Briefing

January 2016



The Paris Agreement A new framework for global climate action

SUMMARY

The Paris Agreement was adopted on 12 December 2015 by the 21st Conference of the Parties (COP 21) to the United Nations Framework Convention on Climate Change (UNFCCC). It provides a framework for global actions to address climate change in the period after 2020.

The objective of the agreement is to maintain the increase in global temperatures well below 2 degrees Celsius above pre-industrial levels, whilst making efforts to limit the increase to 1.5 degrees. The agreement aims to ensure global greenhouse gas emissions peak as soon as possible, and to balance emissions and removals of greenhouse gases in the second half of this century. Furthermore, the agreement addresses adaptation to climate change, financial and other support for developing countries, technology transfer and capacity building, as well as loss and damage.

In contrast to the Kyoto Protocol, which commits only developed countries to specific reduction targets, the Paris Agreement requires all countries to prepare nationally determined contributions (NDCs), take measures to achieve their objectives, and report on progress.

In order to raise the level of ambition over time, Parties must submit updated NDCs every five years. Each Party's new NDC must be more ambitious than its previous NDC.

Initial reactions to the Paris Agreement were mostly positive, but commentators note that huge efforts will be needed to overcome the gap between the ambition of the agreement and the emission reductions pledged by the Parties.



Laurence Tubiana (France's Special Representative), Christiana Figueres (UNFCCC Executive Secretary) and Laurent Fabius (French Foreign Minister and COP 21 President), celebrate the adoption of the agreement.

In this briefing:

- The road to Paris
- Paris agreement provisions
- Upcoming developments
- Initial reactions
- The challenge of implementation
- Main references

Glossary

Adaptation: adjustment of behaviour to limit harm, or exploit beneficial opportunities, arising from actual or expected climate change.

Capacity building: enhancing the ability of individuals, organisations and institutions to identify, plan and implement ways to mitigate and adapt to climate change.

Common but differentiated responsibilities (CBDR): a principle in international law which recognises differences in the contribution of developed and developing nations to global environmental problems, and differences in their respective capacities to take action.

Developed country (Annex I country): in the context of climate negotiations, this refers to countries with a long history of industrialisation, listed in Annex I to the UNFCCC.

Developing country (non-Annex I country): in the context of climate negotiations, this refers to countries without a long history of industrialisation. It includes countries at various levels of economic development and with very different greenhouse-gas emissions levels.

INDC: intended nationally determined contribution.

Kyoto Protocol: an international agreement linked to the UNFCCC that commits developed nations to cutting their greenhouse gas emissions.

Loss and damage: costs of climate impacts that are not prevented by mitigation or adaptation.

Mitigation: actions to limit dangerous climate change, notably by reducing the emission of greenhouse gases into the atmosphere.

NDC: nationally determined contribution.

UNFCCC: United Nations Framework Convention on Climate Change, an international agreement aimed at preventing dangerous man-made climate change.

The road to Paris

Man-made climate change was recognised as a problem in the second half of the 20th century. In 1988, the Intergovernmental Panel on Climate Change (IPCC) was established to assess the scientific evidence.

The United Nations Framework Convention on Climate Change (UNFCCC) was adopted at the 1992 Earth Summit in Rio, and entered into force in 1994. Its objective is the 'stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system'. The UNFCCC acknowledged that countries have common but differentiated responsibilities. Developed countries, responsible for most of the greenhouse gases in the atmosphere and with more capacity to act, were therefore expected to take the lead in the fight against climate change by reducing their own greenhouse gas emissions, as well as providing support (including financial) to developing countries.

The third Conference of the Parties (COP 3, 1997) adopted the <u>Kyoto Protocol</u>, which entered into force in 2005. It commits developed countries¹ to quantified reduction of their collective carbon emissions – 5.2% by 2012 compared to the base year (1990). It established an international emissions-trading system and a Clean Development Mechanism allowing developed countries to meet their commitments with emissions-reduction projects in developing countries. However, the US – at the time the world's number one emitter – did not ratify the protocol, seriously limiting its effectiveness. The second commitment period² (2013-2020) of the Kyoto Protocol affects only 14% of

global emissions because only EU Member States, other European countries and Australia have assumed commitments, while the USA, Russia, Canada and Japan have not.

