

SPICe Briefing

Paris 2015: UN Climate Negotiations

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Between 30 November and 13 December 2015 world leaders will gather in Paris for the latest United Nations climate change conference. This meeting seeks to secure an agreement to bind nations into a global approach to reducing emissions, in line with keeping temperature rise to less than 2°C above pre-industrial levels.

This briefing sets out the background to the conference, the expectations for the meeting, commitments that have been made in advance, and some of the challenges in securing a global agreement.



Source: www.parisdigest.com



The Scottish Parliament
Pàrlamaid na h-Alba

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EXECUTIVE SUMMARY

In December 2015 world leaders will gather in Paris to participate in the latest of a series of annual United Nations meetings on climate change. The meetings, also referred to as Conferences of the Parties (COP), form part of a global environmental treaty negotiated in 1992 that seeks to prevent dangerous climate change.

Under this framework a number of global initiatives and commitments on climate change have been achieved to date. In 1997 (COP3) the Kyoto Protocol was agreed setting out a legally binding commitment for developed countries to reduce emissions by 2012. In 2010 the Cancún agreements noted that future global warming should be limited to less than 2°C above pre-industrial levels. At Copenhagen in 2011 (COP17) over 120 countries proposed that a legal framework for reducing emissions be completed by 2015 and come into effect no later than 2020. In 2013 (COP19) countries agreed to submit national plans for emission reductions by the first quarter of 2015 and for developed countries to make funding available to support developing countries reduce their emissions and adapt to climate change.

The meeting in Paris seeks to secure an agreement that binds nations to a global approach that reduces emissions in line with keeping global mean surface temperature rise to less than 2°C. As part of this initiative countries have been asked to prepare and submit their emission reduction plans and proposals in advance. The meeting also aims to secure a commitment of \$100 billion per year by 2020 from public and private sources in developed countries to support developing countries tackle climate change and adapt to the impacts.

The G20, US, China, India and the European Union have all signalled their commitment to work towards achieving an agreement in Paris 2015. The Scottish Government has also set out its desire to provide expertise and political leadership in support of securing such an agreement. A broad range of stakeholders including academic experts and civic society groups have set out views on the opportunity that Paris 2015 presents to secure a low carbon future, and what the key aspects of the agreement should be.

To date a number of countries have submitted their proposed contributions towards reducing emissions by 2030 and these include many of the world's biggest contributors of climate change emissions. Preliminary analysis suggests that the level of commitments made so far fall short of those required to limit the rise in global mean surface temperature to no more than 2°C.

Approaches that provide funding from developed to developing countries in order to support them reduce emissions and adapt to climate change have been established. However questions remain about whether the level of funding and support available to developing countries is sufficient, and what approaches will secure the necessary investment from public and private sources in the period to 2020 and beyond.

BACKGROUND

The United Nations Framework Convention on Climate Change (UNFCCC)

The United Nations Framework Convention on Climate Change ([UNFCCC](#)) is an international environmental treaty. The treaty was negotiated at the United Nations Conference on Environment and Development (UNCED) in 1992. This conference is more widely known as the Earth Summit.

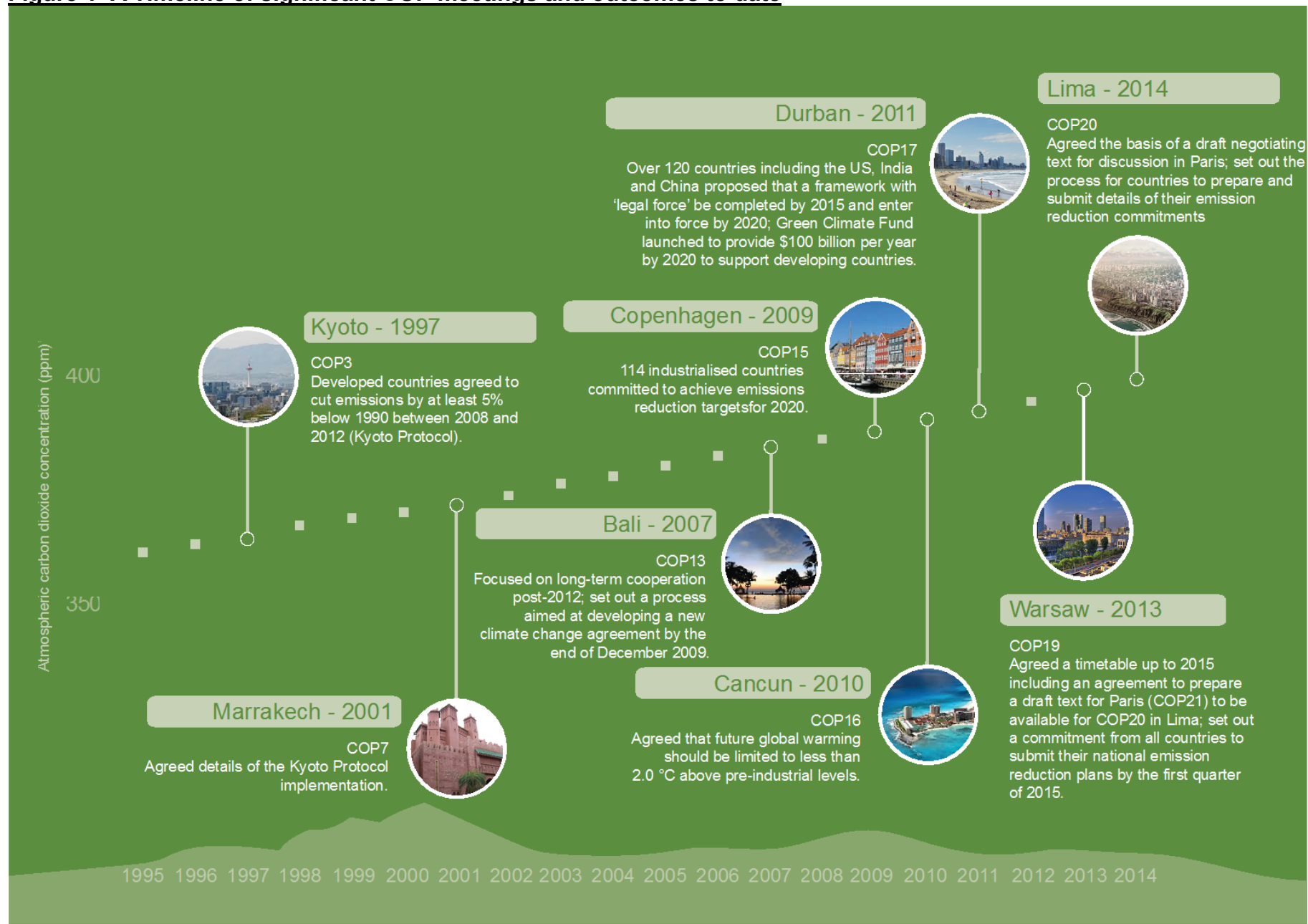
The objective of the treaty is to 'stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system' (United Nations [1992](#)).

