

SUBMISSION BY BULGARIA AND THE EUROPEAN COMMISSION ON BEHALF OF THE EUROPEAN UNION AND ITS MEMBER STATES

Sofia, 05/04/2018

Subject: Views on the Preparatory phase of the Talanoa Dialogue

Summary

- The EU and its Member States see the Talanoa Dialogue as one of the key processes throughout 2018 and deliverable for COP24 enabling us collectively to assess global progress towards the long-term goal referred to in Article 4, paragraph 1 of the Paris Agreement. Based on the best available science and informed by the IPCC Special Report on 1.5 °C, the Talanoa Dialogue should foster an honest global reflection of the adequacy of the present nationally determined contributions (NDCs) compared to the long-term goal and inform the preparations of NDCs during the political phase of the Talanoa Dialogue at COP24 focusing on collective action and enhanced global ambition. The EU and its Member States are strongly committed to participate fully in the Dialogue and encourage all Parties to use this opportunity.
- At the global level evidence shown by the UNFCCC (synthesis report on aggregate effects of INDCs, 2016) and UNEP (Emission Gap report, 2017) demonstrates that collective efforts of Parties' NDCs fall short of that required to achieve the long-term goal in Article 4, paragraph 1 of the Paris Agreement. Global greenhouse gas emissions were 43 % higher in 2012 compared to 1990. In 2016, CO₂ emissions alone were 59 % higher than 1990 levels.
- All Parties committed in Paris to hold 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, recognising that this would significantly reduce the risks and impacts of climate change. The long-term temperature goal stipulated in Article 4, paragraph 1 of the Paris Agreement implies peaking of emissions as soon as possible and rapid reductions thereafter, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks in the second half of this century.



- The long-term goals of the Paris Agreement clearly define ‘where we want to go’ and as the EU, we are committed to doing our utmost best in contributing to their achievement. With the Paris Agreement we all committed to develop ambitious NDCs that would be collectively sufficient to achieve the long-term goals of the Paris Agreement. The Talanoa Dialogue should facilitate that commitment.
- There is an urgent need for accelerated short-term action and enhanced longer-term global and national ambition. Evidence also shows that practical and cost-effective options are available to make the required transition.
- With this submission, the EU would like to share its experience and provide input to the three framing questions of the Talanoa Dialogue.

Where we are:

- *With the existing policies under the EU 2020 climate and energy package, the EU and its Member States are set to (over)achieve the goal of a 20 % GHG reduction domestically by 2020 (from 1990 levels). Current emission levels equate to a 23 % domestic reduction and are projected to reach 26 % by 2020;*
- *By 2030 the EU 2030 climate and energy framework is set to drive the EU to at least 40 % domestic reduction in GHG emissions (compared to 1990 levels);*
- *This reduction target has been translated into a detailed and coherent legislative framework that will ensure delivery of objectives.*

Where we want to go:

- *The common reference points for where we collectively want to go are the long-term goals of the Paris Agreement, in particular the long-term temperature goal in Article 2.1(a) and the long-term mitigation goal in Article 4 paragraph 1;*
- *The EU NDC, and its domestic mitigation targets, are consistent with the objective to reduce GHG emissions by 80 to 95 % by 2050 compared to 1990 levels, in the context of necessary reductions according to IPCC by developed countries as a group.*

How we will get there:

- *The EU and its Member States remain committed to the Paris Agreement goals*
- *All Parties are invited to communicate their mid-term low greenhouse gas emission reductions development strategies by 2020;*

- Building on what has already been achieved, the EU is working on an appropriate strategy to meet the Paris goals, and the European Commission will present by the first quarter of 2019 a proposal for a Strategy for long-term greenhouse gas emission reduction in accordance with the Paris Agreement, taking into account the national plans. Furthermore, all Member States are to develop national low-carbon mid-century strategies (long-term low-emission strategies or national energy and climate plans as they are referred to under the EU Energy Union).

The EU and its Member States are committed to participate fully in the Talanoa Dialogue. The outcome of the Talanoa Dialogue and its global reflection on the adequacy of all present NDCs is to promote enhanced ambition and understanding and to deliver on the mandate in paragraph 20 of decision 1/CP.21 on informing the preparation of the NDCs pursuant to Article 4, paragraph 8 of the Paris Agreement. The EU and its Member States look forward to the upcoming IPCC Special Report on 1.5 °C which will inform the Talanoa Dialogue and the preparation of NDCs.

The EU is strongly committed to discuss the Talanoa Process and its outcome at the appropriate political levels and will do so a first time at the informal Council of Environment Ministers on 10 and 11 April 2018.

Collective and fair action by all Parties moving together is the only means to reach the collective objective that we have set ourselves in the Paris Agreement.

With our submission, we would also like to prompt similar stories of action from partners.

- Achieving the Paris Agreement temperature goal not only implies substantial efforts by Parties within the different sectors and strengthened international cooperation, but also requires action by non-Party stakeholders and a multilevel governance approach. We see the Talanoa Dialogue as the vehicle to accelerate such comprehensive commitments and as establishing a basis for enhanced global ambition. Enhancing ambition can be pursued in multiple, mutually reinforcing ways and within this submission we present different ways of doing so.
- It is important that the organisation of the Talanoa Dialogue during the May session provide for a sufficient exchange on the three framing questions and addressing the mandate we decided on in Paris. The three framing questions will allow for an exchange where we are since Paris and where we stand collectively, sharing lessons learned and preparations in implementing our NDCs and where we want to go by mid-century as well as identifying

opportunities for enhanced actions both short and longer term that could inform our decision makers in the political phase.

- To foster and spur climate action the EU will organise Talanoa events involving different stakeholders and addressing the three framing questions at the EU-scale. The forthcoming Informal Environment Council in April will be an opportunity for EU Ministers to address the Talanoa Dialogue.
- We would like to emphasise that we are fully committed to fulfil the timeline that was agreed at COP22 so as to finalise the Paris Work Programme at COP24. UNFCCC meetings should be scheduled in a way that facilitates both the Talanoa Dialogue and finalizing the Paris Work Programme. We would also like to underline that we see agreement on a robust and balanced Paris Work Programme to fully operationalize the Paris Agreement as the required framework and toolbox to help us achieve its purpose and long-term goals.

INTRODUCTION

The EU and its Member States see the Talanoa Dialogue as a key process throughout 2018 and deliverable for COP24 enabling us collectively to assess progress towards the long-term goal referred to in Article 4, paragraph 1 of the Paris Agreement. Based on the best available science, the Talanoa Dialogue should foster an honest global reflection of the adequacy of the present nationally determined contributions (NDCs) to reach global peaking of emissions as soon as possible and rapid reductions thereafter, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks in the second half of this century.

The Talanoa Dialogue needs to be conducted in a manner that promotes enhanced global ambition and informs the preparation of NDCs. It represents the first stock-take of progress against a Paris Agreement long-term goal and should identify tangible actions necessary to ensure that all NDCs will be delivered on time. The EU stands ready to share its experience with all Parties around the world and learn from others to reach accelerated action.

The EU and its Member States remain fully committed to the Paris Agreement and to climate action and therefore signal the readiness to look at the collective ambition of all NDCs in light of the findings of the Intergovernmental Panel on Climate Change (IPCC) Special Report on Global Warming of 1.5 °C.