In 2009, COP 15 in Copenhagen set out to reach a new climate agreement for the post-Kyoto period that would commit developed as well as developing countries, but this ended in failure. The conference did however result in the <u>Copenhagen Accord</u>, a nonbinding document that sets a target of limiting global temperature rise to 2 degrees, establishes the Green Climate Fund, and agrees a goal to provide climate finance from

'a wide variety of sources', worth US\$100 billion per year to developing countries by 2020. Countries made voluntary mitigation pledges for the period up to 2020.

In 2011, COP 17 in Durban started the process that led to the Paris Agreement, by resolving to conclude a new agreement by 2015 to cover the post-2020 period.

In November 2014, <u>China and the US</u> announced their intention to address climate change. This accord was widely regarded as raising the chances of reaching an agreement in 2015.

The Lima conference in December 2014 (COP 20) concluded with the adoption of the 'Lima Call for Climate Action', a document that invited all Parties (countries) to communicate their plans for post-2020 climate action in the form of Intended Nationally Determined Contributions (INDCs). By the end of November 2015, 184 out of 196 Parties had submitted an INDC. The Lima call contained an annex with elements of a draft negotiating text. Several UNFCCC negotiation sessions were held in in 2015,

The High Ambition Coalition and the EU

The level of ambition of the Paris Agreement exceeded expectations, in particular the commitment to make efforts for limiting global temperature rise to 1.5 degrees. This objective was pushed by the High Ambition Coalition, an alliance of over 100 countries that emerged during the Paris conference. It includes the EU and developing countries from Africa, the Caribbean and Pacific regions, among others. The United States, Australia and Brazil joined the group during the Paris conference. As climate and energy Commissioner, Miguel Arias Cañete, <u>revealed</u>, alliance met discreetly in May 2015 in Berlin, and on the sidelines of major climate gatherings throughout the year. The group wanted five-yearly reviews, a common robust set of transparency and accountability rules, and a fair deal on climate finance and support.

but did not resolve key issues regarding fairness, responsibility and finance.

The European Commission published its position for COP 21 in February 2015, Council adopted a negotiating mandate in September 2015, and the European Parliament adopted its resolution in October 2015.

COP 21, chaired by the French Foreign Minister, Laurent Fabius, started in Paris on 30 November 2015 with a gathering of over 150 heads of state or government, and ended on 12 December 2015 with the adoption of the Paris Agreement and a number of related decisions.

Paris Agreement provisions

The <u>Paris Agreement</u> establishes a comprehensive framework for international climate action, to which all Parties contribute.

Legal form

The outcome of COP 21 consists of a COP decision (140 points and 20 pages), and the actual text of the Paris Agreement (29 articles), which is presented as an annex to the decision.

The legal form was an important issue in the negotiations, with the EU and other Parties insisting on a legally binding agreement, but US Secretary of State, John Kerry, warning that it must not be a 'treaty' that legally requires countries to reduce their emissions.³

The Paris Agreement contains some provisions that are legally binding (such as preparation and implementation of NDCs, as well as reporting), and others that are voluntary.⁴ The agreement avoids quantified targets for emissions reductions or financial flows, and does not provide for enforcement or sanctions.

It foresees a 'mechanism to facilitate implementation of and promote compliance' that shall be 'be expert-based and facilitative in nature and function in a manner that is transparent, non-adversarial and non-punitive'. As set out in the COP decision, it will be led by an expert committee comprising '12 members with recognised competence in relevant scientific, technical, socio-economic or legal fields, to be elected by the Conference of the Parties on the basis of equitable geographical representation ... while taking into account the goal of gender balance'.