The treaty does not set binding limits on greenhouse gas emissions for individual countries, however it provides a basis for negotiating specific treaties or 'protocols' to establish binding limits on emissions of greenhouse gasses.

To date 196 countries have signed up to the Convention and these are referred to as Parties. These countries have met annually since 1995 in meetings referred to as Conferences of the Parties (COP). The next COP meeting is COP21 and this will take place in Paris between 30 November and 11 December 2015. Figure 1 sets out some of the significant outcomes of previous COP meetings. More detail of the outcomes of these meetings is included in Annex 1.

The UNFCCC provide a secretariat function providing support and technical expertise to the UNFCCC negotiations and implementation of the Convention.

Figure 1 A Timeline of significant COP meetings and outcomes to date



SIGNIFICANCE OF COP21

Global leaders failed to reach a legally binding agreement on reducing emissions at the Copenhagen conference in 2009 (COP15). At the following COP meeting in 2010 leaders signed up to the Cancún agreements noting that future global warming should be limited to less than 2°C above pre-industrial levels. In 2011 international agreement was reached at COP17 in Durban to develop a new global, legally binding agreement, to be adopted in Paris in 2015, which would be:

- applicable to all nations
- come into force by 2020; and
- scale up efforts before 2020 to cut emissions.

According to the UNFCCC ([2015](#)) the objective of the 2015 negotiations is twofold:

- ‘... to bind nations together into an effective global effort to reduce emissions rapidly enough to chart humanity's longer-term path out of the danger zone of climate change, while building adaptation capacity.’ and
- ‘... to stimulate faster and broader action now.’

The UNFCCC suggest that the agreement must focus equally on mitigation - aimed at limiting global warming to below 2°C, and adapting to changes already taking place together with further likely changes in the future, and enter into force in 2020.

[Paris 2015](#) - the official COP21 meeting website ([2015](#)) states that:

‘The stakes are high: the aim is to reach, for the first time, a universal, legally binding agreement that will enable us to combat climate change effectively and boost the transition towards resilient, low-carbon societies and economies.’

Is 2°C an adequate goal?

A number of scientists have suggested that the goal to limit the increase in average temperature to below 2°C is not sufficient. According to US climate scientist James Hansen (Hansen [2005](#)) 'the 2°C scenario cannot be recommended as a responsible target'. Kevin Anderson of the Tyndall Centre (Anderson & Bows [2010](#)) states that:

'2°C now more appropriately represents the threshold between dangerous and extremely dangerous climate change,'

Many countries and organisations have also set out their concerns about such a goal. The [Alliance of Small Island States](#) (AOSIS) propose that the long term goal should be to limit temperature rise to less than 1.5°C. According to AOSIS:

'Already, at just one degree of warming, our small island states are feeling the effects of climate change – deadly, and life-altering impacts – and they will only get worse as the world warms. Our future depends on everyone accepting that 2 degrees is too much for us.'

At COP 16 Parties agreed to periodically review the adequacy of the goal to limit the increase in global average temperature to less than 2°C. The subsidiary UNFCCC body for Scientific and Technological Advice released their report at the [Bonn Climate Change Conference](#) in June 2015 (IPCC [2015](#)).

The report concluded that limiting warming to 2°C is still possible but poses 'substantial technological, economic and institutional changes' and noted that the world is not on track to achieve this goal. The report also noted that considering 2°C of warming as a 'safe' level is inadequate and that such a limit should be 'stringently defended' with a lower level of warming preferable.

The process also considered whether the 2°C goal should be reduced to 1.5°C but concluded that the science on such a limit is less robust, however they did note that limiting warming to such level would offer several advantages in the form of avoiding or reducing risks to threats associated with climate change but greater costs. The authors suggest that as further scientific findings become available the consideration of such a goal in the future is likely to continue.

KEY ISSUES FOR COP21

The COP21 [website](#) describes the main three issues for discussion at COP21 as:

- Intended nationally determined contributions
- Financing
- Agenda for solutions

INTENDED NATIONALLY DETERMINED CONTRIBUTIONS

At COP20 in Lima all countries agreed to set out the actions they will take towards the goal of tackling climate change in advance of the COP21. This information takes the form of an 'intended nationally determined contribution' or INDC.

Under the agreement those least developed countries and small island developing states with low levels of emissions and most vulnerable to climate change are required to provide details of their plans to develop in a low-carbon way. For all other countries [guidelines](#) as to what may be included in INDCs were agreed – this was important to try and make pledges comparable (UNFCCC [2015b](#)). The guidance requires that INDCs include:

- a reference point (for instance, the base year from which emissions will be reduced)
- time frames/periods for implementation
- assumptions and methodological approaches
- how the contribution is fair and ambitious
- how it contributes towards achieving the objective of the UN's Convention on Climate Change.