The EU and its Member States are committed to participate fully in the Talanoa Dialogue. The outcome of the Talanoa Dialogue and its global reflection on the adequacy of all present NDCs is to promote enhanced ambition and understanding and to deliver on the mandate in paragraph 20 of decision 1/CP.21 on informing the preparation of the NDCs pursuant to Article 4, paragraph 8 of the Paris Agreement. The EU and its Member States look forward to the upcoming IPCC Special Report on 1.5 °C which will inform the Talanoa Dialogue and the preparation of NDCs.

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The Talanoa Dialogue should provide evidence to the international public and all stakeholders that national action has indeed been undertaken to deliver on the Paris Agreement long-term goals and that climate action has been accelerated since leaders announced their pledges in Paris and the Agreement entered into force.

With this submission the EU and its Member States hope to contribute to identifying additional opportunities to enhance global ambition by pointing to concrete options for increasing climate action and cooperation. Our views on the organisation of the Talanoa Dialogue process are outlined in section IV.

I. Where are we?

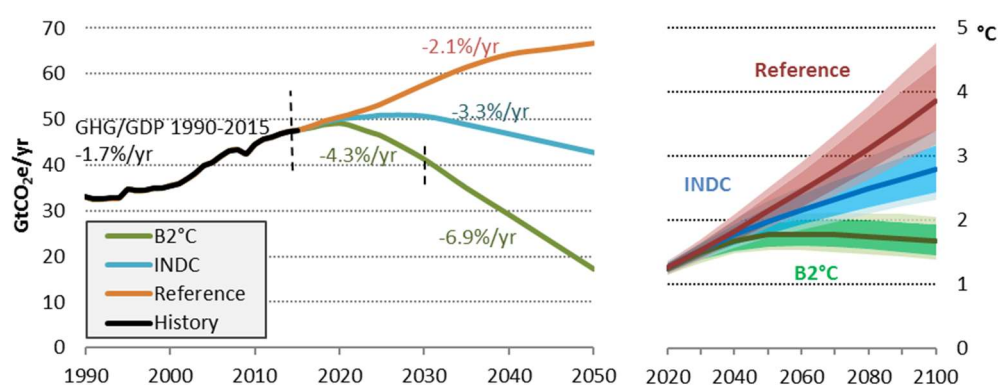
This question provides an opportunity to assess where we are globally as well as to take stock of collective efforts by Parties in relation to the long-term temperature goal referred to in Article 4, paragraph 1. The EU will share information on progress to date and invite other Parties to do the same.

Overview of the global picture

Strong scientific evidence presented in recent reports points to the acceleration of climate change. This means there is unprecedented urgency to step up global efforts to halt and reverse climate change.

Global greenhouse gas emissions were 43 % higher in 2012 compared to 1990¹. In 2016 CO₂ emissions alone were 59 % higher than 1990 levels.

Figure 1: GHG emissions, World, and average annual growth rates for GHG emissions intensity of the economy (left); global average temperature change (right)².



If globally we are to meet the temperature goal of the Paris Agreement, this trend needs to reverse, with global emissions falling below 1990 levels before 2030 and continuing to decline rapidly thereafter, reaching carbon neutrality in the second half of this century.

It is important that through the Talanoa Dialogue we not only consider overall progress of Parties in mitigating climate change but also how the major sectors of the global economy are performing in reducing emissions. This will help us identify major opportunities and challenges and it will highlight where action can or should be scaled up, and the measures that Parties can take to make emission reductions in different sectors, including through making finance flows consistent with low GHG emissions and climate resilient development.

Unfortunately, analysis tells us that only a few sectors have the right level of policies and action currently in place to reach targets consistent with the Paris Agreement's long-term goals.

The breakdown of global anthropogenic GHG emissions by sector according to C2ES in 2013 showed that the top four emitting sectors were electricity and heat (31 %); transport (15 %); manufacturing and construction (12.4 %); and agriculture (11 %), respectively³.

The International Energy Agency published a report in 2017 examining whether some of these sectors and the main activities they are composed of are currently on track towards interim 2° C scenario targets in 2025⁴. Whilst commitments for electric vehicles, energy storage and solar PV and onshore wind mean that these sectors are 'on track', other sectors are not. Similar analysis was produced by the New Climate Institute' for GIZ in 2017⁵. It should also be noted that despite some positive progress in the past few years, projected 2017 data shows a 2 % increase in CO₂ emissions⁶.

The 2017 UNEP Emissions Gap Report tells us that a large part of the potential for emission reductions can be found in six categories: solar and wind energy, efficient appliances, efficient passenger cars, afforestation and stopping deforestation⁷. In its sectoral analysis, it states that even if only the basic emission reduction potential for 2030 is considered, the estimated total potential listed there is sufficient to bridge the emissions gap in 2030 for 2 °C (> 66 % chance) and 1.5 °C (50 to 66 % chance) trajectories.

Coal still accounts for the largest share of power generation, at over 40 %⁸. Its growth has slowed compared with the average of the past decade but new coal capacity is still in development. Whilst a majority of Parties mention renewable energy in their NDCs, 'the cost-effective potential for renewables is much higher than what is captured'⁹ in current NDCs.

Global transport sector GHG emissions continue to grow and a BAU scenario could lead to a 55% increase in transport CO₂ emissions by 2030 compared with 2010¹⁰. Currently, more than three-quarters of NDCs explicitly identify transport as a mitigation priority¹¹; at the same time, transport is one of the sectors with the greatest discrepancy between current policy pathways, and required pathways for 2 °C or 1.5 °C compatibility¹².

Aviation, shipping and heavy-duty road vehicles are the most challenging modes of transport to decarbonise. There are still few alternatives to fossil fuels for aviation and whilst the IMO has made progress on developing a GHG emissions reduction strategy for shipping, it should be noted that the development of reduction measures under the IMO initial strategy should commence as soon as possible, in order to have an impact on the possibility of meeting 2025 interim 2 °C targets for shipping¹³.

Industrial sector energy consumption has grown by about 1.5 % annually since 2010, but energy-intensive sectors have made some progress in improving process energy efficiency. However, long capacity lifetimes and lack of coordinated international policies for industrial decarbonisation pose particular challenges¹⁴.

CO₂ emissions related to buildings have continued to rise globally by nearly 1 % per year since 2010¹⁵. As a result, the IEA has stated that assertive action is needed now across all countries to improve global average energy use per capita by at least 10 % by 2025 using energy-efficient and low-carbon building technologies. More positively, global buildings sector energy intensity has fallen thanks to continued adoption of building energy codes and efficiency standards.

The agriculture sector appears to be lagging behind: Policy and technology options for reducing agricultural GHG emission sources need to be further improved and climate finance for mitigation of agricultural emissions is a fraction of that of other sectors¹⁶.

Cities are a crucial source of emissions to tackle. The IPCC Fifth Assessment Report (AR5) stated that many of the key and emerging global climate risks are concentrated in urban centres',¹⁷ where more than half of the world's population live¹⁸.

Oceans currently play an important role in absorbing CO₂ emissions, but ocean ecosystems are changing with negative impacts on fisheries and aquaculture, which is an issue for food security, and coral reef ecosystems are declining¹⁹.

