Large countries’ preparations and views for the 2015 Paris climate agreement

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1. Introduction: A New 2015 Climate Agreement in Paris

The 196 Parties to the United Nations Framework Convention on Climate Change (UNFCCC) are currently engaged in negotiations for a new climate change agreement applicable to all Parties from 2020. The deadline for concluding the agreement is at the 21st session of the Conference of the Parties (COP 21), which will be held in Paris, France, in December 2015.

This report, commissioned by the Finnish Ministry of the Environment, describes and analyzes negotiating positions by key large countries (with the exception of the European Union) in the Paris negotiations. The report has been structured as follows: Chapter 1 gives an introduction in the Paris negotiations and negotiating mandate. It also briefly describes the countries analyzed in this report. In Chapter 2 the contributions of the countries to the Paris Agreement are reviewed. Chapter 3 introduces and examines some key issues in the Paris negotiations, and the position in relation to such taken by key countries. Chapter 4 includes brief conclusions.

1.1 The 2015 Paris Agreement: Background and Negotiating Mandate

The UNFCCC was adopted in 1992. It provides the main international legal framework for addressing climate change. According to Article 2, the ultimate objective of the UNFCCC is to prevent dangerous anthropogenic interference with the climate system. Parties have subsequently agreed on a goal to limit the global average temperature increase to below 2°C from pre-industrial times. This target is currently under review that will take place in 2013-15.

The current international legal framework for mitigating climate change is based on binding emission targets for developed countries under the 1997 Kyoto Protocol. The first commitment period for Annex I countries under the Kyoto Protocol took place in 2008-12. Based on the Doha Amendment to the Kyoto Protocol, adopted in 2012, the second commitment period runs from 2013 until 2020.1 In addition to the Kyoto Protocol’s legal framework, a number of developed and developing countries have submitted unilateral mitigation pledges to the UNFCCC Secretariat. These submissions were mostly made in context of the 2009 UN Climate Change Conference in Copenhagen and cover the pre-2020 period. In light of climate science it is clear, however, that the combined effect of the existing binding and non-binding mitigation measures is inadequate to achieve the two-degree target. A new negotiating round was therefore launched at COP 17 in Durban with two workstreams. Workstream 1 focuses on enhancing pre-2020 ambition and the Workstream 2 on negotiating a new climate treaty that would apply from 2020 onwards.

1 Note, however, that the Doha Amendment to the Kyoto Protocol containing, *inter alia*, emission targets for 2013-2020 has not entered into force.
A new subsidiary body entitled the Ad Hoc Working Group on the Durban Platform for Enhanced Action (ADP) oversees the negotiations. Concerning Workstream 1, its mandate is to negotiate a new agreement, applicable to all Parties. The agreement should be adopted in 2015 and become effective and be implemented from 2020 onwards. Issues addressed by the ADP include mitigation, adaptation, finance, technology development and transfer, transparency of action and support, and capacity building. These are also the main issues analyzed in this report, along with countries’ views on the overall Paris outcome and its legal form.

Intended Nationally Determined Contributions (INDCs) are an important aspect of preparations for the 2015 Paris agreement. In their INDCs, countries outline what climate actions they intend to take in the post-2020 period. According to guidance from COP 20 in Lima last year, INDCs should facilitate the clarity, transparency and understanding of a country’s contribution. The UNFCCC Secretariat publishes INDCs on its website and will prepare a synthesis report on their aggregate effect by 1 November 2015.

1.2 Preparations for Paris by Large Countries

This report focuses on large key countries’ negotiating positions and preparations for the Paris conferences. The countries were selected because of their role as major emitters, or their major role in their continent regarding climate negotiations. The European Union (EU) is not covered in this report, but is included as reference in the overview tables in the end of Chapter 2.

Countries considered in this report include:

1. **China**: China is the world’s largest emitter of greenhouse gases. Categorized as a non-Annex I country, it is a Party to both the UNFCCC and the Kyoto Protocol. China belongs to the Group of 77 and China. It also participates in the group of Like-Minded Developing Countries (LMDCs) and in the BASIC group along with Brazil, India and South Africa. China submitted its INDC to the UNFCCC Secretariat in June 2015.

2. **The United States**: The US is the second largest global emitter of greenhouse gases. Categorized as an Annex I country, it is a Party to the UNFCCC but not to its Kyoto Protocol. The US participates in the UNFCCC negotiations in the Umbrella Group, along with Australia, Canada, Japan, Kazakhstan, New Zealand, Norway, Russia and Ukraine. The US submitted its INDCs to the UNFCCC Secretariat in March 2015.

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5. Decision 1/CP.20, Lima Call for Climate Action, paras. 13-14.
7. Source: World Resources Institute, see data in Figure 1 below.
3. India: Categorized as a non-Annex I country, India is a Party to both the UNFCCC and the Kyoto Protocol. India is the third largest emitter country of greenhouse gases. It belongs to the Group of 77 and China. It also participates in the group of Like-Minded Developing Countries (LMDCs) and in the BASIC group along with China and South Africa. India has submitted its INDC to the UNFCCC Secretariat on 1 October 2015.

4. Russia: Russia is listed in Annex I of the UNFCCC. It is also Party to the Kyoto Protocol, but has indicated that it will not participate in the second commitment period in 2013-2020. Russia is the fourth largest emitter of greenhouse gases. Russia participates in the Umbrella Group. Russia submitted its INDC to the UNFCCC Secretariat in March 2015.

5. Mexico: Mexico is categorized as a non-Annex I country. Mexico is a Party to the Kyoto Protocol, and has deposited its instrument of acceptance under its second commitment period (the Doha Amendment). Mexico is the 8th largest emitter of greenhouse gases, if land use, land use change and forestry (LULUCF) emissions are excluded, and 10th largest if LULUCF emissions are included. In the UNFCCC negotiations Mexico participates in the Environmental Integrity Group (EIG) alongside Republic of Korea, Switzerland, Liechtenstein and Monaco. Occasionally Mexico also affiliates itself with submissions of the Independent Alliance of Latin America and the Caribbean (AILAC) group, but is not a member of the group. Mexico is taking part in the Cartagena Dialogue for Progressive Action. Mexico submitted its INDC to the UNFCCC Secretariat as the first non-Annex I country.

6. Indonesia: Categorized as a non-Annex I country, Indonesia is Party to both the UNFCCC and the Kyoto Protocol. It has accepted the Doha Amendment. In the UNFCCC negotiations the country belongs in the Group of 77 and China. It also participates in the Coalition for Rainforest Nations, but does not endorse all the submissions of the group. Indonesia is the 5th largest emitter of greenhouse gases of individual countries, when LULUCF emissions are taken into account. If LULUCF emissions are excluded, it is the 8th largest emitter. Indonesia is taking part in the Cartagena Dialogue. Indonesia has submitted its INDC to the UNFCCC Secretariat on 24 September 2015.

7. Brazil: Brazil is categorized as a non-Annex I country in the UNFCCC, and is also a Party to the Kyoto Protocol. Brazil is the sixth largest greenhouse gas emitter. It belongs to the Group of 77 and China, and also participates in the BASIC group alongside South Africa, India and China. Brazil submitted its INDC on 28 September 2015.

8. South Africa: Categorized as a non-Annex I country, South Africa is Party to both the UNFCCC and the Kyoto Protocol. South Africa is the 16th largest emitter when LULUCF emissions are excluded, and 17th largest if they are included. South Africa belongs to the Group of 77 and China. It also participates in the African Group as well as in the BASIC

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8 World Resouces Institute, CAIT Climate Data Explorer (2012 data). This source is used for all the GHG emission data in this chapter.

9 Cartagena Dialogue is a collection of around 40 countries working towards an ambitious legally binding agreement under the UNFCCC, and who are committed to becoming or remaining low carbon domestically.
group along with Brazil, China and India. South Africa submitted its INDC on 25 September 2015.10

9. Japan: Japan is listed in Annex I of the UNFCCC. It is also Party to the Kyoto Protocol, but has indicated that it will not participate in the second commitment period in 2013-2020. Japan is the 5th largest greenhouse gas emitter, if LULUCF emissions are excluded, and 7th largest if they are included. Japan participates in the Umbrella Group. Japan submitted its INDC to the UNFCCC Secretariat in July 2015.

10. Australia: Australia is listed in Annex I of the UNFCCC. It is also Party to the Kyoto Protocol with a commitment for the second commitment period in 2013-2020. Australia has yet to ratify the Doha Amendment to the Kyoto Protocol. Australia is the 5th largest emitter of greenhouse gases, when LULUCF emissions are excluded, and 12th largest if they are included. Australia participates in the Umbrella Group and submitted its INDC to the UNFCCC on 11 August 2015.

11. Turkey: Turkey is an Annex I country whose special circumstances were recognized by COP 7 in 2001 when Turkey was removed from Annex II of the Convention. While Turkey is a Party to the Kyoto Protocol, it is not listed in Annex B and does not have an emission reduction target. It is yet to ratify the Doha Amendment. Turkey is the 19th largest emitter, when LULUCF emissions are excluded, and the 23rd largest if they are included. Turkey submitted its INDC to the UNFCCC Secretariat on 30 September 2015.

12. Republic of Korea: Categorized as a non-Annex I country, the Republic of Korea is a Party to both the UNFCCC and the Kyoto Protocol. Republic of Korea is the 12th largest emitter if LULUCF emissions are excluded, and 13th largest if they are included. The Republic of Korea participates in the Environmental Integrity Group along with Liechtenstein, Mexico, Monaco and Switzerland. The Republic of Korea submitted its INDC to the UNFCCC Secretariat on 30 June 2015.

13. Canada: Canada is listed in Annex I of the UNFCCC. It was Party to the Kyoto Protocol, but withdrew from it before the end of the first commitment period. Canada’s emissions are 8th highest in the world if the LULUCF sector is included and 11th highest without the LULUCF sector. Canada participates in the Umbrella Group. It submitted its INDC to the UNFCCC Secretariat on 15 May 2015.

14. Democratic Republic of Congo: The Democratic Republic of Congo (“DRC”) is categorized as a non-Annex I country, and is a Party to both the UNFCCC and the Kyoto Protocol. From 1971 to 1997 the country was named Zaire. It is the second largest country in Africa by area and the eleventh largest in the world. The DRC is listed as a Least Developed Country (LDC) by the UN. Its GHG emissions including the LULUCF sector are 37th highest in the world (201.5 Mt CO₂e in 2012), without LULUCF they are almost negligible (36.3 Mt CO₂e). DRC participates in the G77 and China, the Coalition for Rainforest Nations group and also in the African Group in the climate negotiations. The DRC has submitted its INDC on 18 August 2015.

1.2.1 Comparison of greenhouse gas emissions and energy sources of the selected countries

In Figure 1 below, the total greenhouse gas (GHG) emissions of the selected countries is pictured both including and excluding emissions from land use, land-use change and forestry (LULUCF). It shows that China and the US are by far the largest global emitters of greenhouse gases, and that the African least developed countries (LDCs) have very small emissions. The figure also indicates that in countries, such as Brazil and Indonesia, where deforestation is occurring on a large scale, greenhouse gas emissions including LULUCF are substantially higher than emissions excluding LULUCF. On the contrary, in countries, such as China, US, India and Russia, the land-use and forestry sector acts as a carbon sink.

Figure 1: Greenhouse gas emissions in the selected countries in 2012, excluding and including LULUCF emissions (data source: World Resources Institute CAIT Climate Data Explorer)

Figure 2 below compares CO₂ emissions per unit of Gross Domestic Product (GDP) and CO₂ emissions *per capita* in the select large countries. It shows that in developed countries, such the US, Australia, Canada and Japan, *per capita* emissions are relatively high, but the emissions intensity of the GDP is lower. From non-Annex I countries, the Republic of Korea also belongs to this group. This indicates that a large share of these countries’ GDP comes from services and other economic sectors with low greenhouse gas emissions, and a smaller share from emissions-intensive manufacturing. On the other hand several large non-Annex I countries, such as China, India and South Africa, have relatively low *per capita* emissions, while the emissions intensity of their GDP is substantially higher. Only in Brazil, Mexico, Turkey and Russia both values are approximately at the same level.
Figure 2: CO₂ emissions in the selected countries per unit of GDP (USD, left axis) and per capita (tons of CO₂, right axis) in 2012, data by World Bank

The current energy mix in electricity generation in the selected countries also gives indication of the countries' mitigation potential and gives an interesting insight when comparing the INDCs of the countries. In figure 3 below the electricity generation in the selected countries is illustrated by energy source, in percentages from total net electricity generation.

Figure 3: Electricity generation by energy source in the selected countries in 2012. Source: US Energy Information Administration (data on DRC not available)
2. Intended Nationally Determined Contributions of selected large countries

Intended Nationally Determined Contributions (INDCs) are an important aspect of preparations for the 2015 Paris agreement. In their INDCs, countries outline what climate actions they intend to take in the post-2020 period. According to guidance from COP 20 in Lima last year, INDCs should facilitate the clarity, transparency and understanding of a country’s contribution. The UNFCCC Secretariat publishes INDCs on its website and will prepare a synthesis report on their aggregate effect by 1 November 2015.

2.1 China

Contents

China has determined four unconditional targets in its INDC:

1) Peaking of CO₂ emissions around 2030, making best efforts to achieve an earlier peaking year;
2) Lowering of CO₂ emissions per unit of GDP by 60-65 % from the 2005 level by 2030;
3) Increasing the share of non-fossil fuels in primary energy consumption to around 20 % by 2030; and
4) Increasing the forest stock volume by 4.5 billion m³ from 2005 levels by 2030

China will also continue to proactively adapt to climate change by enhancing mechanisms and capacities to effectively defend against climate change risks in key areas such as agriculture, forestry and water resources, and to progressively strengthen early warning and emergency response systems as well as disaster prevention and reduction mechanisms.

Equity aspects

China refers to the principles of equity and common but differentiated responsibilities and respective capabilities (CBDRC) in the implementation of the UNFCCC. In the INDC China refers to itself as a responsible developing country and as a country most severely affected by adverse impacts of climate change due to its status as a developing country.

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11 Decision 1/COP.20, Lima Call for Climate Action, paras. 13-14.
12 Ibid., para. 16.
13 Enhanced Actions on Climate Change: China’s Intended Nationally Determined Contributions (unofficial English translation) June 2015
with a large population. The INDC states that the actions under the INDC have been determined based on their match with China’s national circumstances, current actions and the further strengthening of South-South cooperation on climate change. The INDC does not discuss the fairness of the actions per se.

Links to finance

China’s INDC is unconditional, and therefore the mitigation targets are not dependent on financial support from other countries. However, China highlights in its INDC its position as a developing country needing support from developed countries. On the other hand, China announced on 25 September together with US in the Joint Presidential Statement that it will make available ¥20 billion (€2.8 billion) for setting up the China South-South Climate Cooperation Fund to support other developing countries to combat climate change, including enhancing their capacity to access Green Climate Fund (GCF) funds.14

Level of Ambition

The ambition level of China’s INDC differs between the four targets. Regarding the carbon intensity target, there is a gap of 1.6 to 3.3 GtCO₂e between the policies China is already implementing, and its carbon intensity target for 2030. If China would to improve its carbon intensity target to a 70% reduction by 2030 from 2005 levels, this would close this gap and limit GHG emissions to 13.6 GtCO₂e in 2030, all other assumptions remaining the same. Therefore the carbon intensity target is not ambitious enough, compared to current policies.15 A recent study by Grantham Research Institute estimates that the peaking year of emissions in China is expected to happen already in 2025 or shortly after, due to important restrictions on coal consumption as well as other existing policies. In this light also the peaking year target of 2030 can be seen as unambitious.16 Also the emission level of the peaking year is not given in the INDC.

On the other hand, the renewable energy target of 20% is ambitious, as the country would need to generate 800 to 1,000 gigawatts in non-fossil capacity,17 meaning that it has to nearly double its current renewable energy share. According to the International Renewable Energy Agency (IRENA), the share of renewables in China’s energy mix was 13% in 2010, including an estimated 6% traditional use of biomass and 7% modern renewables. Hydroelectricity (3.4%) and solar thermal (1.5%) accounted for most of China’s modern renewable energy use.18 There are also other figures about China’s current share of renewable energy, for example the European Chamber of Commerce uses 10% as the current share of clean energy (including nuclear energy) in China’s energy mix.19 IRENA estimates that under current policies and investment patterns, the

15 http://climateactiontracker.org/countries/china.html
16 Stern, N. and Green, F (2015): China’s "new normal": structural change, better growth, and peak emissions
18 IRENA (Nov 2014): Renewable energy prospects: China
share of renewables in China's energy mix is projected to reach 17% by 2030. This means that further policies are needed to reach the INDC target of 20%. Also worth to mention regarding this issue is the constantly growing energy demand of China, which makes reaching the target more difficult. Already before 2020 the total energy demand in China is expected to increase by approximately 16% from the 2014 levels.

Also the forest target is ambitious, as this amount of forest would create a roughly 1-gigaton carbon sink, equivalent to taking 770 million cars off the road. In 2015, China forest cover area is 208.321 million hectares, most of which are plantations, and have low carbon stocks. The forest cover accounts for about 22% of China’s country area and 5% of global forest area. According to the Food and Agriculture Organisation of the United Nations (FAO), China reports the greatest annual forest area gain in the world in the years 2010-2015, meaning that China’s forests are growing annually approximately 1.54 million ha (0.8%) in area annually. It is difficult to find recent data on the forest stock volume China is using as measure for its forestry target. In the Sixth National Inventory on Forest Resources (1998-2003) China’s forest stock volume was 12.46 billion m³. The INDC target of growing the forest stock volume is 136% of this level, so it can be seen as ambitious.

China is facing economic uncertainty, which is probably behind some of the conservatism in the Chinese contribution. It seems also that China is leaving some space to update and strengthen its ambition over time, so that there is potential to go further. China has become by far the number one greenhouse gas emitter over the years, which makes it the key country in the global fight against climate change. This is not yet substantially reflected in China’s position, as it sees the historical responsibilities as most important. Still, this year China has, for the first time, set itself targets for the peaking of CO₂ emissions, which can be seen as a historical change in the country’s mindset.

It is important to note that China’s INDC includes carbon dioxide emissions only, which account to about 80% of total emissions. China has not yet implemented sufficient policies addressing non-CO₂ greenhouse gas (GHG) emissions, so there is a risk that the total GHG emissions would continue increasing even after the peaking year of CO₂ emissions. It is also good to keep in mind that the peaking year of emissions is not necessarily the key issue, but what happens to China’s emissions after that. A possible scenario is that the emissions would plateau after the peaking year. The economic situation of the country has changed dramatically from the years the UNFCCC was negotiated. An important aspect in reaching the INDC targets is how the growing middle class in China is able to change into more low-carbon lifestyles and consumption habits.

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20 IRENA (Nov 2014): Renewable energy prospects: China
21 PowerPoint presentation World Energy China Outlook | Xiaojie Xu and Chen Tangsi (July 2014)
23 FAO (2015): Global Forest Resources Assessment 2015, p.15
25 http://www.blog-iddri.org/2015/06/30/chinas-indc-a-first-analysis/
26 http://climateactiontracker.org/countries/china.html
as the rising wealth of the people increases emissions from e.g. transportation and buildings. It is expected that the emissions from these sectors will surpass the emissions from manufacturing in the longer term.28

2.2 United States

Content

Based on the INDC, the goal of the United States is a 26-28 % reduction in GHG emissions from 2005 levels by 2025. The target is economy-wide and covers all greenhouse gases included in the 2014 Inventory of United States GHG emissions and sinks, i.e. carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulphur hexafluoride (SF₆), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs) and nitrogen trifluoride (NF₃). Notably, the US states in its INDC that it does not intend to utilise international market mechanisms to reach the 2025 goal.29

As a background, the Copenhagen pledge of the US is to reduce net GHG emissions by 17% between 2005 and 2020. The US accounting approach for the land use sector modifies the reductions in industrial greenhouse gases by +/-2 % compared to the net GHG targets declared for 2020 and 2025.30

Equity aspects

The US states in its INDC that the 2025 target is fair and ambitious and represents a substantial acceleration of the current pace of greenhouse gas emission reductions. The Copenhagen pledge of the US is to reduce net GHG emissions by 17 % between 2005 and 2020. Assuming a linear trend, this is equivalent to a reduction of -1.1 percentage points per year. GHG inventory reports show that the realized average annual trend of the US was -1.6 percentage points per year between 2005 and 2012. Thus, the US is on track of fulfilling the Copenhagen pledge. For comparison, the average yearly trend of the EU was -1.9 percentage points per year in the same period.

In accordance with the INDC achieving the 2025 target will require a further emission reduction of 9-11% beyond the 2020 target (relative to the 2005 baseline) and a substantial acceleration of the annual emission reduction pace to 2.3-2.8 per cent per year from current 2005 to 2020 reduction levels. Further USA’s 2025 target is consistent with a path to decarbonisation and to economy wide emission reductions of 80% or more by 2050. The INDC does not contain further discussion on the fairness of the target in relation to other states or USA’s total emissions. Neither does it refer to developing countries or the principle of CBDRRC.

Links to finance

29 Intended Nationally Determined Contribution of the United States, March 2015
30 http://climateactiontracker.org/countries/usa.html
Finance is not mentioned in the US INDC. However, the US has pledged 3 billion USD to the Green Climate Fund.

**Level of ambition**

The 26-28% reduction of greenhouse gases from 2005 levels equals a reduction of 14–17% compared to 1990 levels, excluding LULUCF. The targets are slightly lower than the pathway of -30% below 2005 levels by 2025, which the US envisioned in its Copenhagen pledge back in 2010. Based on available estimates, measures already adopted or proposed in the US will reduce emissions between 19.5 and 23% below 2005 levels, meaning additional measures will be needed to achieve the 2025 target. The ambition level of the US INDC can be seen as “medium”, however the target is not yet consistent with limiting warming to below 2°C unless other countries make much deeper reductions and comparably greater effort. Also the land use sector accounting approach chosen by the US is an issue of potential concern; in accordance with the chosen “net-net” accounting approach, targets are set against base year emissions that are net of industrial GHG emissions and removals from the land sector.

Achieving the target by 2025 will be challenging for the US, as it will need to double the rate of emissions reductions it is currently scheduled to deliver through 2020. Without comprehensive national legislation from Congress, the US state and federal administrations will have to make aggressive use of all the tools at their disposal, including actions to increase energy efficiency, to reduce emissions from vehicles, power plants and production of oil and natural gas, and to decrease the use of HFCs. According to data in table 1 below in section 2.16., the US needs to reduce emissions by approximately 1.3% per year from the year 2012 level of emissions until 2025. This is a relatively ambitious annual target.

The recent US climate contributions and statements such as the US-China joint announcement on climate change in November 2014, the U.S.-China Joint Presidential Statement on Climate Change in September 2015 and the US-Brazil joint statement on climate change in July 2015, together with the INDC and the new Clean Power Plan rules of the US, give an impression that the US is willing to reach an Agreement in Paris and commit to climate action. However, the national political situation in the country remains challenging, and it is a key question, if the United States can convince the rest of the world that its target won’t unravel after the 2016 presidential elections. With no

31 Ibid.
33 Center for Climate and Energy Solutions: Achieving the United States’ Intended Nationally Determined Contribution (June 2015)
34 http:// climateactiontracker.org/countries/usa.html
39 http://www2.epa.gov/cleanpowerplan
chance of Congress enacting federal legislation to make these targets into actual US law, the White House is depending on using existing authority under the Clean Air Act and other laws, or executive orders issued by the president, to set regulations in place on power plant emissions, heavy-duty vehicles etc. This shows the limits to US action, and the challenge of raising global ambition towards the two degrees goal.  

2.3 India

Contents

India published its INDC on the evening of 1 October, just in time for the official UNFCCC Secretariat submission deadline. In its INDC India sets the following targets:

1) A 33-35 % reduction in emissions intensity of GDP by 2030 compared to 2005 levels
2) About 40 % non-fossil fuel based electric power of installed capacity by 2030
3) Creating an additional forest carbon sink of 2.5 to 3 billion tonnes of CO$_2$e by 2030
4) To better adapt to climate change by enhancing investments in sectors vulnerable to climate change.

India wishes to clarify, that the INDC does not bind it to any sector specific mitigation obligation, including the agriculture sector. The targets are to be seen as overall goals.

Equity aspects

India states that its INDC is based on the 1992 Convention, and that the targets represent the “utmost ambitious action” in the current state of development of the country. India recalls its low per capita emissions (1.56 t CO$_2$e in 2010), and that it houses the largest population of the global poor (30 %) and around 24 % of the global population without access to electricity. It also estimates that more than half of the India in 2030 is yet to be built, as the population grows and rapid urbanization is ongoing. India says its INDC is “fair and ambitious” considering that India is attempting to work towards a low emission pathway while endeavouring to meet all the developmental challenges it faces.

Links to finance

India’s INDC seems to be conditional to additional Means of Implementation (finance, technology and capacity building). India estimates the preliminary amount of finance needed until 2030 to be at least 2.5 trillion USD, however this presumably includes both national and international finance. The INDC is somewhat vague on the conditionality on finance, and what sources of finance are expected, even though it has given clear numbers for finance needed for mitigation and adaptation actions.

40 Questions from the White House climate goals, http://www.eenews.net/stories/1060016104
41 Intended Nationally Determined Contribution of India, 1 October 2015
In its INDC India also mentions its domestic financing instruments for climate change actions. It says that the maximum share of India’s current climate finance comes from public sources, as most of the resources for adaptation and mitigation are built into the ongoing sectoral programmes. However, in addition India is experimenting with a mix of market mechanisms together with fiscal instruments and regulatory interventions to mobilize finance to climate change. India also plans setting up its own “Adaptation Fund”.

**Level of Ambition**

Within the next 20 years, India will likely surpass China in both population and energy use. India has strongly emphasized that its foremost priorities are development and economic growth. It has so far refused to cap its greenhouse gas emissions because its per capita emissions are so low, ranking it 130th in the world, even though the country has the third largest total GHG emissions.  

World Resources Institute (WRI) sees India’s emissions intensity target could be more ambitious, as it actually reflects the scale of mitigation that would result from its planned investments in renewables. Several studies suggest that India could reduce its emissions intensity by that much or more even in the absence of significant new measures. According to the WRI, India’s renewables target sets a clear signal, and achieving it would result in at least 200 GW of new renewable capacity by 2030. However, if India achieves its previously announced goal of 175 GW of renewable energy by 2022, much of this capacity will come sooner than the INDC goal demands. Yet, WRI sees the 2022 renewables target very ambitious. Between 2001 and 2011 the GDP emissions intensity of India was already reduced by 33%. In light of this development, India’s objective to further improve the emissions intensity by a similar amount in a longer time period is not very ambitious.

