

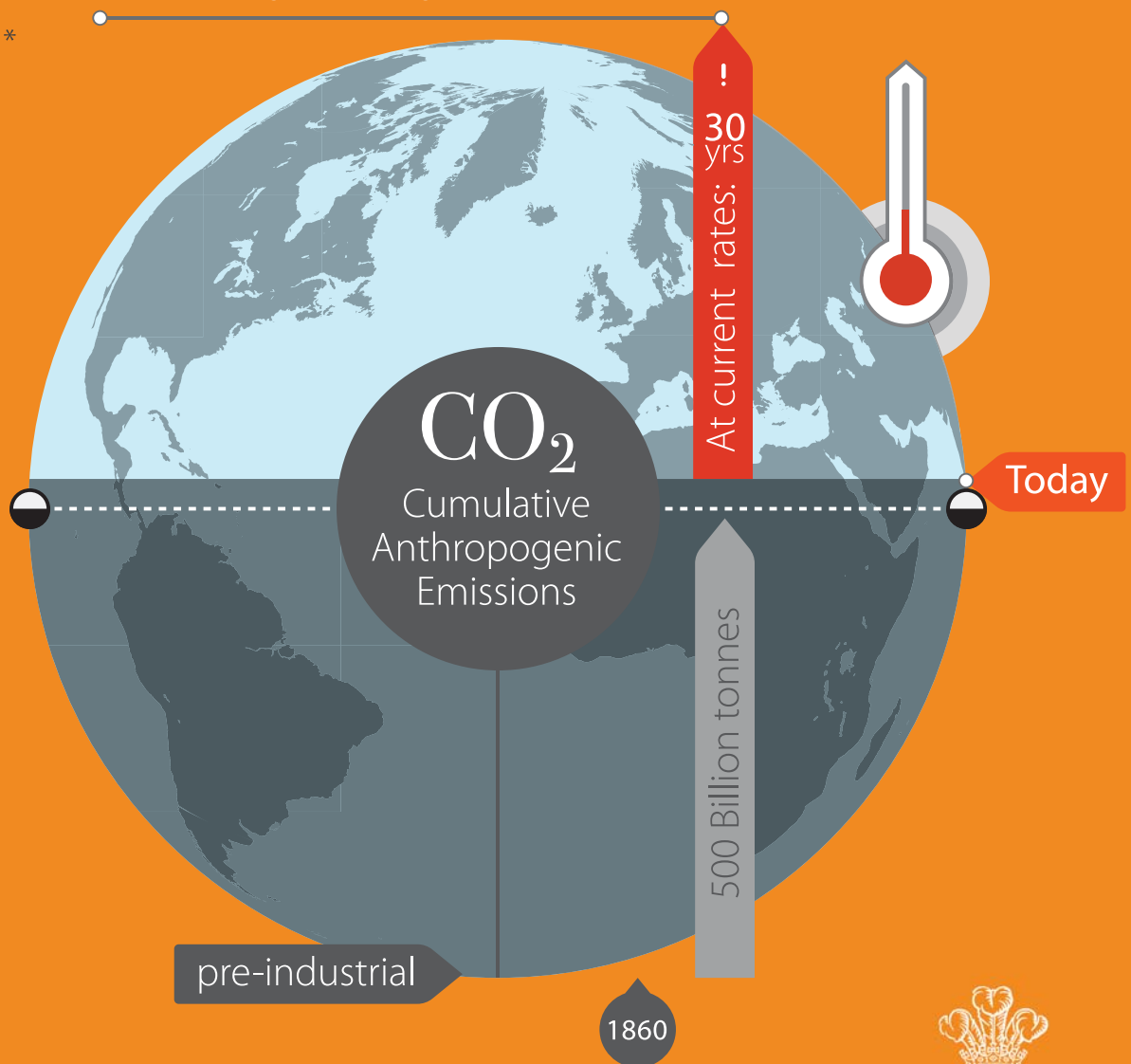
# THE TRILLION TONNE COMMUNIQUÉ

A CALL FROM BUSINESS FOR AN URGENT AND EFFECTIVE RESPONSE  
TO CLIMATE CHANGE

1,000,000,000,000 tonnes

We need to limit the carbon emitted from manmade CO<sub>2</sub> to less than one trillion tonnes in order to limit global warming to less than

2°C\*



UNIVERSITY OF  
CAMBRIDGE  
— INSTITUTE FOR —  
SUSTAINABILITY LEADERSHIP



THE PRINCE OF WALES'S  
CORPORATE LEADERS GROUP

## **Trillion tonnes**

is the amount of carbon from  
carbon dioxide that we  
can emit and still be  
confident of keeping global  
warming at, or below,  
2°C this century

# Background to The Trillion Tonne Communiqué

---

The Corporate Climate Communiqués are international business statements calling for policies and action to tackle climate change. Bringing together hundreds of business leaders in support of a robust and equitable international treaty on climate change, they are seen by many as representing the definitive voice of progressive business in advance of policy discussions.