It is hoped by the organisers that the plans will be ambitious enough to ensure emissions are reduced sufficiently to meet the goal of limiting global average temperature increases to 2°C. Country INDCs to the UNFCCC, if provided, are available on the UNFCCC website [here](#). The UNFCCC secretariat plan to publish a synthesis of these contributions by 1 November 2015, and this will provide an indication of the cumulative impact of all these efforts, and whether they put the world on track to limit warming by 2°C.

To date 56 countries have submitted their INDCs, including the European Union (28 countries), the United States, Russia, Canada and Switzerland. Carbon Brief, an organisation that provides news and analysis of the latest developments and media coverage on climate and energy issues, is tracking the INDC pledges as they are submitted (Carbon Brief [2015](#)). Figure 2 highlights the pledges made by some of the largest emitters. Annex 2 summarises the pledges submitted up to 1 September 2015.

In May 2015 the Grantham Research Institute on Climate Change and Environment published a policy paper (Boyd et al [2015](#)) entitled 'What will global annual emissions of greenhouse gases be in 2030, and will they be consistent with avoiding global warming of more than 2°C?'

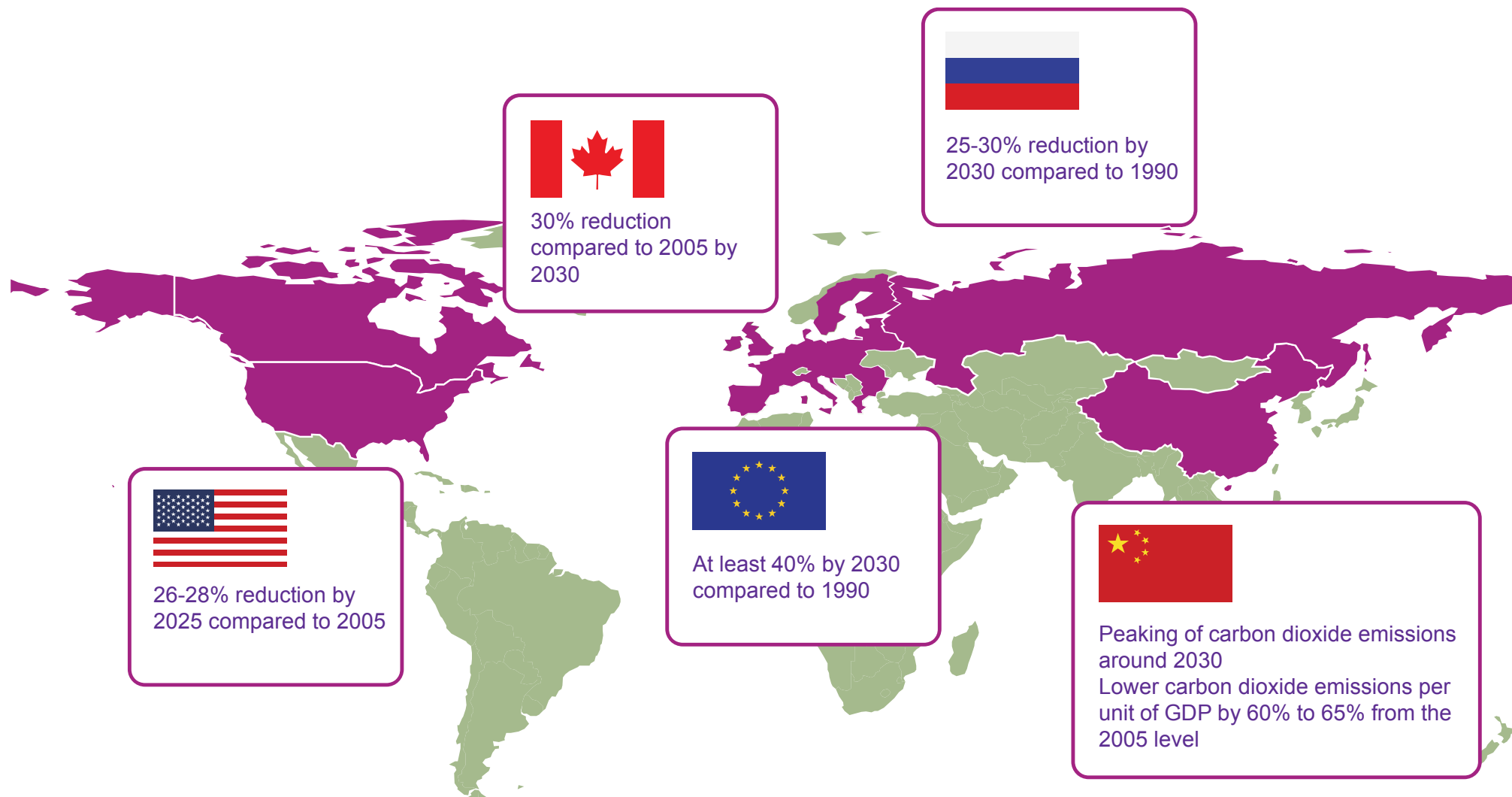
These authors reviewed those INDCs that had been submitted up to May 2015 alongside recent announcements by some of the largest emitters: the European Union, the United States and China in order to estimate what global annual emissions in 2030 could be. The authors then compared this to estimates of what emissions would need to be if global warming is to be limited to less than 2°C.

According to their preliminary analysis total global emissions would be 57-59 Gt CO₂e in 2030 compared to 32-44 Gt CO₂e that would be required to limited global warming to less than 2°C ¹. The authors acknowledge that countries may put forward more ambitious emission reduction plans as part of their submissions of INDCs. However, overall, they conclude that:

'...the INDCs submitted to the UNFCCC secretariat in 2015 are unlikely to be consistent with the international goal of limiting the rise in global mean surface temperature to no more than 2°C'

¹ On the basis of i) a 50-66% chance of limiting global warming to less than 2°C, and ii) not relying on achieving net negative emissions from energy use (e.g. through carbon capture and storage) in the second half of this century.