Many environmental organisations in India think that the country’s INDC is relatively ambitious, taking into account the level of development. "India's INDC is fair and is quite ambitious, specifically on renewable energy and forestry. It reflects its development challenges, aspirations of large numbers of poor people and the realities of climate change," said India’s Center for Science and Environment. The Center also stated that: "From all angles, India's INDC is as good as China's and better than the US's considering that both these countries have higher emissions than India and are economically more capable of reducing their emissions and mitigating climate change".

Director Sanjay Vashist from the Climate Action Network South Asia (CANSA) said that India, through its INDC, demonstrates its willingness to play an important role on the international stage ahead of climate talks in December in Paris. According to him "India's signal could no doubt be much stronger, going even further to help the international

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43 http://www.wri.org/blog/2015/10/5-key-takeaways-india%E2%80%99s-new-climate-plan-indc
community avoid unmanageable climate impacts, should the rich and developed countries step up and provide adequate finance and technology support".  

2.4 Russia

Russia in its INDC intends to limit GHG emissions to 70-75% of 1990 levels by the year 2030 (meaning a 25-30% reduction of emissions from 1990 levels). This is conditional with “maximum possible account of absorbing capacity of forests”. However, the INDC does not contain information on accounting rules for forestry or its impacts on emissions levels in 2030. The INDC is economy-wide, covers all GHGs and does not contain the use of international market mechanisms.

Russia underlines the importance of forest as the country accounts for 70% of boreal forests and 25% of the world’s forest resources. Therefore, forest management is one of the most important elements of the Russian policy to reduce GHG emissions.

Equity aspects

Russia’s INDC does not directly discuss the issue of fairness or equity. The INDC states that states during 2000-2012 GDP growth and GHG emissions have been decoupled: and that this tendency is expected to continue towards 2030 as Russia will continue focus on sustainable forest management, further raise the level of energy efficiency and reduce energy intensity of the economy and increase share of renewables. Therefore, according to the INDC, if the contribution of forests is fully taken into account, limiting GHG emissions to 70-75% of 1990 levels by the year 2030 does not create any obstacles for social and economic development. This is because Russia’s emissions can actually be increased from the current levels to reach the INDC target, and thus strict mitigation targets do not hinder social development and economic growth. The INDC mentions the global significance of the Russian boreal forests for e.g. mitigating climate change and protecting biodiversity. Forest management thus becomes central in Russian policy to reduce emissions.

Links to finance

Russia does not mention finance in its INDC. Russia has not pledged finance to the Green Climate Fund so far (situation September 2015).

Level of Ambition

Russia has already in force legally-binding instruments aimed at limiting GHG emissions to at maximum 75% of 1990 levels by the year 2020, which is the same as the upper range of the 2030 emissions target (-25% by 2030). It is unclear whether LULUCF is taken into account in the 2020 target. If Russia would reach the Copenhagen pledge levels in 2020, it would mean that the emissions would stay the same for the decade

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45 Ibid.
46 Russia’s Intended Nationally Determined Contributions (unofficial English translation)
2020-2030, if Russia would use the less ambitious end of the target range (-25% from 1990 levels). This is not an enhancement of ambition from the current actions.

Russia’s INDC is not ambitious, as the country could actually increase its emissions by 40-50 percent above current levels by 2030. This is due to the fact that the country’s greenhouse gas emissions have already dropped 50 percent from 1990 levels, mainly due to the collapse of the Soviet Union in the early 1990s.47 The Russian population has decreased by 4.5 million from 1990 levels48, but at the same time the GDP has grown about 3.6 times the amount in 1990 to 1.861 trillion USD in 201449. In the Figure 4 below, the development of Russia’s emissions in 1990-2012 is pictured. It can be seen that land use and forestry sector has acted as a major carbon sink after the collapse of the Soviet Union as forests grew on abandoned farmland, and that recently the greenhouse gas emissions have been on the rise. The total emissions (including LULUCF) in 2012 are still not even 50% of the total emissions in 1990.

Figure 4. Russia’s greenhouse gas emissions development in 1990-2012. Source: Carbon Brief based on UNFCCC data50

After the Soviet Union fell, Russia’s emissions declined as industry collapsed, while forests grew over abandoned farmland. Chart by Carbon Brief based on UNFCCC data

Russia states in the INDC that it has been able to decouple economic growth and GHG emissions. Although LULUCF accounting rules are yet to be defined, Russia anticipates that it does not need to undertake any additional measures in achieving INDC target if forests are taken into account.

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47 http://www.wri.org/blog/2015/04/russia%E2%80%99s-new-climate-plan-may-actually-increase-emissions
50 http://www.carbonbrief.org/blog/2015/04/ambiguous-russian-climate-pledge-mystifies-many/
2.5 Mexico

Contents

In the INDC, it is stated that Mexico is committed to an unconditional reduction of GHG by 25% below Business-As-Usual (BAU) levels for 2030. Further, Mexico states in the INDC that the 25% reduction commitment could be increased, up to a 40% reduction target, conditional on a global agreement and international support. The target includes the following gases: carbon dioxide (CO\(_2\)), methane (CH\(_4\)), nitrous oxide (N\(_2\)O), sulphur hexafluoride (SF\(_6\)), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs) and black carbon. Notably, nitrogen trifluoride (NF\(_3\)) is not included. The INDC also states that this commitment implies a peaking year of 2026 for greenhouse gas emissions, and reducing emissions intensity per unit of GDP by around 40% from 2013 to 2030.

Mexico’s unconditional INDC commitment will be met without the use of carbon market mechanisms, although Mexico states that these would assist cost-effective implementation. However achieving the conditional -40% goal will require “fully functional bilateral, regional and international market mechanisms”. Mexico includes a baseline in the INDC, both for GHGs and black carbon. However, the given baseline is higher than what Climate Action Tracker estimate as the current trend with implemented policies.

Mexico’s INDC also includes targets related to adaptation: it will strengthen the adaptive capacity of at least by 50% the number of municipalities in the category of “most vulnerable”, establish early warning systems and risk management at every level of government and reach a rate of 0% deforestation by the year 2030.

Equity aspects

Mexico sees that the translation of previously aspirational goals into mandatory goals provides for ambition of the INDC. The INDC explicitly mentions that Mexico is a developing country, with national emissions of only 1.4% of global emissions and net per capita emissions of 5.9 tCO\(_2\)e. Further it states that the “commitment constitutes a considerable increase in the level of ambition for a developing country with moderate levels of emissions”.

Mexico considers the INDC to be fair and ambitious due to the inclusion of an unconditional GHG mitigation commitment. The INDC represents the first such undertaking by Mexico and the commitment amounts to a 22% reduction by 2030. Inclusion of the black carbon in the numbers increases the commitment to 25%. Mexico also states that its INDC is consistent with Mexico’s pathway to reduce 50% of GHG emissions by the year 2050.

Links to finance

Mexico has pledged a symbolic 10 million USD to the Green Climate Fund, showing its role also as a source of climate finance.\(^5\) The only reference to finance in Mexico’s INDC is in the conditions for increasing the level of ambition from 25% to 40%. The conditions include sufficient international support and that the 2015 Agreement needs to address the

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topics of an international carbon price, carbon border adjustments, technical cooperation, access to low cost financial resources and technology transfer.

**Level of Ambition**

Mexico became an OECD member country in 1994, only 2 years after the Convention was negotiated. This means that it was quite close to achieving an Annex I status under the UNFCCC. In this light Mexico’s target, being a “BAU” target instead of an absolute emission reduction target, can be seen as somewhat unambitious. Mexico relies quite heavily on fossil fuels for power production, as can be seen from Figure 3 above. Still, the country’s emissions per capita and emissions intensity of GDP are relatively low, and the GHG emissions excluding and including LULUCF are on almost the same level, so these factors could signal that there would not be a very large emission reduction potential in the country.

French institute IDDRI states that projections under Mexico’s current policy framework estimate GHG emissions above 800 MtCO$_2$ in 2030, which is less than 20% below BAU. Thus the INDC target would require rapid reversal of current trends, as well as additional and scaled-up actions and policies to reach the targeted levels.$^{52}$ Climate Action Tracker classifies Mexico’s INDC as “medium”, and notes that Mexico’s progress in policy planning and institution building has been remarkable, including the adoption of the General Law on Climate Change in 2012, marking the first climate law in a developing country. The 25% pledge by Mexico implies a reduction of 22% of GHGs and a reduction of 51% of black carbon. However, the role of black carbon in global warming is debated and currently still highly uncertain.

A positive element of the INDC is that the emissions reduction goal is economy-wide. At the time of its submission it was the first economy-wide unconditional target from a non-Annex I country. A further positive element is that both an unconditional and a conditional reduction target are given in the INDC. A negative element is that the goals are given relative to baseline emission projections, which are rather uncertain.

## 2.6 Indonesia

**Contents**

Indonesia commits in its INDC to an unconditional target of 29 % reduction from BAU level by 2030. The BAU scenario emissions would be approximately 2.881 Gt CO$_2$e in 2030. Conditional to international support, Indonesia could increase its contribution to 41 % below BAU level by 2030. The INDC of Indonesia covers carbon dioxide (CO$_2$), methane (CH$_4$) and nitrous oxide (N$_2$O) emissions and the following sectors: energy including transport, industry, agriculture, LULUCF and waste. Use of market mechanisms is not included in the unconditional target.

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$^{52}$ [http://www.blog-iddri.org/2015/05/19/the-mexican-indc-a-conditional-target-that-calls-for-collective-climate-action/](http://www.blog-iddri.org/2015/05/19/the-mexican-indc-a-conditional-target-that-calls-for-collective-climate-action/)
Most of the mitigation actions will be done in the LULUCF sector. The commitment will be implemented through effective land use and spatial planning, sustainable forest management, restoring degraded ecosystems, improved agriculture and fisheries, promotion of clean and renewable energy sources and improved waste management. Indonesia’s INDC is a by-product of the Indonesia Mitigation Policy (RAN-GRK) Review Process. Indonesia also has set goals for adaptation - it will reduce risks on all development sectors by 2030 through e.g. local capacity strengthening, improved knowledge and management and application of adaptive technology.

Equity aspects

According to its INDC, 11 % of Indonesia’s population is living in poverty, and thus the country strives for an at least 5 % GDP growth per year to reduce the poverty rate below 4 % by 2025. Despite this challenge, Indonesia is committed to a low-carbon pathway and contributing to achieving the global 2°C target. The country is also looking at setting a peaking year for greenhouse gas emissions in the future.

Links to finance

Indonesia has set a higher target of 41 % below BAU level, which is conditional to technology development and transfer, capacity building, payment for performance mechanisms, technical cooperation and financial support from developed countries.

Level of Ambition

Indonesia is the fourth most populous country and fifth largest emitter of GHGs in the world (when taking LULUCF into account). About 86% of the country’s emissions come from land use. Many recent REDD+ efforts have focused on Indonesia, with the most influential being the Norway-Indonesia bilateral REDD+ Partnership. One of the outcomes from Norway’s assistance to Indonesia is the preparation of the Forest Reference Emission Level (FREL), which includes all land sector emissions, and which was prepared and presented in 2014.

According to the World Resources Institute (WRI), the unconditional target of Indonesia’s final INDC (-29 % from BAU) does not enhance the ambition of the GHG reduction target much beyond the already pledged Copenhagen pledge of -26 % below BAU by 2020. Also, it is not very clear what the BAU emission level numbers in the INDC are based on. Indonesia’s INDC does not provide clarity on its plan to deal with its recurring forest and peatland fires, one of the greatest sources of emissions in recent years. The INDC also lacks a quantified forest restoration pledge. Indonesia’s existing moratorium policy

53 INDC of Indonesia, 24 September 2015
54 http://unfccc.int/files/cooperation_and_support/capacity_building/application/pdf/indonesia_indc.pdf
55 INDC of Indonesia, 24 September 2015
56 WRI CAIT 2012 data
57 http://www.wri.org/blog/2015/09/details-indonesia%E2%80%99s-climate-plan-remain-hazy
offers significant mitigation potential, as the policy calls for no new licenses to convert primary forests and peatlands for other uses such as timber, wood pulp, and palm oil. The policy has already reduced Indonesia’s emissions from forest clearing by 1-2.5% over four years, but it alone is not enough to reach the INDC target.58

2.7 Brazil

Contents

Brazil commits in its INDC to an economy-wide unconditional absolute GHG reduction target of 37% below 2005 levels by 2025. It is the only non-Annex I country (situation 1 October 2015) to take on such absolute reduction target in its INDC. Brazil also gives an indicative target for the year 2030, a reduction of 43% below 2005 levels. The target covers all sectors, including LULUCF, and all major greenhouse gases except nitrogen trifluoride (NF₃). Brazil reserves its position in relation to the possible use of any market mechanisms that may be established under the Paris Agreement.

Brazil intends to fulfill the targets by actions especially in the forestry and land use sector. Brazil plans to strengthen policies and measures with a view to achieve zero illegal deforestation by 2030 in the Brazilian Amazon. The country also plans restoring and reforesting 12 million hectares of forests by 2030, achieving 45% of renewables in the energy mix by 2030 (28-33% share for non-hydro renewables), achieving 10% efficiency gains in the electricity sector by 2030 as well as increasing the share of sustainable biofuels in the Brazilian energy mix to approximately 18% by 2030. Brazil also includes adaptation efforts in its INDC, e.g. implementing its National Adaptation Plan.59 In its Joint Statement with the US in July Brazil recognized the importance of managing hydrofluorocarbons (HFCs) and agreed to work multilaterally in the Montreal Protocol to consider promptly amendment proposals to phase down HFCs.60

Equity aspects

"Our goals are just as ambitious, if not more so, than those set by developed countries,” President Dilma Rousseff said as she announced Brazil's targets at the U.N. in New York.61 According to the INDC, Brazil's GDP increased by 32% in the period 2004-2012, while emissions dropped 52%, delinking economic growth from emissions. At the same time Brazil managed to lift more than 23 million people out of poverty. Brazil states that its INDC, while consistent with its national circumstances and capabilities, is far more ambitious than what would correspond to Brazil’s marginal relative responsibility for the global average temperature increase. Brazil’s mitigation efforts are of a type, scope and scale at least equivalent to the INDCs of those developed countries most responsible for climate change.

58 http://www.theguardian.com/environment/2015/may/08/protecting-indonesias-forests-is-a-key-issue-for-paris-climate-talks
59 Brazil’s Intended Nationally Determined Contribution, 28 September 2015
Links to finance

The implementation of Brazil’s INDC is not contingent upon international support, yet it welcomes support from developed countries with a view to generate global benefits. Specifically concerning the forest sector, the implementation of REDD+ activities and the permanence of results achieved require the provision, on a continuous basis, of adequate and predictable results-based payments in accordance with the relevant COP decisions.

Recognizing the complementary role of South-South cooperation, on the basis of solidarity and common sustainable development priorities, Brazil will undertake best efforts to enhance cooperation initiatives with other developing countries e.g. on forest monitoring systems and biofuels capacity-building and technology transfer. Brazil invites developed country Parties and relevant international organizations to further support such initiatives.

Level of Ambition

The targets would reduce Brazilian emissions from the current level of 1.6 billion tons a year to 1.5 billion tons by 2025 and 1.3 billion tons by 2030, according to World Resources Institute. Using the year 2005 as reference year means the targets already account for the substantial emission reductions made by Brazil over the past decade by reining in rampant deforestation.

In Brazil, the main climate issue is not fossil fuel emissions, but forests. The country has had one of the highest deforestation rates in the world. On the other hand Brazil has one of the lowest GHG emissions per capita and one of the lowest emissions per GDP unit of all the countries covered in this report (see Figure 2). Most of Brazil's electricity is produced with hydropower (see Figure 3), but the severe drought experienced by the country may force it to move towards using other energy sources.

In its INDC Brazil states that its targets correspond to an estimated reduction of 66% in terms of greenhouse gas emissions per unit of GDP (emissions intensity) in 2025 and of 75% in terms of emissions intensity in 2030, both in relation to 2005. This is somewhat higher than China’s similar goal of reducing emissions intensity by 60-65 % from 2005 levels by 2030.

The International Energy Agency projects that currently implemented policies in Brazil will already achieve a share of non-hydro renewables in the energy system of 28% by 2030. In that light the lower end of the range of the indicative target for non-hydro renewables seems quite unambitious.

64 http://cleantechnica.com/2015/04/07/indc-clues-large-developing-nations-part-3/
2.8 South Africa

Contents

South Africa’s INDC includes adaptation, mitigation and financial components. The mitigation target is a “peak, plateau and decline GHG emissions trajectory range”. This means that South Africa’s emissions will peak between 2020 and 2025, plateau for approximately a decade and decline in absolute terms thereafter. The greenhouse gas emissions will be in a range between 398 and 614 Mt CO$_{2}$e between 2025 and 2030. The target will cover all greenhouse gases and sectors, including land use and forestry.

South Africa includes also six adaptation targets in its INDC, including:

- developing and operationalizing a National Adaptation Plan;
- climate considerations in national development, sub-national and sector policy frameworks in 2020 – 2030;
- building institutional capacity for climate change response planning and implementation;
- developing an early warning, vulnerability and adaptation monitoring system;
- vulnerability assessment and adaptation needs framework by 2020; and
- communication of past investments in adaptation.\(^{66}\)

Equity aspects

According to its INDC, South Africa is committed to working with others to ensure temperature increases are kept well below 2°C above pre-industrial levels. In its own view South Africa faces significant rigidity in its economy, and policy-driven transition to a low carbon and climate resilient society must take into account and emphasise its overriding priority to address poverty and inequality. South Africa’s INDC should be understood in the context of these and other national circumstances. South Africa identifies itself as a developing country.

Links to finance

The higher expected target of 42 % reduction below BAU by 2025 is conditional to receiving financial support from other countries.

Level of Ambition

South Africa has the highest emissions intensity of GDP of all countries assessed in this report, as can be seen from Figure 2 above. Also, it has the highest share of fossil fuels in electricity production, and relatively high CO$_{2}$ emissions per capita (on the same level as Japan). With these figures in mind it can be said that there is significant mitigation potential in the country.

The INDC targets are stated as a wide range of emissions, rather than specific emission level targets. Under the INDC, national emissions in 2025 and 2030 will be limited to

\(^{66}\) South Africa’s Intended Nationally Determined Contribution, 25 September 2015
between 398 and 614 million tonnes of carbon dioxide equivalent (whereas emissions in 2010 were 563 million tonnes). This wide emissions range hinders accountability and creates uncertainty on the country’s future emissions path.\(^\text{67}\)

However, cutting greenhouse gas emissions will not be easy for South Africa. Climate Action Tracker analysts say that without new policies the country’s emissions could increase 82% from 1990 levels by 2025.\(^\text{68}\) South Africa has a large and intensive coal mining industry that it uses to meet the country’s growing energy demand, and it also consumes the second-most amount of petroleum in Africa. South Africa’s greenhouse gas emissions rose by 25 percent between 2000 and 2010, with a large share of the emissions coming from coal-fired power and vehicles. In an effort to curtail the rapid increase in emissions South Africa is planning to impose a carbon tax in 2016.\(^\text{69}\)

### 2.9 Japan

**Contents**

Japan INDC\(^\text{70}\) includes 2 unconditional targets:

1. a 26% reduction of greenhouse gas emissions by 2030 compared to 2013 levels (equal to a 25.4% reduction compared to 2005 levels).
2. the target for removals by LULUCF is set as approximately 37 million tCO\(_2\) by 2030, corresponding to 2.6% of total emissions in 2013. This target is part of the greenhouse gas emission reduction target, reducing the target for other sectors than LULUCF to 23.4% below 2030.

Japan intends to use market mechanisms, namely its own bilateral Joint Crediting Mechanism (JCM), in achieving its mitigation target. The amount of credits acquired by Japan through the JCM is estimated at 50-100 Mt CO\(_2\)e by 2030, which would reduce the domestic mitigation target to approximately 16-20% below 2013 levels (excluding LULUCF).

The mitigation target encompasses all sectors including LULUCF and waste, and all greenhouse gases, thus covering 100% of Japan’s emissions. Japan does not mention adaptation in its INDC.

**Equity aspects**

Japan concludes in its INDC that to solve the global problem of climate change it is essential to establish a fair and effective new international framework applicable to all major Parties. Under this international framework to be established Japan will together with all major emitters undertake domestic emission reductions and contribute to global


\(^{68}\) http://climateactiontracker.org/countries/southafrica.html

\(^{69}\) http://thinkprogress.org/climate/2014/07/14/3459903/south-africa-carbon/

\(^{70}\) Intended Nationally Determined Contribution by Japan, July 2015
emission reductions through Japan’s leading technologies and support for developing countries. Japan does not mention the concept of CBDRRC in its contribution.

Japan explains in its INDC that its greenhouse gas emissions per unit of GDP are 0.29 kg CO₂e/USD in 2013 and that the energy efficiency of the country as a whole is already at the leading level among developed countries. Thus the marginal cost of reducing GHG emissions is high in Japan due, inter alia, to the measures taken so far. Japan sees that the submission and sharing of information in this manner improves transparency and ensures fairness and enables effective reviews of the INDCs. The sector-by-sector actions that are promoted using this disclosure method would lead to fair and efficient reductions of global emissions. As a concrete example Japan uses its converted steel production and clinker production which both have according to the INDC attained world’s highest level of energy efficiency but for which further improvement is planned.

**Links to finance**

Japan does not mention finance in its INDC. However, Japan has pledged 1.5 billion USD (in Japanese currency) to the Green Climate Fund.

**Level of Ambition**

In INDC submission Japan has cited the Fukushima nuclear accident in 2011 as forcing a drastic change in its circumstances with respect to energy. The country is planning to build dozens of new coal fired power plants until 2030 to fill its energy needs, and thus it argues it cannot commit to very high mitigation ambition level. Japan plans in its INDC to get 26% of their power from coal by 2030, which is not a sustainable way forward. Japan also relies heavily on LULUCF targets and the results of the new and yet unproven Joint Crediting Mechanism. 

Japan’s contribution is one of the least stringent domestic targets of Annex I countries. Coal-fired power plants are set to play an increasingly important role in Japan according to its INDC, which is a contrary development to the actions decided under the G7 in June 2015 of phasing out fossil fuels by the end of the century. Also, it has been noted in the media, that Japan’s baseline year of 2013 gives it an advantage as that year’s emissions were higher than usual because of the shutdown of all the nuclear reactors after the Fukushima accident in 2011. In 2013 Japan registered its highest rate of emissions to date; the country’s emissions were 10.8% higher than they were in 1990. For comparison, the EU saw its emissions peak in 1979. This development caused Japan to backtrack on its 2020 pledge under the Copenhagen accord. Originally, Japan had said it would reduce its emissions by 25% on 1990 levels. In November 2013 the Japanese government announced it would instead target a reduction of 3.8% below 2005 levels, which is equivalent to an increase of 5.2% from 1990 levels. Japan’s 2030 target if equivalent of a 25.4% reduction from 2005 levels and around a 16% reduction from 1990

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71 Ibid.
72 http://www.theguardian.com/world/2015/jun/08/g7-leaders-agree-phase-out-fossil-fuel-use-end-of-century
levels, meaning that the INDC target is significantly lower in ambition than Japan’s initial 2020 Copenhagen pledge.\textsuperscript{74}

The Climate Action Tracker rates Japan’s contribution as “inadequate”, and that Japan’s target is not in line with the 2°C goal. Japan can almost reach its target with the policies it has already in place, therefore no major additional actions are needed. The mitigation target excluding the LULUCF sector is 15 % compared to 1990 levels, and the use of credits through the JCM brings the domestic target further down to 7-11 % from 1990 levels.\textsuperscript{75}

2.10 Australia

\textit{Contents}

In its INDC Australia states that it will implement an economy-wide target to reduce its greenhouse gas emissions by 26 to 28 per cent below 2005 levels by 2030.\textsuperscript{76} Australia reserves the right to adjust its target and its parameters before it is finalised under a new global agreement.

The target covers the following sectors: energy, industrial processes and product use, LULUCF and waste. It covers the following gases: carbon dioxide (CO\textsubscript{2}), methane (CH\textsubscript{4}); nitrous oxide (N\textsubscript{2}O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF\textsubscript{6}) and nitrogen trifluoride (NF\textsubscript{3}). Thus it will cover 100 % of greenhouse gas emissions and removals in Australia’s national greenhouse gas inventory. The target will be developed into an emissions budget covering the period 2021-2030.

\textit{Equity aspects}

The INDC defines the Australian contribution as ambitious, fair and responsible towards the objectives of the UNFCCC and to limiting temperature rise. In the INDC it is considered that the -26 to -28 % target is a significant progression beyond Australia’s 2020 levels, doubling the rate of emission reductions per GDP compared to 2020. It is also stated that the target is comparable to the targets of other advanced economies across a range of metrics.

According to the INDC the target represents serious and ambitious efforts for Australia. Australia’s effort takes account of Australia’s unique national circumstances, including a growing population and economy, role as a leading global resources provider, its current energy infrastructure, and higher than average abatement costs. The INDC does not mention the principle of CBDRRC.

\textsuperscript{74} http://www.carbonbrief.org/blog/2015/07/japans-2030-climate-pledge-leaves-room-for-coal-expansion/

\textsuperscript{75} http://climateactiontracker.org/countries/japan.html

\textsuperscript{76} Australia’s Intended Nationally Determined Contribution to a new Climate Change Agreement, August 2015
**Links to finance**

Australia’s INDC does not mention finance to developing countries. However, Australia has so far pledged 187 million USD to the Green Climate Fund to finance climate action in developing countries. On domestic finance the INDC states that Australia’s Emissions Reduction Fund supports Australian businesses to reduce emissions while improving productivity, by purchasing emission reductions through auctions.

**Level of Ambition**

In its INDC Australia states that against 2005 levels its target is represents projected cuts of 50-52 % in emissions per capita by 2030 and 64-65 % per unit of GDP by 2030. Therefore Australia sees its targets as relatively ambitious compared to other developed countries such as the United States.

Australia relies heavily on fossil fuels. As can be seen from the Figure 3 above, the country’s share of fossil fuels in power production is approximately 90 %, which is the highest of the large developed countries. In the light of the previous Prime Minister Tony Abbott’s approach to climate change, such as repealing the Australian carbon tax scheme in 2014, the Australian INDC is on an expected, or even a relatively ambitious level. Given that the INDC will still result in Australia having the highest per capita emissions in the OECD, it cannot be said that Australia is providing leadership on the key issue of ambition.

According to the Sydney-based Climate Institute\(^ {77}\) Australia’s target is not ambitious enough to be compatible with the maximum 2°C target for global warming. The Institute states that if other countries took the same approach as the Australian government, the world would warm by 3-4°C compared to pre-industrial times. Even fulfilling its target Australia would still be the highest per capita greenhouse gas emitter among developed economies in 2030, with its per capita emissions (18 tonnes CO\(_2\)e) on triple the level of the EU average in 2030 (6 t CO\(_2\)e), and almost double than the US (10 t CO\(_2\)e). The Climate Institute has calculated that Australia’s target corresponds to a 20 % reduction of emissions from the 1990 level, which is the base year used by EU in its INDC\(^ {78}\).