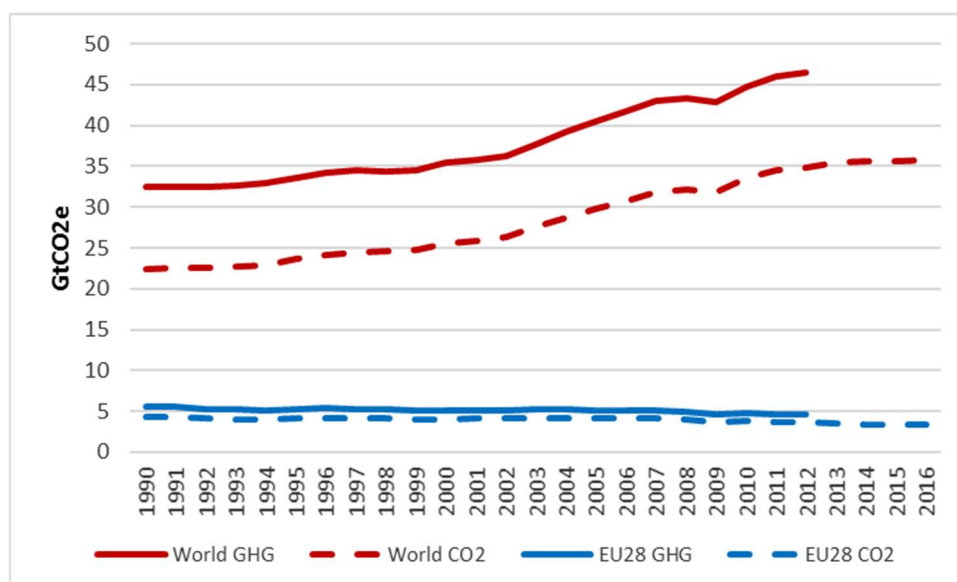
'Forests represent the world's most significant terrestrial carbon sink' and, while the annual rate of deforestation has decreased, forest areas continue to shrink, largely due to unsustainable agriculture expansion, land conversion and illegal logging²⁰.

Green and sustainable finance can help develop the tools and instruments needed to unlock the trillions of dollars in investment needed across these sectors. The European Commission estimates that to achieve the EU's targets for energy and climate policy alone, additional annual investments of EUR 170 billion are required. The financial sector will have a crosscutting role in helping meet the investment challenge.

EU share of global emissions

It is estimated that the EU's share of global GHG emissions fell from 17.3 % in 1990 to 9.9 % in 2012²¹. Its share of CO₂ emissions alone fell from 19.7 % in 1990 to 9.6 % in 2015²². Since leaders announced their pledges in Paris and the Agreement entered into force, the EU and its Member States have accelerated domestic action to deliver on the Paris Agreement long-term goals.

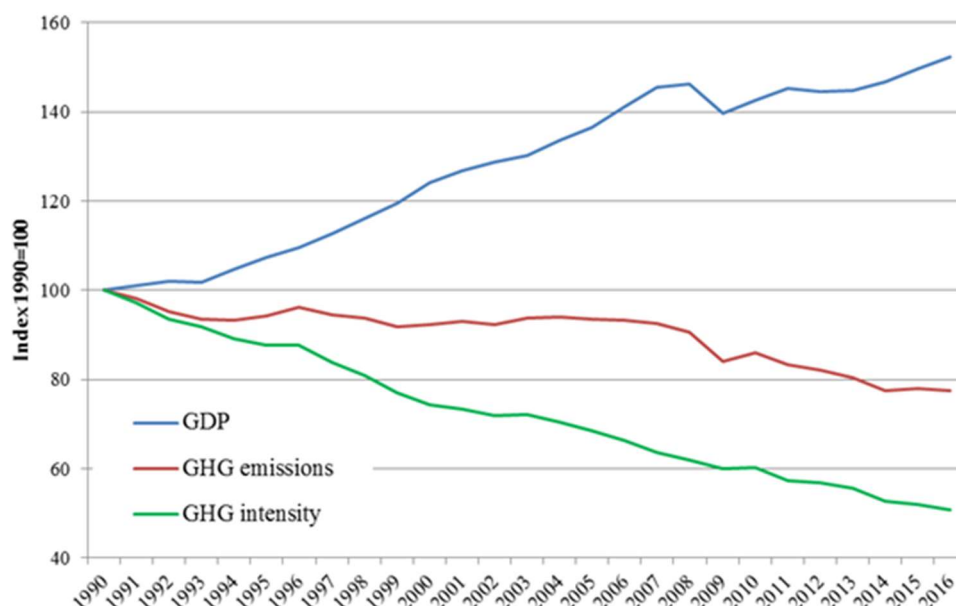
Figure 2: Greenhouse gas emissions (CO₂, CH₄ & N₂O) and CO₂ emissions since 1990, excluding LULUCF²³



EU's mitigation efforts

The EU continues to successfully decouple its economic growth from its emissions (see Figure 3). The EU is the only region in the world where emissions have continuously decreased since 1990, with maintained GDP growth. From 1990 to 2016, the EU's GDP grew by 53 %, while total emissions fell by 23 %. The EU economy's GHG emissions intensity, defined as the ratio between emissions and GDP, halved in that period.

Figure 3: Change in real GDP, GHG emissions and GHG emission intensity in the EU, 1990-2016²⁴



Overall, total EU emissions fell by 0.7 % from 2015 to 2016, while overall GDP rose by 1.9 %, confirming that emissions and GDP continue to be decoupled²⁵.

By decarbonising the energy supply, and also becoming more energy efficient and increasing security of supply the EU has, since 1990, combined continuous economic growth and absolute reductions in GHG emissions.

Progress towards EU 2020 targets

The EU has put in place an ambitious mix of 2020 targets and structural policies in the field of climate and energy as a response to our commitments under the Kyoto Protocol. Under the Protocol, the EU and its Member States have taken a joint emission reduction target, enshrined in legislation, to reduce GHG emissions by 20 % compared to 1990 by 2020. Information on EU and its Member States efforts in the pre2020 period will be addressed in our forthcoming submission on Pre2020 implementation and ambition.

This effort is divided between the sectors covered by the EU Emissions Trading System (EU ETS) and non-ETS sectors under the Effort Sharing Decision (ESD) which includes, inter alia, transport, agriculture, buildings and waste. The EU ETS, which has been operational since 2005, is based on the 'cap and trade' principle. As a market-based instrument by setting a cap, the EU ETS puts a price on carbon, providing an incentive for investments in clean, low-carbon technologies, while delivering emissions cuts cost-effectively. It includes nearly 11,000 heavy energy-using installations (power stations and industrial plants) and slightly over 500 aircraft operators operating between countries in the European Economic Area, and covers around 45 % of the EU's GHG emissions.

In conformity with the Doha Amendment, for which the EU and Member States have deposited ratification instruments, our actions have already resulted in exceeding our 2020 target to reduce emissions by 20 % from 1990²⁶. By 2016, we had already cut emissions by 23 %, and we are on course for a 26 % reduction²⁷ (see Figure 4).

