



Brussels, 25.2.2015
COM(2015) 81 final

ENERGY UNION PACKAGE

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL

The Paris Protocol – A blueprint for tackling global climate change beyond 2020

{SWD(2015) 17 final}

Contents

1.	Executive Summary	3
2.	The Paris Protocol.....	5
3.	Securing ambitious reductions of greenhouse gas emissions	6
3.1.	The EU 2030 target and intended nationally determined contribution.....	6
3.2.	Sharing the global effort	7
4.	Ensuring dynamism through regular review of targets.....	8
5.	Strengthening transparency and accountability	8
6.	Achieving climate resilience through adaptation	9
7.	Promoting implementation and cooperation.....	9
7.1.	Mobilising public and private climate finance	9
7.2.	Scaling up international cooperative action.....	10
7.3.	Supporting the development and deployment of climate technologies	11
7.4.	Building capacity	11
8.	Mobilising other EU policies.....	11
9.	Next steps.....	13

1. EXECUTIVE SUMMARY

According to the latest findings of the Intergovernmental Panel on Climate Change (IPCC), without urgent action, climate change will bring severe, pervasive and irreversible impacts on all the world's people and ecosystems. Limiting dangerous rises in global average temperature to below 2°C compared with pre-industrial levels (the below 2°C objective) will require substantial and sustained reductions in greenhouse gas emissions by all countries.

This global transition to low emissions can be achieved without compromising growth and jobs, and can provide significant opportunities to revitalise economies in Europe and globally. Action to tackle climate change also brings significant benefits in terms of public well-being. Delaying this transition will, however, raise overall costs and narrow the options for effectively reducing emissions and preparing for the impacts of climate change.

All countries need to act urgently and collectively. Since 1994, the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) have focused on this challenge, resulting in more than 90 countries, both developed and developing, pledging to curb their emissions by 2020. However, these pledges are insufficient to achieve the below 2°C objective¹. For these reasons, in 2012, the UNFCCC Parties launched negotiations towards a new legally binding agreement applicable to all Parties that will put the world on track to achieve the below 2°C objective. The 2015 Agreement is to be finalised in Paris in December 2015 and implemented from 2020.

The progress made at the recent climate conference in Lima brings a robust agreement in Paris within reach. Most importantly, it was decided how countries should formulate and communicate their proposed emission reduction targets well in advance of the Paris conference. A first full draft text of the 2015 Agreement was also developed, reflecting the positions of all Parties on all the elements under negotiation.

Well ahead of the Lima conference, the EU continued to show leadership and determination to tackle climate change globally. At the European Summit in October 2014, European leaders agreed that the EU should step up its efforts and domestically reduce its emissions by at least 40% compared to 1990 by 2030. This was followed by announcements of China and the US. In Lima, EU Member States pledged about half of the initial capitalisation of US\$10 billion to the Green Climate Fund (GCF) to assist developing countries. Within the EU, a new investment plan was adopted. This will unlock public and private investments in the real economy of at least €315 billion over the next three years (2015-17). These investments will help modernise and further decarbonise the EU's economy.

This communication responds to the decisions taken in Lima, and is a key element in implementing the Commission's priority of building a resilient Energy Union with a forward-looking climate change policy consistent with the President of the Commission's political guidelines. This communication prepares the EU for the last round of negotiations before the Paris conference in December 2015.

¹ United Nations Environment Programme - "The emissions gap report 2014. A UNEP synthesis report"

In particular this communication:

- translates the decision taken at the European Summit in October 2014 into the EU's proposed emissions target - its Intended Nationally Determined Contribution (INDC) to be submitted by the end of the first quarter of 2015;
- proposes that all UNFCCC Parties submit their INDCs well in advance of the Paris conference. China, the US and other G20 countries, as well as high and middle-income countries should be in a position to do so by the first quarter of 2015. Greater flexibility should be provided to Least Developed Countries (LDCs);
- sets out a vision for a transparent and dynamic legally binding agreement, containing fair and ambitious commitments from all Parties based on evolving global economic and geopolitical circumstances. In aggregate these commitments - based on scientific evidence - should put the world on track to reduce global emissions by at least 60% below 2010 levels by 2050. Should there be a gap in the level of ambition set in Paris, this should be addressed by devising a work programme starting in 2016 working closely with the GCF to identify additional action to reduce emissions;
- proposes that the 2015 Agreement should be in the form of a Protocol under the UNFCCC. Major economies, in particular the EU, China and the US, should show political leadership by joining the Protocol as early as possible. It should enter into force as soon as countries with a collective total of 80% of current global emissions have ratified it. Under the new Protocol, climate finance, technology development and transfer, and capacity building should promote universal participation and facilitate the efficient and effective implementation of strategies to reduce emissions and adapt to the adverse effects of climate change;
- underlines that the International Civil Aviation Organisation (ICAO), the International Maritime Organisation (IMO) and the Montreal Protocol should act to effectively regulate emissions from international aviation and shipping and the production and consumption of fluorinated gases before the end of 2016;
- highlights how other EU policies such as, trade, scientific research, innovation and technological cooperation, economic and development cooperation, disaster risk reduction and environment could reinforce the EU's international climate policy; and
- is complemented by a climate diplomacy action plan jointly developed by the European External Action Service and the Commission. The action plan is aimed at scaling up EU outreach and building alliances with ambitious international partners in the run up to the Paris conference.

Some aspects of this communication are set out in further detail in the accompanying Staff Working Document.

2. THE PARIS PROTOCOL

In order to promote collective action consistent with the IPCC's findings, the Paris Protocol must deliver the following objectives:

- secure ambitious reductions of emissions by:
 - specifying that the long term goal should be to reduce global emissions by at least 60% below 2010 levels by 2050²; and
 - in that context setting out clear, specific, ambitious and fair legally binding mitigation commitments that put the world on track towards achieving the below 2°C objective. These commitments must be consistent with the UNFCCC's principles applied in the light of evolving responsibilities, capabilities and different national circumstances;
- ensure dynamism by providing for a global review, to be conducted every five years, to strengthen the ambition of these mitigation commitments consistent with the latest science;
- strengthen transparency and accountability in order to be able to assess whether emissions reduction targets and related commitments have been met. A common set of rules and procedures for annual reporting and regular verification and international expert reviews of emission inventories needs to be established;
- encourage climate-resilient sustainable development by promoting international cooperation and supporting policies that decrease vulnerability and improve countries' capacity to adapt to the impacts of climate change; and
- promote efficient and effective implementation and cooperation by encouraging policies that mobilise substantial, transparent and predictable public and private sector investment in low-emission climate-resilient development.

These objectives should be set out in the Protocol. A technical work programme, to be completed by 2017, should develop the detailed rules, processes and institutions needed to achieve these objectives.

To join the Protocol, a Party must make a mitigation commitment. Parties will be able to participate in decision-making under the Protocol and have access to financial and other resources to support the implementation of the Protocol. Mitigation commitments under the Protocol should be equally legally binding on all Parties.

² This is equivalent to the EU's long-standing objective of halving global emissions by 2050 compared to 1990, as reiterated by the Environment Council in its conclusions of 28 October 2014.

This will give the clearest signal to governments, markets and the public that Parties to the Protocol are committed to fighting climate change as they provide:

- the strongest expression of a Party's political will to achieve its commitments;
- necessary predictability and certainty for all public and private actors; and
- durability in the context of domestic political changes.

It is incumbent on those countries advocating that mitigation commitments should not be binding at international level to demonstrate how these advantages can be delivered under an alternative approach.

All G20 nations, representing around 75% of global emissions, as well as other high and middle-income countries are expected to ratify the Protocol in a timely manner and to implement it from 2020 onwards. The EU, China and the US should send a particularly important signal of political leadership, setting the pace by joining the Protocol as early as possible. The Protocol should enter into force as soon as countries accounting for more than 40Gt of CO₂equivalent emissions in 2015 have deposited their instrument of ratification. This represents approximately 80% of current global emissions.