Table 1 – Main features of the Kyoto Protocol and the Paris Agreement

	Kyoto Protocol	Paris Agreement
Scope	Mitigation	Mitigation, adaptation, finance
Duration	Phase 1: 2008-2012 Phase 2: 2013-2020	Indefinite, with revision of NDCs every five years
Application	Only developed country Parties have emission reduction targets	All Parties must make (nationally determined) mitigation contributions
Coverage of global emissions	14% in phase 2	99% of emissions are covered by already submitted INDCs
Mechanism	Emissions targets for developed countries, market-based mechanisms	Nationally determined contributions, voluntary cooperation between Parties
Compliance	Enforcement through suspension from emissions trading, and additional emissions reductions in second commitment period	Expert-based and facilitative mechanism that is transparent, non-adversarial and non-punitive
Transparency	Different reporting require- ments for developed and developing countries	Similar reporting requirements for all Parties

Universal application and differentiation

The Paris Agreement applies to all Parties, overcoming the traditional split between developed countries on the one hand and developing countries on the other. Differentiation between Parties of the Paris Agreement is to be based on 'equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances'.

Article 3 requires all Parties 'to undertake and communicate ambitious efforts ... with the view to achieving the purpose of this Agreement', and to increase these efforts over time.

Article 4.2 stipulates that 'each Party shall prepare, communicate and maintain successive nationally determined contributions ... Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions.'

Article 4.4 differentiates between developed and developing countries, but avoids making the distinction legally binding (by using the verb 'should' instead of 'shall').

'Developed country Parties should continue taking the lead by undertaking economy-wide absolute emission reduction targets. Developing country Parties should continue enhancing their mitigation efforts, and are encouraged to move over time towards economy-wide emission reduction or limitation targets in the light of different national circumstances.'

Article 4.5 says that 'support shall be provided to developing country Parties', in order to allow them to raise their ambitions.

Objectives and ambition

The main objectives of the agreement are:

- 'holding the increase in the global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels',
- 'increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development', and
- 'making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development'.

Although decarbonisation is not explicitly mentioned as an objective, 'all Parties should strive to formulate and communicate long-term low greenhouse gas emission development strategies'.

Mitigation

Without giving an emissions budget or quantified emission targets, the agreement aims to 'reach global peaking of greenhouse gas emissions as soon as possible, recognising that peaking will take longer for developing country Parties, and to undertake rapid reductions thereafter' and to 'achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century'.⁵

In order to achieve the objectives of their NDCs, 'Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions'. However, they may also cooperate on a voluntary basis and use 'internationally transferred mitigation outcomes towards nationally determined contributions'.

The latter provision leaves open the possibility to establish and link emissions trading systems and similar mechanisms.

Adaptation

The Paris Agreement establishes 'a global goal on adaptation: enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change'. The COP decision urges a significant increase in financial assistance for adaptation in developing countries. Adaptation arrangements under the UNFCCC are to be reviewed in 2017.

Transparency and accountability

The agreement holds Parties accountable for their NDCs through an 'enhanced transparency framework for action and support', with 'built-in flexibility' for developing countries. Each Party must regularly provide a national inventory report of anthropogenic emissions and removals, and information about the progress made in implementing and achieving its NDC.

Reporting is also required for support to developing countries through finance, technology transfer and capacity-building.

The information submitted will undergo a technical expert review. Such provisions for accountability and transparency were demanded by the EU and the USA.

Five-yearly ambition mechanism

Recognising that the INDCs submitted ahead of the COP 21 are not sufficient to achieve the ambitions of keeping global temperature rise well below 2 degrees, let alone 1.5 degrees, the Paris Agreement includes an ambition mechanism for revising the Parties' plans and raising their ambitions.

Parties must communicate an NDC every five years. They may adjust their existing NDC at any time with a view to enhancing its level of ambition. A global stocktake is planned for 2023 and every five years thereafter.

The COP decisions contain provisions for raising the level of ambition before 2020. A facilitative dialogue among Parties will be held in 2018 to take stock of their collective efforts. NDCs with timeframes up to 2030 should be updated by 2020.

This five-yearly ambition mechanism was one of the EU's key demands. Revision of the nationally determined contributions by 2020 was also demanded in the European Parliament resolution on COP 21.