The Australian government has argued that its target will equal the efforts undertaken by other countries due to Australia’s population growth. Australia does not plan to make use of the international carbon market, but will reconsider allowing emitters buying foreign offsets in a climate policy review in 2017-2018.\(^ {79}\) If the use of offsets is allowed, this could further reduce the ambition level of the country’s domestic emission reduction actions.

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\(^{78}\) EU’s target is an at least 40 % reduction from the 1990 level

\(^{79}\) Carbon Pulse: Australia sets 26-28% emission reduction target by 2030, 11 August 2015
2.11 Turkey

Contents

Turkey sets a target of up to 21% percent reduction in GHG emissions from the BAU level by 2030. The BAU emission level is estimated at 1175 Mt CO$_2$e in 2030. The target is economy-wide (including LULUCF), and it covers all 7 greenhouse gases in the national inventory. Turkey aims to use carbon credits from international market mechanisms to achieve its 2030 target, but does not specify how much credit would be used.

Equity aspects

Turkey does not specifically state that its INDC is fair or ambitious. However, Turkey states in its INDC that it faces financial and technological constraints, and that it has to continue its sustainable development process. Turkey also states that it is responsible for only 0.7% of global emissions since the industrial revolution, and that rapid industrialisation and urbanisation has taken place in the country in the last 30 years. It states that the INDC provides additional policies, plans and measures in many sectors.

Links to finance

The INDC of Turkey is not conditional to international finance. However, it states that “in view of successfully implementing this INDC, Turkey will use domestic sources and receive international financial, technological, technical and capacity building support, including finance from the Green Climate Fund”.

Level of Ambition

The notion of “up to” 21% reduction can mean that the country could lower its ambition level from the stated target. It gives a very vague impression of the overall ambition level of the country. The INDC also does not specify the amount of carbon credits Turkey would use, so it is difficult to estimate the level of domestic action. According to the BAU scenario figure in Turkey’s INDC the country can more than double (increase by 116%) its current emissions to reach the -21% from BAU target, compared to a 173% increase under BAU. The plan would allow Turkey’s emissions to increase at an even faster rate to its growth over the previous ten years, which makes it quite unambitious.\(^8^0\)

2.12 Republic of Korea

Contents

In its INDC\(^8^1\) Korea states that it plans to reduce its greenhouse gas emissions by 37% from the business-as-usual (BAU, 850.6 Mt CO$_2$e) level by 2030 across all economic

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\(^8^0\) http://carbon-pulse.com/turkey-submits-indc-for-its-emissions-to-rise-116-by-2030/

\(^8^1\) Intended Nationally Determined Contribution of the Republic of Korea, June 2015
sectors. This target is unconditional, but Korea will partly use carbon credits from international market mechanisms to achieve its 2030 mitigation target.

Sectors covered are in the target are energy, industrial processes and product use, agriculture and waste. A decision on whether to include LULUCF will be made at later. Gases covered include all major greenhouse gases: carbon dioxide (CO₂), methane (CH₄); nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF₆) and nitrogen trifluoride (NF₃).

Republic of Korea also aims to strengthen its capacity for climate change adaptation by implementing actions such as developing disaster prevention and stable water supply systems, and strengthening infrastructure for climate change monitoring, forecasting and analysis.

**Equity aspects**

In its INDC Korea refers to its mitigation target as fair and ambitious to the extent possible. According to the INDC the mitigation potential of Korea is limited due to an industrial structure with a large share of manufacturing and a high energy efficiency of major industries. As a consequence of a change of public opinion after the Fukushima accident Korea views its possibilities to use one of the major mitigation measures available (i.e. nuclear power) as limited. Despite these challenges Korea is according to its INCD setting a target in line with the IPCC Fifth Assessment Report and aims to reduce its emissions in accordance with the recommendations of the IPCC in the aforesaid report. The INDC does not refer to equitability or the principle of CBDRRC nor does it refer to Korea’s status as a developing country under the Kyoto Protocol.

**Links to finance**

There is nothing mentioned on finance in Korea’s INDC. However, Korea has pledged 100 million USD to the Green Climate Fund, which is by far the largest amount pledged by a non-Annex I country of the UNFCCC.

**Level of Ambition**

Even though the Republic of Korea is listed as a non-Annex I country in the UNFCCC and its Kyoto Protocol, it has developed economically after 1992 to a level of Annex I countries, with a Gross Domestic Product per capita of 34 356 USD in 2014 (World Bank data). This equals the level of e.g. Spain or New Zealand. Korea became an OECD country in 1996, some years after the UNFCCC was negotiated, and thus it was not added to the Annex I list. The Climate Action Tracker sees that Korea’s economic circumstances and development would have allowed for it to take on a national absolute legally binding mitigation target, and thus the BAU target is deemed insufficient.

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82 Ibid.
83 World Bank: GDP per capita, PPP (current international $). Link
84 http://unfccc.int/parties_andObservers/items/2704.php
The Republic of Korea is among the top ten countries with highest carbon dioxide emissions per capita, 11.86 t CO\(_2\) in 2012. This is well above the OECD average of 9.68 t CO\(_2\)^85, and therefore Korea can be seen as a major emitter. From this perspective it would be reasonable to limit Korea’s emissions with legally binding targets. It is significant that Korea does not mention its non-Annex I status in its INDC, which gives the impression that Korea would not insist on sticking with the Annex division of the UNFCCC in the case of the 2015 Agreement.

The BAU target of the Republic of Korea amounts to emissions 81% above 1990 emission levels (536 MtCO\(_2\)e) excluding LULUCF, and if other countries would follow Korea’s approach global warming would be in the range of 3-4°C. Furthermore Korea has stated that it will use international market mechanisms, but has not specified in its INDC the share of credits in achieving the mitigation target.\(^86\) However, in a separate Korean language document the country has stated that a 25.7 % reduction from BAU levels would be achieved domestically and in addition 11.3 % through international mechanisms. This amounts to about 30 % of the mitigation commitment being achieved through international credits.\(^87\) In this case the domestic emission target would equivalent to 115% above 1990 emission levels excluding LULUCF.\(^88\)

2.13 Canada

Content

According to its INDC, Canada has an economy-wide target of reducing GHG emissions by 30% between 2005 and 2030. The target includes the following gases: carbon dioxide (CO\(_2\)), methane (CH\(_4\)), nitrous oxide (N\(_2\)O), sulphur hexafluoride (SF\(_6\)), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), nitrogen trifluoride (NF\(_3\)). In the INDC it is written that Canada is “committed to doing more in concert with all major emitters”, calling for joint efforts. Canada states that it may also use international mechanisms to achieve the target, subject to robust systems that deliver real and verified emissions reductions.\(^89\)

According to Climate Action Tracker, by using a net-net approach, Canada includes LULUCF in its 2030 GHG mitigation framework. After accounting for forestry, the Canada’s target translates into a reduction of 21% between 2005 and 2030 according to Climate Action Tracker (using LULUCF credits weakens the INDC, as these credits can be used to offset emissions increases in other sector).

Equity aspects

\(^{85}\) https://data.oecd.org/air/air-and-ghg-emissions.htm
\(^{86}\) http://climateactiontracker.org/countries/southkorea.html
\(^{87}\) Ministry of Environment of Korea (2015). Korea confirmed 2030 greenhouse gas reduction target of 37% reduction as compared to BAU (851 million tons) (in Korean) Link
\(^{88}\) http://climateactiontracker.org/countries/southkorea.html
\(^{89}\) Canada’s Intended Nationally Determined Contribution
Canada states in its INDC that every country must do its part to address climate change. The Canadian INDC states that the country is responsible for only 1.6% of the global greenhouse gas emissions, that it is committed to do its part and that the target to reduce greenhouse gases is ambitious but achievable. Canada affirms it continued commitment to develop an agreement that is fair, effective and includes meaningful and transparent commitments from major emitters. The INDC does not include a reference to the equitability of the Canadian efforts in relation other countries or to the principle of CBDRRC.

**Links to finance**

According to the INDC, since 2006, the Government of Canada has invested more than $10 billion in green infrastructure, energy efficiency, cleaner fuels and smart grids. It is further stated that “Canada will focus climate-related investments in innovative production technologies to continue to drive further improvements in environmental performance in the oil sands and other growing sectors”. Canada has pledged 277 million USD to the Green Climate Fund.

**Level of ambition**

If compared to the base year used by the EU, Canada’s contribution is equivalent to only a reduction of 2% below 1990 levels by 2030, when sinks are taken into account. Climate Action Tracker classifies Canada’s INDC as “inadequate”, but also notes that Canada will miss the 2030 INDC pledge by a wide margin. The projection is that with policies, Canada’s emissions excluding LULUCF are projected to increase with 1% between 2005 and 2020 and with 8% between 2005 and 2030. In order to be classified as *sufficient* Canada would need to need to set a reduction target of 73% between 2005 and 2030. For comparison, Canada’s Kyoto Protocol target for the first commitment period 2008–2012 was a reduction of 6% below 1990 levels. In December 2011, Canada withdrew from the Kyoto Protocol. In 2012, Canada reported an emissions increase of 18% above 1990 levels.  

The extraction of oil from tar sands presents a clear risk for reducing emissions. Canada’s emissions from tar sands have already increased by 79% between 2005 and 2012, to represent 9% of Canada’s total emissions. The increasing in emissions is expected to continue. Moreover, the EU and the United States will achieve their targets without using international market mechanisms, while Canada has indicated it may use such mechanisms – to an unstated extent – to meet its goal. This means that Canada’s reductions undertaken domestically may not reach the level of its stated target.

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90 http://climateactiontracker.org/countries/canada.html
91 Ibid.
92 http://www.wri.org/blog/2015/05/canadas-proposed-climate-commitment-lags-behind-its-peers
2.14 Democratic Republic of Congo

Contents

In its INDC, published on 18.8.2015 the Democratic Republic of Congo (DRC) commits to a conditional target of reducing its emissions by 17% by 2030 compared to Business-As-Usual (BAU) emissions. The BAU emissions are estimated to be 430 MtCO$_2$e in 2030, thus the emission reduction from BAU level is estimated to be around 70 Mt. The mitigation actions are conditional to provision of adequate support in terms of financial resources, technology transfer and capacity building.

The sectors included in the mitigation target are LULUCF, agriculture and energy. The greenhouse gases considered under the target are carbon dioxide, methane and nitrous oxide. Industrial and waste sector are not considered, because of their minimal contribution to the country’s greenhouse gas emissions. Regarding LULUCF, the country intends to plant 3 million hectares of forest by 2025, which would sequester approximately 3 million tons of CO$_2$. This is included in the mitigation target.

The INDC also includes an adaptation contribution, based on its National Action Programme of Adaptation to Climate Change (NAPA, 2006). The NAPA includes three priority areas regarding adaptation: securing livelihoods of rural and urban communities, rational management of forest resources and protection of vulnerable ecosystems in coastal areas. On adaptation, the country estimates its financing needs of about 9.1 billion USD, describing the impacts of climate change on the country and particular vulnerabilities.

Equity aspects

The INDC recalls that DRC is a Least Developed Country and that it has the lowest ratings on the Human Development Index (ranked 186$^{th}$ in the world) and thus faces many challenges in relation to economic and social development. A part of the DRC’s economic activities, e.g. agriculture, are vulnerable to climate change and the INDC states that the DRC shall prioritize the mitigation of risks related to the impacts of climate change.

According to the INDC the emissions of DRC account for 0.5% of the global emissions in 2010 and the emissions in relation to GDP are very low. DRC also constitutes a carbon sink. Despite the aforesaid the country is proposing to implement actions that reduce emissions with 17%. The DRC views this target as ambitious and equitable in this context.

Links to finance

The mitigation actions are conditional to provision of adequate support in terms of financial resources, technology transfer and capacity building. The DRC estimates the total cost of reaching the mitigation target to be around 12.54 billion USD, and reaching the adaptation target around 9.1 billion USD. It is not mentioned in the INDC which sources this financing would come from.
Level of Ambition

As the DRC is a Least Developed Country it is remarkable that it has committed to a mitigation target in addition to an adaptation target, even though the commitment is conditional to international finance. The effects of climate change and adaptation measures are more of a priority to the country than mitigation, as it is among the most vulnerable countries and does not have enough financial resources to cope with the effects. It can be seen as an encouraging development, that also LDCs are willing to take on targets in the Paris Agreement. LULUCF is the most important sector for the country in regards to greenhouse gases, and the sector's emissions development is key for the DRC to reach its mitigation targets.

The contribution of the DRC to global warming is small, as can also be seen from Figure 1 above. The other sectors than LULUCF emit very small amounts of greenhouse gases, and the INDC describes the forest cover of the country to be a net carbon sink. Therefore achieving any type of mitigation target can be considered ambitious for the country.

2.15 Comparison of INDCs and country data

Countries with absolute greenhouse gas reduction targets

In Table 1 below INDCs with absolute reduction targets are compared, and an annual reduction rate for each is calculated from current (year 2012) emissions to the target year. The annual reduction rate is calculated in percentage points (abbreviated pp), i.e. the percentage reduction between 2012 and the target year is divided with the length of the period in years. This approach gives insight into the ambition level of the proposed commitments, and makes them easier to compare with each other. The same numbers for the EU are given as comparison, even though it is not as such evaluated in this report.

From Table 1 it can be seen that the annual reduction rate of the US (-1.35 pp to -1.52 pp per year between 2012-2025) is approximately same as that of the EU (-1.43 pp per year between 2012-2030), when LULUCF emissions are excluded. Somewhat surprisingly, Australia, Canada and Japan, whose INDCs have been deemed “unambitious” in the above assessments, have even higher annual reduction rates from current emission levels by 2030 than the EU or US. This means that they have a harder task in annual reduction terms in achieving their targets. Russia is in its own league in the Annex I countries regarding the level of unambition of its INDC – it is the only country that can actually increase its emissions from current levels. If LULUCF emissions are taken into account, as Russia wants in its INDC, it could increase emissions with 2.27 to 2.83 pp annually until 2030.

Brazil’s contribution is the only non-Annex I country with an absolute reduction target. It is very ambitious, and has the highest annual reduction rate from current emission levels of all the selected countries. Brazil’s target gives an impression that the country is willing to joint the Annex I countries in leading the efforts in combating climate change, and showing other (more developed) developing countries the way out of the Kyoto Protocol world.
Table 1: Annual reduction targets of selected countries with absolute reduction targets. Sources: INDCs, UNFCCC Greenhouse Gas Inventory Data, WRI CAIT93.

<table>
<thead>
<tr>
<th>Country</th>
<th>Reduction period</th>
<th>Conditionality</th>
<th>Contribution</th>
<th>Annual reduction excl. LULUCF</th>
<th>Annual reduction incl. LULUCF</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>in percent by the end of the period</td>
<td>in percentage points per year in reduction period starting from 2012 (2013 for Japan)</td>
<td>in percentage points per year in reduction period starting from 2012 (2013 for Japan)</td>
</tr>
<tr>
<td>Australia</td>
<td>2005..2030</td>
<td>Unconditional</td>
<td>-26%..-28%</td>
<td>-1.60..-1.70</td>
<td>-1.52..-1.63</td>
</tr>
<tr>
<td>Brazil 1</td>
<td>2005..2025</td>
<td>Unconditional</td>
<td>-37%</td>
<td>-3.67</td>
<td>-2.22</td>
</tr>
<tr>
<td>Brazil 1</td>
<td>2005..2030</td>
<td>Indicative</td>
<td>-43%</td>
<td>-2.93</td>
<td>-1.98</td>
</tr>
<tr>
<td>Canada</td>
<td>2005..2030</td>
<td>Unconditional</td>
<td>-30%</td>
<td>-1.46</td>
<td>-1.41</td>
</tr>
<tr>
<td>Japan</td>
<td>2013..2030</td>
<td>Unconditional</td>
<td>-26%</td>
<td>-1.53</td>
<td>-1.53</td>
</tr>
<tr>
<td>Russia</td>
<td>1990..2030</td>
<td>Conditional to LULUCF</td>
<td>-25%..-30%</td>
<td>0.15..0.55</td>
<td>2.27..2.83</td>
</tr>
<tr>
<td>United States</td>
<td>2005..2025</td>
<td>Unconditional</td>
<td>-26%..-28%</td>
<td>-1.35..-1.52</td>
<td>-1.31..-1.48</td>
</tr>
<tr>
<td>European Union</td>
<td>1990..2030</td>
<td>Unconditional</td>
<td>-40%</td>
<td>-1.43</td>
<td>-1.34</td>
</tr>
</tbody>
</table>

**Countries with other types of mitigation targets**

In Table 2 below the selected countries with reduction targets relative to BAU or other measure, such as peaking year for emissions, are listed. Of these countries the annual reduction rates in percentage points are calculated based on the information the countries have given in their INDC on the Business as Usual (BAU) emission levels or the peaking level of their emissions. In the case of China the estimations by Climate Action Tracker are used, as China does not give an indication of the emission levels in 2030 in its INDC.

From Table 2 it can be seen that South Korea has the most ambitious target in terms of annual reductions (-1.05 pp annually by 2030) of the countries with a relative reduction target. Also Mexico’s and Indonesia’s conditional targets, which are conditional to financial support, would imply an annual reduction of emissions from current levels. Reaching the more ambitious end of South Africa’s “peak and plateau” range (398 Mt) would also mean that the country would need to reduce emissions from the current level according to its unconditional target. However the higher end of the target range (614 Mt) amounts to a higher annual increase in emissions from current levels than China’s targets. China’s emission levels in 2030 are difficult to estimate based on the INDC, but based on the Climate Action Tracker projections for 2030 it can be calculated that the

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93 WRI CAIT data is used for countries which have not submitted recent (2012) data to the UNFCCC. The CAIT data is a compilation from several different sources and estimates.
annual emission increase in China would be approximately 1.55 percentage points from the current levels until 2030.

**Table 2: Annual reduction of countries with reduction targets expressed relative to BAU or a peaking year. Sources: INDCs, World Resources Institute CAIT**

<table>
<thead>
<tr>
<th>Country</th>
<th>Type of target</th>
<th>Reduction period</th>
<th>Stated BAU in 2030</th>
<th>GHG reduction target</th>
<th>Annual reduction incl LULUCF</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit</strong></td>
<td></td>
<td></td>
<td></td>
<td>in Mt CO2 eq.</td>
<td>in percentage points per year starting from 2012 until the end of the reduction period with BAU in INDC</td>
</tr>
<tr>
<td>China <strong>94</strong></td>
<td>Unconditional</td>
<td>2012..2030</td>
<td>n/a</td>
<td>Emissions to peak and intensity -60..66% by 2030</td>
<td>1.55</td>
</tr>
<tr>
<td>India</td>
<td>Conditional?</td>
<td>2012...2030</td>
<td>n/a</td>
<td>Emissions intensity -33..35% by 2030</td>
<td>n/a</td>
</tr>
<tr>
<td>Mexico</td>
<td>Unconditional</td>
<td>2012..2030</td>
<td>1110</td>
<td>-25% below BAU</td>
<td>0.62</td>
</tr>
<tr>
<td></td>
<td>Conditional</td>
<td>2012..2030</td>
<td>1110</td>
<td>-40% below BAU</td>
<td>-0.62</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Unconditional</td>
<td>2012..2030</td>
<td>2881</td>
<td>-29% below BAU</td>
<td>0.18</td>
</tr>
<tr>
<td></td>
<td>Conditional</td>
<td>2012..2030</td>
<td>2881</td>
<td>-41% below BAU</td>
<td>-0.79</td>
</tr>
<tr>
<td>South Africa</td>
<td>Unconditional</td>
<td>2012..2025</td>
<td>n/a</td>
<td>Lower threshold (398 Mt)</td>
<td>-0.79</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Upper threshold (614 Mt)</td>
<td>1.80</td>
</tr>
<tr>
<td>Korea, Rep.</td>
<td>Unconditional</td>
<td>2012..2030</td>
<td>850.6</td>
<td>-37% below BAU</td>
<td>-1.05</td>
</tr>
<tr>
<td>DRC</td>
<td>Conditional</td>
<td>2012..2030</td>
<td>430</td>
<td>-17% below BAU</td>
<td>4.28</td>
</tr>
<tr>
<td>Turkey</td>
<td>Unconditional</td>
<td>2012..2030</td>
<td>1175</td>
<td>Up to 21 % below BAU</td>
<td>7.65</td>
</tr>
</tbody>
</table>

**Turkey** has a target of reducing emissions up to 21% below BAU by 2030. The given BAU scenario is that emissions increase from 430 to 1175 Mt between 2012 and 2030. The reduction target, thus, translates to an emissions trajectory from 430 to 929 Mt, which allows Turkey to increase emissions by 7.65 pp per year assuming the -21% below BAU target. The “up to” implies that the target can be even lower.

**India**’s annual reduction rate could not be calculated from the information given in the INDC, as its targets are emissions intensity and clean energy targets, and not e.g. relative to BAU. India did not give in its INDC a level for its emissions intensity in 2005 (the base year) or an emission level for 2030. **Indonesia** on the other had did give a level of BAU emissions in its INDC, and its targets look quite ambitious based on this calculation, as the country can only increase its emissions by 0.18 pp annually until 2030. If the country would reach its conditional -41% target, the emissions would actually lower each year by 0.79 pp.

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94 Climate Action Tracker (CAT) has calculated that China’s emissions will be around 13.6 Gt CO2 in 2030, if INDC targets are reached. Current level of emissions in China is approximately 11 Gt according to CAT.
The Democratic Republic of Congo's conditional target, even though ambitious for a LDC country, would allow the country to increase its emissions by 4.28 pp by 2030 when LULUCF sector is taken into account, which is the second highest annual increase of this selected group of countries, after Turkey.

Relevant country statistics and analysis of gaps in INDCs

In Table 3 below the relevant country characteristics are gathered from statistics about GDP per capita, CO₂ emissions per capita, CO₂ emissions per unit of GDP and share of fossil fuels (excluding nuclear power) in the electricity production. This information is used to see, which countries would have the greatest mitigation potential in terms of financial capacity and emission reduction potential (such as the current emission intensity and the share of GHG emitting electricity).

When comparing the relevant country characteristics with the INDC targets, Australia could do even more efforts than other Annex I countries because it has the highest GDP per capita of the selected countries, and also the 2nd highest CO₂ emissions per capita. It also has the highest share of GHG emitting sources in electricity production (90 %). In its INDC Australia has not determined very clearly how it will reach its targets. Regarding renewable energy it only cites the Renewable Energy Target scheme, under which over 23% of Australia's electricity will come from renewable sources by 2020. For the period 2020-2030 the country does not mention how the development of renewables will continue. It states that it is commencing the development of a range of policies that will reduce emissions into the post-2020 period, but it seems the content of these policies is not yet clear.

When looking at the level of development in Brazil compared to the Annex I countries, the country's targets are relatively even more ambitious than the annual reduction rate implies. In Table 3 the relevant country characteristics show that Brazil has a significantly lower GDP per capita, CO₂ emissions per capita, CO₂ emissions per unit of GDP and share of GHG emitting sources in electricity production than any of the Annex I countries that are expected make absolute reductions between 2012 and 2030. Brazil's GDP per capita is on the same level as Russia's, which is not committing to absolute reductions from the current level.

Canada has less GHG emitting electricity production than most of the assessed countries (21 %), but it has high GHG emissions from the transport sector and the oil & gas sector. Together these two sectors account for around half (48 %) of the country's emissions. Therefore also its CO₂ emissions per capita are high; double the level of the EU, even though the electricity production in Canada is relatively clean. This means that the country would have most significant mitigation potential in transport and the oil & gas sector. These sectors are mentioned in Canada’s INDC, but no clear sector-specific targets or policies are given. Canada says it intends to develop regulations to address methane emissions from the oil and gas sector, and that has put in place progressively more stringent greenhouse gas emission standards for vehicles. How these actions will affect the achievement of the INDC targets is not clear.

95 https://www.ec.gc.ca/indicateurs-indicators/default.asp?lang=en&n=F60DB708-1
Table 3: Relevant country characteristics. Sources: World Bank, U.S. Energy Information Administration.

<table>
<thead>
<tr>
<th>Type of target</th>
<th>Country</th>
<th>GDP per capita in 2011</th>
<th>CO2 emissions per capita in 2011</th>
<th>CO2 emissions per unit of GDP in 2011</th>
<th>Share of GHG emitting sources in electricity generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolute</td>
<td>Australia</td>
<td>62.13</td>
<td>16.52</td>
<td>0.40</td>
<td>90%</td>
</tr>
<tr>
<td>Absolute</td>
<td>Brazil</td>
<td>13.28</td>
<td>2.23</td>
<td>0.15</td>
<td>13%</td>
</tr>
<tr>
<td>Absolute</td>
<td>Canada</td>
<td>52.09</td>
<td>14.14</td>
<td>0.34</td>
<td>21%</td>
</tr>
<tr>
<td>Absolute</td>
<td>European Union</td>
<td>36.22</td>
<td>7.07</td>
<td>0.20</td>
<td>48%</td>
</tr>
<tr>
<td>Absolute</td>
<td>Japan</td>
<td>46.2</td>
<td>9.29</td>
<td>0.27</td>
<td>86%</td>
</tr>
<tr>
<td>Absolute</td>
<td>Russia</td>
<td>13.32</td>
<td>12.65</td>
<td>0.56</td>
<td>67%</td>
</tr>
<tr>
<td>Absolute</td>
<td>USA</td>
<td>49.78</td>
<td>17.02</td>
<td>0.34</td>
<td>70%</td>
</tr>
<tr>
<td>Peak year, intensity</td>
<td>China</td>
<td>5.57</td>
<td>6.71</td>
<td>0.65</td>
<td>77%</td>
</tr>
<tr>
<td>BAU</td>
<td>DRC</td>
<td>0.37</td>
<td>0.06</td>
<td>0.08</td>
<td>n/a</td>
</tr>
<tr>
<td>Intensity, renewables</td>
<td>India</td>
<td>1.50</td>
<td>1.70</td>
<td>0.35</td>
<td>82%</td>
</tr>
<tr>
<td>BAU</td>
<td>Korea, Rep.</td>
<td>24.16</td>
<td>11.84</td>
<td>0.38</td>
<td>70%</td>
</tr>
<tr>
<td>BAU</td>
<td>Indonesia</td>
<td>3.66</td>
<td>2.31</td>
<td>0.26</td>
<td>88%</td>
</tr>
<tr>
<td>BAU</td>
<td>Mexico</td>
<td>9.81</td>
<td>3.91</td>
<td>0.25</td>
<td>81%</td>
</tr>
<tr>
<td>Peak range</td>
<td>South Africa</td>
<td>8.08</td>
<td>9.26</td>
<td>0.75</td>
<td>94%</td>
</tr>
<tr>
<td>BAU</td>
<td>Turkey</td>
<td>10.60</td>
<td>4.39</td>
<td>0.25</td>
<td>72%</td>
</tr>
</tbody>
</table>

Notes: Nuclear is not included in the share reported in the last column, since nuclear is a non-GHG emitting source.