3. SECURING AMBITIOUS REDUCTIONS OF GREENHOUSE GAS EMISSIONS

3.1. The EU 2030 target and intended nationally determined contribution

The climate and energy policy efforts of the EU are delivering results. EU emissions declined by 19% between 1990 and 2013, while over the same period EU GDP grew by 45%. The EU's 2030 climate and energy framework, as agreed by EU leaders in October 2014, will further strengthen the policy landscape. It sets out a binding, economy-wide reduction target, covering all sectors and all sources of emissions, including agriculture, forestry and other land uses, of at least 40% domestic reductions in emissions by 2030 compared to 1990. This target is ambitious and fair and it is in line with a cost-efficient pathway to at least 80% domestic reductions by 2050³. The EU has already taken significant steps to become the most emission efficient economy in the world. The 2030 target will decrease the emissions intensity of the EU economy by a further 50%. The EU's recently approved investment plan will unlock substantial private finance to modernise and further decarbonise the EU's economy.

There is no merit in proposing a higher conditional target at the present time. Should the outcome of the negotiations warrant a more ambitious target, then the EU should be open to the use of international credits to complement domestic commitments as long as their environmental integrity is fully secured and double counting is avoided.

³ COM(2011) 112 final: A roadmap for moving to a competitive low carbon economy in 2050

3.2. Sharing the global effort

The EU accounts for 9% of global emissions and this proportion is falling. In November 2014 the world's two largest emitters - China (25% of global emissions) and the US (11%) – followed the EU by announcing their indicative post 2020 targets. Combined, these targets would cover close to half of global emissions. For the Protocol to be effective, and to achieve a global level-playing field, it needs to have the following:

- **Broad geographical coverage.** To achieve the necessary coverage of emissions all Parties, except LDCs, need to put forward their INDCs as early as possible in 2015. All G20, high and middle-income countries should be in a position to do so by the end of the first quarter of 2015. These INDCs should be communicated in accordance with the information requirements agreed in Lima. Table 1 sets out the at least 40% domestic reduction target as agreed by EU Leaders in October 2014 in the form of an INDC consistent with the information requirements agreed in Lima to ensure that targets are transparent, quantifiable, and comparable. This table provides a simple template that could serve as a possible model for those Parties still formulating their INDC. On a voluntary basis, LDCs could submit INDCs that summarise policies and measures with an estimate of emissions reductions. All other Parties to the Protocol must at all times maintain a mitigation commitment. These should be set out alphabetically by Party in an Annex to the Protocol.
- **Comprehensive coverage of sectors and emissions.** Parties' commitments must create strong incentives for all actors to further reduce and limit global emissions. The Protocol should require emissions reductions in all sectors, including agriculture, forestry and other land uses, international aviation and shipping and fluorinated gases. ICAO, IMO, and the Montreal Protocol should act to effectively regulate emissions from international aviation and shipping and the production and consumption of fluorinated gases, respectively, by the end of 2016.
- **The highest possible level of ambition.** Well in advance of the Paris conference, each Party must choose its mitigation commitment type and define its level of ambition and scope in light of evolving responsibilities, capabilities and different national circumstances. Countries with the highest responsibilities and capabilities need to have the most ambitious mitigation commitments. Each Party's INDC should represent a significant progression in the level of mitigation ambition and scope compared to its current pledge. It should demonstrate convergence on low levels of overall emissions and per capita emissions and improvement in emission intensity over time.
- **Robust mitigation commitments.** Economy-wide absolute targets combined with emission budgets are the most robust commitment type. They have a number of advantages including certainty, transparency, flexibility and, if used widely, reducing the risk of carbon leakage. In line with the idea of progression over time, all countries that already have such targets should maintain and increase these against a historic base year or reference period. G20 and other high-income countries that do not have absolute targets under the Protocol from 2020 should commit to do so by 2025 at the

latest. Other emerging economies and middle-income countries are encouraged to do so as early as possible and not later than 2030.

4. ENSURING DYNAMISM THROUGH REGULAR REVIEW OF TARGETS

The Protocol should set out a process, applicable to all Parties, to regularly review and strengthen mitigation commitments, consistent with the Protocol's long term goal. If Parties' collective efforts fall short of what is necessary, the process should encourage Parties to raise the level of ambition of existing commitments and formulate sufficiently ambitious commitments in subsequent target periods.