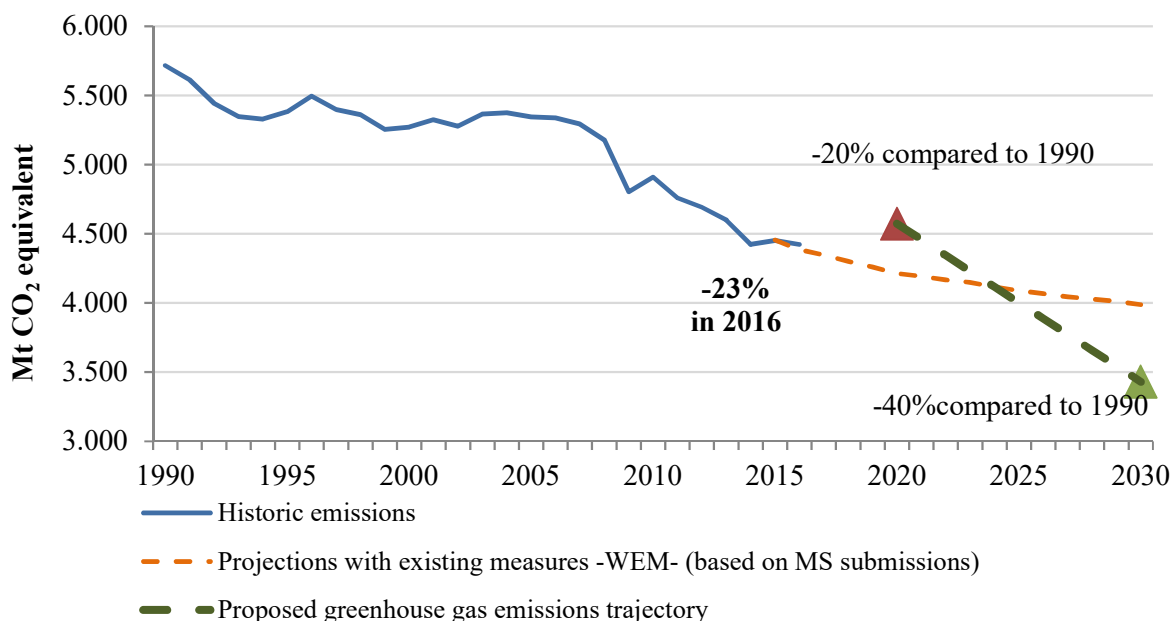
Between 2005 and 2016, emissions covered by the EU ETS fell by 26 %. This is more than the target as set.

Emissions from sectors not covered by the EU ETS were 11 % lower in 2016 than in 2005, also exceeding the 2020 target.

The EU also has targets on renewable energy and energy efficiency for 2020. The share of renewable energy in the EU energy mix continues to rise and is on track to reach the 20 % target in 2020. Likewise, the EU is broadly on track to meet its 20 % 2020 energy efficiency target²⁸.

The EU therefore remains on track to meet its domestic emissions reduction target of 20 % by 2020 and consequently its obligations under the second commitment period of the Kyoto Protocol.

Figure 4: Progress towards meeting EU 2020 and 2030 targets (total EU GHG emissions)²⁹



The European Environment Agency provides further details on the EU and its Member States' greenhouse gas inventories, the Member States' GHG projections and progress towards the renewable energy and energy efficiency targets³⁰.

EU 2030 targets and Member States efforts

The EU is committed to achieve at least 40 % domestic GHG emissions reductions by 2030 compared to 1990. Over the past few years, we have been working to put in place a clear, detailed and coherent legislative framework for 2030, covering all sectors of the economy, to achieve our target on reducing emissions, increasing the share of renewables and increasing energy efficiency. As of mid-March 2018, most elements of the package are well-advanced.

Legislation has been finalised that translates the at least 40 % domestic reduction target into separate targets for the EU ETS and non-ETS sectors respectively.

In late 2017, the EU institutions reached an agreement on reducing GHG emissions in important sectors not covered by the EU ETS, such as transport, buildings, agriculture and waste. Under this 'Effort Sharing Regulation', all Member States have national emissions targets for 2030, building on targets already in place for 2020. Each Member State will be subject to a binding annual

GHG emission limit for the period 2021–2030. The relevant efforts are shared on the basis of fairness, solidarity, cost-effectiveness and environmental integrity.

The EU and its Member States have also decided to incorporate emissions and removals from Land Use, Land Use Change and Forestry (LULUCF) as a separate non ETS -sector into our 2030 climate framework, to ensure these sectors also contribute to our overall emissions goals.

Further information on policies and measures is available in the EU's Seventh National Communication and Third Biennial Report submitted to the UNFCCC³¹.

Action on vehicle emissions performance is one of the key levers to get the transport sector on the right track, given that road transport represents a third of all EU non-ETS emissions. The EU is also in the process of adopting several low-carbon transport measures, both supply- and demand-oriented, including legislation on new CO₂ emissions standards for cars and vans, non-legislative initiatives such as an action plan on infrastructure for alternative fuels and a European initiative on batteries.

Following a proposed regulation on monitoring CO₂ emissions and fuel consumption for new Light-Duty Vehicles, the European Commission will soon also put forward a proposal for CO₂ Standards for Heavy-Duty Vehicles.

In 2016, the European Commission adopted the Clean Energy for All Europeans Package, which aims to keep the EU competitive as the clean-energy transition changes global energy markets. The Clean Energy package provides a clear legislative framework for a more integrated, more market-oriented and more innovative energy sector, with consumers at the heart of the necessary transition. Most elements of this framework are presently under negotiation in the European Parliament and the Council of the European Union.

The package includes eight legislative proposals covering different aspects of the energy transition aiming to put energy efficiency first, achieve global leadership in renewable energies and provide a fair deal for consumers. It will create a more stable framework for investing in renewable energy and energy efficiency, thus supporting the delivery of the EU's renewable energy and efficiency targets. These are complemented by measures for the electricity markets, allowing for a better integration of renewable sources, as well as setting efficiency standards for products coming to the EU market.

In implementation and as a complement to the EU targets, Member States have launched a broad set of climate policies, which are further described under the section on enabling environments.

Governance and review of the energy and climate policies in the EU

A proposed regulation on the governance of the Energy Union is currently under discussion among the Council, the European Parliament and the European Commission. An objective of the EU climate and energy governance system is to make sure that national Member State objectives and policies are coherent with EU goals, while at the same time allowing individual countries sufficient flexibility to adapt to local conditions and needs. This would require Member States to draft integrated national energy and climate plans (NECPs) covering a ten-year period, starting from 2021 to 2030. The plans will set out national energy and climate objectives including the EU's joint energy efficiency and renewable energy targets. The plans should also be aligned with the long-term low emissions strategies and assist in ensuring that the EU meets its obligations under the Paris Agreement, including those on reporting.

The proposal establishes a ten year calendar for drafting and finalising the plans and foresees also the necessity for their update/confirmation 5 years after their presentation thus taking into consideration the timing of the Global Stocktakes.

II. Where do we want to go?

The common reference points for where we collectively want to go are the long-term goals of the Paris Agreement, in particular the long-term temperature goal in Article 2.1(a) and the long-term mitigation goal in Article 4, paragraph 1. The EU and its Member States are committed to do our utmost best in contributing to the achievement of these goals. With the Paris Agreement, we all committed to developing ambitious NDCs that collectively are sufficient to achieve the long-term goals and the Talanoa Dialogue should foster this.

All Parties committed in Paris to hold 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, recognising that this would significantly reduce the risks and impacts of climate change. The long-term temperature goal in Article 4, paragraph 1 implies peaking of emissions as soon as possible and rapid reductions thereafter, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks in the second half of this century.