Japan has one of the highest GDP per capita rates of the selected countries, close to the level of the US. This implies that there would be significant financial capacity for emission reductions. The country has relatively high CO\textsubscript{2} emissions per capita and a high share of GHG emitting fuels in electricity production, but relatively low emissions intensity of GDP. This implies that the country has a relatively efficient industrial sector, and thus emission reductions from that field could be more difficult. Japan's situation after the Fukushima accident has led to the country opening many new coal powered plants. Japan quite clearly states in its INDC what the country's energy mix will be in 2030 (nuclear coming back to 26-28 %, renewables taking 22-24% and coal remaining at 26%). Japan has also indicated in its INDC exactly where and how it intends to reduce its emissions in order to make its 26% reduction target by 2030. An oddity in Japan's emissions reduction strategy is that, by 2030, the emissions absorbed by Japan's LULUCF sector will diminish by around a third, but the reason for this is not explained in the INDC. Japan is also
somewhat vague over the use of market mechanisms in its INDC, if the planned credits from the JCM mechanism will actually be counted towards their target or not.\textsuperscript{96}

**Russia** has far lower GDP per capita than most of the assessed Annex I countries, at the same level as countries such as Brazil. Russia has quite high emissions per capita, around 80% higher than the EU level. Its CO\textsubscript{2} emissions per unit of GDP levels are the third highest of the assessed countries, after South Africa and China. The share of GHG emitting sources in electricity sources (67 \%) is not among the highest at, but it is on the same level as in US or Korea. When comparing to other Annex I countries, Russia’s lower financial resources could make it harder for the country to reduce emissions, but when comparing to Brazil with similar GDP per capita, Brazil is committing to much more mitigation actions. In this light Russia could do more than currently states in its INDC. Russia’s INDC is very short and vague on what the country is planning to do to reach the mitigation target. More clarity on the planned actions up to 2030 would be needed.

**The United States** has the highest CO\textsubscript{2} emissions per capita of the assessed countries, and one of the highest GDP’s per capita. Its emissions intensity of GDP is in the middle of the range, same as Canada’s. Compared to e.g. the EU, the US has quite high share of GHG emitting sources in electricity production (70\%). From this view, the US could do more than the EU in the post-2020 period. The US INDC includes quite a comprehensive list on policies and measures they intend to use for achieving the mitigation target, so there are no significant caps in the information.

When comparing to Annex I countries and its relative size in the world economy, **China** has a low GDP per capita (less half of the level of Brazil), therefore it can be said that China’s financial resources to combat climate change are limited. On the other hand, the emissions intensity of the GDP is the second highest of all assessed countries, and the share of GHG emitting sources in electricity generation is high (77\%), even though China is now leading the world in renewable energy investments. Therefore there is room for improvement and substantial mitigation options available. China’s INDC is quite thorough on the policies currently in place, and to be further developed to reach the 2030 targets. However, China’s INDC does not mention other greenhouse gases than CO\textsubscript{2}, and this can be seen as a major gap in the information.

**The Democratic Republic of Congo (DRC)** is a Least Developed Country, and has by far the lowest GDP per capita, emissions per capita and emissions intensity of all the assessed countries. In this view the DRC does not have much potential to reduce its emissions, and thus even its conditional BAU target can be seen as ambitious. Also the coverage of the INDC is on a relatively good level without major gaps, as it states the e.g. the expected BAU emissions and the cost of the mitigation and adaptation actions clearly.

**India** has a very low GDP per capita and very low GHG emissions per capita. In this view India has less potential to reduce its emissions than most of the other assessed countries, even though it is the 3\textsuperscript{rd} largest emitter of GHGs. Its emissions intensity per GDP is currently on the same level as US and Canada. It has a high share of GHG emitting sources in electricity production (82 pp), and this regard its target to reach 40 \% of clean energy in 2030 is a commendable target. Even though India’s INDC is very long and elaborate on several issues such as policies to reach the targets, and equity issues, there is a lack of clarity on emissions intensity in the base year (2005) and target year (2030), as well as the scope and coverage of the intensity target and the methodologies

\textsuperscript{96} \texttt{http://www.carbonbrief.org/blog/2015/07/japans-2030-climate-pledge-leaves-room-for-coal-expansion/}
for measuring it. These gaps in information make it very difficult to compare the country’s INDC to others, and its contribution to the 2°C target.

**Republic of Korea** has a GDP per capita of approximately half of the level of the US, but significantly higher than other assessed non-Annex I countries, almost double that of Brazil, which is taking an absolute reduction target. Korea’s CO₂ emissions per capita are relatively high. Therefore it could have been fair for Korea to take on absolute reduction target, as it is in many ways similar to current Annex I countries. The fact that Korea does not mention how much it will use carbon market mechanisms to fill its target, gives a vague impression on how Korea is planning to reach the target domestically.

**Indonesia** has low financial resources, as its per capita GDP is nearly half of that of China, and 10% of the level of the EU. Also its per capita emissions are among the lowest. The area where Indonesia could improve is the use of GHG emitting resources in electricity production, as currently it has one of the highest levels, 88%. Indonesia’s INDC lacks sufficient details on the modelling and assumptions of the BAU baseline and the estimated amount of required support to reach Indonesia’s conditional target (previously stated as at least $6 billion).

**Mexico**’s emission intensity per GDP is on a relatively low level, even though the electricity production relies quite heavily on fossil fuels. The country’s GDP per capita is less than in Brazil or Korea, but higher than most of the assessed non-Annex I countries. Mexico’s INDC lists current climate policies, but information on future actions to reach the target is limited. It is the only country that has targets for still contested black carbon, which somewhat confuse the BAU calculations. The country has indicated e.g. the BAU emissions in 2030 to be 1110 MtCO₂e (973 GHG and 137 Black Carbon / 152,332 metric tons). Thus it calculates together the emissions from GHGs and carbon, and this can puzzle the readers of the INDC.

**South Africa**, even though one of the major economic players of non-Annex I countries, has relatively low GDP per capita, lower than e.g. Mexico or Brazil. South Africa has relatively high emissions per capita and also emissions intensity of GDP. It relies most heavily on fossil fuels of the assessed countries. In this regard there is major abatement potential in the country, but the lower financial resources can make it more difficult. South Africa’s “peak, plateau and decline range” target might be difficult to understand for most readers of the INDC, but it is good that the country has taken on a target that actually reduces its emissions in the future. However, the range is still quite wide, and thus assessing the impact of the INDC is difficult. It would have been clearer for the country to state a more limited range or just one level of peak emissions.

**Turkey** has a low GDP per capita for an Annex I country (with special circumstances), in the level between those of Mexico and Brazil. Its emissions per capita and emissions intensity of GDP are also relatively low. However, the share of GHG emitting sources in electricity production is on the higher side, somewhat higher than in e.g. the US. The relatively low financial resources make Turkey’s mitigation activities more difficult, and thus it has taken on a BAU target. But when comparing to e.g. Brazil, which is taking an absolute reduction target, Turkey could have gone much further in its ambition level. Turkey lists well the policies and actions it plans to do to reach the 2030 target, and it also gives the BAU emission levels in its INDC. However, it is not clear how much carbon

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97 http://www.wri.org/blog/2015/10/5-key-takeaways-india%E2%80%99s-new-climate-plan-indc
credits Turkey is planning to use to reach its target, therefore the level of domestic actions is not clear from the INDC. Also the wording “up to 21 % reduction” in the BAU target is vague, as it can mean that the reduction could be lower than 21%.

**Overall assessment of the INDCs**

The 119 INDCs (EU as one INDC) submitted by 1 October 2015 cover 85.3 % of global greenhouse gas emissions, and cover most of the world’s countries. Areas that have not submitted INDCs so far are mostly in the Middle East and Northern Africa, as can be seen from the below picture.

**Figure 5: Geographical coverage of submitted INDCs. Source: WRI CAIT**

The INDCs submitted by 1 October do not reach yet the global goal of limiting global warming to 2°C. Estimations vary between research institutes on the level of warming that could be reached with the current INDCs. Climate Action Tracker has calculated the warming to be 2.7°C, while Climate Interactive scoreboard estimates 3.5°C warming. One important difference in the figures is that Climate Interactive only uses the unconditional contributions in its calculations, and leaves out the conditional ones.

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100 [https://www.climateinteractive.org/tools/scoreboard/](https://www.climateinteractive.org/tools/scoreboard/)
3. Comparing Country Positions on Some Key Issues

This chapter identifies key issues in the negotiations of the Paris agreement. It then describes and analyses select countries’ positions on these issues, which include the Paris outcome and its legal form: mitigation; adaptation; finance; technology; LULUCF; and transparency.

Figure 6: Core components of the 2015 Paris Agreement (source ACT and WRI 2015)\textsuperscript{101}

\textsuperscript{101} ACT 2015 and World Resources Institute working paper (2014): Elements and ideas for the 2015 Paris Agreement
3.1 General Views on the Paris Outcome and its Legal Form

3.1.1 Introducing the Issue

The ADP’s negotiating mandate, agreed at COP 17 in Durban, defines the outcome of the negotiations under the Durban Platform as “a protocol, another legal instrument or an agreed outcome with legal force under the Convention applicable to all Parties...”.

There have been different interpretations of what this mandate means with respect to the legal form of the Paris outcome. While the protocol option seems clear, the expressions “another legal instrument” and “agreed outcome with legal force” leave more scope for interpretation.

Some legal scholars support a broad interpretation, arguing that the Paris outcome could take the form of an amendment to the Convention and/or its annexes, as well as a COP decision or a set of COP decisions. Other legal scholars feel, however, that the Durban mandate can only be fulfilled through an instrument that has a stronger international legal status than that of a COP decision. According to their view, the reference to “legal force” implies that the Paris outcome “must take the form of a treaty within the meaning of the Vienna Convention on the Law of Treaties.” Considerations to support this interpretation including the negotiating history of the ADP’s mandate suggesting that the reference to “legal force” was included in the ADP’s mandate with the intention of achieving something more than a COP decision and that the five-year gap between the deadline for adopting the ADP’s outcome in 2015 and its effectiveness in 2020 could be seen as a time period reserved for countries to ratify the Paris outcome and for the legal instrument to enter into force.

Regardless of the legal form of the Paris ‘core’ agreement, it is generally agreed that some issues relating to the Paris outcome should be included in COP decisions. The ADP Co-Chairs' scenario note issued in July 2015 (ADP.2015.4.InformalNote) made an attempt to identify those issues in the ADP negotiating text that should go to the draft agreement and those that should be in a COP decision. Accordingly, provisions that should go the draft agreement include overarching commitments, durable provisions and standard provisions for an agreement. Provisions appropriate for inclusion in COP decisions include details of implementation, provisions likely to change over time, provisions related to pre-2020 action and interim arrangements pending the entry into force of the agreement. The Co-Chairs non-paper from October 2015 (ADP.2015.8.Informal Note) includes a proposal for a draft agreement and accompanying COP decisions to give effect to the agreement.

102 Decision 1/CP.17


105 Ibid.

106 Ibid.
### 3.1.2 Country Positions

The table below summarizes country positions concerning the Paris outcome, including its scope and legal form. More detailed information on country positions, including the sources of information, are listed in Annex 1 of this report.

<table>
<thead>
<tr>
<th>Country</th>
<th>Legal form and general views</th>
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</table>
| China       | • Outcome with core agreement and COP decisions  
• Legally-binding agreement implementing the Convention and covering mitigation, adaptation, finance, technology, capacity building and transparency of action and support in a balanced manner  
• Developed country commitments on finance, technology and capacity building to have the same legal status as mitigation commitment, included in the agreement as attachments                                                                                                                                                                                                                     |
| US          | • Agreement forms part of a larger package to be adopted in Paris  
• Agreement should contain long-term provisions; other provisions to be included in instruments that will be easy to modify over time  
• Mitigation contributions to be reflected in schedules in a separate document compiled by the Secretariat; international legal status of the contents of mitigation contributions needs to be determined                                                                                                                                                                                                 |
| India       | • The expression “outcome with legal force” in the ADP’s mandate can be interpreted meaning that the outcome could derive its legal force from domestic instead of international law  
• All options on legal from can be considered when substantive contents have been agreed                                                                                                                                                                                                                                                                                                                                                                 |
| Russia      | • Agreement should be legally binding and set commitments for all Parties  
• Actions by developed and developing countries may differ, but they should be reflected in a single international legal instrument  
• Clear links between commitments and compliance                                                                                                                                                                                                                                                                                                                                                                                                       |
| Mexico      | • Agreement should be a legally-binding instrument to be ratified by Parties; it should allow for efficient adjustments without a new ratification process  
• Agreement should be complemented by the Parties’ commitments in the form of nationally-determined contributions  
• Mitigation commitments part of the agreement as an annex for each Party  
• Establishing commitments for all parties on mitigation, adaptation, finance, technology, capacity building and transparency of action and support                                                                                                                                                                                                                                                                                                                                 |
| Indonesia   | • Legally-binding agreement  
• Includes a spectrum of commitments of each Party in terms of mitigation, adaptation and means of implementation                                                                                                                                                                                                                                                                                                                                                                                               |
| Brazil      | • Universal undertakings with commitments from all Parties  
• Agreement should be such that it does not need to be revisited each cycle  
• NDCs should not be included in annexes given the need for regular updating; an online tool should be used that forms an integral part of the agreement                                                                                                                                                                                                                                                                                                                                 |
| South Africa| • Comprehensive agreement with commitments, targets, actions and efforts  
• Mitigation, adaptation and means of implementation, ensuring that adaptation commitments commensurate with those on mitigation                                                                                                                                                                                                                                                                                                                                                                 |
3.1.3 Analysis of Country Positions

Comparing positions of countries covered in this report, there is broad support for a Paris outcome that includes both a legally-binding instrument and COP decisions. Of the countries analysed here, those explicitly supporting such a combination include Australia, Canada, China, Japan, the US and the Republic of Korea. Presumably, the combination of a binding instrument and COP decisions would be acceptable to all Parties supporting a legally-binding instrument as the core outcome from Paris.

Some country positions regarding a legally-binding international treaty are, however, ambivalent. India played an important role in negotiating the final wording of the ADP’s mandate at COP 17 and maintains that the expression “agreed outcome with legal force” could also refer to legal effects derived from domestic legislation. India has, however, expressed openness to considering all options on legal from when the substantive content has been agreed. Considering this [along with positions of some countries not considered in this report], there might be some opposition to adopting a binding international treaty as the core outcome in Paris. However, the majority of countries analysed here supports an outcome consisting of an international treaty and COP decisions.
Large countries’ preparations and views for the 2015 Paris climate agreement
Final Report
ALA-070815 06.10.2015

It is also conceivable that differences will emerge in Paris on how the legally-binding instrument should be called. While some countries [especially those not considered in this report] have supported adopting a new protocol under the UNFCCC, this option might not enjoy universal support. In this respect, it is useful to note that from the perspective of creating binding obligations under international law, it is not so important whether the instrument will be called a ‘protocol’, ‘implementing agreement’ or something else. The key in this respect is the Vienna Convention on the Law of Treaties, which defines a “treaty” as “an international agreement concluded between States in written form and governed by international law, whether embodied in a single instrument or in two or more related instruments and whatever its particular designation.” Therefore, any instrument falling under this definition would achieve the objective of creating binding obligations for states.

Several of the countries analysed here have emphasized the need for a long-lasting agreement, indicating that the Paris agreement should include such provisions that are sensible to include in a long-term instrument. Partly related to this, partly for other reasons, countries analysed in this report have expressed different views on whether INDCs should be part of the legally-binding agreement. Countries like South Africa and Mexico have proposed inscribing INDCs in the agreement’s annexes. Brazil, in turn, has proposed an online tool for INDCs given the need to update them regularly, proposing that the tool form an integral part of the agreement. China has called for the inclusion of separate attachments for developed and developing country mitigation in the agreement, with the developed country attachment being binding under international law. The US is proposing a system of national schedules outside the core agreement, in a document compiled by the UNFCCC Secretariat. In its view, obligations to submit and maintain a commitment in a schedule, report on its implementation and accept review procedures would be included in the agreement as binding elements. In contrast, the US submission leaves open the question as to whether the contents of the mitigation contribution would also be legally-binding. Canada has suggested that the core agreement be complemented by COP decisions and countries’ INDCs, noting that decisions on formalisation of nationally-determined contributions must be made in 2016-2020. This points towards some differences among the countries analysed here concerning how they see the legal status and placement of INDCs in the final Paris outcome. Differences on this question may be even more obvious when considering positions of all UNFCCC Parties.

Differences can also be detected on which thematic issues should be included in the legally-binding element of the Paris outcome. Especially the non-Annex I countries analysed here have supported a comprehensive agreement, covering mitigation, adaptation, finance, technology, capacity building and transparency of action and support. For example, Mexico has called for an agreement that establishes commitments for all Parties on these issues and China has emphasized that the agreement should

107 Ibid.
108 Most provisions of the Vienna Convention on the Law Treaties are also considered customary international law, meaning that they also bind countries that have not joined the Convention.
109 Article 2.1(a) of the Vienna Convention on the Law Treaties.
reflect these issues in a balanced manner. Japan, in turn, has argued that while technology, finance and capacity building are important issues, these should not be included as legal obligations in the agreement. Other Annex I countries analysed here have not been as explicit in their submissions but, as shown below, most of them do not have detailed positions on issues, such as finance, technology and capacity building. This could be taken to mean that these countries do not foresee a strong role for these issues in the Paris agreement. Indeed, in recent ADP negotiations, the Group of 77 and China has warned against a mitigation-centric agreement. The substantive scope and balance of the agreement is therefore one aspect of the negotiations that may generate controversy in the Paris negotiations. The draft agreement in Co-Chairs’ non-paper from October 2015 has provisions on all main substantive issues under negotiation, including technology and capacity building. The non-paper will be considered by the Parties later in October.

In conclusion, the question of legal form has proven difficult several times in the history of the UNFCCC negotiations, including at COP 13 in Bali, at COP 15 in Copenhagen and at COP 17 in Durban. While most would interpret the ADP’s mandate as requiring the adoption of an international treaty in Paris, other interpretations of the somewhat obscure expression “agreed outcome with legal force” have also been put forward. The view that substance must be finalised before agreeing on the legal form has also been expressed by countries like India. Nevertheless, most Parties seem to agree that the Paris outcome should consist of a legally-binding instrument and COP decisions. Such an outcome is thus conceivable, but requires consensus not only on the principled issue of legal form but also on the substantive scope, name and detailed design of the legally-binding instrument.

3.2 Elements Agreed in the Negotiating Mandate

Negotiations for the Paris Agreement cover the following substantive areas: mitigation, adaptation, finance, technology development and transfer, transparency of action and support, as well as capacity building. Country positions on each of these areas are assessed in this section.

3.2.1 Mitigation

3.2.1.1 Introducing the Issue

Given the gap between current climate policies and those needed to achieve the two-degree target agreed in Copenhagen (2009) and Cancun (2010), mitigation is one of the crucial issues in the negotiations for the Paris agreement. The current mitigation regime under the UNFCCC and its Kyoto Protocol illustrates that the issue has been difficult in the history of the UNFCCC regime. In the 2013-2020 period, only a small proportion of global GHG emissions fall under the legally-binding framework of the Kyoto Protocol as only European countries and Australia have expressed willingness to join the second commitment period. Annex I countries like Russia and Japan have not done so, Canada withdrew from the Kyoto Protocol entirely and the US never ratified the instrument. As a result, global GHG emissions mostly fall under a ‘bottom-up’ mitigation regime consisting of unilateral mitigation pledges made by UNFCCC Parties, mostly in connection of the 2009 UN Climate Change Conference in Copenhagen. The positive aspect of the
‘bottom-up’ approach is that it has encouraged more than half of UNFCCC Parties to pledge mitigation actions. Challenges with the ‘bottom-up’ approach include vastly inadequate level of collective mitigation ambition as well as the difficulty of comparing countries’ highly divergent pledges and the fact that there is no mechanism to effectively monitor their implementation.

The need to address the ‘emissions gap’ between the existing and necessary climate policies was one of the motivations for launching the ADP process. A number of proposals are on the table in the Paris negotiations on how to strengthen action on mitigation, including in the post-2020 period. The proposals included in the ADP negotiating text from February 2015 cover long-term and global aspects of mitigation, such as proposals endorsing the 2°C/1.5°C targets, peaking of global emissions, long-term zero emissions, net zero emissions, full decarbonisation and/or carbon neutrality. They also cover proposals for individual mitigation commitments, contributions or actions by Parties. Some proposals apply equally to all Parties, some distinguish between developed and developing counties, and yet others envisage new country categories, such as annex x and y countries.

Issues under discussion also include whether a country’s mitigation contribution, commitment or action must be unconditional or whether aspects of it can be conditional, such as dependent on support received. There are also various proposals concerning the form that mitigation commitments or contributions should take, including inscribing them in a legally binding annex of the Paris agreement, national schedule or an attachment, or in an information document or online registry maintained by the Secretariat. Several Parties have proposed a cyclical approach, whereby mitigation contributions are periodically updated. There are also proposals on the table for a review the adequacy of the collective level of mitigation ambition. The mitigation section also addresses issues, such as market mechanisms, land sector principles and response measures.

### 3.2.1.2 Country Positions

The table below summarizes the main positions of the countries considered in this report on general aspects of mitigation. Their more detailed positions, including the sources of information, are reflected in Annex 1 of this report. Market mechanisms and the land-use sector are discussed in separate sections below.

<table>
<thead>
<tr>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Annex I and non-Annex I differentiation continues in the post-2020 period</td>
</tr>
<tr>
<td>• Ambitious, economy-wide and absolute quantified emission reduction targets for developed countries up to 2030 in light of historical responsibilities</td>
</tr>
<tr>
<td>• Diversified enhanced mitigation actions for developing countries, such as emission intensity targets, deviation from BAU targets or low-carbon strategies in context of sustainable development and in accordance with specific needs and special circumstances; dependent on adequate finance and technology support from developed countries</td>
</tr>
<tr>
<td>• Developed country emission targets are internationally legally-binding</td>
</tr>
</tbody>
</table>

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110 These are compiled in the ADP negotiating text
and included in an attachment of the agreement
- Developing countries’ enhanced mitigation actions are compiled in an attachment to the agreement with relevant information communicated through national communications and BURs

<table>
<thead>
<tr>
<th>Country</th>
<th>Details</th>
</tr>
</thead>
</table>
- The agreement to include provisions on each Party providing, when joining the agreement, a schedule with its nationally-determined mitigation contribution; the agreement could include a basic format for the schedule  
- Schedules are included separately in a document maintained by the UNFCCC Secretariat and updated over time; the legal status of their substance is to be determined but the obligation to submit a schedule is binding  
- In principle, quantifiable contributions from each Party; for countries with limited capabilities and low emissions, purely qualitative targets (policies etc) could be appropriate  
- Commitments concerning reporting and review of implementation |
| India   | - Annex I and non-Annex I differentiation continues in the post-2020 period  
- Quantified emission limitation and reduction objectives for Annex I Parties  
- NAMAs enabled by finance and technology transfer for non-Annex I Parties  
- Need to address response measures and discourage the use of unilateral trade measures |
| Russia  | - No static division between Annex I and non-Annex I countries; flexible country categories that allow for adjustments to be made to countries' commitments as their level of socio-economic development increases  
- All Parties to set their own commitments pursuant to their levels of socioeconomic development, natural and geographical characteristics, and financial and technical capacity  
- Agreement on general criteria to country commitments and sufficient information to ensure transparency and enable comparisons |
| Mexico  | - Appropriate mitigation commitments of same international legal form and under the same rules for all Parties at different depths according to CBDRRC and equity  
- Developed countries take the lead with quantified, economy-wide emission reduction targets; other countries in a position to do so to follow their lead  
- Absolute reduction targets, intensity targets, deviation from BAU targets or sectoral mitigation plans for other developing countries  
- Low-emissions development planning processes for LDCs  
- The agreement should provide adequate flexibility for national circumstances, and adapt to changing conditions |
| Indonesia | - Annex I and non-Annex I differentiation continues in the post-2020 period  
- Spectrum of commitments for each Party in terms of mitigation  
- Principles of the UNFCCC apply |
<table>
<thead>
<tr>
<th>Country</th>
<th>Key Points</th>
</tr>
</thead>
</table>
| Brazil           | - The agreement must be consistent with the principles and provisions of the UNFCCC, including differentiation between developed and developing countries  
                  - CBRRC to be operationalized through differentiation in types of NDCs and the level of effort expected; proposal for a “concentric approach” to mitigation and differentiation  
                  - Quantified, economy-wide, absolute emission limitation or reduction target in relation to a baseline year for Annex I Parties  
                  - Non-Annex I Parties can also include intensity targets, deviation from BAU or per capita targets  
                  - Non-economy wide actions for LDCs                                                                                                    |
| South Africa     | - A common long-term reduction goal of 50% in 2050 from 1990 levels; ambitious mid-term targets and equitable burden-sharing  
                  - All parties to take mitigation commitments pursuant to Article 4.1 of the UNFCCC and developed countries to take additional commitments under Article 4.2 of the UNFCCC  
                  - The Convention’s principles and objectives will apply to the 2015 Agreement, including the Annex and non-Annex I division  
                  - For developed countries, quantified, economy-wide reduction commitments or targets from base year 1990 with an annual trajectory to 2030; a long-term goal of zero emissions in 2050  
                  - Developing countries can take emission reduction commitments or actions, also expressed as intensity targets or sets of NAMAs; also indicating support needs for NAMAs |
| Japan            | - Dynamic interpretation of the CBDRRC reflecting the evolution of the international community  
                  - All Parties should have the same obligation to submit an INDC in a common timeframe to allow for comparison and evaluation  
                  - Major economies expected to present quantified economy-wide emission reduction targets  
                  - All parties subject to a transparency mechanism with ex ante and ex post reviews                                                                 |
| Australia        | - Annex I vs. non-Annex I division of the UNFCCC is no longer viable  
                  - All Parties to take credible and quantifiable emissions reduction commitments, in particular major economies  
                  - Nationally-determined contributions allowing countries to decide the effort appropriate to their national circumstances  
                  - Rule-based architecture that creates transparency and accountability                                                                 |
| Turkey           | - Proposal for a new differentiation mechanism, where countries are objectively evaluated in a dynamic manner according to their socio-economic indicators and emissions  
                  - All Parties to take commitments in accordance with their respective capabilities and national priorities.  
                  - Flexibility to use both, ‘bottom-up’ and ‘top-down’ approaches  
                  - No Party should be compelled to commit to migration; a Party should decide its level of contribution as it deems realistic, scientifically possible and nationally appropriate |
| Republic of      | - The agreement must be based on one common set of rules for all Parties but at different depths in terms of type, stringency and timing according |

51 (134)
3.2.1.3 Analysis of Country Positions

As explained above, it is clear that countries’ collective mitigation ambition must be considerably stepped up both in the pre- and post-2020 periods to achieve the two-degree target under the UNFCCC. Mitigation is therefore a critical concern in negotiations for the Paris agreement. When comparing positions of countries included in this report, some traditional differences concerning the design of the international mitigation regime remain visible.