Starting in 2020, the review should be repeated every five years and facilitate transparency, clarity and understanding of mitigation commitments in light of their contribution to the below 2°C objective. The review should invite Parties to explain progress on their mitigation commitments and why they think their actions have been fair and ambitious.

The process should be informed by science, be evidence-based, and be guided by considerations of evolving responsibilities, capabilities and different national circumstances. It should be simple, efficient, and avoid duplication of other processes. The arrangements for the review cycle should be improved over time to stay on track to achieve the below 2°C objective.

The Protocol and accompanying decisions by the Conference of the Parties (COP) need to provide for the dynamic mobilisation of climate finance, technology transfer and capacity building for eligible Parties, particularly those with least capabilities. This will include processes to regularly assess and improve the adequacy and effectiveness of the means of implementation mobilised by the GCF, the Global Environmental Facility (GEF), and other relevant institutions. Support for Parties to regularly review and strengthen their approaches to adaptation over time will also need to be ensured in Paris.

5. STRENGTHENING TRANSPARENCY AND ACCOUNTABILITY

The Protocol must set out the key elements of a common transparency and accountability system, applicable to all Parties. This must include robust rules on monitoring, reporting, verification and accounting, and a process for holding each Party accountable for achieving its commitments. This system will be essential to provide confidence that each Party is implementing its commitments and is on track to meet its target. It will also be crucial to build trust, encourage ambition, and to provide predictability and legal certainty. As such, Parties should submit, at the latest by the time of ratification, the most recent set of annual emissions inventories from 2010 covering the period up to 2015.

This system should be fit for the long term. While it must be sufficiently flexible to cater for a diverse range of commitment types, national capabilities and circumstances, this flexibility should not undermine transparency, accountability and ambition. Independent expert review teams should conduct regular reviews. The new Protocol should recognise net transfers between those countries that have decided to link their domestic carbon markets and this should be taken into account when evaluating compliance.

Finally, the Protocol should establish a body to facilitate implementation and address questions that are raised over compliance with regard to the implementation of any Party's commitments. This body should focus on commitments related to mitigation, including monitoring, reporting, verification and accounting. The body should be expert and non-political, with its mandate to be specified in the Protocol.

6. ACHIEVING CLIMATE RESILIENCE THROUGH ADAPTATION

While ambitious mitigation action is essential, it will be equally important to encourage individual and collaborative actions to prepare for and adapt to the adverse impacts of climate change. The role of the land use sector with regard to resilience of food security, and other environmental, social and economic benefits are key to this work. The EU's strategy on adaptation, complementing Member States' strategies, aims to develop a more climate-resilient Europe. Ecosystem-based adaptation can reduce flood risk and soil erosion as well as improve water and air quality.

In the context of achieving climate resilient sustainable development of all Parties, the Protocol should reinforce the commitments of all Parties to continue to formulate, plan and implement measures to facilitate adaptation and to report on these through their national communications. The Protocol should continue to facilitate assistance to those regions and countries that are particularly vulnerable to the adverse effects of climate change, including through providing financial and technical support and capacity building.

In this way the Protocol will provide further visibility for adaptation action and support, and strengthen the monitoring and reporting provisions under the UNFCCC. It will also enable greater understanding of the effectiveness of measures carried out to facilitate adequate adaptation drawing on national reports and other relevant information, in order to inform further enhanced action to be undertaken by Parties.

With the adoption of the Protocol, further COP decisions should strengthen the implementation of the provisions under the Cancun Adaptation Framework and the Nairobi Work Programme.

7. PROMOTING IMPLEMENTATION AND COOPERATION

7.1. Mobilising public and private climate finance

The transformation into low emission climate resilient economies will only be achieved through large-scale shifts in investment patterns. The Protocol should promote investments in low emission, climate-resilient programmes and policies. All countries should commit to take steps to improve their enabling environments for attracting climate friendly investments. In line with the Commission Communication "A global partnership for Poverty eradication and Sustainable Development after 2015", all resources should be effectively used to reach various internationally agreed sustainable development and climate objectives. Countries in a position to do so should mobilise financial support for eligible Parties to the Protocol. The base of financial support needs to be broadened over time as capabilities of Parties change. Clarity should also be provided by all Parties on the climate impact of financial flows that do

not fall within the remit of climate finance. Financing for climate action should continue to reflect national governments' commitments, enabling environments and investment strategies post 2020. The amount of climate finance to be mobilised will also depend on the ambition and quality of the proposed INDCs, subsequent investment plans and national adaptation planning processes. At this stage, as INDCs and national adaptation planning processes are not fully known, it is too early to elaborate on the scale and type of climate-related finance needed post 2020.

