of rapid emissions growth, its likely continuation in the absence of climate change mitigation, and the possibly catastrophic consequences of large, rapid temperature increases."

Climate science and emissions targets

Three Australian climate scientists who contributed to the UN's Intergovernmental Panel on Climate Change —Bill Hare, David Karoly, and Amanda Lynch—condemned the proposed 550 ppm target. "Ross Garnaut's report is effectively putting off the cost of climate change to another generation, who will have to deal with a 3-degree rise in temperature," Dr. Hare, of Germany's Potsdam Institute for Climate Impact Research, remarked.

Notwithstanding the inherent complexity and uncertainty involved in climate science, there is now widespread agreement within the scientific community that a 550 ppm carbon dioxide equivalent atmospheric concentration would be dangerously high.

According to a 2006 study conducted by Dr. Malte Meinshausen (also of the Potsdam Institute for Climate Impact Research), if 550 ppm is reached there will be a 63-99 percent chance (average of 82 percent) that global warming will exceed 2 degrees Celsius. This temperature rise has been widely recognised—including by the United Nations and the European Union—as the threshold beyond which highly dangerous and potentially irreversible climate change will occur. (It should, however, be noted that a number of scientists have cautioned that the 2 degree mark may itself be too high; average temperatures have now risen by 0.8 degrees above preindustrial levels, with many consequences more severe than previously forecast.)

Meinshausen concluded that "our current knowledge about the climate systems suggests that only stabilisation around or below 400 ppm CO2 equivalence will likely allow us to keep global mean temperatures below 2°C in the long-term."

A similar conclusion was reached by NASA's leading climate scientist James Hansen, who published a detailed scientific study earlier this year that found the target should be 350 ppm or less carbon dioxide concentration—equal to about 400 ppm carbon dioxide equivalent. (Complicating matters somewhat, climate scientists sometimes use two different measures—atmospheric carbon dioxide alone, because it is the leading greenhouse gas, or "carbon dioxide equivalent" whereby other greenhouse gases such as methane are assigned an equivalent value to a unit of carbon dioxide and added to the total.)

Given that the atmospheric concentration of greenhouse gases now stands at about 455 ppm CO2-equivalent, a major and immediate reduction in emissions is necessary. Without any mitigation efforts, carbon concentration is expected to reach 550 ppm by 2030, 750 by 2050, 1,000 by 2070, and 1,600 by 2100. Such levels are projected to result in potential temperature increases of 5.6 degrees Celsius ("best estimate") or 7.1 degrees ("upper end of likely range") by the end of the century. According to Garnaut's chilling forecasts of such "unmitigated climate change", the potential temperature increases—ranging from the lower end to the upper end of the likely range—would see the world's coral species suffering a 90-100 percent mortality rate, an 85-100 percent likelihood of initiating irreversible melting of the Greenland ice sheet, and would place 48-100 percent of the world's species at risk of extinction.

The Garnaut Review's supplementary report made clear that it chose the 550 ppm target rather than 450 or 400, not because the lower figures were inherently impossible to achieve. The primary obstacle was of a political, not a technological, character.

"Without a framework for global cooperation, every country has an incentive to free-ride on the actions of others while making as little effort as possible in the meantime," Garnaut explained. "Collectively, this can only lead to one outcome, namely, inaction and the inexorable accumulation of greenhouse gases in the atmosphere. By the time the manifestation of climate change is sufficiently powerful to overcome the free-rider problem, most options will have been consigned to history."

Through a series of opaque cost-benefit calculations, based on present and future gross domestic product growth and satisfaction of "marginal utility", Garnaut concluded that it was in Australia's economic interests to aim for a 450 ppm target. But he added: "Australia alone is not in a position to achieve 450 ppm. Is the international community ready to commit itself to such a strong outcome? Not yet... [T]he developed countries are yet to demonstrate their seriousness about such a commitment, and in any case cannot alone deliver such an outcome... Substantial reductions in emissions below business as usual in developing countries would also be required, and constraints in the order of what is required are not likely to be accepted over the next few years."

Garnaut also stressed the difficulty in reaching even a less onerous

target: "Achieving the emissions limits set by the 550 scenario over the next decade would be a major win, reflecting unprecedented levels of global cooperation. It might just be feasible."

In the face of divergent and intractable national interests, Garnaut described ordinary people's interest and concern over climate change as the potential "saving grace". "The saving grace means that what might seem impossible from experience in other areas of international cooperation (such as international trade or arms control), has a chance," Garnaut declared. "It is worth nurturing that chance."