The emission pathway as set out by Article 4, paragraph 1 of the Paris Agreement is in line with the IPCC Fifth Assessment Report (AR5) scenarios of keeping global warming well below 2 °C above pre-industrial levels. In the light of where we need to go, the AR5 found that delaying global mitigation efforts to 2030 would

substantially increase the difficulty of transitioning to a long-term low GHG emission pathway and narrow the range of options available. In particular, the AR5 outlined that rapid upscaling of low-carbon energy supply in the decades to come is vital to be in line with scenarios of keeping global warming well below 2 °C.

The EU remains committed to the Paris mitigation goals. The EU continues to stress that global greenhouse gas emissions need to peak by 2020 at the latest and be reduced by at least 50 % by 2050, consistent with the findings of the AR5.

We expect that the IPCC Special Report on global warming of 1.5 °C will provide clarity on the scale of the global challenge related to limiting global warming to 1.5 °C, including how this compares to limiting global temperature to 2 °C.

IPCC reports provide the most comprehensive assessment of the best available science to guide the implementation and review of NDCs and to foster reflection on ways for enhancing ambition and support in implementing and strengthening NDCs.

So far, the collective efforts of Parties' NDCs fall short of the ambition needed, as demonstrated by the UNFCCC's synthesis report on the aggregate effect of INDCs of 2016 and the Emissions Gap report of 2017 by UNEP³². The overarching conclusions of the gap report are the urgent need for all countries to contribute to accelerated short-term action and enhanced longer-term national ambition, if the goals of the Paris Agreement are to remain achievable. Practical and cost-effective options are available to make this possible.

Green and sustainable finance can help develop the tools and instruments needed to unlock the trillions of dollars in investments. The scale of the investment challenge is well beyond the capacity of the public sector alone.

The OECD has recently estimated that making the annual USD 6.3 trillion investment in infrastructure needed to meet development needs globally from 2016 to 2030 climate compatible will require an additional USD 0.6 trillion per year, with much of the additional cost offsetting itself over time by fuel savings arising from low emission technologies and infrastructure³³.

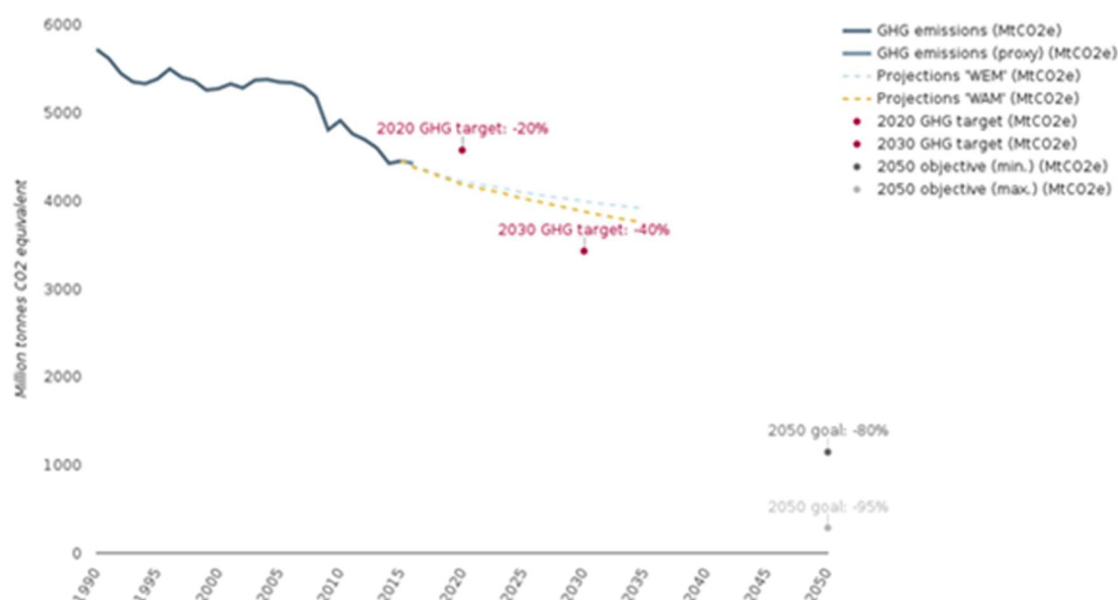
The OECD also found that embarking on a decisive transition has positive macroeconomic effects in the medium and long term. The net positive impact on GDP for G20 economies in a combined climate and structural policy scenario would lead to an increased output of 1 % GDP in 2021, rising to 2.8 % in 2050. If the benefits of avoiding damages from climate change are included, the impact rises to 4.7 % in 2050³⁴.

The IEA has estimated that even a partial phase-out of fossil fuel subsidies by 2020 would reduce GHG emissions by 360 million tonnes³⁵, which equates to 12 % of the reduction in GHG emissions needed to limit a temperature rise to 2 °C³⁶.

Creating enabling environments for the transition to a low emission development

Implementing the policies described and achieving our NDC will make the EU the most GHG-efficient major economy in the world by 2030. As well as being an ambitious contribution to the Paris Agreement, the EU and its Member States' NDC of at least 40 % GHG emission reductions by 2030 is a milestone towards our objective of reducing GHG emissions by 80 to 95 % by 2050, compared to 1990, in the context of necessary reductions according to the IPCC AR4 by developing countries as a group. This is demonstrated in the Roadmap published in 2011 by the European Commission for moving to a competitive low-carbon economy by 2050³⁷. The 2050 Low-Carbon Economy Roadmap has also been accompanied by roadmaps for energy and transport and sustainable finance looking in greater detail at long-term transformation in these areas.

Figure 5: Greenhouse gas emission trends, projections and targets in the EU³⁸



In accordance with Article 4, paragraph 19 of the Paris Agreement, all Parties should strive to formulate and communicate long-term low GHG emission development strategies. In addition, paragraph 35 of decision 1/CP.21 invites

Parties to communicate them by 2020. Such strategies can provide a pathway for the structural changes needed to achieve low emissions and climate-resilient economies, in line with the goals of the Paris Agreement and by addressing the transformation needed to shift public and private investments. They also support a just transition by encouraging forward-looking political and private decisions, thus avoiding structural breaks. They could highlight existing solutions and technologies, and set a roadmap to their deployment and funding or financing. This vision can then give a long-term perspective to short-term decisions and avoid locking in investments for decades to come.

In council conclusions from November 2017, EU environment Ministers highlighted the importance of long-term low greenhouse gas emission development strategies as a policy tool for developing reliable pathways and long-term policy changes needed to achieve the goals of the Paris Agreement. As such the EU environment Ministers welcomed the initiative of the European Commission and Member States to prepare an in-depth analysis of the environmental, economic and social impacts of pathways that are coherent with the long-term temperature goals of the Paris Agreement, so as to inform EU political debates with a view to formulate the EU strategy in accordance with paragraph 35 of decision 1/CP.21. As such, the European Commission will present by the first quarter of 2019 a proposal for a Strategy for long-term EU greenhouse gas emission reduction in accordance with Article 4, paragraph 19 of the Paris Agreement and paragraph 35 of decision 1/CP.21, taking into account the national plans.