Figure 2 Emission reduction commitments submitted by some of the largest emitters (Canada, China, the EU, Russia and the US)

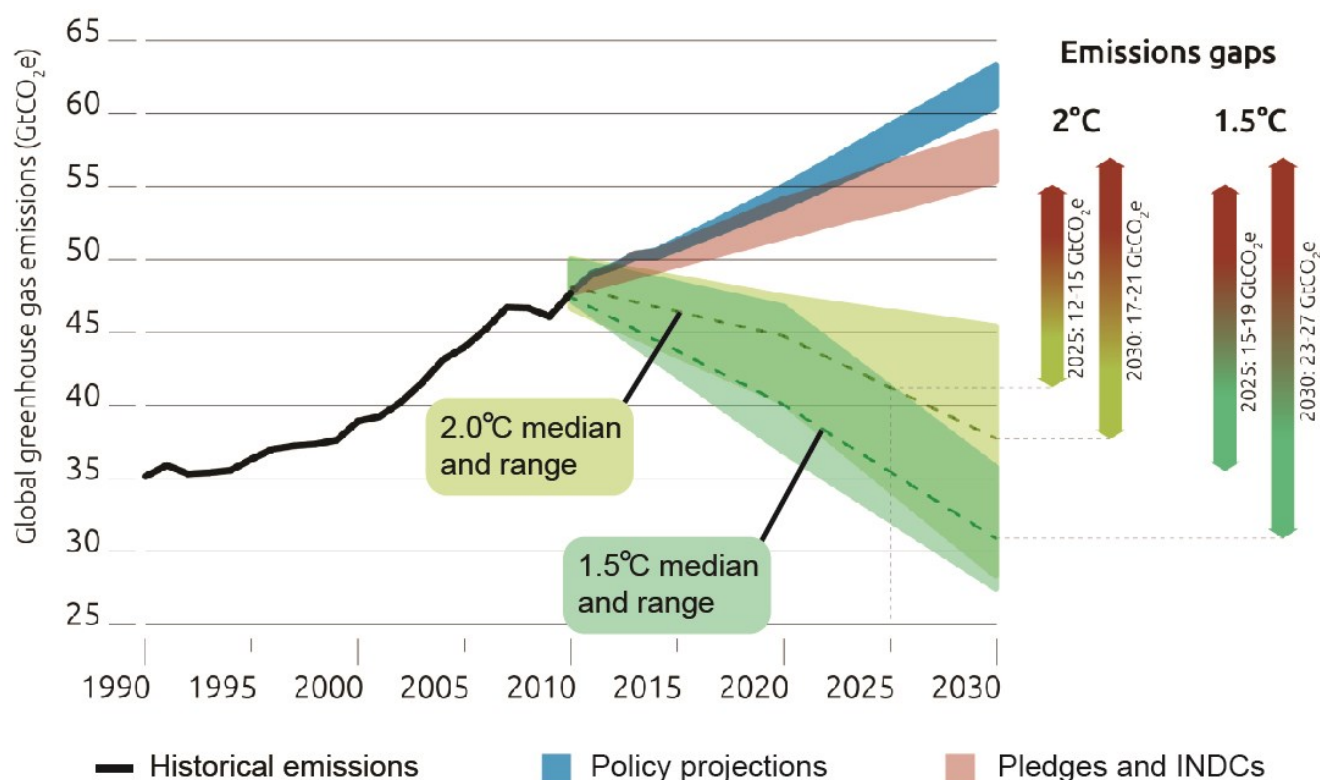


In September 2015 a consortium of four climate research organisations Ecofys, Climate Analytics, the Potsdam Institute for Climate Impact Research and NewClimate Institute published an analysis of the emission commitments contained within the INDCs submitted as at September 1 2015 (Climate Action Tracker [2015](#)). The commitments cover an estimated 65% of global emissions in 2010. According to their report the emission pledges fall short of those required to limit warming to less than 2°C, or below 1.5°C in 2100:

‘INDCs announced by 1 September 2015 lead to global emissions far above the levels needed by 2025 and 2030 to put the world on track to hold warming below 2°C, or to below 1.5°C, in 2100,’

Figure 3 is based on this data and compares projections of global emissions based on INDC pledges and a business as usual approach with those consistent with limiting warming to 2°C and 1.5°C. The diagram highlights the additional emission reductions that are required to achieve these targets. The consortium that produced the analysis have suggested that further emission reduction commitments equivalent to between 12-15 GtCO₂e by 2025 and 17-21 GtCO₂e by 2030 are required to limit global warming to less than 2°C.

Figure 3 - A comparison of greenhouse gas emissions based on pledges and INDCs made to date, against those consistent with limiting warming to 1.5°C and 2°C



Source: www.climateactiontracker.org/ClimateAnalytics/Ecofys/NewClimate/PIK

Note: 2°C median and range is based on a greater than 66% chance of staying within 2°C in 2100. 1.5°C median and range is based on a greater than or equal to 50% chance of being below 1.5°C in 2100. Temperature paths show the median and 10th to 90th percentile range.

INDCs are yet to be submitted by 140 countries. Collectively these countries were responsible for around 35% of emissions in 2010 and include India, Brazil, Iran and Saudi Arabia.

FINANCING

The COP21 meeting aims to secure a commitment of \$100 billion per year by 2020 from public and private sources in developed countries to support developing countries tackle climate change and adapt to the impacts. In their report 'Biennial Assessment and Overview of Climate Finance Flows' the UNFCCC ([2014b](#)) estimate that financing from developed to developing countries and reported to the UNFCCC is estimated at \$28.775 billion in 2011 and \$28.863 billion in 2012.

The Paris meeting also seeks to ensure that economic and financial stakeholders direct their investments in ways that support the transition to low-carbon economies. According to the World Economic Forum ([2013](#)) in a business-as-usual scenario the water, agriculture, telecoms, power, transport, buildings, industrial and forestry sectors will require an investment of about US\$5 trillion per year to 2020. The World Economic Forum note that 'Such business-as-usual investment will not deliver stable growth and prosperity' and suggest that additional investment of at least US\$ 0.7 trillion per year will be required to support clean energy, low-carbon transport, energy efficiency measures and forestry in line with limiting global average temperature rise to 2°C. The authors state that in the context of these demands 'current levels of climate finance are inadequate to secure action that will limit temperature rises to below 2°C.' In their briefing paper 'Aligning finance to deliver climate ambition and climate resilience in a 2015 climate agreement' ([2014](#)) E3G suggest that as part of the 2015 agreement climate finance has a key role to play in:

- enabling countries to achieve to limit emissions to those consistent with keeping warming below 2°C and increasing climate resilience, and
- rebuilding confidence and trust between parties in previous commitments from developed countries to provide fair contributions.