The Trillion Tonne Communiqué, like the six previous Corporate Climate Communiqués was created by The Prince of Wales's Corporate Leaders Group (CLG). The CLG brings together business leaders from major UK, EU, and international companies who believe that there is an urgent need to develop new and longer term policies for tackling climate change.

The statement is a global call to arms from businesses who take the science of climate change seriously and are supporting a global goal of net zero greenhouse gas emissions.

The latest report from the Intergovernmental Panel on Climate Change (IPCC) sets out the link between the cumulative total of greenhouse gases in the atmosphere and the resultant global climate change target. It warns that if atmospheric emissions exceed more than a trillion tonnes of carbon from manmade CO<sub>2</sub> then the global average temperature increase is likely to exceed 2°C.

The Communiqué draws out the implications of this by calling on policy makers to deliver a global goal of net zero emissions before the end of the century, a fundamental redesign of the energy system and a plan to manage the emissions from fossil fuels.

Businesses that sign the Communiqué want to be a part of the solution in meeting this challenge and support a policy response at a sub-national, national and international level.



THE PRINCE OF WALES'S  
CORPORATE LEADERS GROUP

**The Prince of Wales's Corporate Leaders Group** is a select club of business leaders working together, under the patronage of the Prince of Wales and with the support and advice of the University of Cambridge, to advocate solutions to climate change to policy makers and business peers at the highest level, both within the EU and globally.

The Corporate Leaders Group is pleased to work in partnership with business groups in the **Corporate Leaders Network**, the **Green Growth Platform** and **We Mean Business** coalitions, of which it is a founding partner.

# 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.<sup>i</sup>

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 CO<sub>2</sub> emissions.<sup>ii</sup> 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.<sup>iii</sup> 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.

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 light of this, we call on governments to:

## **1 Set a timeline for achieving net zero emissions.**

In order to keep cumulative emissions below one trillion tonnes of carbon from man-made CO<sub>2</sub>, global emissions need to peak and begin to decline as soon as possible achieving net zero before the end of the century.<sup>iv</sup> 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.

## **2 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.

## **3 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.

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

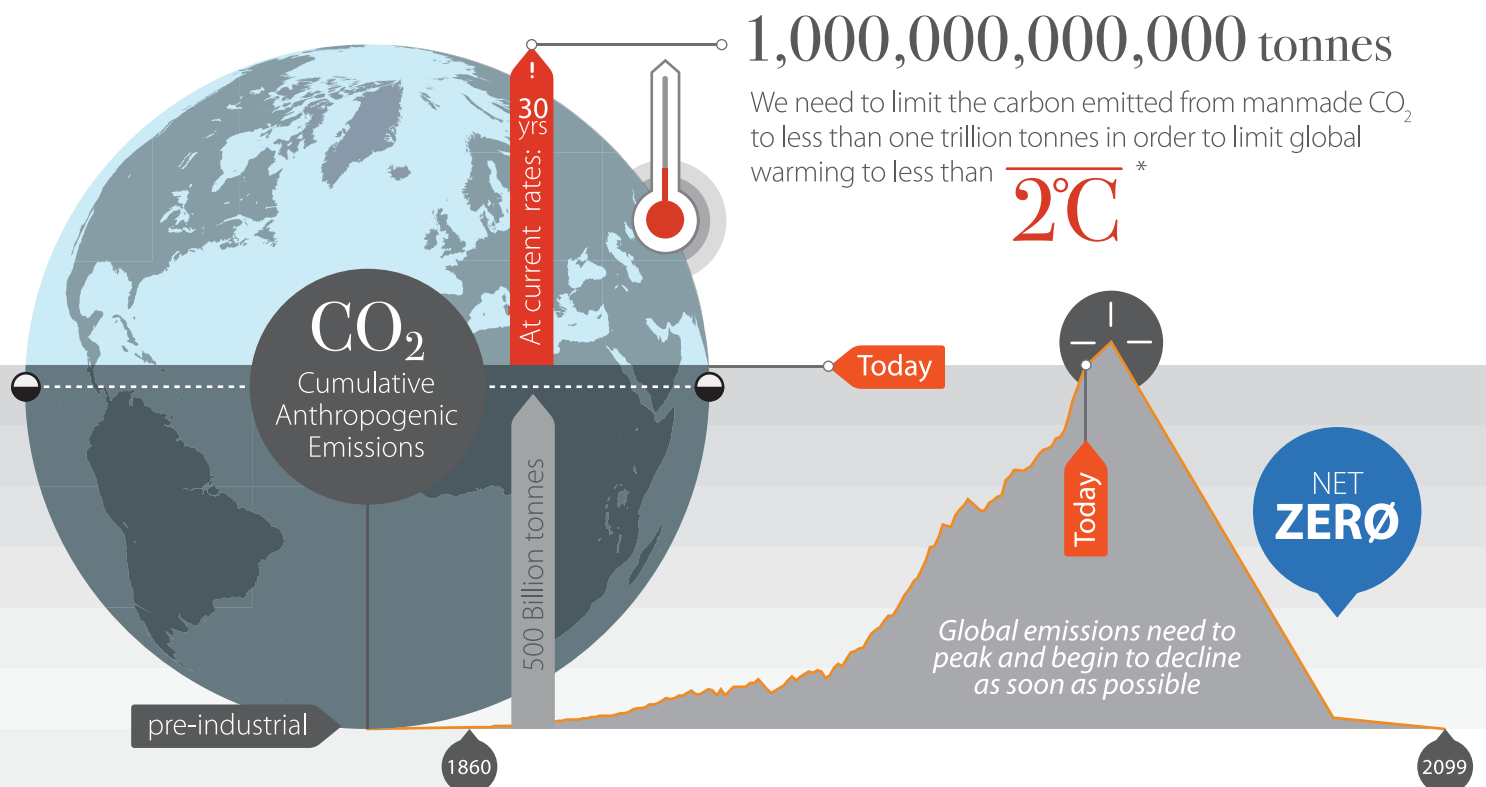
to bring about this transition, global emissions are still steadily rising. Unless we increase the pace and scale of change, we will not successfully manage the risks of climate change.