An important difference concerns differentiation between developed and developing countries. All non-Annex I countries considered in this report argue for maintaining the current distinction between Annex I and non-Annex I countries. They propose that developed countries’ should take quantified and economy-wide targets, while non-Annex I countries would enjoy more leeway in designing their mitigation actions or commitments. According to Brazil, these could include intensity targets, deviation from business-as-usual or per capita targets. Mexico suggests intensity targets, BAU targets and sectoral mitigation plans for such developing countries that are not able to lead developed country lead in terms of quantified, economy-wide mitigation. LDCs would enjoy even more flexibility. Countries including China, India and the DRC also emphasize a link between non-Annex I countries’ mitigation actions and support received from developed countries and South Africa indicates that developing countries should indicate support needs for NAMAs.

In contrast, Annex I countries like the US, Russia, Japan, Canada and Australia, as well as Turkey oppose a static division between Annex I and non-Annex I countries. They emphasize the need to take into consideration developments since the 1990s when the UNFCCC and its annexes were negotiated. The US has proposed replacing Annex I with
two new annexes and Turkey has suggested a new differentiation mechanism based on objective evaluation of countries. While these countries accept that the CBDRRC will play a role in the Paris agreement, they argue for its dynamic interpretation, as explained in the Japanese submission. However, also these Annex I countries accept that developing countries with limited capabilities would have more flexibility in designing their mitigation contributions. The US, for example, submits that they would be allowed to take qualitative instead of quantitative mitigation contributions. Canada recognises that allowing nationally-determined contributions to reflect diversity encourages ambition and broad participation. However, such differentiation is not based on the traditional distinction between Annex I and non-Annex I countries, and there is a greater emphasis on the common elements of the mitigation regime in Annex I countries’ positions.

Reaching a compromise on the long-standing problem of differentiation can be seen as one of the keys for a successful outcome on mitigation in Paris. Six years ago in Copenhagen, countries showed little willingness to make compromises on this highly principled issue. Approaching Paris, there are some signals, including from outside the UNFCCC process, that some positive alignment of positions may be taking place. Several of the non-Annex I countries analysed here have indicated in their UNFCCC submissions that all Parties should have mitigation commitments, while Annex I countries recognise that nationally-determined contributions will be diverse, reflecting differences in countries’ national circumstances and capabilities. Still, the question concerning the future of the Annex I and non-Annex I distinction continues to divide countries. The extent and significance of possible progress on this issue between 2009 and 2015 remains difficult to assess for the purposes of this report. Could, for example, the language first used by the US and China in their joint climate change announcement in November 2014 and subsequently incorporated in the Lima Call for Climate Action on agreement that reflects “the principle of common but differentiated responsibilities and respective capabilities, in light of different national circumstances” hold potential for an acceptable compromise in Paris? The draft agreement in Co-Chairs’ non-paper from October 2015 incorporates the above language from the Lima Call for Climate Action and also contains other references to national circumstances. However, it does not contain language on Annex I and non-Annex I countries, but on developed and developing countries. The proposed article 3 on mitigation uses language on ‘each Party’ submitting their nationally determined mitigation contribution every five years. Also the transparency system would apply to all Parties. The non-paper will be considered by the Parties later in October.

As discussed in Sections 3.1.2 and 3.1.3 above, divergent views also exist on whether the Paris outcome should ultimately include mitigation commitments or contributions; and whether the contents of a country’s NDCs should form part of the internationally legally-binding element of the Paris outcome. In other words, the legal status of mitigation

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111 Some support for this argument can be found in international law; there are examples of international judicial bodies adopting an evolutionary interpretation of international treaties. One of the most famous examples is by the Appellate Body of the World Trade Organization, which, in the Shrimp-Turtle dispute, adopted an evolutionary interpretation of the General Agreement on Tariffs and Trade to recognise the relevance of contemporary environmental concerns in applying a treaty drafted in the 1940s. Regardless, the question of re-interpreting the CBDRRC in the UNFCCC context remains controversial.

commitments or contributions continues to divide among UNFCCC parties, with some hoping to see a legal framework with binding mitigation commitments and possibly also a strong compliance mechanism and others insisting on nationally-determined contributions with no binding force under international law. The US submission, for example, leaves this question open with respect to the contents of the nationally-determined contribution, noting the need to consider which option is likely to promote ambitious undertakings and broad participation. Given the range of views, a post-2020 mitigation regime based on mitigation contributions the substance of which remains outside the legally-binding agreement is currently looking like a more probable outcome from Paris than one relying on mitigation commitments inscribed in an international treaty. The draft agreement in Co-Chairs’ non-paper from October 2015 also uses bracketed language on mitigation commitments, contributions or other, giving a strong indication that this requires further negotiation.

Finally, one issue with important implications for the success of the Paris outcome concerns mitigation ambition. Proposals concerning international review of countries’ mitigation contributions have proven controversial throughout the ADP negotiations. For example, at COP 20 in Lima last year, no agreement could be reached on ex ante review of INDCs by UNFCCC Parties as some Parties proposed. As things stand, the question of pre-Paris ambition relies on unofficial assessments by climate scientists, think tanks and other organizations. Based on the INDCs submitted, it seems clear that the collective level of ambition in the Paris agreement will not be sufficient to guide UNFCCC Parties on a safe pathway to achieving the two-degree target although some analysis show that the emissions gap could be narrowing to 2.7 degrees. In any case, attention in the negotiations has been turning towards ways of increasing ambition in the post-2020 period (see Section 3.3.3 below). In light of parties’ proposals, the draft agreement in Co-Chairs’ non-paper from October 2015 would address this through a global stocktaking of the proposed agreement’s implementation. The stocktaking would also consider, Parties’ aggregate efforts and scientific assessments at regular intervals. The non-paper also contains a proposal for a facilitative process or mechanism to consider implementation. While these proposals, if accepted, could be seen as positive developments, the risk remains that the legitimacy of the UNFCCC regime will suffer if the Paris outcome will be mainly procedural with respect to the key issue of mitigation, yet again deferring difficult decisions and ambitious action to the future.

3.2.2 Adaptation

3.2.2.1 Introducing the Issue

Adaptation refers to adjustments in ecological, social, or economic systems in response to actual or expected climatic stimuli and their effects or impacts. It refers to changes in processes, practices, and structures to moderate potential damages or to benefit from opportunities associated with climate change”. (IPCC 2001, Third Assessment Report). Although the UNFCCC historically has placed greater emphasis on climate mitigation than on adaptation, a number of the Convention’s provisions relate directly or indirectly to climate adaptation.

Article 4.1(b) of the UNFCCC includes the key commitment on adaptation. It requires parties to publish national information on mitigation and adaptation, including measures to facilitate adequate adaptation to climate change. A similar provision is found in Article 10(b) of the Kyoto Protocol.
Article 4.1(e) requires cooperation for the preparation on adaptation of the impacts of climate change, particularly in Africa. Articles 4.3 and Article 4.4 of the UNFCCC mandates all Annex II countries to assist developing countries to cope with climate impacts. Article 4.4 requires them to assist developing countries that are particular vulnerable to the adverse effects of climate change in meeting the costs of adaptation of those adverse effects. In addition, Article 4.9 states that "Parties shall take full account of the specific needs and special situations of the least developed countries in their actions with regard to funding and transfer of technology".

Implementation of these provisions has evolved along many pathways under the UNFCCC. Three important milestones that provide the foundations of an international regime for adaptation under the UNFCCC include the LDC Work Programme, the Nairobi Work Programme and the Cancun Adaptation Framework.

Least Developed Country Work Program (LDCWP):

- **Least Developed Countries Work Program 5/CP.7**: Under the LDCWP, Least Developed Countries (LDCs) identify and report their adaptation needs and report through their National Adaptation Programmes of Action (NAPAs).
- **Least Developed Countries Fund: 7/CP.7**: The Least Developed Countries Fund (LDCF) was established to meet the adaptation needs of least developed countries (LDCs). Specifically the LDCF has financed the preparation and implementation of National Adaptation Programs of Action (NAPAs) to identify priority adaptation actions for a country based on existing information.
- **Guidelines for the preparation of National Adaptation Programs of Action (NAPAs) decision 28/CP.7**: NAPAs provide a process for the LDCs to identify priority activities that respond to their urgent and immediate needs with regard to adaptation to climate change - those needs for which further delay could increase vulnerability or lead to increased costs at a later stage.
- **Least Developed Countries Expert Group (LEG) 29/CP.7**: provide technical support and advice to the LDCs on the National Adaptation Programmes of Action (NAPAs) and the LDC work programme, and to provide technical guidance and support to the national adaptation plan (NAP) process.

The Nairobi Work Programme was established by COP11 through Decision 2/CP.11, as a mechanism under the Convention to facilitate and catalyze the development and dissemination of information and knowledge that would inform and support adaptation policies and practices.

The Cancun Adaptation Framework was established at COP16 in 2010 relates to:

1. Implementation, including a process to enable LDC Parties to formulate and implement national adaptation plans (NAPs), and a work programme to consider approaches to address loss and damage;
2. Support;
3. Institutions, including the establishment of an Adaptation Committee at a global level, as well as regional and national level arrangements;
4. Principles;
5. Stakeholder engagement.

The Lima Call for Climate Action adopted at COP 20 affirmed that adaptation is among the issues to be addressed in the Paris agreement. Beyond the question of how to ensure
adequate financial resources to assist particularly vulnerable developing countries in strengthening their adaptation efforts, broad issues for consideration on adaptation in the Paris agreement include, firstly, how the new agreement can establish greater parity between mitigation and adaptation. Should the agreement set some form of adaptation goal or establishes new adaptation commitments? Other issues related to adaptation in the ADP’s official negotiating text (FCCC/ADP/2015/1) include proposals for obligations to match the level of support with adaptation needs and enhancing support for developing countries; establishment of a platform for Parties to communicate their adaptation efforts towards achieving the proposed adaptation goal.

3.2.2.2 Country positions

In the below table the main positions of the selected large countries on adaptation are summarized. The more detailed positions, including the sources of information, are listed in Annex 1.

<table>
<thead>
<tr>
<th>Country</th>
<th>Positions</th>
</tr>
</thead>
</table>
| China   | - Adaptation should be on equal footing with mitigation  
- All Parties are to take enhanced actions on adaptation  
- Developed countries shall continue to support developing countries to formulate and implement national adaptation strategies and plans so as to effectively adapt to the impacts of climate change; adaptation funding to the GCF should be increased  
- Further elaboration of institutional arrangements resulting from the negotiations under the Bali Action Plan |
| US      | - Adaptation should be an important part of the Paris outcome with parties needing to enhance efforts on adaptation  
- Parties to enhance their efforts to integrate adaptation into national and development planning; undertake vulnerability assessments; prioritise action on most vulnerable sectors, ecosystems, people and places; understand costs and benefits of adaptation at the local level; strengthen governance and enabling environments; and monitor, report and evaluate policies and programs  
- Enhanced cooperation on adaptation should build on work by the Subsidiary Bodies (with specific proposals) |
| India   | - There must be predictable and adequate Annex II funding for adaptation  
- The Cancun Adaptation Framework and the Doha decision for setting up an institutional mechanism for ‘loss and damage’ must be carried forward and implemented. Without provision of finance it will be extremely difficult to undertake adaptation. Adaptation and MoI need to be at the core part of the agreement. |
| Russia  | - Adaptation should be included in the international legal regime as one of the thematic building blocks |
| Mexico  | - Adaptation to be given same level of priority as mitigation and included in INDCs  
- The 2015 agreement needs to include the following elements a global goal on adaptation, with the collective and individual adaptation commitments, as well as means of implementation and institutional arrangements.  
- Link mitigation goal with adaptation cost  
- Encourage joint mitigation and adaptation  
- Adaptation Mechanism that builds on existing arrangements |
<table>
<thead>
<tr>
<th>Country</th>
<th>Notes</th>
</tr>
</thead>
</table>
| Indonesia       | • Post-2020 agreement should ensure the effective implementation of actions under the UNFCCC, namely mitigation, adaptation and means of implementation  
                  • Supports priority support for LDCs                                                                                       |
| Brazil          | • Parties shall enhance cooperation through the Cancun Adaptation Framework  
                  • The communication of the NDC on adaptation may follow the processes and timelines for the development of national adaptation plans, as appropriate, therefore it does not have to follow the same timelines as mitigation.  
                  • The Secretariat shall keep and update an online registry/clearing house of adaptation policies and actions communicated through the NDC |
| South Africa    | • The 2015 agreement should address adaptation with the same priority as mitigation.  
                  • All Parties must commit to a common global goal for adaptation. Parties should agree to develop a Strategic Framework for a coherent and consolidated international response and work programme on adaptation for the period 2020 to 2030  
                  • The Strategic Framework must be a flexible mechanism under the Cancun Adaptation Framework.  
                  • The agreement should integrate actions on mitigation and adaptation with the enabling means of implementation that correspond to the global goal.  
                  • The agreement should balance funding for mitigation and adaptation in the long-term, as one way of specifically addressing the concerns of the most vulnerable countries. More generally, it should give priority to adaptation at the same level as mitigation.  
                  • All Parties have responsibility for adaptation in their countries, with those in need being supported. Funding for adaptation is at the heart of the new instrument.  
                  • Balance of adaptation and mitigation must be maintained operationally.                                                          |
| Japan           | • Adaptation should be treated as a key element of the post-2020 framework, taking into consideration the progress of existing arrangements such as the Cancun Adaptation Framework (CAF), which consists of the Adaptation Committee, national adaptation plans |
| Australia       | • The post-2020 international climate change regime will be designed to promote both mitigation and adaptation responses to climate change, with means of implementation helping countries deliver mitigation and adaptation goals. |
| Turkey          | • The agreed outcome should contain all elements of climate change, namely mitigation, adaptation, finance, technology, capacity building and reporting |
| Republic of Korea | • 2015 agreement will have mitigation put at the core, it will also address adaptation and means of implementation in balance with mitigation  
                • differing national circumstances have to be properly reflected  
                • 2015 Agreement should enable and catalyze adaptation actions on the ground by setting out clear global vision |
| Canada          | • Focus is on agreement with mitigation at the core, and meeting the 2 degrees pathway. Adaptation, finance, technology, and capacity-building will also continue to be important in the post-2020 period |
| DRC             | • Support the African Group Position: Regarding institutions, there is a need to |
anchor adaptation and LED in the agreement to allow expand and strengthen mandates of these committee to undertake additional functions we ay want them to perform.

- MRV of support (for adaptation) is needed and would like to see this, especially to be able to see that the needs of developing countries are met in this respect.

### 3.2.2.3 Analysis of Country Positions

All countries considered in this report have made submissions on including adaptation as part of the Paris agreement. Their views are not always consistent on how adaptation should be treated compared with mitigation in terms of priority. A number of submissions, such as by Canada and the Republic of Korea see mitigation as a “core” part of an agreement, which includes also adaptation but could be interpreted as diminishing the place of adaptation in contrast to mitigation. The Republic of Korea does, however, identify the need for a balance between mitigation and adaptation as well as means of implementation. Other submissions, consistently from non-Annex I countries, state that adaptation should be of the same priority as mitigation. There are a number of vulnerable and fragile state parties that agree that adaptation should be a priority.

All countries proposed that any post-2020 agreement on adaptation should build on what has already been established, such as the Cancun Adaptation framework, Nairobi Work Programme etc. This is also reinforced in the submissions from Mexico and Republic of Korea. Countries agree that the Adaptation Committee should continue its work, overseeing the UNFCCC’s approach to adaptation, and this needs to be reflected in the agreement. However there are different expectations on the future flexibility with respect to the mandate of the Adaptation Committee. The LDCs and G77+China would like the Paris Agreement to have flexibility to strengthen and broaden the mandate of the Adaptation Committee, but it not clear to what extent, at this stage.

The institutional arrangements are likely to reflect the reporting requirements of parties. Developing countries have made it clear that any new agreement reached in Paris should not require additional reporting requirements for adaptation. This view is supported by G77+CHINA, The African Group and the LDC Group, representing South Africa, Indonesia, Brazil, DRC and CAR within the group.

Many developing country submissions note that recent financing for adaptation has not been adequate, predictable or sustainable, and that finance has been predominantly skewed in favor of mitigation.

Upon further investigation of the overall Multilateral Funding Focus, we find that this is quite consistent. According to Climate Funds Update, Multilateral focus has been, so far, focused on mitigation, as outlined in the table below.

**Table 4: Multilateral Funding by Focus. Source: climatefundsupdate.org**
Breaking down the information, it can be seen that the current focus of multilateral funding at a regional level is quite consistent with the positions above.

**Table 5: Breakdown of multilateral finance by region. Source: climatefundsupdate.org**

<table>
<thead>
<tr>
<th>Region</th>
<th>Adaptation USD</th>
<th>Mitigation USD</th>
<th>REDD+ USD</th>
<th>Multiple foci USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Saharan Africa, Middle East and North Africa</td>
<td>1.438 Billion (39%)</td>
<td>1.727 Billion (46%)</td>
<td>0.377 Billion (10%)</td>
<td>0.186 Billion (5%)</td>
</tr>
<tr>
<td>Latin America and Caribbean</td>
<td>0.438 Billion (16%)</td>
<td>1.181 Billion (44%)</td>
<td>0.915 Billion (34%)</td>
<td>0.151 (6%)</td>
</tr>
<tr>
<td>South Asia, East Asia and the Pacific</td>
<td>0.905 Billion (25%)</td>
<td>2.158 Billion (60%)</td>
<td>0.315 Billion (9%)</td>
<td>0.249 Billion (6%)</td>
</tr>
</tbody>
</table>

Sub-Saharan Africa, Middle East and North Africa attract the most finance regionally for adaptation, but they still attract more on mitigation, even though CAR, and a number of other African countries, state that adaptation should be of equal priority to mitigation, or in some cases should be a higher priority than mitigation. Asian countries, such as Korea, Japan and Indonesia, do not downplay adaptation, but, for example, point to mitigation being at the core of the agreement.

Brazil and Mexico are the only Latin American countries assessed in this report, and the indication of multilateral finance would suggest that mitigation, and REDD+ are much stronger priorities for financing in that region than adaptation or multiple foci. There position has been that adaptation should be part of an agreement, though they use different priority wording to countries from the African region.

One of the key synergies building in the submissions is the call for a global goal for adaptation. Brazil foresees that the NDC process should include adaptation and also Mexico supports the inclusion of adaptation into countries’ INDCs. Mexico, Republic of Korea, South Africa and the African Group have all called for the establishment of a global goal for adaptation.

At the time the Intercessional negotiations occurred in Bonn August 31st-September 4th, most countries still shied away from committing to language for adaptation, such as “global adaptation goal” or “long term vision”, however there seems to be general agreement that adaptation will be part of the Paris outcome. Some of the vulnerable countries now place more emphasis on adaptation, than mitigation.

If the INDCs and negotiations in Paris do not stay on the 2 degree pathway, adaptation will need to have a stronger focus in the coming years. There is early indication that the 2
degree pathway is unlikely to be met in Paris, and therefore we see a number of Parties slowly beginning to shift their positions towards a stronger role for adaptation. Mexico has pushed for Joint Mitigation and Adaptation in its submissions, and particularly within the context of the REDD+ discussions.

3.2.3 Finance

3.2.3.1 Introducing the Issue

According to Article 4.3 of the Convention, Annex II Parties are to provide financial resources to developing country Parties. The current institutional framework for climate finance under the UNFCCC consists of the Convention's Financial Mechanism with the Green Climate Fund (GCF) and the Global Environment Facility (GEF) as its operating entities. The Standing Committee on Finance assists the COP in its functions related to the Financial Mechanism. Concerning the scale of funding, developed countries promised in the 2009 Copenhagen Accord and 2010 Cancun Agreements to mobilize US$100 billion of annual climate finance by 2020.

Key issues in the negotiations for the Paris agreement include the provision and mobilization of financial resources, including which countries are responsible for providing them. In the ADP official negotiating text (FCCC/ADP/2015/1), there are proposals that financial resources should be provided by: all developed countries; countries included in the Convention’s Annex II; countries included in a new annex; or all countries in the position to do so. Some proposals address the scale of funding, including by suggesting periodic needs’ assessments. Concerning sources, some proposals highlight the mobilization of diverse sources while others place the emphasis on public finance, for example, through quantified individual commitments, such as a proportion of the Gross Domestic Product (GDP).

There are several proposals concerning the allocation of resources between adaptation and mitigation, and for new funding windows for example, for REDD+ and loss and damage. Several proposals have been made for the Convention’s Financial Mechanism to serve under the new agreement and concerning the respective roles of the GCF, SCCF and AF under the new agreement. Proposals have also been made with respect to enhancing enabling environments.

3.2.3.2 Positions of Selected Countries

In the below table the main positions of the selected large countries on finance are summarized. The more detailed positions, including the sources of information, are listed in Annex 1.

<table>
<thead>
<tr>
<th>Country</th>
<th>Sources of finance, finance flows</th>
<th>Institutions</th>
</tr>
</thead>
</table>
| China   | • Clear roadmap to scale up developed countries’ financial commitments in the post-2020 period  
• Funding primarily from public sources, additional to Official Development Assistance with developed countries | • Institutional arrangements, especially the GCF, should be further elaborated  
• The GCF shall be under authority of, guided by, and accountable to the COP |
<table>
<thead>
<tr>
<th>Country</th>
<th>Contributions and Views</th>
</tr>
</thead>
</table>
| **US**   | • Significant evolution has already taken place with respect to finance  
          • More attention is being paid to private sources than before  
          • Adaptation funding is now a major part of (public) climate finance  
          • Need to strengthen recipient country reporting of climate finance flows  
          • Substantial evolution also in terms of institutions, namely the GCF, Standing Committee on Climate Finance and Climate Technology Centre and Network  
          • Institutional and other advances will continue in the post-2020 period |
| **India**| • Amount of financing provided by Annex II Parties should be increased.  
          • Finance should come mainly from public sources.  
          • Full incremental costs of meeting enhanced non-Annex I reporting obligations should be met through additional funding  
          • Work under the finance pillar must build on existing promises and institutions. |
| **Russia**| • No submission on financial sources or flows  
          • Best if the financial mechanism of the UNFCCC/KP serves as the financial mechanism for the new instrument |
| **Mexico**| • Financial resources from both private and public sources with public financing catalyzing private sector co-financing and co-investment  
          • Inclusion of commitments in the agreement to mobilize public funds and means to facilitate and encourage private investment  
          • The 2015 agreement must provide definitions, respective roles, and give guidance on the mechanisms to achieve a useful balance of public and private sources  
          • The financial mechanism of the 2015 agreement should be built based on improved existing institutions and funds, such as the GCF, the Standing Committee on Climate Finance, the Adaptation Fund and the Long-Term Finance Program. |
| **Indonesia**| • 2015 Agreement must continue the effective implementation of the existing principles of the UNFCCC, including on finance  
          • Continuing with UNFCCC institutions |
| **Brazil**| • NDCs to contain a finance component related to national budgetary cycle  
          • Annex II countries must include in NDC and regularly update information on quantified financial pledges, targets and actions to mobilize finance, and assistance to developing countries through the financial mechanism  
          • Financial mechanism of the UNFCCC shall support developing country parties in the implementation of all aspects of the Paris Agreement, with the GCF in a key role  
          • Standing Committee on Climate Finance shall |
<table>
<thead>
<tr>
<th>South Africa</th>
<th>Japan</th>
<th>Australia</th>
<th>Turkey</th>
<th>Republic of Korea (with the EIG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Agreement should include a global commitment to mobilize finance on the scale needed to achieve the Convention’s ultimate objective and support developing country implementation</td>
<td>• Encouraging all responsible and capable Parties to provide financial support; broader donor-base in line with changing capabilities of Parties since the establishment of the Convention</td>
<td>• Great majority of financial flows will come from private or other non-government sources; the Convention will be ‘Peripheral’ to how these are mobilized</td>
<td>• No submission on this issue, except that the 2015 Agreement should include finance as one element</td>
<td>• MOI, including finance, integral part of the agreement</td>
</tr>
<tr>
<td>• Inclusion of pathways to mobilizing developed countries’ US$100 billion annual long-term finance commitment</td>
<td>• Better addressing the needs of particularly vulnerable countries, such as SIDS, LDCs and African countries</td>
<td>• All countries to co-operate on climate finance issues, and commit countries to further work on transparency</td>
<td></td>
<td>• All developed country Parties and other Parties in a position to do should, in accordance with CBDRRRC, provide enhanced, effective and transparent support</td>
</tr>
<tr>
<td>• Inclusion of an assessed contribution arrangement based on agreed percentage formula (GDP, income, other) for calculating Annex I contributions</td>
<td>• Both donors and recipients should mobilize private finance</td>
<td></td>
<td></td>
<td>• A practical approach for mobilizing finance</td>
</tr>
<tr>
<td>• Agreement on a range of global policies and regulations on the generation and sources of climate finance</td>
<td>• Enhancing MRV of support</td>
<td></td>
<td></td>
<td>• Important to create synergies among different financial institutions</td>
</tr>
<tr>
<td>• Enhanced the utilisation of the GCF</td>
<td></td>
<td></td>
<td></td>
<td>• Different circumstances require different financial instruments and financing sources</td>
</tr>
<tr>
<td>continue to assist the COP in improving coherence and coordination in the delivery of finance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
from both public and private sectors

<table>
<thead>
<tr>
<th>Country</th>
<th>Support should be provided by Parties in a position to do so, taking into consideration evolving capabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>Increasing number of countries are able to access sufficient flows of finance and investments on affordable terms; consideration of the poorest and most vulnerable countries</td>
</tr>
<tr>
<td>DRC (with the African Group)</td>
<td>Countries seeking to address resources must dedicate sufficient domestic resources and report transparently on results achieved</td>
</tr>
<tr>
<td>Canada</td>
<td>The existing financial architecture, both within the UNFCCC and outside, already enables actions on mitigation and adaptation</td>
</tr>
<tr>
<td>DRC (with the African Group)</td>
<td>Recognizing and promoting cooperation among relevant institutions as well as countries at various levels of development</td>
</tr>
</tbody>
</table>

### Analysis of Country Positions

When comparing positions of the countries included in this report concerning climate finance, important differences can be detected. For the non-Annex I countries considered, climate finance constitutes a key element of the Paris agreement. Countries like China and the DRC highlight Article 4.3 of the UNFCCC, making a link between developing country actions on one side and finance, technology and capacity building support from developed countries on the other. Brazil indicates that the UNFCCC’s financial mechanism should support developing countries in the implementation of all aspects of the Paris agreement.