Climate finance

Developed countries shall provide financial resources to assist developing country Parties with both mitigation and adaptation, in continuation of their existing obligations under the UNFCCC. They are obliged to report every two years. The agreement encourages developing country Parties to provide such support voluntarily.

What is missing from the Agreement?

The Paris Agreement does not stipulate an emissions budget or quantified emission reductions, although it notes that greater emission reduction efforts (down to 40 gigatonnes CO₂ equivalent instead of 55 gigatonnes by 2030) would be required to achieve the 2 degrees target. The Paris Agreement fails to mention 'decarbonisation', aiming instead to balance emissions and removals of greenhouse gases.

As expected, the agreement does not have enforceable formal mitigation commitments. It does not make any provisions for carbon pricing, but keeps open the possibility of using and linking carbon markets.

Although the agreement addresses loss and damage, it excludes any liability or compensation.

International shipping and aviation, two sectors with large and growing greenhouse gas emissions, are not mentioned in the Paris Agreement. However, the International Maritime Organization (IMO) works on market-based measures to reduce shipping emissions, and the International Civil Aviation Organization (ICAO) aims to agree global market-based measures for carbon neutral growth by 2016, to take effect in 2020.

Regarding the amount of climate finance to be provided by developed countries, the COP 21 decision affirms the existing goal of mobilising at least US\$100 billion per year by 2020, and commits to setting a higher collective quantified goal for the period after 2025.

Loss and damage

Inclusion of loss and damage in the agreement was a demand of countries that are particularly vulnerable to the impacts of climate change. While the COP 21 decision explicitly rules out the agreement providing a basis for liability or compensation, the agreement recognises 'the importance of averting, minimising and addressing loss and damage', and says that the <u>Warsaw International Mechanism for Loss and Damage</u> 'may be enhanced and strengthened'. A review of loss and damage is planned for 2016. The COP 21 decision requests the establishment of a clearing house for risk transfer, to serve as a repository for information on insurance and risk transfer.

Capacity building and technology transfer

Recognising that developing countries may lack the capacities to fully implement the agreement, the COP 21 decision establishes the Paris Committee on Capacity Building to oversee a work plan to enhance capacity-building across the globe. This Committee will identify capacity gaps and needs, foster international cooperation and identify opportunities to strengthen capacity for climate action.

The agreement recognises the importance of technology development and transfer for adaptation and mitigation. The existing UNFCCC Technology Mechanism will support collaborative research and development, and technology transfer to developing countries.

Upcoming developments

The next steps comprise the ratification of the agreement, development of long-term low-carbon strategies and revision of NDCs, and implementation of NDCs by the Parties.

The agreement will be open for signature at the United Nations Headquarters in New York from 22 April 2016 to 21 April 2017. A high-level signature ceremony is planned for 22 April 2016. The agreement will enter into force after ratification by at least 55 Parties to the Convention, accounting in total for at least an estimated 55% of global greenhouse gas emissions.

Each Party's submitted INDC will become its NDC unless it submits a revised NDC. In 2018, a facilitative dialogue among Parties will take place to take stock of the collective efforts of Parties. Parties are invited to communicate, by 2020, long-term low-greenhouse-gas-emission development strategies. Parties whose NDC has a timeframe up to 2030 are requested to update it by 2020. This provides an opportunity to raise ambitions before application of the agreement, and to close the 'emissions gap' between the current INDCs and the objectives of the agreement.

Finally, Parties will have to take concrete measures to achieve the objectives of their NDCs. The EU began the process in July 2015, with a <u>legislative proposal</u> for lowering the number of allowances in the EU Emissions Trading System (ETS) by 2.2% annually from 2021 to 2030, in addition to already adopted legislation establishing a market stability reserve for the ETS. A Commission proposal for emission reduction in the non-ETS sectors is expected for 2016. The Commission will also review legislation concerning renewable energy sources and energy efficiency.

The <u>United States</u> aims to achieve its targets through measures such as fuel efficiency standards and the Clean Power Plan. <u>China's actions</u> will be specified in the 13th Five Year Plan which is due to be announced in the coming months.