**The time for action is now.**

Well over 145 chief executives and business leaders have already signed on to support this statement, with numbers increasing all the time.

To see an updated list, please visit  
**[www.climatecommuniques.com](http://www.climatecommuniques.com)**

# The Trillion Tonne Communiqué



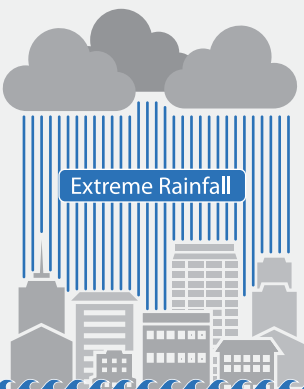
## Avoiding the Impacts

The latest climate science points to multiple changes in the future including:

Heat Waves



Extreme Rainfall



Ocean Acidification



Rising Sea Levels

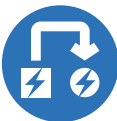
which will have real and significant impacts on economies and societies

## Action



### Set a timeline for achieving net zero emissions.

Need to achieve net zero before the end of the century. Timeline and pathway will vary from country to country.



### Transform the energy system.

Design a credible strategy to transform the energy system that matches our net zero ambitions. Including: new infrastructure, technologies, processes, business models, greater energy and resource efficiency and a robust carbon price.



### Create a plan for fossil fuels, especially coal.

The scale of demand for fossil fuels means we will only be able to continue to use them if the emissions can be captured. Coal, which, although abundant and cheap, is also the energy source associated with the most carbon emissions.



**PARIS 2015** provides a major opportunity to secure global agreement on a net zero emissions goal.

\* The IPCC's Fifth Assessment Report clearly shows that to have a better than two-thirds chance of limiting warming to less than 2°C we need to limit the carbon emitted from manmade CO<sub>2</sub> to one trillion tonnes. For further information and the full document please see: [www.climatecommuniques.com](http://www.climatecommuniques.com)



THE PRINCE OF WALES'S  
CORPORATE LEADERS GROUP

**Members of The Prince of Wales's Corporate Leader Group on Climate Change** who created this statement:

---



---

The Trillion Tonne Communiqué has been developed with support from a range of organisations, with particular thanks to **The Corporate Leaders Network** and **Pottinger**.