For non-Annex I countries, the US$100 billion annual climate finance contribution should be scaled up in the post-2020 period. However, when looking at positions of the Umbrella Group countries analysed here, their emphasis is markedly different. They argue that considerable progress has already been made under the UNFCCC concerning finance and related institutions. They stress the importance of mobilizing the private sector, creating enabling environments, as well as the need for recipient countries to participate in mobilizing private sector funding and provide transparent reporting on the results achieved.

Overall, climate finance constitutes one of the most important and controversial issues in the negotiations for the Paris agreement. For Annex II countries, private sector will play an important role in mobilizing the US$100 billion annual climate finance goal agreed in Copenhagen and Cancun. In contrast, non-Annex I countries argue for enhancing the role of the GCF in channelling such funding.

Several non-Annex I countries considered in this report also argue that the Paris agreement should include quantified finance targets for developed countries. There are
proposals by countries including Brazil, China and South Africa to link such targets to the GDP, income or other criteria. As seen above, courtiers like China also argue that commitments on finance should have the same legal status in the Paris agreement as commitments on mitigation. As part of the African Group, the DRC is also suggesting a process to review the adequacy, predictability and sustainability of the funding provided and linking the scale of funding to the achievement of the two-degree target. For the Annex I countries considered here, however, such proposals are unlikely to be acceptable. They have traditionally strongly opposed quantified finance commitments and been reluctant to further strengthen the UNFCCC institutional structure of climate finance.

The draft agreement in Co-Chairs' non-paper from October 2015 includes a provision to scale up climate finance from 2020. Reflecting Parties' differences, it contains bracketed options on groups of countries that are expected to provide climate finance. There are no provisions on quantified finance commitments but an obligation to “strive to improve the predictability of finance flows.” Based on the various differences and the Co-Chairs’ non-paper, a Paris outcome with strong, quantified finance commitments by Annex II is looking unlikely. At the same time, finance will be an important element in reaching a successful outcome. Compromises will therefore need to be found that give more clarity on, inter alia, how the US$100 billion finance goal will be mobilized and by whom, and whether and when it will be increased.

3.2.4 Technology

3.2.4.1 Introducing the Issue

Article 4.1.c of the UNFCCC includes a general obligation for all Parties to cooperate “in developing, applying and diffusing, including transferring technology.” Under Article 4.3, Annex II Parties must provide financial resources for technology transfer and under Article 4.5, they are to take all practicable steps to finance and facilitate technology transfer. Article 4.7 provides that the extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by developed country Parties of their commitments related to financial resources and technology transfer. In 2010, Parties agreed to establish a Technology Mechanism as part of the Cancun Agreements. It consists of the Technology Executive Committee (TEC), as well as the Climate Technology Centre and Network (CTCN).

In the ADP official negotiating text (FCCC/ADP/2015/1), there is a proposal for a global goal of technology transfer and development, as well as various proposals on strengthening action on technology. Many of these involve the existing Technology Mechanism and some would also address the issue of intellectual property rights (IPR). However, the text also includes proposals that the Paris agreement should contain no provisions technology and IPRs. There are also different views on which Parties, if any, the obligation to promote technology transfer should cover: all countries; countries in a position to do so; or only developed countries. On institutional arrangements, several proposals have been put forward for the Convention’s Technology Mechanism to serve the new agreement and for it to be strengthened. Some Parties have proposed, however, that the Paris agreement should not contain any provisions on institutional arrangements for technology.
### 3.2.4.2 Country positions

<table>
<thead>
<tr>
<th>Country</th>
<th>Technology development and transfer</th>
<th>Institutions and mechanisms</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>• Long-term technology goal&lt;br&gt;• Developed countries must promote and finance technology transfer to&lt;br&gt;developing counties, as well as regularly assess prepare a list of &quot;ready to transfer&quot; technologies&lt;br&gt;• Developed countries must remove obstacles, such as IPRs, and support strengthening of endogenous capacities in developing countries</td>
<td>• Further development of institutional arrangements&lt;br&gt;• Establishing an international mechanism on IPR&lt;br&gt;• A window for technology development and transfer in the GCF</td>
</tr>
<tr>
<td>US</td>
<td>• Has not addressed technology in its submissions to the ADP</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>• Agreement must operationalize technology transfer to developing countries; ensure Annex II financing for technology development; remove obstacles; provide financing and incentives for transfer of technology, and facilitate R&amp;D cooperation in climate technology&lt;br&gt;• Barriers created by IPRs must be addressed</td>
<td>• The GCF should allocate funds to meet the full costs of developing country access to environmentally sound technologies</td>
</tr>
<tr>
<td>Russia</td>
<td>• Has not addressed technology in its submissions to the ADP</td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>• Strengthening the Technology Mechanism&lt;br&gt;• Enabling in-depth country-level identification and prioritization of technology for both adaptation and mitigation&lt;br&gt;• Technical expertise and capacity to support Parties</td>
<td>• The Technology Mechanism should focus international public and private funds onto a portfolio of projects which represent the most compelling options for the creation of dynamic future markets, and foster enabling environments in both developed and developing countries</td>
</tr>
<tr>
<td>Indonesia</td>
<td>• has not addressed technology in its submissions to the ADP</td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td>• Enhanced cooperation through the Technology Mechanism&lt;br&gt;• Annex II Parties must include in their INDCs, and regularly update, policies and measures for technology development and transfer</td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td>• Commitment on technology support must be commensurate with mitigation and adaptation commitments&lt;br&gt;• Various technology commitments for</td>
<td>• Enhancing the operation of the Technology Executive Committee and Climate Technology Centre and Network through the Paris</td>
</tr>
<tr>
<td>Developed countries, including on humanitarian or preferential licensing; patent pools; not asserting patent rights for technology users in developing countries; enhancing developing country access to technology as a public good through multilateral institutions; subsidies for making licences available to developing countries; various forms technical support etc.</td>
<td>Obligation for developing countries to carry out a Technology Needs Assessment with Annex I country support, and to develop national structures, strategies, systems and policies</td>
<td></td>
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<td>---</td>
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<td></td>
</tr>
<tr>
<td>Japan</td>
<td>has not addressed technology in its submissions to the ADP</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>In Bonn June 2015 Japan cautioned against creating new obligations for parties regarding technology transfer, stressing that providing incentives to the private sector would be more effective</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>has not addressed technology in its submissions to the ADP</td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td>has not addressed technology in its submissions to the ADP</td>
<td></td>
</tr>
<tr>
<td>Republic of Korea (with EIG)</td>
<td>An independent chapter on MOI, including technology, in the agreement</td>
<td></td>
</tr>
<tr>
<td>Republic of Korea (with EIG)</td>
<td>Parties “in a position to do so” are invited to offer MOI support to developing countries</td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>Technology and capacity building support will continue to play a role in enabling the implementation of the post-2020 agreement, taking into account the evolving capabilities of countries</td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>The 2015 Agreement should recognize and promote cooperation among relevant institutions as well as countries at various levels of development and encourage the sharing of technology and capacity by all Parties in a position to do so</td>
<td></td>
</tr>
<tr>
<td>DRC (African Group)</td>
<td>Obligations for Annex I countries in the development, application, diffusion and transfer of technologies, as well as the financing of technology transfer</td>
<td></td>
</tr>
<tr>
<td>DRC (African Group)</td>
<td>Non-Annex I countries to co-operate regarding technology; building on the Technology Needs Assessments and Technology Action Plans for mitigation and adaptation</td>
<td></td>
</tr>
<tr>
<td>DRC (African Group)</td>
<td>Institutional arrangements for technology transfer should be anchored in the TEC and the CTCN</td>
<td></td>
</tr>
</tbody>
</table>
3.2.4.3 Analysis of Country Positions

Comparing positions of countries analysed in this report, clear divides concerning the role of technology in the 2015 agreement are visible. Notably, Annex I countries have not made detailed submissions on technology and Japan has stated explicitly that no new obligations on technology should be included in the new agreement. In contrast, for several developing countries, technology is a key element of the Paris agreement. China has proposed a global goal for technology and Brazil argues that policies and measures for technology development and transfer should be part of Annex II Parties' NDCs, and subject to regular updating. According to India, the agreement must operationalize technology transfer to developing countries and ensure Annex II financing for it.

Several of the non-Annex I countries analysed here have proposed addressing IPRs in the Paris agreement. China argues for establishing an international mechanism for IPRs. South Africa proposes new technology commitments for developed countries addressing, inter alia, humanitarian or preferential licensing of technologies, patent pools and not asserting patent rights against users in developing countries. While the Annex I countries analysed here have not addressed IPRs in their submissions, the issue has traditionally been controversial, reflecting deep divides between Annex I and non-Annex I country positions. Against this background, it is highly unlikely that the Annex I countries analysed here are willing to include provisions on IPRs in the Paris agreement. While such opposition is unlikely to come as a surprise to non-Annex I countries, the issue still holds some potential to generate difficulties in the negotiations.

Overall, divides between Annex I and non-Annex I countries over technology seem fairly large. For one group of countries, technology should be an important element of the Paris agreement; the other group of countries has made no proposals in this respect and shows reluctance to include the issue in the Paris agreement. At the most recent ADP negotiating session in Bonn in September 2015, the Group of 77 and China warned that the Paris outcome should not be mitigation-centric but must address all elements including the ADP’s mandate. Linking the Technology Mechanism to the Paris agreement and continuing cooperation through the existing institutions possibly holds some potential for finding a compromise solution. Such a view is also reflected in the draft agreement in Co-Chairs’ non-paper from October 2015. Accordingly, the agreement would recognise the need to strengthen cooperative action on technology and also establish a technology framework with the Technology Mechanism serving the new agreement.

3.2.5 Capacity building

3.2.5.1 Introducing the Issue

Capacity building has been part of the UNFCCC negotiating process since its inception in early 1990s. Capacity building has long been recognized in the Convention’s work on such issues as national communications, greenhouse gas inventories, technology transfer and adaptation. In 2001, the COP adopted two frameworks that address the needs, conditions and priorities of developing countries and countries with economies in transition in decisions 2/CP.7 (Marrakesh Accords, includes framework on developing country capacity building) and 3/CP.7 (capacity building in countries in transition). Since
the adoption of the frameworks in 2001, countries continued to implement or enhance capacity building activities at the individual, institutional and systemic levels. In 2009 capacity building was introduced in the ADP negotiating process, and the Durban Forum on Capacity-building was established in 2011.\(^\text{113}\)

In the negotiations for the 2015 Agreement many developing country parties have underscored that their enhanced climate change actions will depend on Means of Implementation (MOI) provided by developed countries, which includes capacity building. The Co-Chair’s Tool from July 2015 reaffirms that capacity-building shall be guided by the framework for capacity-building in developing countries established by the Marrakech Accords.

### 3.2.5.2 Country positions

<table>
<thead>
<tr>
<th>Countries</th>
<th>Capacity building actions</th>
<th>Institutions and mechanisms</th>
</tr>
</thead>
</table>
| China     | • all Parties need to enhance their action on capacity building to address climate change  
• developed countries should provide support in all areas of capacity building to developing countries | • establishing an international capacity-building mechanism  
• a separate window for capacity building under the GCF  
• creation of a capacity-building body or center to e.g. provide a more structured and holistic approach to capacity building |
| US        | • No submissions           | • opposes the establishment of an international capacity-building mechanism  
• In Bonn in June 2015 listed the TEC, the CTCN and the Climate Technology Initiative Private Financing Advisory Network as means for capacity building |
| India     | • no submissions           |                             |
| Russia    | • no submissions           |                             |
| Mexico    | • advancing existing provisions on capacity building  
• traditional cooperation modalities as well as south-south and triangular (north-south-south) cooperation schemes  
• going beyond support for government and implementing agencies; also supporting pioneer projects, programs and actions in low-emission or adaptation-related |                             |

\(^{113}\) [http://unfccc.int/cooperation_and_support/capacity_building/items/1033.php](http://unfccc.int/cooperation_and_support/capacity_building/items/1033.php)
<table>
<thead>
<tr>
<th>Country</th>
<th>Preparations and Views on Capacity Building</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>• no submissions</td>
</tr>
</tbody>
</table>
| Brazil                  | • all Annex II Parties shall include, and update regularly, in their NDCs policies and measures to promote capacity building  
• developing country Parties should be encouraged to include, and update regularly, south-south cooperation initiatives on capacity building in their NDCs  
• an online registry of NDCs related to finance, technology and capacity building forming an integral part of the 2015 agreement |
| South Africa            | • common global commitments to enhance capacity in all areas of climate change action  
• further development of human and institutional capacity in developing countries  
• framework for capacity-building should be enhanced |
| Japan                   | • No obligations on capacity building in the Paris agreement |
| Australia               | • National climate change capacity-building plans for articulating countries’ needs |
| Turkey                  | • No submissions                            |
| Republic of Korea (EIG) | • Capacity building is an important pillar of means of implementation  
• Recognizing the importance of the operating entities of the financial mechanism, including the GCF, for capacity building |
| Canada                  | • no submissions                            |
| DRC                     | • MRV of support received for capacity building against needs identified by Parties  
• assessment of the effectiveness of implementing capacity-building activities, including clear performance indicators  
• a capacity-building mechanism, with institutional arrangements, such as a capacity building committee |
3.2.5.3 Analysis of Country Positions

Capacity building is one of the issues in the Paris negotiations that clearly enjoys a much higher priority among non-Annex I countries than Annex I countries. Of the countries analysed here, Annex I countries have not made detailed submissions on capacity building and Japan has opposed its inclusion in the Paris agreement.

In contrast, non-Annex I countries have made various proposals to strengthen capacity building and include it in the Paris agreement. Brazil proposes that policies and measures related to capacity building should be included in Annex II countries’ NDCs and reflected in an international registry. South Africa calls for the inclusion of capacity-building commitments in the Paris agreement. China has suggested creating a capacity-building window under the GCF. A proposal for an international capacity-building mechanism is also on the table with support from non-Annex I countries. This has, however, been opposed by developed countries, such as Canada, US and Japan.

The draft agreement in Co-Chairs’ non-paper from October 2015 includes a provision on capacity building that would, *inter alia*, scale up cooperation on capacity building with respect to all key thematic areas.

3.2.6 Transparency

3.2.6.1 Introducing the Issue

Transparency refers to Parties’ obligations to report and communicate their efforts to implement the UNFCCC and possible new agreement. In the Paris negotiations, proposals have been made to improve transparency both regarding mitigation as well as with respect to support provided to developing countries. A closely related concept is monitoring, reporting and verification (MRV), which can relate to mitigation, adaptation as well as means of implementation. Under the current UNFCCC system, MRV is differentiated between Annex I and non-Annex I countries. Transparency is a key element in all reporting under the UNFCCC and in the forthcoming 2015 Agreement.

Reporting requirements for Annex I Parties under the Convention include greenhouse gas inventories annually and national communications every four to five years, as well as biennial reports on the progress of achieving emission reductions and providing support to non-Annex I Parties. There is also an International Assessment and Review process for developed countries under the Subsidiary Body for Implementation, which started in 2014. The process consists of two steps: technical review of national reports by each developed country, followed by Multilateral Assessment (MA) of progress toward achieving the country’s economy-wide mitigation target.

Reporting for developing countries is implemented through national communications and biennial update reports (BURs). Developing country Parties are required to submit their national communications every four years (conditional on provision of resources). The first BUR should be, consistent with the Party's capabilities or level of support provided, submitted by December 2014, and every two years thereafter. LDCs and SIDS may submit BURs at their own discretion. The reports are considered at the international level through a process known International Consultation and Analysis (ICA). The process
includes two steps, starting with a technical analysis of the BUR conducted by a team of technical experts and ending with a facilitative sharing of views among Parties.

In the ADP negotiating text (FCCC/ADP/2015/1), issues related to transparency are addressed under the title ‘transparency of action and support.’ This highlights the fact that especially for non-Annex I countries, negotiations on transparency are not confined to reporting on mitigation, but they also include financial, technological and capacity-building support provided by developed countries as an essential component.

With respect to detailed proposals in the ADP negotiating text, the relevant section is lengthy. It includes a range of proposals on whether the transparency framework for action and support should be common to all Parties or differentiated, for example, between developed and developing countries, or between countries in new or existing annexes. There are numerous proposals concerning the role of expert review and existing arrangements as well as applicable methodologies and metrics. Proposals are also included on developed country reporting and review on the provision of support to developing countries.

3.2.6.2 Country positions

<table>
<thead>
<tr>
<th>Country</th>
<th>Inventories, mitigation &amp; adaptation</th>
<th>Support to developing countries</th>
</tr>
</thead>
</table>
| China   | • Different rules for developed and developing country Parties  
         • Enhanced reporting by developed countries on mitigation and support through national communications, BRs and ICA, as well as Kyoto Protocol rules; common templates and rules applicable to all developed countries  
         • With support from developed countries, developing countries enhance transparency of their reporting through national communications, BURs, registry and ICA in a manner that is non-intrusive, non-punitive and respects national sovereignty | • Multilateral assessment of support with compliance consequences |
| US      | • Periodic reporting by all Parties  
         • Single reporting and review system with built-in flexibility  
         • Same guidelines for all Parties with appropriate differentiation in light of capabilities and encouraging improved reporting over time  
         • Review of implementation of schedules is essential; based on a single system with appropriate differentiation  
         • Parties report through biennial communications as well as national |  

<table>
<thead>
<tr>
<th>Country</th>
<th>Technical review of communications, followed by ‘facilitative examination’</th>
<th>MRV requirements in relation to Annex I mitigation</th>
<th>MRV requirements in relation Annex II provision of finance and technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Russia</td>
<td>No submissions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>Transparency is an obligation but must be tailored to fit diverse commitments</td>
<td>Building on existing provisions; an improved set of accounting rules may be used by different sectors</td>
<td>Transparency framework is applicable to every thematic area</td>
</tr>
<tr>
<td>Indonesia</td>
<td>No submissions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td>Proposes an implementation committee or a group of experts to facilitate the preparation and implementation of NDCs; facilitative and non-intrusive process</td>
<td>NDCs preferably subject to multilateral review after their formal communication</td>
<td>Online registry maintained by the Secretariat on nationally-determined contributions on finance, technology and capacity building; registry is an integral part of the Paris agreement</td>
</tr>
<tr>
<td>South Africa</td>
<td>Common rules for all Parties, but a separate framework for developed countries’ commitments</td>
<td>Transition time: over time developing countries adopt similar accounting rules</td>
<td>MRV of support should be more specific</td>
</tr>
<tr>
<td></td>
<td>Developed countries to apply common base year (1990) and common rules on LULUCF and carbon credits</td>
<td>Developed countries to apply similar accounting rules</td>
<td>Enhanced transparency with respect to finance at all levels (levels of financing, what it is used for, are funds new and additional)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assessment must include verification of financial support for developing countries</td>
<td>Assessment must include verification of financial support for developing countries</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Recognition of contributions to international cooperative initiatives (ICIs) should also be considered.</td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td>Proposal/Position</td>
<td></td>
<td></td>
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<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>• Common transparency mechanism for all Parties.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ex ante consultation whereby Parties submit their contributions in advance; comments are invited from Parties and other stakeholders; the Party examines its initial contribution in light of the comments and submits official contribution</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>• Ex post international evaluation and review of performance with regular reporting using common format; comments can be sent concerning the reports; review session in context of the Subsidiary Bodies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>• Common MRV system containing national inventories, mitigation and adaptation actions, support for climate action.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Flexibilities where countries are still developing their national systems and capacities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td>• Opposes single transparency system (the US proposal), but in favor of common framework with flexibility for developing countries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>• No submissions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>• The agreement must contain an obligation for all Parties to participate in the common transparency and accounting framework</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Regular reporting of progress towards nationally-determined contributions using common reporting guidelines</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Commitment to participate in regular review of progress</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>• Regular reporting of traded carbon units by Parties using market mechanisms</td>
<td></td>
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<tr>
<td></td>
<td>• Detailed framework to be elaborated in 2016-2020 drawing on lessons learned</td>
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</tr>
<tr>
<td>DRC</td>
<td>• Common rules for Annex I Parties for their emission reduction targets (position of African group)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Common rules for Annex II Parties on the commitments on finance and technology support (position of African group)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Support for climate action to be included into common post MRV-system.
3.2.6.3 Analysis of Country Positions

Comparing positions of the countries considered in this report, differences are evident in their views concerning the post-2020 transparency framework. The Umbrella Group countries have given a lot of importance to transparency and MRV in the history of the UNFCCC negotiations, expressing a desire to create a common reporting framework for all Parties. These views continue to be reflected in their positions on the Paris agreement.

Of the countries analysed here, Australia, Canada, Japan and the US emphasize the need for a common reporting and review framework in the Paris agreement. According to a detailed submission on transparency by the US, for example, the framework would include a common obligation for all Parties to report using the same tools (national communications and biennial reports) and the same guidelines, albeit with countries’ different capabilities taken into consideration. There would also be a common framework for review, including a technical review and facilitative examination of reporting.

Compared with Annex I submissions, positions expressed by the non-Annex I countries considered here generally include less detail on the transparency framework and place more emphasis on MRV of means of implementation than on MRV of mitigation. The question concerning differentiation also divides countries. China and the DRC, for example, argue that the transparency framework should remain differentiated for developed and developing countries, which stands in contrast to the Umbrella Group position. However, South Africa sees that over time developing countries can phase in similar accounting rules as for developed countries.

At the same time, the non-Annex I countries considered in this report stress the need to strengthen MRV of support and some have made detailed submissions on how to achieve this. Brazil has proposed a registry concerning means of implementation, and South Africa calls for enhanced transparency of climate finance and verification of developed countries’ financial contributions. The Annex I countries considered here have attached similar importance to transparency of support.

One possibility to address the question of transparency is to agree on the general approach and principled issues, such as differentiation, in Paris while postponing negotiations on the various details to a later stage and include them in COP decision. Still, the question concerning differentiation and the emphasis to be given MRV of action and MRV of support can be expected to be difficult in context of the transparency framework. The draft agreement in Co-Chairs’ non-paper from October 2015 envisages a transparency system applicable to all Parties “in a flexible manner and taking into account their differing capacities.” Each party would provide regular information on through a national GHG inventory, implementation of the nationally-determined mitigation commitment/contribution, information on climate change vulnerability and actions taken to address this, as well as support provided, domestic enabling environments and support received. The paper will be considered by the Parties for the first time later in October.
3.3 Some Specific Issues in the Negotiations

There are also other important issues in the negotiations, than those agreed in the negotiating mandate. Many of these issues can be crucial to achieving an Agreement in Paris, such as the equity and responsibility issues.

3.3.1 Interpretation of Equity and Responsibility in the Post-2020 Period

3.3.1.1 Introducing the Issue

The principle of common but differentiated responsibilities and respective capabilities (CBDRRC) is included in Convention Article 3.1 and has played an important role in the UNFCCC regime. It is reflected in the differentiation between Annex I (developed) and non-Annex I (developing) countries. Reflecting the CBDRRC, the 1997 Kyoto Protocol imposed legally-binding emission reduction targets only on Annex I countries.

There is broad agreement among Parties that the CBDRRC along with other principles of the Convention remains relevant in the post-2020 period. There are, however, several proposals to adopt an evolutionary or dynamic interpretation of the CBDRRC and reconsider differentiation among countries taking into account economic and other developments since the early 1990s. In contrast, some Parties emphasize the need to retain the Convention’s current structure and annexes.

3.3.1.2 Country positions

<table>
<thead>
<tr>
<th>Country</th>
<th>Interpretation of Equity and Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>• Paris outcome must be in line with Convention’s principles, and the current annexes continue to apply</td>
</tr>
<tr>
<td>US</td>
<td>• Convention’s principles continue to apply, but annexes need to be updated</td>
</tr>
<tr>
<td></td>
<td>• Efforts to be differentiated based e.g. on circumstances, level of development, mitigation opportunities, capabilities</td>
</tr>
<tr>
<td>India</td>
<td>• Outcome must be built on equity and CBDRRC</td>
</tr>
<tr>
<td></td>
<td>• Actions and commitments must be differentiated on the basis of equity in terms of historical responsibilities and the needs for social and economic development and poverty eradication</td>
</tr>
<tr>
<td>Russia</td>
<td>• CBDRRC shall not be interpreted as a basis for rejecting the obligations by all Parties</td>
</tr>
<tr>
<td></td>
<td>• Vital to include measures by developing countries</td>
</tr>
<tr>
<td>Mexico</td>
<td>• Parties to take appropriate commitments at different depths according to CBDR/RC and equity</td>
</tr>
<tr>
<td></td>
<td>• Calls for a mechanism that allows for adapting to changing conditions, both in terms of scientific findings as well as in levels of development of countries</td>
</tr>
<tr>
<td>Indonesia</td>
<td>No submissions</td>
</tr>
<tr>
<td>Brazil</td>
<td>• Has proposed “concentric differentiation”: all Parties should move towards absolute economy wide targets over time</td>
</tr>
<tr>
<td>Country</td>
<td>Key Points</td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>South Africa</td>
<td>• Important to demonstrate that developed countries are taking the lead</td>
</tr>
<tr>
<td></td>
<td>• Convention’s principles continue to apply</td>
</tr>
<tr>
<td>Japan</td>
<td>• CBDRRC must be interpreted in a ‘dynamic context’</td>
</tr>
<tr>
<td>Australia</td>
<td>• Annex I vs. non-Annex I division is no longer a viable basis</td>
</tr>
<tr>
<td></td>
<td>• All countries to act taking into account their current and evolving</td>
</tr>
<tr>
<td></td>
<td>circumstances and capacities</td>
</tr>
<tr>
<td>Turkey</td>
<td>• Historical responsibilities should not be overlooked, but dynamic</td>
</tr>
<tr>
<td></td>
<td>differentiation in accordance with the CBDRRC is required</td>
</tr>
<tr>
<td></td>
<td>• National circumstances to be evaluated taking into account the</td>
</tr>
<tr>
<td></td>
<td>development level, economic and social indicators, per capita GHG</td>
</tr>
<tr>
<td></td>
<td>emissions, carbon intensity and energy demand</td>
</tr>
<tr>
<td></td>
<td>• IPCC to develop methodology for assessing historical responsibilities</td>
</tr>
<tr>
<td>Republic of Korea (with</td>
<td>• Outcome in Paris should be guided by equity and CBDRRC</td>
</tr>
<tr>
<td>EIG)</td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>• Calls for diversity of approaches, in line with Parties’ capabilities.</td>
</tr>
<tr>
<td></td>
<td>This will maximize participation and ambition</td>
</tr>
<tr>
<td></td>
<td>• Recognition that Parties need to continue to grow their economies</td>
</tr>
<tr>
<td>DRC</td>
<td>• Demands a specific reference to equity, CBDRRC and historical responsibility,</td>
</tr>
<tr>
<td></td>
<td>whilst taking into account national circumstances</td>
</tr>
</tbody>
</table>

3.3.1.3 Analysis of Country Positions

Umbrella Group members like the US and Japan argue for an interpretation of the CBDRRC that takes into consideration changes since 1992. They emphasize the need to change the current bifurcation of countries into Annex I and non-Annex I countries, and the US is proposing updated annexes x and y. China among many other non-Annex I countries stresses the importance of retaining the current Convention structures, including the distinction between Annex I and non-Annex I countries. The US, Australia, etc. do accept the need for differentiation, especially for countries with low emissions and capabilities, but would like to move forward from the 1992 division to a more updated situation, taking into account the developments of the last two decades.