According to the analysis by E3G securing a 2015 deal will not only require agreement on finance for the period beyond 2020, but also assurance on finance in the more immediate period:

"Without a realistic understanding of how developed countries will mobilise and report on the US\$100bn by 2020, the 2015 agreement in Paris is unlikely to be successful. In addition, meaningful contributions to the Green Climate Fund (GCF), as part of developed countries' commitments to the US\$100bn, are a prerequisite if the agreement is to be considered successful and support the means of implementation in the run-up to 2020."

In an article on the G7G20 website ([2015](#)) Christiana Figueres, Executive Secretary of the UNFCCC has suggested that the upward investment in climate finance is encouraging and highlights a number of new initiatives relating to the private sector, including commitments from investors to decarbonise investment and from the insurance industry to double green investment.

However Figueres does highlight that while trends are going in the right direction 'Neither the support to developing countries nor the total climate flows are high enough yet to achieve the necessary transformation.' Figueres also highlights gaps and uncertainties, for example relating to:

- whether those most in need are being supported
- the relatively low level of finance for supporting adaptation and boosting resilience to climate impacts compared to what is required

- the extent to which significant planned infrastructure investment will support a low carbon transition or lock in a high-carbon pathway.

In their analysis E3G further highlight that constraints on public spending in many developed countries may limit their ability to deliver climate finance commitments and bolsters the need to secure investment from private sources.

The Green Climate Fund (GCF)

The GCF was established at the COP16 meeting in Cancun, Mexico. The fund aims to support developing countries to limit or reduce emissions of greenhouse gas emissions and adapt to the impacts of climate change. The GCF plans to provide at least half of their adaptation funding to the most vulnerable countries, for example Least Developing Countries (LDCs) and small island developing States (SIDS).

The GCF is a legally independent institution hosted by South Korea and has its own secretariat. According to the Green Climate Fund ([2015](#)) as of 12 August 2015 36 countries have made a pledge to the Green Climate Fund and the financial commitments amount to 10.2 billion US Dollars.

‘AGENDA OF SOLUTIONS’

The Agenda of Solutions initiative was launched at COP20 in Lima - as a joint exercise between the Peruvian and French COP Presidencies, Office of the Secretary General of the United Nations and the UNFCCC Secretariat. The programme aims to highlight the broad range of initiatives being developed by stakeholders including businesses, local governments and NGOs and their commitment to an ambitious new legal agreement in Paris.

The UNFCCC website states ‘These initiatives will supplement States’ commitments, raise awareness of economic and social opportunities, and thus help to strengthen individual ambitions.’ According to the official COP21 website ([2015](#)) the initiatives are supposed to support the implementation of the agreement that is being sought in Paris by:

- presenting solutions that already exist and can be scaled up
- offering credibility to the emission reduction and adaptation targets being considered at the Paris Summit
- providing a political signal that a range of government and non-government stakeholders are keen to work together towards achieving a common goal.

As of 1 October 2015 456 cities, 88 regions, 1122 companies and 277 investors have made commitments to date and these are detailed on the [UN Lima-Paris Action Agenda](#) website.

Agenda of Solutions – examples

Cities: The Compact of Mayors initiative is a global coalition of city leaders that have pledged to reduce their greenhouse gas emissions, monitor progress and prepare for the impacts of climate change (Compact of Mayors, [2015](#)). To date 82 cities have signed up to this compact.

Regions: 19 regions have signed up to the Compact of States and Regions that commits them to a public target to reduce emissions in their region. As examples:

New York State has committed to reduce region-wide emissions by 80% by 2050.

São Paulo has committed to reduce region-wide carbon dioxide emissions by 20% by 2020

Companies: 680 companies have signed up to take action on climate change. As examples:

Iberdrola have committed to reduce emissions intensity by 30% per megawatt hour by 2020 in all generation facilities around the world

Unilever have made a commitment to reduce the emissions intensity of manufacturing operations by 39% per tonne of product by 2020 through the use of renewable energy and investing in energy efficiency.

Investors: Commitments to take action made by the financial services sector include reducing operational emissions, boosting investment in low carbon technologies and reducing the carbon intensity of investment portfolios.

As examples:

Standard Life have committed to reduce operational emissions by 50% from 2006 to 2020 through increased energy efficiency and conservation.

AXA investment group are committed to the Montreal Carbon Pledge requiring them to measure and disclose the carbon footprint of their investment portfolios on an annual basis.

POSITIONING

G20

The COP21 conference was discussed at the G20 Conference held in Australia on 14-16 November 2014. There were widespread reports (BBC [2014](#)) that the Australian Government had sought to avoid any discussion of climate change at the summit, however the final G20 communique (G20 [2014](#)) outlined G20 support for securing action on climate change at the COP21 meeting:

‘We support strong and effective action to address climate change... We will work together to adopt successfully a protocol, another legal instrument or an agreed outcome with legal force under the UNFCCC that is applicable to all parties at the 21st Conference of the Parties (COP21) in Paris in 2015. We encourage parties that are ready to communicate their intended nationally determined contributions well in advance of

COP21 (by the first quarter of 2015 for those parties ready to do so). We reaffirm our support for mobilising finance for adaptation and mitigation, such as the Green Climate Fund.’