## Signatories

---



## Small and medium enterprise signatories

---

ACCA	ITM Power
African Conservation Trust	John Stebbing Architects Ltd
Agulhas Applied Knowledge	Just Trees (Pty) Ltd
ARICIA India International (P) Limited	LUZ VERDE pvt
Ashridge Business School	Madison Computer Works, Inc.
Blueallow	MPCEE
Brighton Energy Coop	nachhaltig wirkt
Canmore Partnership Ltd	Net Balance
Carbon Clear	Net Learnings
Carbon Coach Ltd	NEUW Ventures
Carbon Credit Capital	Nouveau Energy
Carbon Farmers of Australia	NOVADAYS
Carbon3IT Ltd	Offsetters Climate Solutions
carbonjobs	OHT Solutions
CARBONyatra	Omnclimate
CCLA	Pale Blue Dot Energy Ltd
CJH Multisourcing SNC	RES
Climate Friendly Pty Ltd	S360
ClimateCare	Sandwalk Ltd
Club Serres for UNESCO	Scatec Solar AS
CO2-monitor AG	SecondNature
Crown Oil	Skyviews Inc.
Digital Dots Limited	Smith of Derby Limited
Down-to-Earth Solar Power Inc	Society for the Environment
Eco-Conservation Initiatives - ECI	SolaVis Sustainable Intelligence
Ecodesk	Sol-Up USA
Ecofrotas	Spier Wine Farm
Ecover / Method	START2SEE
Eden Ventures	Sustain Ability Showcase Asia - SASA
Energy Resources Management	Sustainable Engagement
ewizz electric vehicles	The Carbon Capture and Storage Association
Falvez Energy	The Carbon Trust
Fisdel Green Consult Ltd	The CarbonNeutral Company
Future Earth Ltd	The CMG Consultancy
Global Sustainability Institute	The Gold Standard Foundation
Global Vision Foundation	The TYF Group
Graham A Brown & Associates	The Weston School of Dance & Performing Arts
Green Directions	Thriev
Green Times Publications NPC	Transition Town Louth
GreenSearch Global	Tri Tec Group
Harbon Wind Turbines Ltd	Trillion Fund
Herban Lifestyle	Trucost Plc
HESTA	Verco
HGEN Capital Ltd	Village Development of America LLC
Honeybee	Vision Industries Corp
Infinergy Limited	Volans Ventures
INFRASTRUTTURE SPA	Wiles Greenworld (10-50m turnover)
Inheritance India	Wolcraft GmbH
Institution of Chemical Engineers (IChemE)	Yesilist
International Carbon Reduction & Offset Alliance	Zenogen
IT Power Group	Zero Waste Solutions



## References

- (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/#.UwYUudxFBol](http://www.ipcc.ch/report/ar5/wg1/#.UwYUudxFBol) [Accessed 20 February 2014]
- (ii) The IPCC reports that if we are aiming to limit the warming caused by anthropogenic CO<sub>2</sub> emissions alone, with a probability of more than 66%, to less than 2°C, the cumulative CO<sub>2</sub> emissions from manmade sources will need to stay between 0 and about 1000GtC (3670Gt CO<sub>2</sub>). It is important to note that his figure does not take into account non-CO<sub>2</sub> greenhouse gases – the upper limit would actually reduce to 790GtC if they were also accounted for. Ibid.
- (iii) See [www.trillionthtonne.org](http://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/#.UwYUudxFBol](http://www.ipcc.ch/report/ar5/wg1/#.UwYUudxFBol) [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]

## Cambridge insight, policy influence, business impact

The University of Cambridge Institute for Sustainability Leadership (CISL) brings together business, government and academia to find solutions to critical sustainability challenges.

Capitalising on the world-class, multidisciplinary strengths of the University of Cambridge, CISL deepens leaders' insight and understanding through its executive programmes, builds deep, strategic engagement with leadership companies, and creates opportunities for collaborative enquiry and action through its business platforms.

Over 25 years, we have developed a leadership network with more than 5,000 alumni from leading global organisations and an expert team of Fellows, Senior Associates and staff.

HRH The Prince of Wales is the patron of CISL and has inspired and supported many of our initiatives.



For full details, visit our website or call us on +44 (0)1223 768850

[www.climatecommuniques.com](http://www.climatecommuniques.com)

[www.cisl.cam.ac.uk](http://www.cisl.cam.ac.uk)

### In the UK

1 Trumpington Street,  
Cambridge CB2 1QA, UK  
T: +44 (0)1223 768854  
F: +44 (0)1223 768831  
E: [info@cisl.cam.ac.uk](mailto:info@cisl.cam.ac.uk)

### In Brussels

Pericles Building  
Rue de la Science, 23  
Brussels B-1040  
Belgium  
T: +32 (0)2 894 9320  
E: [info.eu@cisl.cam.ac.uk](mailto:info.eu@cisl.cam.ac.uk)

### In South Africa

PO Box 313  
Cape Town 8000  
South Africa  
T: +27 (0)21 469 4765  
E: [info@sa@cisl.cam.ac.uk](mailto:info@sa@cisl.cam.ac.uk)



Printed with  
vegetable based  
inks on fsc approved  
100% recycled paper