International cooperation and economic planning

Such wishful thinking underlines the position of all those political tendencies that accept the framework of the world capitalist system and regard it as permanent. The Greens, for example, have criticised Garnaut's proposed targets and called for Australia's emissions to be cut by 40 percent below 1990 levels by 2020, and for the country to be "carbon neutral" by 2050. But unable to address the problem of rival national interests, the Greens simply insist that Australia must set a good example for the rest of the world to follow.

The reality is that without a coordinated global agreement, no solution to the climate change crisis is possible—and no such agreement will occur as long as the globe remains divided into rival nation-states. The nation-state system arose in a definite period of humanity's historical development; for a certain stage it played a progressive role, as the emergence of capitalism saw the liberation of the productive forces from the fetters of the outmoded medieval order. This progressive role was long ago exhausted, however, and the global warming threat is but one expression of the destructive consequences of the fundamental contradiction between the nation-state system and the globally integrated world economy.

Amid the historic erosion of the world dominance of US imperialism and the rise of rival powers in Europe, Latin America, and Asia, the international order is now characterised by intensifying competition for markets, resources, and strategic advantage. Contrary to Garnaut's hope, the world's governments have repeatedly demonstrated that they are incapable of setting aside their rivalries for the sake of the environment, regardless of public opinion. Moreover, climate change is inevitably intertwined with critical economic and strategic interests—as demonstrated by the scramble for control of the oil and gas reserves of the Middle East and Central Asia, or for domination of the new naval routes created by the melting of the Arctic.

The only realistic perspective for addressing the climate change crisis is one based on an internationalist and socialist program, which has as its aim the establishment of an internationally planned economy, oriented towards satisfying social need, rather than maximising profit and the accumulation of private wealth. Greenhouse emissions can be lowered to their necessary level, but only through the rational reorganisation of the world economy—involving the restructuring of energy, industrial and agricultural production, urban and international transport, waste disposal, and other sectors—while at the same time raising living standards for the world's population.

The private ownership of the means of production stands as an insurmountable obstacle to the rational utilisation of available technologies to address global warming.

To paraphrase Marx, the material conditions for the resolution of the climate change crisis are already present. According to the International Energy Agency, global emissions could be cut by 50 percent by 2050 if research and development spending on energy were increased by an additional \$US10-\$100 billion annually. As the Garnaut Review

explained, such a reduction would likely see atmospheric carbon dioxide equivalent stabilise at 450 ppm.

But under capitalism, technologies must be profitable or they go unutilised, no matter how essential to the fate of humanity they prove in the long run. "The ultimate achievement of 400 ppm would depend on commercialisation of technologies that can remove carbon dioxide from the atmosphere," Garnaut concluded. "This is a technical possibility at this time, notably through a range of biosequestration options. Such options may become commercially realistic through a combination of high carbon prices and support for research, development and commercialisation of low-emissions technologies."

Put plainly, unless technologies are made "commercially realistic"—i.e., profitable, through public handouts to big business—and a carbon trading scheme introduced, which will push up the price of energy and fuel for ordinary people even further, the unplanned exploitation of fossil fuels will continue unabated.

Private business interests have dominated every stage of the climate change discussion. Corporate Australia welcomed the Rudd government's ratification of the Kyoto Protocol—because, while it required no emissions reductions, it provided access to the European-based carbon trading industry—but remains deeply opposed to any emissions targets that would affect profits.

Garnaut's supplementary report received a very different response from big business than it did from climate scientists. "It's much closer to the ballpark than some of the previous discussion," Chamber of Commerce spokesperson Greg Evans enthused about the proposed emissions targets. "That's the sort of scope that Australian business has indeed been looking at in terms of modelling outcome."

Prime Minister Rudd has dismissed the criticisms made by climate scientists of the Garnaut report. "Well there is always going to be argy bargy within the scientific community, and the policy community, and the business community over climate change and what should be done to it," he declared.

In other words, for the Labor government, the opinions of the "business community" on the science of climate change are just as—or more—weighty than those of the scientific experts.

Rudd came into office making a direct appeal to growing concerns about global warming among ordinary people, and to their hostility towards the former Howard government for its refusal to take any action on the issue. But Labor's real audience has always been those sections of business and the financial sector looking to access the rapidly growing, and potentially highly lucrative, international carbon trading industry, and keen to make Australia a major Asian hub. The prime minister has indicated that he will adopt the Garnaut Review's central recommendations regarding the establishment of an Australian emissions trading scheme. On Garnaut's summary of the necessary emissions targets determined by climate scientists, however, Rudd has already relegated the review to just "one input in the overall debate".



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