US and China – Joint Announcement

On 11 November 2014 the USA and China issued a joint announcement on climate change that set out their actions in support of securing a strong agreement in 2015 (The White House [2014](#)). In the statement President Barack Obama and President Xi Jinping also announced their respective post-2020 actions on climate change. The United States set out its intention to achieve an economy-wide target of reducing its emissions by 26%-28% below its 2005 level in 2025 and to make ‘best efforts’ to reduce its emissions by 28%. China intends to ensure that CO₂ emissions peak around 2030 and to make ‘best efforts’ to peak earlier than this and intends to increase the share of non-fossil fuels in primary energy consumption to around 20% by 2030.

According to analysis published by the Global Legislators Organisation (GLOBE International)² ([2014](#)) the announcement constitutes:

‘.. a watershed moment, raising expectations of an ambitious global deal in which the largest emitters commit to cooperative action to address climate change through a strong international agreement at COP-21 in Paris.’

Carbon Brief [2014](#) suggest that despite the emission reduction pledges from the US and China not being especially ambitious, this demonstration of commitment from the world’s largest emitters helps build momentum towards securing a global agreement.

In August 2015 (The White House [2015](#)) President Obama announced a ‘Clean Power Plan’ that commits to cut carbon dioxide emissions from power plants by 32% by 2030 compared to 2005. In the context of the Paris 2015 negotiations the statement says that:

‘The release of the Clean Power Plan continues momentum towards international climate talks in Paris in December, building on announcements to-date of post-2020 targets by countries representing 70 percent of global energy based carbon emissions.’

India

India is the world’s third largest emitter of carbon dioxide although emissions per capita are much lower than China. In previous global climate change negotiations China and India have co-ordinated their positions, and represented a wider developing countries position, and in doing so formed an important bloc. Some commentators (The Diplomat [2014](#)) had suggested that the Chinese announcement could make India more isolated in the forthcoming climate change negotiations.

According to India Climate Dialogue ([2014](#)), shortly after the joint announcement by the US and China, Prakash Javadekar, India’s minister for environment, forests and climate change, distanced himself from the Chinese proposals. He suggested that India wanted developed countries to take responsibility for emissions that arise in developing countries in order to produce goods and services in rich countries. He said ‘We are going to talk about not only per-capita emission, but also per-capita consumption.’

² GLOBE is an international organisation that consists of parliamentarians from over 80 countries committed to developing and advancing legislation that supports sustainable development.

In May 2015 the Government of the Republic of India and the Government of the People's Republic of China (referred to as 'the Two Sides') issued a joint statement (Government of India [2015](#)) on climate change. In this statement they commit to working together to secure agreement and also emphasised their own domestic action:

'The Two Sides will work together, and with other Parties, to advance the multilateral negotiations to achieve a comprehensive, balanced, equitable and effective agreement under the UNFCCC in 2015, with a view to ensuring the full, effective and sustained implementation of the UNFCCC. In this context, the Two Sides express their full support for the success of the UN Climate Conference to be held in Paris, France (Paris Conference) this year.

'As the two biggest developing countries, China and India are undertaking ambitious actions domestically on combating climate change through plans, policies and measures on mitigation and adaptation despite the enormous scale of their challenges in terms of social and economic development and poverty eradication.'

EUROPEAN COMMISSION

In February 2015 the European Commission published the EU's vision for the new climate agreement – The Paris Protocol – a blueprint for tackling global climate change beyond 2020 ([2015](#)).

The EU communication sets out a number of objectives that should be included within the 'Paris Protocol'. These include:

- ambitious emission cuts by specifying a long term goal of cutting global emissions by at least 60% below 2010 levels by 2050
- legally binding commitments to reduce emissions in line with achieving warming of less than 2°C
- a requirement for a review every 5 years to increase the ambition of the commitments in line with up to date science
- a set of rules and procedures for regular reporting and verification and expert review of emission inventories
- supporting policies aimed at mobilising significant and predictable investment from public and private sources in low-emission climate-resilient development.

The communication also sets out the EU's contribution to the 2015 Paris agreement as a binding, economy-wide domestic reduction target of 'at least 40%' in greenhouse gas emissions by 2030.

UK

In 2014 the UK Government published 'Paris 2015: Securing our prosperity through a global climate change agreement' ([2014](#)). The document sets out the latest climate science, the gap between the scale of emissions reductions necessary to have a medium or likely chance of limiting global warming to 2°C and current emission reduction plans, describes why a global climate agreement is achievable and sets out the UK's vision for a 2015 agreement.

The document highlights the Government's position on the benefits of a global climate agreement and the outlook for securing a successful agreement:

‘The world will come together to forge a deal on climate change that should, for the first time ever, include binding commitments to reduce emissions from all countries. The right deal also has the potential to kick-start a transition to a low-carbon future at the global level. With all countries participating, according to their evolving responsibilities and capabilities, we will move towards a level playing field that opens up new markets, brings down costs, and unlocks the investment we need.’

The UK Government document also refers to the need for strong momentum and political will up to, and beyond, the 2015 Paris conference:

‘We recognise the challenges to getting an agreement mean we need to make much more progress ahead of the 2015 COP itself. We are also aware that even with a successful outcome, Paris will not be the end of the story.’

Following her appointment as Secretary of State for Energy and Climate Change in May 2015 Amber Rudd set out her support for securing a global deal (DECC, [2015](#)):

‘The summit in Paris in December is the best opportunity for years to get comprehensive, rules based agreement that keeps the objective of limiting global warming to 2 degrees in reach. The three biggest carbon emitters, the EU, US and China are all determined to get a deal done.’

A global deal is the only way we can deliver the scale of action required – and it is strongly in the UK’s interest. A global deal provides the only credible means to leverage more from others and would further drive down the costs of climate action.

So agreeing a global deal is a massive opportunity for us to avoid the catastrophic effects of climate change and also to open up new opportunities for our low carbon industries. It’s not just governments who want this deal, its businesses, NGOs and campaign groups both in the UK and internationally.’

SCOTLAND

In relation to COP21 the Scottish Government website states that ‘Scotland is ready to play its part and has already set a high ambition trajectory with a greenhouse gas emissions reduction target of 58% by 2027 (relative to 1990 levels)’ (Scottish Government [2015a](#)).