EU Member States are also developing national long-term low GHG emission development strategies. France, Germany and the Czech Republic have already communicated their long-term low GHG emission development strategies to the UNFCCC. Several EU Member States have climate policy frameworks or strategies to guide and finance the energy transition. Examples of these are the United Kingdom's [Clean Growth Strategy](#), the Romanian [National Climate Change and Low Carbon Green Growth Strategy](#) covering the period of 2016-2030, the Dutch [Energy Agenda for 2050](#), the [Climate Protection Policy](#) of the Czech Republic, the [Irish National Mitigation Plan](#), the Portuguese National Programme for Climate Change 2020-2030 and the [Italian National Energy Strategy](#) which covers the period from 2020-2030 and foresees the phase out of power production from coal by 2025.

Other Member States have also adopted sectorial initiatives aiming at reducing or phasing out the use of fossil fuels, such as the [Fossil Free Sweden](#) initiative which supports Sweden's progressive climate policy framework with its goal to have net zero GHG emissions in the atmosphere by 2045.

The Danish government has set a target of at least 50 percent of Denmark's energy needs to be covered by renewable sources by 2030 and a long-term vision of Denmark being a low-emission society independent of fossil fuels by 2050. Finland is aiming at carbon-neutrality by 2045, and has set a goal of phasing out coal in energy production by 2030. Portugal has committed to achieve carbon neutrality by 2050 and, in this context, to phase out coal power generation by 2030. In addition, over 50 countries and regions, including several EU Member States, signed up to phase out unabated coal power generation by 2025, as part of the Powering Past Coal alliance set up by the United Kingdom and Canada.

Some Member States have also passed designated Climate Change Acts, creating legally binding obligations under national law for each consecutive government to take climate action. Such national climate laws have been adopted in, inter alia, the [United Kingdom](#) (2008), Austria (2011) Bulgaria (2014), [Ireland](#) (2015), Malta (2015), [Finland](#) (2015), [France](#) (2015) and most recently [Sweden](#) (2017).

The Paris Agreement also commits Parties to making finance flows consistent with a pathway towards low-carbon and climate resilient development. The EU has been at the forefront of efforts to build a financial system that supports sustainable growth, and in 2016 established a High-Level Expert Group (HLEG) on sustainable finance to develop recommendations for integrating sustainability considerations into the EU's financial policy, protecting the financial system from climate risks, and mobilising finance for sustainable growth. The HLEG delivered its final report in January 2018 and the European Commission just recently presented its Action Plan for a greener and cleaner economy that supports the EU's climate and sustainable development agenda. This roadmap sets out further work and upcoming actions covering all relevant actors in the financial system.

The EU will complete the implementation of the 2030 framework (on which we are on track) and put in place the right enabling environment that keeps us on track for the transition to a low-carbon economy in the long term. The EU's implementation of the 2020 and 2030 packages and specifically the enactment of a binding legislative framework, testify to the fulfilment of our ambition and of concrete delivery of our NDC. In this regard, we would like to acknowledge that good policy planning and preparatory modeling requires time to gather information on what are the best options and propose measures that will be subject to public consultation, political consideration and that require financial investment.

III. How do we get there?

The Talanoa Dialogue should enable a solution-oriented and forward-looking debate, underpinning the urgency for enhanced collective action by all.

The EU and its Member States are acting, domestically and through dedicated international cooperation and support to partner countries. In addition to highlighting opportunities that can inform Parties in the preparation of NDCs as well as opportunities for international cooperation, the Talanoa Dialogue should underline the importance for all Parties to communicate their long-term low GHG emission development strategies by 2020.

It is also important to consider the synergies between enhanced climate action and support and the 2030 Agenda for Sustainable Development and the Addis Ababa Action Agenda. Actions in both areas can be mutually supportive and climate action can contribute to a broader set of sustainable development goals.

In addition, the EU sees an enhanced transparency framework for action and support as essential for informing Parties on the advancements with respect to NDCs.

EU policy framework for domestic action and preparing for enhanced action

The European Commission developed the 2050 Roadmap³⁹ in support of the EU's long-term objective to reduce emissions by 80-95 % by 2050, compared to 1990, in the context of necessary reductions according to the IPCC by developed countries as a group. The binding target of an at least 40 % domestic GHG emissions reduction by 2030, as contained in the EU's 2030 Climate and Energy Framework, is in line with that long-term objective.

The European Commission will present by the first quarter of 2019 a proposal for a Strategy for long-term greenhouse gas emission reduction in accordance with the Paris Agreement, taking into account the national plans..

Our immediate priorities are to complete the implementation of the 2030 framework and to put in place the right enabling environment to keep us on track for the transition to a low-carbon economy in the long term.

Together with the 2030 Climate and Energy Framework, the different domestic and international initiatives and incentive structures as well as local and regional cooperation complete the picture on how we are supporting and empowering action well beyond what is included in our NDC.

Developments within the EU with regards to more advanced energy efficiency and renewable energy measures could also potentially lead to increased mitigation action and ambition.

While the EU 2030 framework and the at least 40 % emissions reduction target by 2030 sets a firm basis, some Member States are putting into place policies that go beyond targets as included in EU legislation.

Sectoral opportunities and policies to enable the transition

The IEA outlined five policy measures with significant potential to cut energy-related GHG emissions in the short term; i) increasing targeted energy efficiency improvements in the industry, buildings and transport sectors, ii) progressively reducing the use of least efficient coal-fired power plants and banning their construction iii) increasing investments in renewable energy technologies in the power sector iv) gradually phasing out of fossil-fuel subsidies to end users by 2030 and v) reducing methane emissions in upstream oil and gas production to end-users⁴⁰. Political declarations by the G7 and G20 to phase out inefficient fossil fuels subsidies send important signals, but efforts should be accelerated.

The potential for carbon pricing is far from being realised. Within the G20, most CO₂ emissions are not priced at all, and less than 10 % are priced at EUR 30 or more per tonne of CO₂ (a conservative estimate of the lowest social costs that result from a tonne of CO₂ emissions), measured on a basis of “Effective Carbon Rates” (ECRs)⁴¹.

Renewable energy features prominently in most of the NDCs, confirming that the transition to a renewable energy future is recognised globally as central to decarbonising energy supply and addressing climate change, 145 refer to renewable energy action to mitigate climate change, whilst 109 Parties include some form of quantified target for renewables⁴². Rapid deployment of renewables, in combination with energy efficiency can contribute to around 90 % emission reductions in the energy sector by 2050 while at the same time advancing economic growth and deployment⁴³.

Creating enabling environments is key. The EU and its Member States’ experience is that dedicated renewable energy and energy efficiency policies combined with putting a price on carbon as well as targeted measures such as economic incentives can reduce emissions in a cost-effective manner. Such efforts need to be complemented by a range of other macro-economic and financial levers, including making available innovative financial instruments and a sustainable capital market union⁴⁴. We will bring to the table good practice examples, particularly measures listed in the Clean Energy for Europe Package and

implementation measures with regards to buildings, electricity regulation, CO₂ emissions of cars, vans and Heavy Duty Vehicles and Member States' experience with taxation policies.

According to the 2017 UNEP Emissions Gap report, international aviation emissions are expected to grow from 0.5 Gt CO₂ in 2017 to around 1.1 Gt CO₂ in 2030⁴⁵. With the implementation of ICAO's Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), up to 0.3 Gt in global emissions could be saved per year by 2030, depending on the emission units to be used to offset emissions, on whether offsets are accounted or not towards NDCs, and on the level of participation.