Public sector climate finance will continue to play an important role in mobilising resources after 2020. The Protocol should also recognise the importance of the private sector as a key source to scaling up climate finance. The Protocol should clarify the role of the GCF and the GEF in providing support for implementation. It should provide assurances to the poorest countries and those most vulnerable to climate change that they will continue to receive priority support. This can best be achieved if the financing framework of the Protocol is fully consistent with the Financing for Development process and the post 2015 Development agenda.

The Protocol should promote the formulation and implementation of strong enabling environments for the transformation to low emission climate resilient economies including:

- ambitious national climate policies;
- effective governance, including investment frameworks, price incentives and financing instruments favouring low-emission and climate resilient investments; and
- providing information on how to address climate change.

Carbon pricing and the investment policies of public development banks will play a central role in this. Mainstreaming climate considerations into all policies, development strategies and investments is essential to make use of the synergies between development, mitigation and adaptation financing.

7.2. Scaling up international cooperative action

Sharing information on experiences with policy design and promoting good practice will greatly accelerate and broaden climate action. In recent years, the EU has been proactive in bilateral and multilateral initiatives to do this, e.g. via bilateral policy dialogues on emissions trading; launching sustainable energy initiatives that contribute to the development of low-carbon economies; or by promoting the development and practical deployment of adaptation policies through the Global Climate Change Alliance, which now comprises 38 vulnerable developing countries and eight regions in Africa, Asia, the Caribbean and the Pacific.

The Protocol should encourage more systematic exchange of experiences within and across geographical regions, bringing together technical expertise including from specialised organisations, the private sector, academia, regions and municipalities. The Protocol should provide for the recognition of significant initiatives that implement and complement national efforts to reduce emissions and to adapt to the adverse effects of climate change. At the Paris conference it should also be decided to continue the work programme to identify additional mitigation action in 2016, working closely with the GCF and other financial institutions. This

will be of particular relevance if there is a gap between the aggregate level of ambition of mitigation commitments and the emission reductions required to achieve the below 2°C objective.

7.3. Supporting the development and deployment of climate technologies

The development and deployment of climate technologies has an essential role to play in meeting climate change objectives, as well as in contributing to job creation and sustainable economic growth. The combination of research funding, market uptake measures, education programmes, finance and policies that impose a price on emissions create an enabling environment for a broad spectrum of technologies. This includes technologies to promote resilience to extreme weather impacts, climate services and water management systems, as well as energy production, industrial processes, transport, agriculture, and reducing deforestation.

Countries choose the most appropriate technological options for themselves, often supported by technology needs assessments and the Climate Technology Centre and Network (CTCN). Innovation including the necessary up-scaling of technology transfer is dependent on voluntary collaboration with private sector actors to develop, finance and deploy a technology. It is essential to preserve the existing intellectual property rules.

The Protocol should recognise the role already played by the Technology Executive Committee and the CTCN, in combination with a reformed technology needs assessment process.

7.4. Building capacity

Capacity building should be an integral element of support for all Protocol-related activities, including adaptation planning, reporting obligations, emissions inventories, technology transfer, and mitigation projects. This should, therefore, be provided through the institutions responsible for supporting activities in these areas, and must be tailored to country needs.

The existing arrangements under the Convention could be strengthened, although the Durban Forum on Capacity Building will remain the appropriate space for discussions on this topic. The EU is actively integrating capacity building in its support to climate action in developing countries, including in relation to mitigation commitments.

The Paris conference should agree to assist those countries that need assistance to set up emission inventories, monitoring, reporting and verification systems, and to develop low emission and climate-resilient development strategies with the right incentive structures.

8. MOBILISING OTHER EU POLICIES

In the coming months, the EU will step up its climate diplomacy ahead of the Paris conference. EU Foreign Ministers have endorsed a Climate Diplomacy Action Plan which was jointly developed by the European External Action Service and the Commission.