In a speech to the Scottish Parliament about Scotland’s greenhouse gas emission data for 2012 (Scottish Government [2014](#)) the then Minister for the Environment and Climate Change, Paul Wheelhouse highlighted that the Scottish Government view Scotland’s emission reduction efforts in the context of the need to secure a global agreement on climate change:

‘...we are also focused on negotiations leading up to the UNFCCC Conference of Parties in Paris in 2015...We need to demonstrate Scottish Government’s commitment to delivery of our stretching targets, as our contribution to the necessary global action, and to encourage others to higher ambition.’

During scrutiny of the draft Scottish Budget 2014-15 (Scottish Parliament [2014](#)) the Europe and External Relations Committee asked the Cabinet Secretary for Culture and External Affairs about Scotland’s role in helping to secure a new global climate agreement in Paris in 2015. The Cabinet Secretary said:

‘It is one of the areas where our relationship with the United Kingdom Government is such that we are represented and play a key role at global climate conferences. We are

seen as a supportive and productive partner in that effort because we are recognised as having expertise.

Where we have expertise and political leadership in our country and where we can work with others, including the UK Government, on those conferences, we will continue to do so.'

In June 2015 Aileen McLeod Minister for Environment, Climate Change and Land Reform reiterated this commitment (Scottish Government [2015b](#)) :

'In the run up to Paris, I will continue to press the international community to look to Scotland and follow our example in striving for the highest global ambition to tackle climate change.'

Scottish Government and Scottish Parliament COP engagement

Since 2010 Scottish Ministers have had a place on the UK delegation to the UNFCCC. The Scottish Government have also joined a number of global initiatives aimed at highlighting support for ambitious international efforts to tackle climate change in the run up to Paris:

- the [Under 2 MOU](#) brings together states and regions that commit to reduce their emissions by 80 to 95 percent of their 1990 level, or less than two metric tons per capita by 2050.
- the [Compact of States and Regions](#) summarises emission reduction commitments made by states and regional governments. Scotland is one of 20 governments that have reported to the Compact.

In 2009 three members of the Scottish Parliament's Transport, Infrastructure and Climate Change Committee and a member of the SPICe research team attended the United Nations COP15 climate change summit in Copenhagen.

In advance of the COP21 meeting in Paris, the Scottish Parliament's Rural Affairs, Climate Change and Environment Committee plan to take evidence from both the Scottish Minister and the UK Secretary of State.

ACADEMIC AND CIVIC SOCIETY STAKEHOLDERS

A wide range of stakeholders have set out views on the opportunities and risks presented by the forthcoming climate negotiations, and key elements that they suggest should be incorporated into an agreement. Those commenting include prominent climate scientists, civic society organisations and members of the business community. This section highlights some of these views.

In a report *Growth, Climate and Collaboration: Towards Agreement in Paris 2015* (Stern [2014](#)) Professor Nicholas Stern, author of the [Stern Review on the Economics of Climate Change](#), suggested that the coming decades offer a significant opportunity to link transformations in our economies with a low-carbon transition:

'We are at a fork in the road. Two remarkable processes are occurring simultaneously over the next two decades: profound structural transformation of the world's economies, and the transition to the low-carbon economy. If the former is managed well over the next two decades, in relation to congestion, efficiency, pollution and care of our land and natural resources, then we will do much of what is necessary for the latter and we will create sound foundations for the low-carbon transition which must proceed strongly throughout this century. That these two periods coincide presents both opportunity and time for decision: an opportunity we can use or lose.'

Professor Stern also summarises several reasons that, with 'wise, collaborative and committed' decision making provide grounds for optimism in securing a new agreement:

'We do, or should, understand that the risks are immense. We can see the scale of reductions necessary to give a reasonable chance of holding temperature increases to 2°C. We can now recognise the growth potential of the transition to the low-carbon economy..... And we understand the economic policies that can set us on that road, including carbon pricing and regulation, support for innovation, and fostering long-term finance.'

In April 2015 17 leading scientists from renowned institutions including the Stockholm Resilience Centre, Grantham Institute, World Resources Institute and Potsdam Institute released the Earth Statement ([2015](#)). The scientists described 2015 as the 'Year of Opportunity for a Sustainable Future' on the basis of several important gatherings of world leaders, including COP21:

'Three times this year, world leaders will meet to set the course for decades to come. In July 2015, heads of state meet to discuss Financing for Development. In September 2015, the UN Sustainable Development Goals (SDGs) will be adopted. In December 2015, nations negotiate a new Global Climate Agreement. Decisions made in this single year will be the legacy of our generation. In particular, if we do not succeed in tackling climate change, the sustainable development goals, livelihoods in many parts of the world and the wellbeing of our close and distant kin will be threatened.'

If we act boldly, we can safeguard human development. It is a moral obligation, and in our self-interest, to achieve deep decarbonization of the global economy via equitable effort sharing. This requires reaching a zero-carbon society by mid-century or shortly thereafter, thereby limiting global warming to below 2°C as agreed by all nations in 2010.'

In the Statement the scientists set out eight key aspects of a Paris agreement, these highlight the need to:

- limit global warming as far below 2°C as possible, recognising that a rise of 2°C will cause significant damage
- limit total emissions in the future to well below 1000 Gt CO₂ to have a reasonable chance of limiting temperature increase to 2°C
- transform the economy to secure a global goal of zero carbon by the middle of the century, supported by national commitments that include a price on carbon and urgently redirecting subsidies from fossil fuels to renewables
- develop a global strategy that reduces the vulnerability, and improves the resilience of communities to the impacts of climate change
- access new levels and sources of funding to support developing countries transition to zero-carbon societies.

A coalition of organisations that work with businesses and investors have formed a joint platform called [We Mean Business](#). Their corporate advisory board includes senior staff from Kingfisher, Ikea, Unilever and HP and the group includes the [World Business Council for Sustainable Development](#) (WBCSD). We Mean Business are calling for a number of commitments to be included in the Paris Agreement including:

- an objective of net zero emissions before the end of the century
- governments to strengthen their commitments every five years, and
- support for carbon pricing.