Emissions from international shipping are expected to grow significantly in coming years due to the growth of international trade and demand for shipping. There is large GHG emission reduction potential in the sector according to a number of studies, from 0.39 to 0.99 Gt CO₂ per year in 2030. The initial IMO GHG Emission Reduction Strategy for Ships due to be adopted in April 2018 is expected to outline the contribution of the international shipping sector to global emission reduction efforts, with a revised strategy being adopted in 2023.

The EU and its Member States expect the IMO to take swift and appropriate additional actions in order for the international shipping sector to contribute its fair share to the fight against climate change. The IMO emission reduction strategy should be underpinned by an adequate emission reduction objective, consistent with the temperature goals of the Paris Agreement, including a list of candidate short, mid and long-term measures equally applicable to all ships, as agreed in the roadmap for developing a comprehensive IMO strategy on reduction of GHG emissions from ships. The Tony de Brum Declaration^a as issued at the One Planet Summit on 12 December 2017 and currently supported by 38 countries can be considered as a political guidance in this respect.

The Kigali Amendment to the Montreal Protocol, which will bring about a global phase-down of hydrofluorocarbons (HFCs) will take effect in January 2019. Its implementation is expected to prevent up to 80 billion tonnes of CO₂ equivalent by 2050, which will make a significant contribution to the Paris Agreement objective to limit the global temperature rise to well below 2 °C. We encourage countries to contribute to this effort. The 2014 EU regulation on fluorinated gases will ensure that the EU can meet its obligations under the Kigali Amendment while also driving innovation in the field. The EU and its Member

^a Link to Declaration, https://www.oneplanetsummit.fr/IMG/pdf/7-transport_maritime_-_tony_de_brum_declaration.pdf

States are making swift progress in proceeding with the ratification of the Kigali Amendment.

Assisting others in the transition towards a low-carbon and climate-resilient pathway

The EU remains committed to the shared developed country goal of mobilising USD 100 billion a year in climate finance by 2020 and through to 2025 for climate action in developing countries from a variety of sources.

In 2016 the EU and its Member States contributed EUR 20.2 billion in climate finance, a significant increase compared to EUR 17.6 billion in 2015. At least 20 % of the EU budget dedicated to external funding - an estimate of EUR 14 billion of public grants - will be used to support climate activities in developing countries. The EU is working closely with multilateral and through bilateral development banks to encourage the provision of transformational climate finance and the integration of climate considerations across their portfolios.

The EU is also committed to capacity building. Capacity building is integrated in EU support activities in order to enable the full, effective and sustained implementation of the Paris Agreement. The EU supports country-driven, gender responsive and comprehensive projects that strengthen national capacities and take into account human rights, combined with relevant qualitative and quantitative methods for monitoring impacts, where appropriate.

As well as taking a leading global role in the development of low-carbon technology, the EU also supports the uptake of low-carbon technology internationally. The EU and its Member States are also the leading donor of the Climate Technology Centre and Network (CTCN), the operational arm of the UNFCCC Technology Mechanism.

The EU is striving for cooperation and synergy with other initiatives, and, in close collaboration with partner countries, is undertaking impact assessment and monitoring, where appropriate, to assess the effectiveness and progress made.

Further information on support provided by the EU and its Member States can be found in recently submitted Third Biennial Reports, and further detail on how finance will be scaled up through to 2020 will be provided through the EU's forthcoming strategies & approaches submission.

Sharing good practices that contribute to low greenhouse gas development and increasing the ability to adapt to impacts of climate change and foster climate resilience

Adaptation objectives are an essential part of many Parties' NDCs (as of May 2017 145 INDC and 104 NDC included adaptation⁴⁶). There is potential to share lessons learned in efforts that contribute to several objectives; for instance, 43 Parties recognise the potential contribution of renewable energy in adapting to, and building resilience against climate change impacts in their NDCs⁴⁷.

The agricultural sector also stands out as the sector where opportunities for synergies or co-benefits between mitigation and adaptation measures exist. For example, agroforestry on agricultural soils, the use of drought and pest resistant seeds can reduce the use of machinery, and organic farming methods may require less fertiliser inputs, resulting in lower GHG emissions. Another example is the forestry sector where actions on REDD+, sustainable management of forests, afforestation could provide co-benefits. For agriculture and forestry, efforts undertaken to restore degraded soils and the adoption of soil conservation practices, offer potential for carbon sequestration. Forest sustainable management and protection measures can help develop sustainable ecosystem services, which can also result in avoided emissions from deforestation and/or degradation. In urban areas, planting trees can provide the dual benefit of reducing heat stress by providing shade and cooling areas, as well as carbon sequestration.

Within Europe, the EU Strategy on adaptation to climate change was adopted in 2013, setting out a framework for taking the EU's preparedness for current and future climate impacts to a new level. This strategy on adaptation complements the activities of Member States. To date, 25 Member States have adopted an adaptation strategy and are advancing in their implementation.

Responding to climate change impacts and enhancing capacity in the EU remains crucial and should be progressively strengthened. Currently, the European Commission is evaluating progress in implementing the EU Adaptation Strategy, and will present its findings in the second half of 2018.

Social dimension and just transition

The Paris Agreement stipulates the need to take into account the imperatives of a just transition. Raising awareness of how implementing climate change mitigation policies can have wider positive impacts – such as economic growth, job creation and benefits to health – is important and can help to increase support for the transition. For example, an impact analysis of implementing the

EU's NDC indicated that the increased need for investments in lower emission energy systems would be largely compensated by the EU's reduced demand for energy imports as well as improvements in public health. Generally, impact assessment modelling as well as OECD analysis on climate and environment policies indicate a moderate positive net effect on employment, on the condition that revenues from economic instruments are invested in transition measures within the economy.

While these co-benefits are likely to outweigh the costs when aggregated globally, the impacts associated with the transition towards low-emission societies will not be the same for all Parties, nor for all sectors and communities within each party. Parties must therefore design climate change policies and measures to minimise the socially and economically disruptive impacts and maximise the benefits - taking into account, inter alia, the imperatives of a just transition of the workforce and the creation of decent green jobs - and reinforce these with appropriate social protection and labour market policies. The EU emphasises the importance of public participation in the development of such policies, and uses open and inclusive consultation processes to reach out to a broad range of stakeholders; enabling the EU to disseminate information, gather views and secure buy-in.

We recognise the importance of creating enabling conditions for a just transition. For instance, the Modernisation Fund and the Innovation Fund under the 2030 Climate and Energy Package will support innovation in low-carbon technologies and processes in industrial sectors, as well as assist in modernising the energy sector to enable energy and manufacturing companies to make the transition. The funds are examples of how to innovatively use the revenues from carbon pricing instruments; in this case revenues from the auctioning of European Emission Allowances in the EU ETS.

Mitigation action by and with non-Party actors

The EU and its Member States support many impactful initiatives within the context of the Marrakech Partnership on Global Climate Action (MPGCA) under the UNFCCC and outside, which demonstrates our support to ambitious climate action beyond what we deliver in the context of our NDC.

