

The Trillion Tonne Communiqué

This Communiqué is a call from business for a **policy response** to the explicit scientific warnings of the risks posed by the continuing rise in atmospheric greenhouse gases. That response, driven by national actions, must be captured and enhanced through international cooperation, ideally through **an ambitious, robust and equitable global deal**.

The scientific evidence is clear. The recently released Fifth Assessment Report from the Intergovernmental Panel on Climate Change (IPCC) reveals the strongest consensus yet amongst scientists that human activities are the main cause of warming since the 1950s.ⁱ

The latest climate science points to multiple changes in the future including longer and more frequent heat waves, increased extreme rainfall events and flooding, ocean acidification, and rising sea levels. This will have real and significant impacts on economies and societies. The Fifth Assessment Report further documents the best scientific evidence of the predicted social, environmental and economic impacts of climate change.

Governments have agreed that in order to minimise the risks of the worst impacts of climate change, global average warming should be stabilised below 2°C. The IPCC reports that this goal equates to a cumulative amount of around one trillion tonnes of carbon from manmade CO₂ emissions.ⁱⁱ Already over half of this has been emitted, with the annual rate of emissions putting us on a trajectory to pass the trillion tonne mark in less than 30 years.ⁱⁱⁱ Only a rapid and focused response can avoid this.

These messages, grounded in science, have deep implications for future economic trends and consequently for the plans and strategies of forward-looking businesses. Significant changes must be introduced to the global economy, or the risks of disruptive climate impacts will grow increasingly serious.

In light of this, we call on governments to:

- **Set a timeline for achieving net zero emissions.** In order to keep cumulative emissions below one trillion tonnes of carbon from manmade CO₂, global emissions need to peak and begin to decline as soon as possible achieving net zero before the end of the century.^{iv} Despite a growing body of climate policies and legislation, such a focused global commitment does not yet exist. The timeline and pathway to net zero emissions will vary from country to country.
- **Design a credible strategy to transform the energy system** that matches our net zero ambitions. We will need to completely reformulate our relationship with energy as new infrastructure, technologies, processes and business models for the 21st century are introduced. This will involve much greater energy and resource efficiency and needs to incorporate all relevant sectors including the built environment, power generation, industry and transport. The policy framework, including fiscal incentives, needs to be adjusted in order to shift investment and stimulate innovation into low-carbon energy infrastructure. This must incorporate a robust carbon price.
- **Create a plan for fossil fuels, especially coal.** Achieving net zero emissions will require substantial changes to our energy supply – the scale of demand for fossil fuels means we will only be able to continue to use them if the emissions can be captured and stored. This is particularly true of coal, which, although abundant and cheap, is also the energy source associated with the most carbon emissions. New investment plans must take this into account.

The UN climate change talks in Paris in 2015 provide a major opportunity to secure global agreement on a net zero emissions goal. In addition, Paris could create a powerful platform to support governments to deliver the other actions. Even with these robust mitigation plans, the world will still experience a range of climate impacts due to past emissions already present in the atmosphere. To ensure continued business performance and economic stability, it is essential to understand and manage the risks these impacts pose.

In summary, we believe that climate risks can be successfully managed and that the transition to a net-zero emission economy can be delivered in ways that create new business opportunities, with manageable costs.

While many governments and businesses have started to introduce the changes needed to bring about this transition, global emissions are still steadily rising. Unless we increase the pace and scale of change, we will not successfully manage the risks of climate change. The time for action is now.

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- ⁱ The IPCC (2013) reports at least 95% certainty of this. The IPCC's Fourth Assessment Report (AR4), released in 2007, stated a >90% confidence rate for warming since 1750 due to human activity. IPCC, 2013: Climate Change 2013: The Physical Science Basis. Working Group I contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. www.ipcc.ch/report/ar5/wg1/#.UwYUudxFBoI [Accessed 20 February 2014]
- ⁱⁱ The IPCC reports that if we are aiming to limit the warming caused by anthropogenic CO₂ emissions alone, with a probability of more than 66%, to less than 2°C, the cumulative CO₂ emissions from manmade sources will need to stay between 0 and about 1000GtC (3670Gt CO₂). It is important to note that his figure does not take into account non-CO₂ greenhouse gases – the upper limit would actually reduce to 790GtC if they were also accounted for. Ibid.
- ⁱⁱⁱ See www.trillionthtonne.org [Accessed 20 February 2014]
- ^{iv} The IPCC explored four future scenarios for climate change, known as Representative Concentration Pathways (RCPs). RCP2.6, which is the only pathway that is more likely than not to keep global warming below 2°C, is equivalent to the trillion tonne cumulative total and implies global emissions hit net zero around the middle of the second half of the century. IPCC, 2013: Climate Change 2013: The Physical Science Basis. Working Group I contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. www.ipcc.ch/report/ar5/wg1/#.UwYUudxFBoI [Accessed 20 February 2014]
- The RCP scenarios are also helpfully discussed in Inman, Mason. (2011). Opening the future. Nature. 1 (April), 7-9. <http://www.nature.com/nclimate/journal/v1/n1/full/nclimate1058.html> [Accessed 20 February 2014]