It includes the following actions:

- raising climate change as a strategic priority in political dialogues, including at G7 and G20 meetings and the UN General Assembly;
- supporting low-emission and climate and disaster resilient development through EU development cooperation; and
- linking climate change with its potential long-term consequences, including security challenges.

In addition, other EU policies can actively support the EU's objectives in the international negotiation process and the implementation of the Protocol in partner countries. They can assist partner countries in the preparatory phase of the Protocol and later when implementing it. These include:

- Economic and development cooperation. The EU and its Member States are already the leading providers of official development assistance and climate finance to developing countries. The EU delivered more than €9.5 billion of climate finance in 2013. The EU should continue to mainstream climate objectives into its economic and development cooperation. To this end, for the period 2014-20 it has already been agreed that at least 20% of the EU development assistance will have to be climate-relevant which is in the order of €14 billion. Member States should also set clear mainstreaming objectives. Further, the EU and its Member States should step up coordination on global climate finance to enhance impact and efficiency in delivery.
- Scientific research, technology development and innovation policy. The EU will take better advantage of the fact that its research and innovation framework programme Horizon 2020 is fully open to third countries' participation and provides financial support to less developed countries. The EU will promote awareness of its commitment to invest under this programme at least €28 billion for climate related actions. A proportion of which will allow broad international collaboration to bring climate technologies to the markets, to educate scientists and entrepreneurs, and contributes to climate diplomacy goals.
- Trade policy. In its bilateral trade agreements the EU and its free trade partners commit to promote climate goals and effectively implement the UNFCCC, including through regular structured dialogues and cooperation on climate and trade issues. Under the GSP+ scheme the EU offers increased market access to developing countries that have ratified and effectively implement international conventions including on climate change. In the WTO, the EU is working with its trade partners towards the conclusion of a significant international agreement with respect to the liberalisation of trade in environmental goods and services before the end of 2015, in order to increase the dissemination and uptake of climate-friendly technologies.

- Environmental policy. Implementing the EU's commitments under the Global Strategic plan for biodiversity, as endorsed by the EU biodiversity strategy, will be critical to addressing climate change while generating social, economic and cultural co-benefits.
- Disaster risk reduction. EU cooperation on disaster risk management⁴ which includes developing national risk assessments also addressing climate impacts and enhanced risk management capabilities contributes to strengthening climate adaptation.

9. NEXT STEPS

The EU needs to:

- submit its own INDC by the end of the first quarter 2015;
- encourage major economies to take the lead through timely and ambitious INDCs particularly in the context of the Major Economies Forum, the G20, and the G7;
- encourage and support as appropriate the preparation of ambitious INDCs by as many Parties as possible;
- make the promotion of ambitious global climate action a central priority of its diplomatic relations and dialogue with partner countries;
- promote, through the UNFCCC and other multilateral and bilateral discussions, the adoption of an ambitious, transparent and dynamic Protocol as described above;
- demonstrate and ensure the stability and predictability of the financial support the EU collectively provides to its international partners for low emissions and climate-resilient development;
- press for the swift liberalisation of trade in environmental goods and services before the end of 2015;
- ensure that climate action is consistent with UN negotiations on Sustainable Development Goals and Sustainable Development Financing post-2015 and the post 2015 Framework for Disaster Risk Reduction; and
- ensure the second commitment period of the Kyoto Protocol is ratified before the end of 2015 by the EU and its Member States and as many Parties as needed to ensure entry into force.

The Commission will organise an international conference to improve mutual understanding of the range of INDCs and the adequacy of their collective ambition, and facilitate an open exchange of views prior to the Paris conference. This conference will aim to bring together

⁴ Articles 5 and 6 of Decision 1313/2013 of the European Council and of the Council on a Union Civil Protection Mechanism

partner countries, key experts from academia, think-tanks and international organisations and will take place by November 2015.

By mid-2015 the Commission will also start to present legislative proposals to implement the 2030 climate and energy framework to the European Parliament and the Council.

