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SYDNEY—In November 1965, US President Lyndon B. Johnson was presented with the first-ever government report warning of the dangers that could result from burning large amounts of fossil fuels. Fifty years is a long time in politics, so it is remarkable how little has been done since then to address the threat posed by carrying on with business as usual.

In remarkably prescient language, Johnson's scientific advisory committee warned that releasing carbon dioxide into the atmosphere would lead to higher global temperatures, causing ice caps to melt and sea levels to rise rapidly. "Man is unwittingly conducting a vast geophysical experiment," warned the scientists. "Within a few generations he is burning the fossil fuels that slowly accumulated in the earth over the past 500 million years…. The climatic changes that may be produced by the increased CO2 content could be deleterious from the point of view of human beings."

The committee's foresight is not surprising; the existence of the greenhouse effect had been known to science since the French physicist Joseph Fourier suggested in 1824 that the earth's atmosphere was acting as an insulator, trapping heat that would otherwise escape. And in 1859, the Irish physicist John Tyndall carried out laboratory experiments that demonstrated the warming power of CO2, leading the Swedish physicist and Nobel Laureate Svante Arrhenius to predict that burning coal would warm the earth—which he saw as a potentially positive development.

Johnson's advisers were not so Pollyannaish. Their report accurately predicted that the amount of CO2 in the atmosphere would increase by close to 25 percent over the course of the 20th century (the actual number was 26 percent). Today, the atmospheric concentration of CO2 is 40 percent higher than it was at the beginning of the Industrial Revolution—by far the highest it has been during the past one million years, as we know from drilling into the Antarctic ice.

Furthermore, Johnson's scientific committee rebutted objections that continue to be used today by those who deny the dangers of climate change, including the claim that natural processes might be behind the rise in CO2 levels. By showing that only about half of the CO2 produced by burning fossil fuels remains in the atmosphere, the committee proved that the earth acts not as a source of greenhouse gases, but as a sink, soaking up half of our emissions.

What Johnson's advisers could not do was offer specific predictions for how much the rise in atmospheric CO2 would affect global temperature; they said they would first need better models and more powerful computers. Those calculations formed the basis of the next landmark report, the 1979 "Carbon Dioxide and Climate: A Scientific Assessment," prepared by the US National Academy of Sciences. Widely known as the Charney Report—after its lead author, Jule Charney of Massachusetts Institute of Technology—it is a model of careful scientific deliberation.

Charney's report estimated that doubling the amount of CO2 in the atmosphere would warm the earth by about 3 degrees Celsius—a figure that is well confirmed today. It also predicted that the heat capacity of the oceans would delay warming by several decades. Both findings are consistent with the global warming observed since the report's publication. "We have tried but have been unable to find any overlooked or underestimated physical effects that could reduce the currently

estimated global warming… to negligible proportions," the report concluded. Since then, the scientific evidence has only gotten stronger; today, the basic findings laid out in these two early reports are supported by more than 97 percent of climate scientists.

And yet, despite 50 years of growing scientific consensus, the warming of the earth continues unabated. Well-funded lobby groups have sowed doubt among the public and successfully downplayed the urgency of the threat. Meanwhile, geopolitics has impeded the development of an effective global response. The international climate negotiations that are expected to culminate in an agreement at the United Nations Climate Change Conference in Paris in November and December have been hampered by the requirement of consensus among the 195 countries participating.

If action is not taken, billions of people will suffer the consequences of drought, crop failure and extreme weather. Eventually, rising sea levels will flood large coastal cities and destroy entire island states. The hottest years since record-keeping began in the 19th century were 2005, 2010 and 2014, and last year's record will almost certainly be broken again this year.

It is time that world leaders put an end to 50 years of dithering. They must seize the opportunity in Paris, set aside their short-term interests, and finally act decisively to avert a looming planetary catastrophe. Project Syndicate

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