Initial reactions

Most reactions to the Paris Agreement were positive; many commentators qualified the agreement as 'historic', and as a signal for a low-carbon future. ⁶

The chair of the European Parliament Environment Committee, Giovanni La Via (EPP, Italy) considers that the agreement 'represents an unprecedented breakthrough in the fight against climate change, but also a new era in terms of policies.'

<u>Elliot Diringer</u> (Center for Climate and Energy Solutions) said 'the Paris agreement is a pragmatic deal that delivers what's needed – tools to hold countries accountable and build ambition over time. We'll only know for sure years from now, but this new global approach could prove transformative.' <u>Robert Stavins</u> (Harvard Project on Climate Agreements) considers the agreement a 'broad foundation for meaningful progress on climate change'.

<u>Jim Currie</u>, former Director-General for Environment in the European Commission, considers it essential to mobilise political support for implementation of the agreement, maintain strong leadership in the coming months, and engage both consumers and industry.

In the view of Markku Markkula, President of the <u>Committee of the Regions</u>, COP 21 was only a partial success because it does not make 'sub-national authorities part of the world's climate governance system, with a more integrated role in the UN climate process'.

<u>Sam Adelman</u>, Professor of Law at the University of Warwick, considers the agreement to be a step in the right direction but a decade too late. He points out that the agreement fails to mention fossil fuels and is weak on corporate accountability and human rights.

Climate scientist <u>James Hansen</u> criticised the Paris Agreement as 'worthless words', and mere promises without action. Hansen advocates a global carbon tax, and – together with other <u>climate scientists</u> – a greater role for nuclear power in decarbonisation.

<u>Greenpeace</u> says the Paris Agreement gives a signal that the age of fossil fuels is over, achieves progress on commitments to improve national climate action, but fails to advance global solidarity, notably because it does not make polluters pay for the damage they cause.

The <u>World Bank</u>, a major provider of climate finance, welcomes the agreement, is ready to help countries fulfil their commitments, and is finalising a Climate Change Action Plan to further integrate climate change into its operations. Vikram Widge, Head of Climate and Carbon Finance at the <u>World Bank Group</u>, was 'happily surprised' about the provisions for carbon markets in the Paris Agreement, as the World Bank is a long-standing advocate of carbon markets.

According to <u>Dirk Forrister</u>, CEO of the International Emissions Trading Association (IETA), the agreement has the potential to revive international emissions trading after 2020, 'provided a reasonable rule book emerges next year'.

The <u>World Resources Institute</u> highlights the considerable extent of business involvement before and during COP 21, which indicates that businesses support an ambitious agreement and are committed to undertaking serious emission-reduction efforts.

The challenge of implementation

Nationally determined contributions and their effect

By 1 January 2016, 188 out of 196 Parties had laid out their plans for post-2020 climate action in the form of Intended Nationally Determined Contributions (INDCs). These Parties account for 99% of global emissions and 98% of the global population. Most of the INDCs cover both mitigation and adaptation. Many developing countries' INDCs indicate that their climate actions are conditional on access to finance and technology. The climate finance requirements outlined in the INDCs submitted by 23 October 2015 amount to more than US\$3 trillion over the period 2015-2030.

The UNFCCC secretariat reported on the <u>collective impact</u> of the INDCs submitted by 1 October 2015, and found that greater emissions reductions were needed to limit global warming to below 2 degrees Celsius. Studies estimate that the current pledges would lead to an increase of global temperatures by around 3 degrees.⁷

Technologies

<u>Kevin Anderson</u>, a climate scientist, points out that enormous emission reductions are required to achieve the 2 degree target, and that going beyond that to reach the 1.5 degree target will require the use of unproven negative-emissions technologies. This view is supported by an editorial in the <u>Technology Review</u> which considers that achievement of such targets relies on technologies that are unproven or even illusory, such as large-scale energy storage, advanced nuclear power, carbon capture and massive afforestation.