Our expectation is that the MPGCA will demonstrate concrete solution-oriented examples of how we get there. We are encouraged that 70 % of the initiatives under the Marrakesh Partnership have made new commitments in terms of emission reductions, adaptation, capacity-building and others⁴⁸. For the Talanoa Dialogue we would welcome further information on the results achieved by the initiatives and we encourage the High-Level Climate Champions and the UNFCCC

Secretariat to put in place a framework for activities and coalitions under the MPGCA to report on progress and delivery. It would be beneficial if the input to the preparatory phase would use a thematic approach to demonstrate sectoral potential and cluster good practice policy options based on a sectoral breakdown and highlight transformative initiatives with significant GHG emissions reduction potential.

There is potential for replicability and sharing good practices channeled through large scale initiatives like the NDC Partnership and coalitions like Carbon Pricing Leadership Coalition to name just two examples amongst the many of the initiatives the EU and its Member States are supporting.

The efforts required to achieve the long-term goals of the Paris Agreement need support from regional, local and municipal leaders. Initiatives such as the Global Covenant of Mayors for Climate Change and Energy bringing together action by thousands of cities and local authorities are key in broadening and enhancing the commitment to climate action and the Paris goals. By 2016, cities that are signatories of the EU Covenant of Mayors, which is part of the Global Covenant of Mayors initiative, had reduced their emissions of GHG by 23 % compared to 1990 and they have pledged to reach a 27 % reduction by 2020. More than one thousand cities have also taken adaptation measures. These numbers clearly show that cities can, and must, make a real difference in the fight against climate change, not only in Europe, but all around the world.

At the One Planet Summit in Paris in December 2017 many initiatives were launched with a focus on mobilising private and public finance that can contribute to accelerate global climate action. Some of the [12 commitments](#), are highly relevant to the acceleration of global mitigation action and could be scaled up, for instance the “Towards Carbon Neutrality” coalition involving 16 countries, 32 cities and a large number of businesses committed to publish, no later than 2020, pathways to carbon neutrality by 2050. These commitments will be tracked to monitor their implementation and there will be a follow-up of the Summit this year.

IV. EU views on the Talanoa Dialogue process

The EU welcomes the message from the current and upcoming COP Presidencies on the Talanoa Dialogue process as issued on 8 and 19 February. The EU would like to present the following additional reflections and expectations for the process.

Report to inform the May session

For the preparatory phase the submissions due by 2 April will be summarised into a report that will inform the Dialogue for its May session announced in the outline document from 8 February. In considering the information received, the EU and its Member States think the report should:

- Be organised around the three framing questions;
- Be factual and based on best available science in describing the trends and possible scenarios with regards to the framing questions. The global picture should include a sectoral break-down and showcase ways to shift financial flows to encourage a solutions-focused approach;
- Highlight where we are in terms of Parties policy frameworks, legislation and policy instruments as well as cooperative action and initiatives from non-Party stakeholders focusing on actions that are replicable and transformative;
- Give due attention to the issue of co-benefits and synergies and thus give sufficient attention to the relationship between mitigation policies and public health, mobility and transport, innovation, employment, financial flows and just transition and other synergetic effects on pursuing sustainable development;
- Identify possible barriers and ways to overcome them;
- Provide the basis for the political phase by setting out concrete and constructive suggestions on how to collectively increase ambition.

As we are currently not on track to reach the temperature goals of the Paris Agreement, and sharp and rapid emission reduction efforts in all sectors are necessary, the report should express throughout the different sections the urgency of collective ambitious action by all Parties and other actors.

Organisation at the May session

Due space and time should be given to conducting the Talanoa Dialogue allowing for the required in-depth consideration needed to address the three framing questions and to respond to the mandate decided in Paris.

In addition to the information already provided by the COP Presidencies, the participants in the sessions should receive clear guidance by the Presidencies in the form of a limited number of key questions of a forward-looking nature and which focus on replicable policy practices and opportunities for action in light of the mandate.

We expect an interactive debate in each of the sessions and welcome the inclusion of non-Party stakeholders. It is essential that all Parties should be able

to participate in the break-out groups. Drafting the report resulting from each of the sessions should be the responsibility of the Presidencies with the support from the Secretariat.

The report back to the closing plenary should entail the common reflection on the three framing questions and present a forward-looking guidance for the political phase during COP24. In addition, the Presidencies should provide further clarity on how the synthesis report will be conducted.

IPCC Special Report

In October the IPCC will publish its Special Report on Global Warming of 1.5 °C. As included in the Talanoa Dialogue Approach paper we think that a dedicated space will be needed both during the preparatory and the political phase to facilitate the understanding of this report. This dedicated space should not discuss findings of the report ahead of its publication. We would recommend that the COP Presidencies, in consultation with Parties and involved intergovernmental organisations, explore how events can be organised to provide this dedicated space for the Special Report after its release.

Political phase of the Talanoa Dialogue at COP24

We see this as an event at the level of at least ministers and high-level representatives meant to take stock of collective progress towards the long-term goal of Article 4, paragraph 1 of the Paris Agreement and to inform the preparation of NDCs. As set out in the Talanoa Dialogue Approach paper we think that the political discussions should be organised in the form of roundtables and ensure focused and interactive discussions. We would also suggest participation of high-level representatives of intergovernmental organisations as well as representatives from non-Party stakeholders. We deem it important to capture the political momentum in an outcome document presented by the COP Presidencies.

While the Talanoa Dialogue is one of the key priorities for the EU, we would like to emphasise that we are fully committed to fulfil the timeline that was agreed at COP22 so as to finalise the Paris Work Programme at COP24. Therefore, we count on the Presidencies to schedule UNFCCC meetings in a way that facilitates both of these objectives. We would also like to underline that we see agreement on a robust and balanced Paris Work Programme to fully operationalise the Paris Agreement as the required framework and tool box to help us achieve its purpose and long-term goals.

Events taking place outside of the UNFCCC

Outside events such as the Global Climate Action Summit in San Francisco could contribute in the build-up of political momentum. We underline the usefulness for the UNFCCC secretariat to keep track of Talanoa-related events on the Talanoa portal site. The COP Presidencies together with the UNFCCC Secretariat should invite other international organisations to be strongly involved in Talanoa-related activities.

The EU will organise on 13 June 2018 in Brussels a large Talanoa event involving different stakeholders and addressing the three framing questions at the EU scale. We expect to see across the EU a multitude of Talanoa activities. Since many Parties and non-Party stakeholders will be involved in the organisation of Talanoa events, we would also recommend that the UNFCCC Secretariat collect information on good practices for the organisation of such events and make such examples available on the Talanoa portal site.

The EU has also recently agreed to hold discussions on the Talanoa Dialogue and international climate negotiations at the Informal Environment Council during the Bulgarian Presidency (10-11 April 2018) so as to have a first discussion on Talanoa between EU Ministers.

The EU is also making full use of its climate diplomacy to partner with other countries in organising Talanoa events. EU Climate diplomacy initiatives on the Talanoa Dialogue will take place across two non-consecutive weeks: one in June (12-24) and one in September (24-30). Our ministers at the Foreign Affairs Council of 26 February 2018 underlined the need for the broadest based engagement of stakeholders and dialogue between international partners and identified the Talanoa Dialogue as a central theme for EU climate diplomacy in 2018.

The EU and Member States stand ready to enhance mutual understanding and trust for stronger cooperation with partner countries and wider stakeholders, and in order to complete the Paris Agreement Work Programme at COP24 resulting in enhanced global ambition with a view to achieving the long-term goals of the Paris Agreement.

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