3.3.2 Land use and forests

3.3.2.1 Introducing the Issue

Article 4.1(a) of the UNFCCC identifies further commitment to develop, periodically update, publish and make available to the Conference of the Parties, in accordance with Article 12, national inventories of anthropogenic emissions, including land use and forestry, not controlled by the Montreal Protocol, using methodologies agreed upon by the Conference of the Parties. Over the past ten years, the methodologies have been
implemented using guidance originating from SBSTA sessions, and have evolved, along with guidance coming from the IPCC.

Decision 18/CP.8 stipulates that Annex I Parties shall apply the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories for preparing annual inventories under the Convention, due since the year 2004. In the following year Decision 13/CP.9 requested Annex I Parties to the Convention to apply the Good Practice Guidance for LULUCF for preparing annual inventories. Following further guidance developed under the IPCC, most recent guidance Decision 24/CP.19 stipulates that Parties included in Annex I should apply the 2006 IPCC Guidelines for National Greenhouse Gas Inventories. The same decision encourages Annex I Parties to use the "2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands" in preparing their annual inventories under the Convention due in the year 2015 and beyond.

In addition to proving and agreeing on guidance for measuring emissions from land under the Convention, Parties who have signed onto the Kyoto Protocol are also required to report information under the Kyoto Protocol (Articles 3.3 and 3.4) during a commitment period, supplementary to the information reported under the Convention (Article 4.1(a)).

Under the Kyoto Protocol, Parties annually report emissions resulting from:

- LULUCF activities under Article 3.3, namely afforestation, reforestation and deforestation that occurred since 1990.
- Any elected human-induced activities under Article 3.4, which can be: forest management (mandatory in the second commitment period), revegetation, cropland management and grazing land management.

Unlike the Convention, which includes all emissions and removals from LULUCF in a Party’s total emissions (Land based accounting), the Kyoto Protocol restricts the accounting of the LULUCF sector to emissions and removals from specific activities (Activity based accounting) that are defined under Article 3, paragraphs 3 and 4, of the Protocol.

The IPCC recently confirmed in the Fifth Assessment Report\textsuperscript{114} (AR5) that tropical deforestation and forest degradation represent ‘the largest and most variable single contributor’ to emissions from land use change and that the ‘AFOLU (Agriculture, Forestry and Other Land Use) sector accounts for about a quarter (~10-2GtCO2eq/yr) of net anthropogenic GHG emissions mainly from deforestation, agricultural emissions from soil and nutrient management and livestock’.

As reported in both the Technical Paper on ‘Investment and financial flows to address climate change: an update’ FCCC/TP/2008/7 and the UNEP ‘Emissions Gap 2012’ report, the mitigation potential in the forestry sector by 2020 in developing countries is equivalent

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to approximately 4.2 Gt CO2 annually. In addition, as highlighted by Houghton\textsuperscript{115} “no other processes or procedures alone have the potential for stopping and reversing the accumulation of CO2 in the atmosphere at the speed necessary to stabilize concentrations at 450 ppm or less.

REDD+ is one of the more advanced negotiation processes under the UNFCCC, mainly because there has been a good amount of progress in SBSTA on guidance and modalities for reporting, linked to the IPCC. This has placed REDD+ in a unique position, because it has an internationally acceptable framework, which sets it up to achieve results based payments. Without these guidance and modalities agreed already, the future role of REDD+ would be in question.

There are proposals, for example, by the Coalition of Rainforest Countries, which represents the position of DRC, to specifically integrate REDD+ into the Paris agreement under the ADP. Over the year, it has been taken in and out of the agreement text. It is expected generally by REDD+ countries, that Part I of the Paris Agreement needs to be strengthened on REDD+ - reinserting necessary provisions and references to REDD+, as part of the core agreement. The importance of ensuring REDD+ within the core Paris Agreement is that without the specific recognition and high priority on REDD+, the 2 degree pathway will not be able to be met.

For example, DRC would like the following to be reflected in the Preamble: “Reaffirming the critical role played by sinks and reservoirs of greenhouse gases through mitigation actions, including REDD+, to achieve the stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system”

This preamble proposal puts REDD+ very much at the core of the Paris Agreement – without it, the 2 degree pathway cannot be achieved.

Negotiations on REDD originate from COP 11 in 2005. Since then, the COP has adopted a number of decisions on REDD+, including the Warsaw Framework on REDD+ adopted by COP 19 in 2013. Work on REDD+ continues under the Subsidiary Bodies. At the UNFCCC’s most recent intercessional meeting in June 2015, significant progress was made on REDD+ that could potentially become part of a global deal in Paris later this year. In what will become a COP decision, there were three issues that were agreed to:

1. Further guidance on safeguards, that will also see higher levels of financing committed to higher levels of protection;
2. Methodological issues and guidance related to non-carbon benefits (NCBs).
3. Non-market-based approaches, originally introduced by Bolivia. Bolivia’s Joint Mitigation and Adaptation proposal (JMA), would not allow the use of carbon markets. But the decision in Bonn allows all sources of funding,

including carbon markets, to be available, and countries are free to choose the source of finance that they want.

Before Paris REDD+ negotiators will be focusing on what elements of REDD+ should constitute the basis of the Paris Agreement, and to a large extent this will rely on the submissions on INDCs.

In addition, there have been some recent submissions through ADP on REDD+ by DRC through the Coalition of Rainforest Nations (CfRN). These positions are very important because they are supported by a number of other REDD+ countries some that are part of G77, LDCs and African Group. These groups (G77, LDCs and African Group) do not have a common position on REDD+, or might, support the CfRN position at the last moment. The CfRN submissions are the most influential submissions on REDD+ to the UNFCCC. The following are the most recent proposals under the ADP.

On Mitigation:

**REDD+ and other land use activities and categories** - in meeting their mitigation [commitments][contributions][actions], Parties may undertake REDD+ and other actions in the land sector in accordance with relevant decisions of the Conference of the Parties and with the provisions on transparency of action and support as contained in section I

On Markets:

Mitigation outcomes that are transferred between Parties to this agreement can be counted towards meeting the commitments contained in NDCs submitted by those participating Parties, in accordance with accounting rules to be developed by the Governing Body. Accounting rules shall ensure environmental integrity, including avoidance of double counting.

The Governing Body of this agreement may define mechanisms applying a baseline/reference level to produce mitigation outcomes that are real, additional, verifiable, and permanent, that can be used to meet NDCs commitments. These mechanisms shall be under the authority of the Governing Body.

On Finance - Anchoring agreed mechanisms and frameworks:

- The specific reference to the Warsaw REDD+ Framework from Part One has been replaced by ‘relevant decisions of the COP’ (para 12 and footnote 22)
- Replacement of the reference to the Warsaw Framework for REDD+ with reference to relevant decisions of the COP proposed by the co-chairs is too vague
- The text on financing for forestry in accordance with prior COP decisions should have a specific reference to REDD+.

3.3.2.2 Country positions
<table>
<thead>
<tr>
<th>Country</th>
<th>Views on land use in the Paris agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>No submissions</td>
</tr>
<tr>
<td>US</td>
<td>• REDD+ is important to overall ambition</td>
</tr>
<tr>
<td></td>
<td>• Land use accounting should include all significant land use sinks and sources</td>
</tr>
<tr>
<td></td>
<td>• It should also require a Party to take the same approach in the base year(s) and target year(s)</td>
</tr>
<tr>
<td></td>
<td>• Would like to see consistent methodology applied</td>
</tr>
<tr>
<td>India</td>
<td>No submissions</td>
</tr>
<tr>
<td>Russia</td>
<td>• Include land use and forests when setting targets</td>
</tr>
<tr>
<td>Mexico</td>
<td>• Joint benefits of mitigation and adaptation potentially for forests</td>
</tr>
<tr>
<td></td>
<td>• Joint Mitigation and Adaptation for REDD+</td>
</tr>
<tr>
<td>Indonesia</td>
<td>• Supports REDD+ and the role of land sinks in its INDC</td>
</tr>
<tr>
<td>Brazil</td>
<td>• Finance for REDD+ should be based on the Warsaw International Framework</td>
</tr>
<tr>
<td></td>
<td>• Link REDD+ to nationally determined Contributions</td>
</tr>
<tr>
<td></td>
<td>• Link REDD+ to nationally determined contributions</td>
</tr>
<tr>
<td>South Africa</td>
<td>No submissions</td>
</tr>
<tr>
<td>Japan</td>
<td>No submissions</td>
</tr>
<tr>
<td>Australia</td>
<td>No submissions</td>
</tr>
<tr>
<td>Turkey</td>
<td>No submissions</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No submissions</td>
</tr>
<tr>
<td>Canada</td>
<td>• Core legal text should acknowledge that the land sector is an important part of global mitigation and adaptation efforts.</td>
</tr>
<tr>
<td></td>
<td>• Parties to include the land sector as part of their nationally-determined contributions.</td>
</tr>
<tr>
<td></td>
<td>• Furthermore, the agreement should stipulate that market mechanisms should meet standards of environmental integrity and avoid double-counting</td>
</tr>
<tr>
<td></td>
<td>• The role of market mechanisms and social and environmental integrity for the land sector</td>
</tr>
<tr>
<td>DRC</td>
<td>• The Warsaw REDD+ Framework should be at the foundation of a REDD+ mechanism in the 2015 agreement, including both the methodological, financial and institutional elements.</td>
</tr>
<tr>
<td></td>
<td>• Wetlands are, together with forests, the most important Carbon sink and reservoirs that can be managed, in the short-term, for mitigating and adapting to climate change</td>
</tr>
</tbody>
</table>
In order to achieve coherence, the REDD+ mechanism in the 2015 agreement should guide and eventually absorb and replace some existing multilateral initiatives on REDD+ outside the UNFCCC such as UN-REDD, FCPF, FIP, Interim REDD+ Partnership.

The role of wetlands

Paris Agreement should guide, absorb and replace multilateral initiatives.

### Analysis of Country Positions

A number of the countries above have not made separate submissions specifically for REDD+, and view it as an activity covered under mitigation. For the countries that made submissions on REDD+, there is broad agreement that the Paris agreement should include REDD+, building on the Warsaw REDD+ Framework. A number of countries feel that land use should be included in the INDC, and that forests and land use should be accounted for when setting targets. In addition, Brazil linked REDD+ to the INDC, as a number of countries are expected to do.

The set of countries in this report consist of the most important countries with respect to the world’s forests for different reasons. Brazil, Indonesia and Democratic Republic of Congo have the three largest intact forest areas in the world that, if deforested over the next century, will destabilise any effort to keep to a 2 degree pathway if agreed in Paris. India and China, through their growing demand for timber and wood products are yet to establish legislation that encourages sustainable sources of timber. The USA, Australia and Japan have all recently enacted legislation that prohibits or discourages illegal and/or unsustainable wood products on their markets. Mexico, Brazil and Indonesia are all mega diversity hotspots, which means that their forests also have a very important role to play with respect to the conservation of biological diversity.

Though all countries are generally in agreement that REDD+ should be part of the Paris agreement, their views on many of the details differ. For example, historically, India and Brazil see REDD+ as part of their countries’ NAMAs. Other countries, such as DRC and Indonesia see REDD+ as a separate and distinct mitigation action, not under the evolving NAMAs framework, but as a separate mechanism. This does have implications on how a future financial mechanism will need to be designed, and the current absence of the REDD+ window under the Green Climate Fund (GCF), which has been requested, though not addressed.

REDD+ is quite specific for what it rewards with respect to performance-based payments. Under 1/CP.16 it refers to activities that i) reduce deforestation; ii) reduce degradation; iii) conserve forests; iv) Sustainably manage forests; and v) enhance carbon stocks. This later has come under quite a bit of debate, as Brazil wanted to use plantations as part of its efforts to use forests to store carbon. However the safeguards in Annex II of 1/CP.16 are specific to conserving natural forests. In addition, through the Clean Development Mechanism (CDM) under the Kyoto protocol, afforestation and reforestation efforts (through plantations) are remunerated through Certified Emission reductions (CERs). The enhancement of carbon stocks under the REDD+ activities from the Cancun Agreements refers to activities in natural forests that increase carbon storage, such as natural regeneration, and assisted natural regeneration.
India and Brazil, as well as China, would like to see their forest efforts be rewarded and recognized for the climate change benefits that they provide, and therefore prefer to expand the scope of their activities beyond REDD+ to include forest activities such as urban forestry, agroforestry, revegetation, as well as afforestation and reforestation. India and Brazil have already started implementing forestry NAMAs, and through the German Government’s NAMA Facility, a number of other countries are now lining up to follow suit. In the end, the most likely scenario that will occur is that many REDD+ countries will use REDD+ for remunerating emissions reductions from their natural forests, and if their land area allows, they may also pursue forestry NAMAs as well as REDD+.

The proposal by DRC is somewhat counterproductive to this approach of implementing REDD+ alongside NAMAs for forestry. In its position, it states that “In order to achieve coherence, the REDD+ mechanism in the 2015 agreement should guide and eventually absorb and replace some existing multilateral initiatives on REDD+ outside the UNFCCC such as UN-REDD, FCPF, FIP, Interim REDD+ Partnership."

There were eight pilot countries under the Forest Investment Programme (FIP) in 2010, by July 2015, the number had grown to 23 countries. Under the Forest Carbon Partnership Facility (FCPF), there are currently 47 REDD+ countries, and under UNREDD there are 56 REDD countries. These programmes are preparing REDD+ countries for future performance based payments by supporting the set up of systems for Monitoring, Reporting and Verification (MRV), and the development of National REDD+ Strategies and Action Plans. It seems somewhat unrealistic to expect the Paris Agreement to go so far as to absorb several growing and very popular World Bank and UN programmes and start another new programme up under, for example, Green Climate Fund, which to date, has been very weak with respect to defining a role for REDD+ separate to adaptation and mitigation.

Given the submissions and positions in the negotiations of these important REDD+ countries, it is expected that REDD+ will be addressed at a very general level in the Paris Agreement. Going into Paris, at the beginning of the year, there were expectations that REDD+ would have targets associated with it, and some negotiators point to the New York Declaration on the Role of Forests, which sets a target of halting global deforestation by 2030, but there are disagreements on setting targets for forests between parties, and some, like Indonesia and DRC, expect any target setting to be linked with an agreed mechanism for performance based payments.

Finally, the DRC’s proposal to include Wetlands is very important. Wetlands are part of the “blue carbon” negotiations, which is currently under discussion in SBSTA. Blue carbon includes sea grasses, mangrove forests, and salt marshes, and the carbon that those ecosystems store globally is significant. In addition, sea grasses and mangroves are currently under extreme pressure from degradation and destruction around the world. In 2011-2014 some developments in SBSTA were made on blue carbon, though it was concluded early on that the policy was getting ahead of the science, and momentum slowed. Over the past two or three years there has been an increase in research on how to measure carbon from sea grasses, wetlands and mangroves, and there are growing expectations, particularly by Papua New Guinea, that blue carbon will eventually be absorbed into the REDD+ framework in the coming years.
3.3.3  Time frames and process related to commitments/contributions

3.3.3.1  Introducing the Issue

The ADP negotiating text (FCCC/ADP/2015/1) includes a section on time frames and process related to commitments/contributions in the context of the 2015 Agreement. It brings together Parties’ proposals on an assessment and review process for contributions. It also contains various proposals on how contributions will be put forward and renewed over time. In some proposals, contributions are seen as limited in time, e.g. to 2030, while in others, a very long-term cycle is assumed, review and renewal of contributions e.g. every five years without any specified end date.\footnote{OECD (May 2015): Strategic Review: Implications of Proposals to Date for Mitigation Contributions}

In the Co-Chair’s Tool from July 2015 there are proposals e.g. that Parties periodically communicate or update their proposed commitments/contributions. Such periodic communications shall take into account national circumstances and factors that affect the national determination of climate actions, such as public policy planning and execution cycles and domestic legislative requirements.\footnote{Co-Chairs’ Tool: A Non-Paper Illustrating Possible Elements of the Paris Package (July 2015)}

3.3.3.2  Country positions

<table>
<thead>
<tr>
<th>Country</th>
<th>Time frames for commitments/contributions</th>
<th>Assessment and process</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>• 10-year cycle for commitments focusing on enhanced ambition in 2020-2030</td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>• 5-year cycles for commitments</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Adaptation and mitigation cycles may be different</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Preference for synchronizing Parties’ national cycles</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Parties to submit INDCs no later than six months before the beginning of each cycle</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td></td>
<td>• Parties should consider adjustments to their mitigation commitments based on, e.g. historical responsibilities and equitable sharing</td>
</tr>
<tr>
<td>Russia</td>
<td>• 10-year commitment period</td>
<td>• Review process in the middle commitment period could make ratification challenging</td>
</tr>
<tr>
<td>Mexico</td>
<td></td>
<td>• Facilitative Compliance mechanism to allow for the periodic review of progress</td>
</tr>
<tr>
<td>Indonesia</td>
<td>No submissions</td>
<td></td>
</tr>
</tbody>
</table>

\footnote{OECD (May 2015): Strategic Review: Implications of Proposals to Date for Mitigation Contributions}

\footnote{Co-Chairs’ Tool: A Non-Paper Illustrating Possible Elements of the Paris Package (July 2015)}
## Analysis of Country Positions

There are diverging views between Parties on the length of the mitigation cycle, with most Parties supporting either a 5 or 10 year period for commitments. Those supporting the longer 10 year period see it as a stronger sign for private sector actions and building trust, and on the other hand the Parties supporting the shorter 5 year period see it more suitable for countries’ own national processes etc. Parties agree though that in any case the mitigation cycle should include clear steps that are followed every time, and it should
result in greater ambition over time. The draft agreement in Co-Chairs’ non-paper from October 2015 proposes that successive nationally-determined mitigation contributions/commitments be communicated every five years and that governing body of the new agreement take stock of implementation at regular intervals.

3.3.4 Adaptation - Loss and Damage

3.3.4.1 Introducing the Issue

The COP initiated work on loss and damage as part of the Cancun Adaptation Framework to consider approaches to address loss and damage associated with the impacts of climate change in developing countries. This effort resulted in the Warsaw International Mechanism for Loss and Damage (Decisions 2/CP.19, and 2/CP.20).

The Loss and Damage Mechanism undertakes the following functions:

1. Enhancing knowledge and understanding of comprehensive risk management approaches to address loss and damage associated with the adverse effects of climate change, including slow onset impacts, by facilitating and promoting;
2. Strengthening dialogue, coordination, coherence and synergies among relevant stakeholders by:
3. Enhancing action and support, including finance, technology and capacity-building, to address loss and damage associated with the adverse effects of climate change, so as to enable countries to undertake actions pursuant to decision 3/CP.18, paragraph 6, including by:

In exercising the above functions, the Loss and Damage Mechanism will, inter alia:

- Facilitate support of actions to address loss and damage;
- Improve coordination of the relevant work of existing bodies under the Convention;
- Convene meetings of relevant experts and stakeholders;
- Promote the development of, and compile, analyse, synthesize and review information;
- Provide technical guidance and support;
- Make recommendations, as appropriate, on how to enhance engagement, actions and coherence under and outside the Convention, including on how to mobilize resources and expertise at different levels.

The COP also established an Executive Committee to guide the implementation of functions of the Warsaw International Mechanism (WIM). The Executive Committee will report annually to the COP, and the COP will review the Warsaw International Mechanism at its 22nd session (2016). This has some countries quite nervous pre-empting the sunset of the WIM because of the scheduled evaluation in 2016, with so far limited results. Some considerable negotiation time has been taken addressing this concern, and it is driving a number of submissions to the ADP for new institutions.

3.3.4.2 Country positions
<table>
<thead>
<tr>
<th>Country</th>
<th>Loss &amp; damage</th>
</tr>
</thead>
<tbody>
<tr>
<td>China (G77)</td>
<td>• Science is clear why Loss and Damage should be presented as part of the Paris Agreement post 2020.</td>
</tr>
</tbody>
</table>
| US           | • Warsaw International Mechanism (WIM) should continue to be the institution that coordinates work on Loss and Damage  
• Support loss and damage in the Paris Agreement, and note that the WIM does not have a sunset clause on it, regardless of the evaluation outcome in 2016  
• Not sure on how the International Climate Change Displacement Facility/Mechanism proposed by Tuvalu fits into WIM |
| India        | • No submissions |
| Russia       | • No submissions |
| Mexico       | • No submissions |
| Indonesia    | • No submissions |
| Brazil       | • No submissions |
| South Africa | • The temperature does have implications into adaptation and Loss and Damage, and this should be specified in the text |
| Japan        | • No submissions |
| Australia    | • Loss and Damage should be part of the Paris Outcome |
| Turkey       | • Links loss and damage with agriculture  
• Calls for the consideration of research concerning the subvention of insurance with respect to the agriculture sector |
| Republic of Korea | • Addressed loss and damage under operationalizing the Global Adaptation Goal with Commitments, and suggested, an operational target  
• The Executive Committee of the Warsaw International Mechanism further develops and clarifies the concept of loss and damage associated with climate change impacts and its differences from that of adaptation by 2022  
• Reference to WIM for Loss and Damage in Paris Agreement |
| Canada       | • Loss and Damage should continue to be anchored in the Cancun Adaptation Framework and be guided by the Warsaw International Mechanism |
| DRC          | • Loss and damage associated with the adverse effects of climate change should be part of the 2015 Agreement  
• The 2015 Agreement should provide for corresponding costs, including investment needs for risk assessment, risk management, insurance and compensation, including the associated overall costs and impacts of the residual damages (occurring in the form of loss and damage)  
• An international climate change displacement coordination support |
mechanism is established
- A clearinghouse for insurance and risk transfer systems should be established coordinated by the Executive Committee of the Warsaw International Mechanism for Loss and Damage Board

3.3.4.3 Analysis of Country Positions

The submissions on loss and damage, though limited, generally agree that loss and damage should be part of a 2015 agreement, however the terms for loss and damage within the agreement are quite divergent among all submissions. The Republic of Korea links loss and damage with a global adaptation goal. Canada believes loss and damage should be anchored in the Cancun Adaptation Framework and guided by the Warsaw Mechanism. However developing countries, especially LDC submissions and SIDS, emphasize that further work is needed to operationalize the Loss and Damage Mechanism, and their submissions suggest further elaboration of loss and damage, in addition to, and separate from adaptation, such as establishing a clearing house for insurance.

Of countries not included in this report, the Alliance of Small Island Developing States (AOSIS) and the group of Least Developed Countries (LDCs) have been particularly active with respect to loss and damage. For SIDS, whether it be slow onset events or extreme climate events, climate change is an existential problem. Both negotiating groups are advocating loss and damage to be considered specifically separate to adaptation, arguing that it is associated with the residual costs with adaptation. In other words, loss and damage goes beyond adaptation. They are also proposing for an additional and new institution/mechanism under the WIM, which they referred to as the International Climate Change Displacement mechanism/facility. The exact arrangements of the institution or mechanism are still yet to be clarified. One of their motivations is that the WIM is yet to become effective, as the WIM committee will have its first meeting in October 2015, nearly two years after its establishment. LDCs and vulnerable countries are being inpatient, and skeptical that the current institutions can address their grievances.

These elaborate proposals on loss and damage, have come under heavy criticism from many other countries. They feel that existing adaptation institutions and the WIM will suffice. In this spectrum of viewpoints, the LDC (and AOSIS) viewpoints are the most extreme. Some other non-Annex I countries are more moderate and would like an agreement on loss and damage linked with the science. Donor countries, such as Canada, Republic of Korea and the US believe that loss and damage should be anchored in the current institutions and agreements, and they do not want to see additional structures being set up for loss and damage, and it is on this front that the negotiations for loss and damage will take place.

There have been previous discussions on the role of compensation and liability (linked with emissions debt) under adaptation and loss and damage between 2010-2013. However the EU supported by USA, do not agree with any language such as “compensation or liability” in the Paris Agreement, or in any COP decision, their position is to specifically avoid duplicating the WIM.

While there are no strong positions against placing loss and damage in the Paris Agreement, there are a lot of divergences on how, where and to what extent it should be
placed, in light of the existing arrangements under the WIM. This is to a great part, attributed to the fact that there is no common definition of loss and damage, in addition, there is no mention of loss and damage in the Kyoto Protocol or under the Convention. However there are a growing number of positions that are recognizing loss and damage on par with adaptation and mitigation. What started off as a movement by Tuvalu, has gained ground with AOSIS, now LDCs and even LMDCs.

### 3.3.5 Carbon pricing and carbon markets

#### 3.3.5.1 Introducing the Issue

The development of market-based mechanisms to enhance the flexibility of meeting emission reduction targets (and, in theory, ambition levels) was a key part of the Kyoto Protocol, which produced three international carbon market mechanisms: the Clean Development Mechanism (CDM), Joint Implementation (JI) and International Emissions Trading (IET). The utility of these mechanisms has fallen significantly in recent years because of both an oversupply from the CDM & JI mechanisms and a sharp in key sources of demand, primarily the EU ETS. With limited participation from developed countries in the 2nd commitment period of the Kyoto Protocol the structure of the flexibility mechanisms is unlikely to be transferred to the Paris Agreement as such.

On the other hand, countries around the world are increasingly pursuing market-based approaches to reduce their greenhouse gas emissions. Significantly, both the Republic of Korea and China at a national level, and California at a sub-national level are elevating emissions trading as a key climate change policy. In addition, the new US initiative on capping coal power emissions (the Clean Power Plan) may be implemented in certain States through cap-and-trade initiatives. Many other carbon pricing policies are either in force or in the planning stages, including non-Annex I countries such as Brazil, Kazakhstan, South Africa, Thailand, and Mexico.\(^\text{118}\)

The most recent “non-paper” released by the co-Chairs of the ADP on 5 October does not provide clarity on the role of carbon markets within the Paris Agreement or supplemental COP decision. Although the use of “internationally transferred mitigation outcomes” are clearly envisaged within the mitigation framework of Article 3, the proposed text provides little detail on the core issues of avoiding double counting, the institutional structure for transfers, the environmental integrity of units and consistent MRV standards. The proposed text does not establish an International Compliance Unit which could build upon the infrastructure developed under the Kyoto Protocol. On the other hand, issues related to the future role of carbon markets are also being negotiated outside the ADP, within the SBSTA under an agenda item related to a Framework for Various Approaches (FVA), including a possible New Market Mechanism (NMM). It is possible that the NMM could facilitate the transfer of units between different countries in the case of the Paris Agreement, after agreement on the details is reached.