The Commission will continue to mainstream climate change action into its economic and development cooperation; take initiatives to work closer together with Member States in the delivery of climate relevant development finance; and take better advantage of the openness of its scientific research and innovation programmes to support its international partners, assisting them in preparing to carry out their commitments under the new Protocol.

The Commission invites the European Parliament and the Council to endorse the proposed approach as soon as possible.

Table 1: The EU's proposed Intended Nationally Determined Contribution

The Commitment	
Type	Absolute reduction from base year emissions.
Coverage	Economy Wide.
Scope	<p>All greenhouse gases not controlled by the Montreal Protocol: Carbon Dioxide (CO₂)</p> <ul style="list-style-type: none"> • Methane (CH₄) • Nitrous Oxide (N₂O) • Hydrofluorocarbons (HFCs) • Perfluorocarbons (PFCs) • Sulphur hexafluoride (SF₆) • Nitrogen trifluoride (NF₃)
Base Year	1990.
Period	2021-2030 inclusive.
Reduction Level	Achieving at least 40% domestic reduction in emissions in 2030.
% of Emissions Covered	100%.
Agriculture, forestry and other land uses included	Yes.
Net Contribution of International Market Based Mechanisms	No contribution from international credits.
Planning Process	European Council on 23 and 24 October 2014 approving the 2030 Climate and Energy Policy Framework (EUCO 169/14). European Commission to prepare legislative proposals to implement the 2030 framework (Commission Work Programme 2015), including on land use, land use change and forestry.
Fair and ambitious	<p>This commitment is in-line with EU policies to achieve a transition to a low emissions economy, allowing for a likely chance to meet the below 2°C objective. It puts the EU on a cost effective pathway towards long term domestic emission reductions of 80%, consistent with the IPCC's assessment of the reductions required from developed countries as a group, to reduce emissions by 80-95% compared to 1990 levels by 2050.</p> <p>The EU has already seen its emissions peak. According to the EDGAR database, emissions from the EU's 28 Member States peaked in 1979 at around 6.4Gt CO₂equivalent.</p>
Key Assumptions	
Metric Applied	Global Warming Potential on a 100 year timescale in accordance with the IPCC's 4th Assessment Report.
Methodologies for Estimating Emissions	IPCC Guidelines 2006.
Approach to accounting for agriculture, forestry and other land uses	Comprehensive accounting framework, activity or land-based approach, for emissions and removals from land use, land use change and forestry, building upon: (i) rules as agreed under 2/CMP.7, applicable COP decisions and the EU's domestic legislation (Decision 529/2013/EU); and (ii) the current level of environmental integrity.

Coverage	
Sectors/Source Categories	<ul style="list-style-type: none"> • Energy <ul style="list-style-type: none"> ○ Fuel Consumption <ul style="list-style-type: none"> ▪ Energy industries ▪ Manufacturing industries and construction ▪ Transport ▪ Other sectors ▪ Other ○ Fugitive emissions from fuels <ul style="list-style-type: none"> ▪ Solid fuels ▪ Oil and natural gas ○ CO₂ transport and storage • Industrial processes and product use <ul style="list-style-type: none"> ○ Mineral industry ○ Chemical industry ○ Metal industry ○ Non-energy products from fuels and solvent use ○ Electronic industry ○ Product uses as substitutes for ODS ○ Other product manufacture and use ○ Other • Agriculture <ul style="list-style-type: none"> ○ Enteric fermentation ○ Manure management ○ Rice cultivation ○ Agricultural soils ○ Prescribed burning of savannas ○ Field burning of agricultural residues ○ Liming ○ Urea application ○ Other carbon-containing fertilisers ○ Other • Waste <ul style="list-style-type: none"> ○ Solid waste disposal ○ Biological treatment of solid waste ○ Incineration and open burning of waste ○ Wastewater treatment and discharge ○ Other • Land Use, Land-Use Change and Forestry set out in Decision 529/2013/EU <ul style="list-style-type: none"> ○ Afforestation, reforestation ○ Deforestation ○ Forest management ○ Cropland management ○ Grazing land management ○ Or equivalent land-based account using UNFCCC reporting categories ○ Other categories/activities elected by the EU and its Member States as Parties to the Kyoto Protocol and its Doha Amendment.