In August 2014 Christian Aid, Green Alliance, Greenpeace, RSPB, and WWF published a report called 'Paris 2015 Getting a global agreement on climate change' (Green Alliance [2014](#)). In their report the authors set out several components that should be reflected in the agreement including ambitious action before and after 2020, a strong legal framework and the provision of public finance for adaptation and the low carbon transition. The authors suggest that:

'Not only is a deal possible but, with the right political leadership, it can lead to ambitious outcomes that will have a real impact on tackling climate change. Countries like the US and China are working to ensure an outcome is likely in 2015; and the years since the 2009 Copenhagen negotiations have seen some significant breakthroughs.'

Kevin Anderson, former Director of the Tyndall Centre has noted, however, that should only a weak agreement be achieved, this would risk levels of national action that would not be ambitious enough (China dialogue [2014](#)):

'What will happen with a weak deal is targets or frameworks far removed from those necessary to meet the 2C commitments – first agreed by leaders at the Copenhagen Summit in 2009 – will be used to inform the basis of national policies. In practice we'd then likely only achieve a proportion of those and thereby lock in a slightly modified business as usual future heading for temperature rises of 4C or more.

Rather than having a weak and irrelevant deal that would stop the process of significant mitigation for another four or five years, we have to drive a process to bring our leaders back to negotiations.'

ANNEX 1

COP3 1997 (Kyoto): Kyoto Protocol concluded - established a legally binding commitment for developed countries to reduce their emissions of six greenhouse gases by at least 5% below 1990 between 2008 and 2012. The protocol also established emissions trading and a "clean development mechanism" to encourage joint emissions reduction projects between developed and developing countries.

COP13 2007 (Bali): Bali Road Map adopted - focused on long-term cooperation post-2012 and set out steps required to reach a secure climate future and included a negotiating progress aimed at development a new climate change agreement by the end of December 2009.

COP15 2009 (Copenhagen): Copenhagen Accord 'noted' by the Parties and was subsequently agreed by 114 countries. Industrialised countries that agreed the Accord all committed to achieve quantified economy-wide emissions reduction targets for 2020. Developing countries outlined voluntary nationally appropriate mitigation actions.

COP16 2010 (Cancún): Cancún agreements stated that future global warming should be limited to below 2.0 °C relative to the pre-industrial level. Agreed that both developed and developing countries would contribute to reducing emissions and that both would be subject to some form of monitoring and verification.

COP17 2011 (Durban): All governments committed to a plan that would support the goal of stabilising greenhouse gas concentrations. Over 120 countries including the US, India and China proposed that a framework with 'legal force' should be completed by 2015 at the latest, entering into force no later than 2020. Launched the Green Climate Fund setting out how developed countries would deliver their commitment to provide \$100 billion per year by 2020 to support developing countries.

COP19 2013 (Warsaw): Agreed a timetable up to 2015 that included the preparation of a draft text for Paris to be available for COP20 in Lima and a commitment from all countries to submit their national plans for emission cuts or 'contributions' by the first quarter of 2015.

Countries also agreed to provide finance for the Green Climate Fund by the end of 2014, establish a system for compensating developing countries for "loss and damage" caused by climate change and strengthen measures to address the gap between emission reduction commitments made to date and what is required to limit warming to less than 2°C.

COP20 2014 (Lima): Agreed the basis of a draft negotiating text for discussion in Paris in late 2015. Agreed the framework and process for countries to prepare and submit details of the actions and emission commitments they will make under the new agreement. These contributions are referred to as 'Intended Nationally Determined Contributions' (INDCs).

ANNEX 2

Country	Pledge - greenhouse gases emissions reduction (carbon dioxide equivalent (CO ₂ e)).
Andorra	37% reduction based on BAU scenario by 2030
Australia	26-28% reduction by 2030 compared to 2005 levels
Benin	Avoiding cumulative emissions of 120 million tonnes dioxide between 2020 and 2030 compared to BAU.
Canada	30% reduction compared to 2005 by 2030
China	peaking of carbon dioxide emissions around 2030 and making best efforts to peak early; lower carbon dioxide emissions per unit of GDP by 60% to 65% from the 2005 level
Democratic Republic of Congo	17% reduction by 2030 compared to BAU (conditional on receiving international financial support)
Djibouti	40% reduction by 2030 compared to BAU (and additional conditional pledge to a further 20% reduction)
Dominican Republic	25% reduction compared to 2010 by 2030 (conditional upon support)
Ethiopia	64% reduction by 2030 compared to BAU
EU	At least 40% by 2030 compared to 1990
Gabon	At least a 50% reduction by 2025 compared to BAU
Iceland	40% reduction by 2030 compared to 1990
Kenya	30% reduction by 2020 compared to BAU (conditional on financial and technological support)
Japan	25% reduction by 2030 compared to 2005
Liechtenstein	40% reduction on 1990 levels by 2030
Macedonia	30 or 36% reduction in CO ₂ emissions from energy by 2030 compared to BAU
Marshall Islands	32% reduction by 2025 compared to 2010, 45% reduction by 2030 compared to 2010
Mexico	25% reduction compared to BAU by 2030 (rising to 40% subject to outcome of a global deal)
Monaco	50% reduction by 2030 compared to 1990
Morocco	32% reduction by 2030 compared to BAU
New Zealand	30% reduction by 2030 compared to 2005
Norway	At least 40% by 2030 compared to 1990
Republic of Korea	37% reduction by 2030 compared to BAU
Russia	25-30% reduction by 2030 compared to 1990
Serbia	9.8% reduction by 2030 compared to 1990
Singapore	36% reduction by 2030 compared to 2005
Switzerland	50% reduction by 2030 compared to 1990
Trinidad and Tobago	30% reduction in emissions from public transport by 2030 compared to BAU, conditional 15% reduction in emissions by 2030 compared to BAU.
US	26-28% reduction by 2025 compared to 2005

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