Some investors, including <u>Bill Gates</u>, argue that rapid innovation in energy technologies is needed to achieve emission reductions. Together with other investors, he launched the <u>Breakthrough Energy Coalition</u> that intends to invest billions of dollars in clean energy technology research and development, working together with the <u>Mission Innovation</u> initiative of 20 countries that intend to double their investments in this field over five years.

EU ambition

The European Union was one of the first Parties to announce its post-2020 ambition. Based on the October 2014 European Council conclusions on the 2030 EU climate and energy framework, the <u>EU INDC</u> commits to a binding target of at least a 40% domestic reduction in greenhouse gas emissions by 2030, compared to 1990 levels, excluding any contribution from international credits. The target is in line with the EU's long-term objective to reduce its emissions by 80-95% by 2050 compared to 1990. It is to be implemented through the EU emissions trading system, effort-sharing for the non-ETS sectors, and regulation, support for renewable energy sources, and greater energy efficiency.

Oxfam calls on the EU to review all its policies to fit with the 1.5 degrees target, and to raise more climate finance for developing countries. <u>E3G</u>, a think-tank, urges the EU to adapt its Energy Union Strategy to take account of the ambition of the Paris Agreement.

In its October 2015 <u>resolution on a new international climate agreement</u>, the European Parliament called for reinvigoration of EU climate action. The ongoing (ETS reform) and upcoming (effort-sharing, renewable energy sources, energy efficiency) legislative procedures for putting the EU's NDC into practice in the context of the Energy Union Strategy will provide an opportunity to make sure that EU legislation and policies match the ambition of the Paris Agreement.

Main references

<u>Negotiating a new UN climate agreement: Challenges for the Paris climate change conference</u>, European Parliamentary Research Service, November 2015.

<u>International Climate Negotiations: Issues at Stake in View of COP 21</u>, European Parliament DG IPOL, November 2015.

<u>EU approach to the Paris climate conference</u>, European Parliamentary Research Service, October 2015.

<u>COP 21 and Agenda 2030: The challenges of complementarity</u>, European Parliamentary Research Service, November 2015.

<u>Summary of the Paris climate change conference</u> (Earth Negotiations Bulletin 12:663), International Institute for Sustainable Development, December 2015.

Endnotes

- ¹ The developed countries (Annex I to the UNFCCC) are most European countries (including all EU Member States and the European Economic Community itself), Russia, Turkey, Japan, the USA, Canada, Australia, and New Zealand.
- ² The <u>Doha Amendment</u> to the Kyoto Protocol, which establishes the second commitment period, will enter into force after ratification by 144 Parties. As of 21 December 2015, 59 Parties have ratified the amendment.
- ³ Any agreement that commits the USA to legally binding emission reductions or financial obligations would require the Senate's 'advice and consent'. However in 1997, the US Senate passed the Byrd-Hagel resolution, which blocks ratification of any agreement that commits the USA to reducing emissions without commitments for developing countries, or harms the US economy. As a result, the USA did not ratify the Kyoto Protocol. However, an agreement of procedural nature, aimed at implementing or elaborating the UNFCCC, could take the form of an 'executive agreement' that can be signed by the President without Congressional approval, provided it can be implemented on the basis of existing law.
- ⁴ In the text of the agreement, the verb 'shall' is generally used for legally binding provisions, and the verb 'should' for non-binding provisions.
- ⁵ Achieving such a balance, or net-zero emissions, would require <u>removing CO</u>₂ from the atmosphere, for example through forestation or bio-energy with carbon capture and storage.
- ⁶ Carbon Pulse gives an overview of the <u>initial reactions</u> from world leaders, businesses and NGOs.
- ⁷ Climate Action Tracker (CAT), Australian-German Climate and Energy College (CEC), Climate Interactive, Danish Energy Agency (DEA), European Commission Joint Research Centre (EC-JRC), International Energy Agency (IEA), London School of Economics (LSE), Massachusetts Institute of Technology (MIT), MILES Project Consortium (IDDRI), PBL Netherlands Environmental Assessment Agency, UNFCCC, UNEP Emissions Gap Report.

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