### 3.3.5.2 Positions Selected Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>International Market mechanisms</th>
<th>Domestic &amp; bilateral market mechanisms</th>
</tr>
</thead>
</table>
| China   | • No reason for including a market mechanism in the 2015 Agreement  
          • If a market mechanism is included, it should be voluntary for developing countries  
          • Need for eligibility requirements for participating in such mechanism | • Sees carbon markets as a measure to reach its mitigation targets on the national level |
| US      | • New Agreement will approach markets differently from the Kyoto Protocol, which is based on legally-binding commitments and transfers of units reflecting assigned amounts  
          • Does not intend to utilize international market mechanisms to implement its 2025 target | • Need to agree on how to use international markets in order to avoid inconsistencies between bilateral mechanisms |
| India   | • Has not submitted its views on carbon markets or carbon pricing  
          • However, one of the major host countries of CDM projects under the Kyoto Protocol | • Nationwide carbon tax on coal for 50 rupees/ton of coal produced in and imported to India  
          • Domestic systems resembling ETS: ‘Perform Achieve and Trade’ (PAT) initiative for energy efficiency; and a Renewable Energy Credit (REC) trading system |
| Russia  | • Market mechanisms needs to be considered | |
| Mexico  | • A robust global market-based mechanism will be essential  
          • Mexico’s mitigation target would require “fully functional bilateral, regional and international market mechanisms” | • Mexico’s mitigation target would require “fully functional bilateral, regional and international market mechanisms”  
          • National carbon tax on fossil fuel production including an option to use CERs from Mexican projects  
          • Domestic ETS scheme is currently under consideration |
| Indonesia | • Supports bilateral, regional and international market mechanisms  
          • Will not use mechanisms in achieving its unconditional mitigation target | • Supports bilateral, regional and international market mechanisms |
<p>| Brazil  | • Economic mechanism to incentify further action in developing | • Does not support the inclusion of bilateral or voluntary emission trading |</p>
<table>
<thead>
<tr>
<th>Country</th>
<th>Preparations and Views</th>
</tr>
</thead>
</table>
| South Africa     | - Supports the possibility of using CDM and JI also under the Paris Agreement  
|                  | - Supports establishing the New Market Mechanism  
|                  | - Expected to launch its own carbon tax scheme in 2016. Emitters to be allowed to use carbon offsets from South African projects |
| Japan            | - Importance of accounting rules applicable to all Parties and the avoidance of double counting  
|                  | - Mechanisms developed jointly by Parties may also be used  
|                  | - Such mechanism would not be administered by the UN  
|                  | - Intends to use market mechanisms, namely its own bilateral Joint Crediting Mechanism (JCM), in achieving its mitigation target |
| Australia        | - Rules to avoiding double-counting and allow tracking of unit transfers  
|                  | - Subsequent COP decisions to elaborate details on the use of market mechanisms  
|                  | - Parties may use units from credible market mechanisms |
| Turkey           | No submissions.  
|                  | In its INDC Turkey mentioned that it aims to use carbon credits from international market mechanisms |
| Republic of Korea| - No submissions  
|                  | - In its INDC Korea mentioned that it will partly use carbon credits from international market mechanisms to achieve its 2030 mitigation target  
|                  | - Has established a national Emissions Trading Scheme (ETS), as the first non-Annex I country  
|                  | - Offsets from international sources will be excluded from the first two phases of the Korean ETS, but in the post-2020 period international units will be allowed to be used up to 10% |
| Canada           | - Commitment for Parties using market mechanisms to regularly |
### Analysis of Country Positions

The role of carbon markets within the Paris agreement presents something of a paradox. Carbon pricing is gaining significant global momentum and yet the Paris agreement will, in all likelihood, treat this key climate policy as a sub-item within the mitigation framework. The INDC mechanism has in effect put carbon markets within the purview of a "coalition of the willing" and removed the need for consensus agreement as to its form, structure and utility. This will have short term benefits for those seeking to push ahead with domestic carbon pricing policies. However, the disadvantages of this approach are fragmentation, uncertainty of environmental integrity and a lack of access to this policy tool for those without the autochthonous capacity to develop national carbon market infrastructure.

The lack of willingness from countries and regional groupings to use negotiating capital to conclude the details of an international transfer mechanism (as referred to in paragraph 34 of the draft decision attached to the non-paper) reflects the difficult history of the Kyoto mechanisms and the inherent flexibility of the INDC structure. Although there is support from Japan, South Africa, Australia, Brazil and Mexico for the inclusion of global carbon market mechanism(s) in the Paris agreement both the United States and China are wary of the impact on national policy sovereignty that the inclusion of a detailed international mechanism at this stage would involve.

Nearly all Parties agree that issues of accounting and transparency are key and accordingly this will be the least common denominator that enables agreement on text in Paris. Substantive issues such as the role of the CDM in pre 2020 ambition, the use of mechanisms as a delivery tool for climate finance and fungibility of domestic offset schemes such as the Chinese CCER will be left, for better or worse, for another occasion. The argument that developed country ambition will be increased through certainty over the role of carbon markets, a fundamental premise of the Kyoto Protocol, has been subsumed with the realpolitik of the bottom-up world of INDCs.

#### DRC

- Build on existing mechanisms
- Need to agree on market and non-market mechanisms which take into account environmental integrity

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4. Conclusions

4.1 INDCs

The assessed INDCs of large countries differ from each other in coverage, scope, target year and level of detail about emission levels and other key issues. This makes it very difficult to compare the INDCs, their ambition level and the equity aspects of the targets. Nearly all of the assessed countries have given reasons why mitigation is challenging to achieve in their country, and why they consider their INDC to be fair and ambitious. However, when looking into the country characteristics, such as GDP per capita, CO$_2$ emissions per capita, emissions intensity of the GDP and share of GHG-emitting sources in electricity generation, there are major differences in countries’ starting points, financial capacities and current emission levels. Many countries have made less ambitious targets than their financial or environmental situation would allow or command. However, there are also positive surprises.

Some non-Annex I countries, such as Brazil, have shown exceptional ambition in taking on mitigation targets that are even more ambitious than those of the Annex I countries, especially when comparing the country characteristics, such as GDP per capita. Surprisingly, Brazil’s annual reduction pace until 2025 is the tightest of all assessed countries, at -2.2 percentage points per year. Also countries such as Indonesia and Mexico have taken on relatively ambitious unconditional targets when looking at the annual reduction rate. In Indonesia’s case the country could increase its emissions only by 0.18 %, and Mexico’s rate is would be 0.62 % annually. On the other hand some Annex I countries, such as Russia and Turkey have taken on targets that allow them to increase their emissions considerably. This can be seen as a discouraging sign to developing countries, and for achieving the global 2°C goal. Turkey’s target is the least ambitious of all assessed countries in this report, as it would allow the country to increase its GHG emissions by 7.65 % per year, compared to e.g. the Democratic Republic of Congo, which as a Least Developed Country would take on a (conditional) target relating to an annual reduction of 4.28 %. Also Russia could nearly double its emissions by 2030. The collapse of the Soviet Union meant the country’s emissions crashed down in the early 1990, thus using the 1990 base year is not very ambitious, and does not give an accurate picture of the current level of emissions.

Several non-Annex I countries have developed significantly after the Convention was signed in 1992, and thus would be better suited nowadays in the Annex I group. The clearest example of this is the Republic of Korea, which now has a GDP per capita of the same level as e.g. Spain or New Zealand. Still, in its INDC Korea stays in the “developing countries” group, as it takes on only a mitigation target relative to BAU, not an absolute target. Also the situation of China has changed considerably since the early 1990s, and it is now by far the biggest GHG emitter in the world. It is a positive sign that China is willing, for the first time, turning their emissions downwards, and increasing considerably its emissions intensity and share of renewable energy. Also China’s recent joint announcements with the US give a signal that the country is willing to reach an agreement in Paris, and is ready to take on legally binding mitigation targets for the first time.
4.2 Negotiating positions and prospects for Paris outcome on key issues

Our analysis of negotiating positions point towards divergent views on many important issues amongst the countries analysed here. Differences between Annex I and non-Annex I country positions remain clearly visible. They are particularly significant concerning such key issues as differentiation and equity, mitigation and climate finance, but are reflected in all areas of ADP negotiations. The analysis below identifies what we see as key issues for a successful Paris outcome.

Finding a compromise on the questions of differentiation and equity is one of the key preconditions for a successful outcome in Paris. While there is broad agreement that the CBDRRC principle will be part of the Paris outcome, there are different views on how it should be applied in concrete terms. All Annex I countries analysed in this report argue for a dynamic interpretation of the CBDRRC principle, taking into account changes in countries’ circumstances and capabilities since the early 1990s when the UNFCCC was negotiated. For them, the current distinction between Annex I and non-Annex I countries is not viable and they have put forward proposals to modify it. In contrast, all non-Annex I countries analysed here have argued for maintaining the current distinction between Annex I and non-Annex I countries in the Paris outcome. These differences are mainly reflected in countries’ positions on mitigation, but can also be detected in other areas, such as transparency of action as well as proposals concerning categories of countries expected to provide climate finance and other support to developing countries.

It is not evident how positions on differentiation and equity can be reconciled in the Paris outcome, although some possible grounds for compromise can be detected. Notably, there is broad agreement that all Parties should undertake mitigation efforts under the Paris agreement even if their contributions may be diverse, reflecting national circumstances and capabilities. The Lima Call for Climate Action (Decision 1/CP.20) also includes some possible compromise text acknowledging the importance of the CBDRRC principle with some qualifications referring to national circumstances. It remains to be seen whether such elements, also reflected in ADP Co-Chairs non-paper from October 2015, can help Parties to bridge their long-standing differences over these issues in Paris.

Mitigation ambition is another crucial but challenging element of the Paris outcome. The prospect of the two-degree target slipping out of reach was one of the main motivations for launching the ADP process in 2011. However, based on the current INDCs, the Paris outcome is unlikely to guide the world to a safe pathway in this respect. The best solution that the Paris agreement can realistically be expected to offer is a procedural one. If successful, the Paris outcome can strengthen the international framework for mitigation, *inter alia*, through creating common timetables and other parameters for countries’ mitigation contributions, and by enhancing transparency and creating *processes* and *timeframes* to increase mitigation ambition in the post-2020 period. While a step forward, such mostly bottom-up architecture is unlikely to be satisfactory to those countries and stakeholders preferring a strong, top-down mitigation regime. Also, in light of the history of the UNFCCC negotiations, questions concerning transparency and ambition review have been difficult, as many important countries are reluctant to accept strong international controls over their climate policies. Thus, a strong outcome on some of the key procedural elements of the post-2020 mitigation regime cannot be taken for granted even if promising grounds for this are provided by the ADP Co-Chairs non-paper from October 2015 with proposals on a regular stocktaking
process, 5-year mitigation cycles and facilitative compliance mechanism or process. Furthermore, from a broader perspective, a merely procedural solution to the burning mitigation problem in Paris can be challenging to the legitimacy of the UNFCCC process. This will be even more so, if the also the procedural and institutional elements of the post-2020 mitigation regime remain relatively weak. This is therefore one of the most important for negotiators to tackle.

On finance, there are important differences in Annex I and non-Annex I countries' positions. For non-Annex I countries, finance is a key element of the Paris agreement and most make a strong link between developing country actions and support received from developed countries. One of the most contentious issues concerns the respective roles of public and private finance in mobilizing the US$100 billion annual goal, along with scaling up annual climate funding in the post-2020 period. For most non-Annex I countries, public finance and the GCF should play an important role in this respect. Countries including China and Brazil have proposed the inclusion of clear financial targets for developed countries in the Paris agreement, based, for example, on GDP or other criterion. Such proposals are meeting strong opposition from Annex II countries, including those analysed in this report. Indeed, looking at positions of the Umbrella Group countries analysed here, their emphasis on climate finance is markedly different. They argue that considerable progress has already been made under the UNFCCC and related institutions. They stress the importance of mobilizing the private sector, creating enabling environments, as well as the need for recipient countries to participate in mobilizing private sector funding. The Paris agreement is unlikely to include strong new commitments on public funding, but more clarity on the scale and mobilization of the annual climate finance goal would send an important signal to developing countries and prepare ground for compromises on climate finance and other issues. Compromises will also needed on groups of countries expected to contribute climate finance. While difficult, climate finance issues are an important element of a successful outcome.

There is broad agreement that adaptation is necessary and will be part of the Paris agreement. There are, however, differences between the Annex I and non-Annex I countries considered here on how adaptation should be treated compared with mitigation in terms of priority. In addition, their views differ concerning the types of adaptation obligations that the Paris agreement should include. While there is widespread agreement that the Paris outcome on adaptation should build on existing institutions such as the Cancun Adaptation Framework and Nairobi Work Programme, several of the non-Annex I countries analysed here have called for the inclusion of a global goal for adaptation in the Paris agreement. Annex I countries do not generally see this as necessary. There is also a close link between adaptation and climate finance discussions. Many developing country submissions note that recent financing for adaptation has not been adequate, predictable or sustainable, and that finance has been predominantly skewed in favour of mitigation.

Comparing positions of countries analysed in this report, clear differences concerning the role of technology in the Paris agreement are visible. Notably, Annex I countries have not made detailed submissions on technology and Japan has stated explicitly that no new obligations on technology should be included in the new agreement. In contrast, for several developing countries, technology is a key element of the Paris agreement. Some of the non-Annex I countries analysed here also have proposed addressing IPRs in the Paris agreement. The issue has traditionally been controversial, reflecting deep divides between Annex I and non-Annex I country positions. Against this background, it is unlikely that the Annex I countries analysed here are willing to include provisions on IPRs.
in the Paris agreement. While such opposition is unlikely to come as a surprise to non-Annex I countries, the issue still holds some potential to generate difficulties in the negotiations. Overall, divides between Annex I and non-Annex I countries over technology seem fairly large. For one group of countries, technology should be an important element of the Paris agreement; the other group of countries has made no proposals in this respect and shows reluctance to include the issue in the Paris agreement. Linking the Technology Mechanism to the Paris agreement and continuing cooperation through the existing institutions possibly holds some potential for finding a compromise solution. Such a view is also reflected in the draft agreement in Co-Chairs’ non-paper from October 2015. Accordingly, the agreement would recognise the need to strengthen cooperative action on technology and also establish a technology framework with the Technology Mechanism serving the new agreement.

REDD+ continues to dominate the negotiations on forests and land use, even though many countries have noted the general importance of including the land sector in INDCs in the lead up to Paris. The guidance and modalities for countries reporting to the Kyoto Protocol, as well as the guidance and modalities for measuring and reporting activities from REDD+ has already been agreed – which laid the foundations for the Warsaw REDD+ Framework.

Going into Paris, there are Parties that would like to see REDD+ as a specific item of the Paris Agreement, separated from mitigation. There is little objection to this move, however, even though it is routinely placed under mitigation, much to the grievance of the Coalition of Rainforest Nations. There are some countries, such as India and Brazil, who view REDD+ as a NAMA, and would like to use a broader range of approaches to yield performance-based finance from forests and land. This is generally not a contradictory position to REDD+, however it can affect the placing of the REDD+ text in agreements. The most likely reality on the ground will be that many REDD+ countries will use REDD+ for remunerating emissions reductions from their natural forests, and if their land area allows, they may also pursue forestry NAMAs as well as REDD+. Whether it be reflected under mitigation or as a separate feature will depend on the deals done in Paris, however history shows that REDD+ has been successful at achieving separate visibility from mitigation.

Concerning loss and damage, the issue has also been highly controversial in the history of the UNFCCC negotiations and these divisions remain visible in the current negotiations. The most elaborate proposals on the loss and damage come from non-Annex I countries not considered in this report, including LDCs and SIDS with proposals for a climate change displacement coordination facility and compensation regime. These are unlikely to be acceptable for the Annex I countries considered in this report. At the same time, there is broad support, especially among developing countries, to include loss and damage in the Paris agreement and it can therefore be expected to form a part of the final compromise as at other recent COPs. The draft agreement included in the ADP Co-Chairs non-paper from October 2015 includes a short provision on loss and damage, while sending a signal that the question of possible institutional arrangements remains difficult and requires further negotiation.

Concerning the Paris overall outcome and its legal form, there is fairly broad convergence of views that the outcome will include a legally-binding agreement with long-lasting provisions and complemented by COP decisions. Yet, the language used in the ADP’s mandate concerning the legal outcome leaves some room for interpretation.
and the need for a new legally-binding treaty may not enjoy universal support among the UNFCCC Parties.

Positions of the countries analysed here clearly illustrate that divergence remains concerning the substantive scope of the Paris agreement. While Annex I countries place the emphasis on mitigation and transparency of action, non-Annex I countries call for a broad agreement that reflects adaptation, mitigation, finance, technology, capacity building as well as transparency of action and support in a balanced manner. In contrast, countries like Japan have explicitly opposed the inclusion of technology and capacity-building issues in the Paris agreement. Our analysis also shows that there are different views on legal status of Parties’ nationally determined contributions, whether they should be part of the legally-binding agreement or included in the Paris outcome in a softer legal format. These differences are reflected in the ADP Co-Chairs’ non paper from October 2015, which includes options on mitigation contributions, commitments or ‘other.’ As noted above, it is looking likely that the post-2020 mitigation regime will remain predominantly “bottom-up” and procedural, with relatively weak substantive mitigation contributions both in terms of their legal form and, for some Parties at least, also in terms of their contents.

In conclusion, the question of legal form has proven difficult several times in the history of the UNFCCC negotiations. Nevertheless, most Parties seem to agree that the Paris outcome should consist of a legally-binding instrument and COP decisions. This is also the structure proposed by the ADP Co-Chairs in their non-paper issued in October 2015. Such an outcome is conceivable, but requires consensus not only on the principled issue of legal form but also on the substantive scope and contents of the legally-binding instrument. For all substantive issues, difficult compromises will be needed, especially between Annex I and non-Annex I countries. Overall, it is possible for an agreement to be strong and binding with respect to the legal form but weak in terms of substantive obligations. The Paris outcome is likely to include trade-offs in this regard.

4.3 Next steps

- The ADP Co-Chairs non-paper, issued on 5 October, will be considered by Parties from 19-23 October 2015 in Bonn, Germany.
- The UNFCCC Secretariat preparing by 1 November 2015 a synthesis report on the aggregate effect of the INDCs sent by Parties by 1 October 2015.
- The COP-21 Paris Climate Change Conference will start on 30. November 2015.
Annex 1. Country positions on some key issues

General Views on the Paris Outcome and its Legal Form

**China:** In its INDC China states that the 2015 Agreement shall be a legally binding agreement implementing the Convention. It can take the form of a core agreement plus COP decisions. Mitigation, adaptation, finance, technology development and transfer, capacity building and transparency of action and support should be reflected in a balanced manner in the core agreement, and relevant technical details and procedural rules should be elaborated in COP decisions. According to China the Nationally Determined Contributions (NDCs) can be listed respectively and separately in the Paris outcome.

In its submissions to the ADP[^119], China notes that commitments by developed country Parties on finance, technology and capacity-building support to developing country Parties must have the same legal status as their mitigation commitments. The Agreement should include attachments on developed country mitigation commitments, developing country mitigation actions and developed country commitments on finance, technology and capacity-building support to developing country Parties, including relevant roadmap and targets. China stresses the importance of retaining the current Convention structures, including the differentiation between Annex I and non-Annex I countries.

**US:** In the view of the US, the Agreement will be part of a larger package adopted in Paris. The Agreement should be designed to last and should therefore include provisions that are sensible to include in a long-term instrument. Other provisions should be included in related instruments that will be easier to modify over time. According to the US the Agreement should evolve over time to promote progressively more ambitious action[^120]. The US states that like the UNFCCC, the 2015 Agreement is likely to contain a mix of provisions that are legally binding and non-legally binding. The US opposes including INDCs in the Agreement's annexes, indicating that another format will be more appropriate for 195 diverse contributions.

US would not support a post-2020 Agreement based on a 1992-era bifurcated approach (differentiation into Annex I and non-Annex I). The only case in which the US would be

[^119]: China’s Submission on the Work of the ADP, March 2014
[^120]: IISD Earth Negotiation Bulletin, Summary of Geneva Climate Change Conference, February 2015
able to consider this type of approach would be if the categories are updated, in line with evolving realities.\textsuperscript{121} In the Geneva session in February 2015 the US proposed replacing references to developed and developing countries throughout the text with references to new regularly updated Annexes x and y. The new Annex x would be agreed in Paris and updated regularly based on criteria relating to evolving emissions and economic trends, and new Annex y would be agreed based on capabilities and evolving economic circumstances.\textsuperscript{122}

**India:** India interprets the notion “agreed outcome with legal force” as including domestic legislation, meaning that the outcome could derive its legal force from domestic legislation instead of international law.\textsuperscript{123} However, according to its submission for the ADP workplan India is open to exploring any and all options of the legal form, including a combination of the different options, when the substantive content of the arrangements have been agreed.\textsuperscript{124}

At COP 20 in Lima, Peru, India called for a clear reference in the preambular paragraphs of the Agreement that it is not just “guided by” but is “in accordance with” the provisions under the UNFCCC, especially the principle of Common But Differentiated Responsibilities and Respective Capabilities (CBDRRRC). India proposed an additional paragraph to the preamble on consideration of economic and social issues, including just transition.\textsuperscript{125} India opposes the US proposal for new Annexes x and y.

**Russia:** In its submission in April 2014, Russia emphasized that it is paramount that a new instrument under the post-2020 climate regime is legally binding and sets commitments not only for developed countries, but also measures to be taken by developing countries. While the actions by developed and developing countries may differ, they should be reflected in a single international legal instrument. Russia rejects the static division of countries to Annex I and non-Annex I as per the current UNFCCC categories. According to Russia, the categories should be flexible and allow for adjustments to be made to countries’ commitments as their level of socio-economic development increases.\textsuperscript{126}

The Russian Federation has also proposed that the agreement should include objectives, principles and major thematic issues. It has emphasized establishing a clear link between commitments and compliance, universal participation by all Parties and considering lessons learned from the Kyoto Protocol for the entry into force of the new agreement.\textsuperscript{127}

\textsuperscript{121} United States’ submissions on the elements of the 2015 agreement, February 2014 and September 2014
\textsuperscript{122} IISD Earth Negotiation Bulletin, Summary of Geneva Climate Change Conference, February 2015
\textsuperscript{124} IISD Earth Negotiations Bulletin, COP-20 summary
\textsuperscript{125} Russian submission to the ADP on Approaches for the 2015 Agreement, April 2014
\textsuperscript{127} IISD Earth Negotiation Bulletin, Summary of Geneva Climate Change Conference, February 2015
Mexico: According to Mexico, the 2015 Agreement should be a legally binding instrument (LBI) under the UNFCCC and guided by its principles. It should establish commitments for all Parties concerning mitigation, adaptation, finance, technology development and transfer, capacity-building as well as transparency of action and support. Mexico supports an Agreement that allows for efficient adjustments without a new ratification process. In Mexico’s view the mitigation commitments shall be part of the 2015 package in the form of an Annex for each Party. Furthermore, the 2015 Agreement should provide adequate flexibility for national circumstances, be rules-based, include ex-ante clarity and comparability on the commitments adopted, and incorporate a mechanism that allows for the evolution of its provisions and adapts to changing conditions.128

Indonesia: Indonesia in its submission to the ADP in March 2013 stated that the 2015 Agreement shall be legally binding and shall include a spectrum of commitments of each Party in terms of mitigation, adaptation and means of implementation. The Agreement shall ensure a “strong pull of compliance” to all Parties. In Indonesia's view the Agreement shall continue the effective implementation of the existing principles of the UNFCCC, also on adaptation and means of implementation.129 In Lima COP-20 Indonesia highlighted the need to ensure adherence to the principles of the UNFCCC in the entire agreement, including the differentiation of countries to Annex I and non-Annex I countries.130

Brazil: In its submissions to the ADP, Brazil underlines that the 2015 Agreement must be fully consistent with the principles and provisions of the UNFCCC, including differentiation between developed and developing countries. Still, in the Geneva negotiations in February 2015 Brazil supported universal undertakings with commitments from all Parties.131 Brazil also stressed the importance of an Agreement that does not need to be revisited every cycle. According to its submissions Brazil does not support the insertion of NDCs as annexes to the Agreement, because they will likely need to be updated regularly. An online tool, based on formal communication from Parties, would better serve this purpose in Brazil’s view. The legal nature of this online tool maybe clarified in the Agreement itself. Brazil has made a proposal of a “concentric approach” for mitigation commitments, which is described in section 3.2.1.2..

South Africa: In South Africa’s view, the 2015 Agreement must be comprehensive, consisting of a package of commitments, targets, actions, efforts, etc. in the areas of mitigation and adaptation and the provision of means of implementation. INDCs are a crucial element of the system. The 2015 Agreement should ensure that adaptation commitments are commensurate with the emission reduction commitments. In South Africa’s view, INDCs will be provisionally inscribed in an annex to the 2015 agreement, when the agreement is adopted at COP21. Final individual commitments on mitigation,

128 Mexico’s submission to ADP about elements of the 2015 Agreement, May 2014
129 Indonesia’s submission to ADP Workstream 1, March 2013
130 IISD Earth Negotiations Bulletin, COP-20 summary
adaptation and means of implementation shall be finally inscribed no later than June 2017, to enable the entry into force of the Agreement on 1 January 2020.\textsuperscript{132}

**Japan:** According to Japan, the legal nature of the 2015 Agreement should take into consideration universal participation and encouragement of ambitious actions. The Agreement should consist of two parts, a simple core agreement and relevant COP decisions. The main elements of the core agreement should be: each Party submits its INDC; each Party is subject to an effective transparency mechanism with \textit{ex ante} consultation and \textit{ex post} review; and each party is encouraged to integrate adaptation into national planning and development. According to Japan finance, technology and capacity building are important issues, but should not be included as legal obligations in the 2015 Agreement.\textsuperscript{133}

**Australia:** According to Australia, the 2015 Agreement itself should be concise and only set out understandings that are durable and require the highest level of political and legal commitment. Most of the detail of implementing arrangements should be set out in accompanying decisions, which may be new decisions or updates of existing decisions.\textsuperscript{134}

**Turkey:** Turkey sees the Paris outcome as an agreed outcome with legal force, applicable to all Parties with enhanced participation. The outcome should have a legal status that each Party can adopt in accordance with its internal processes.\textsuperscript{135} The agreed outcome should contain all elements of climate change, namely mitigation, adaptation, finance, technology, capacity building and reporting. The outcome should be inclusive, equitable and comprehensive, covering in principle 100\% of global emissions. According to Turkey, the UNFCCC regime from 1992 which is based on the Annexes does not reflect the realities of today, as many developing countries have made significant progress in their economic development, and reached a new level in terms of their capacity to respond to climate change. Therefore Turkey suggests a new differentiation mechanism, whereby countries are objectively evaluated in a dynamic manner according to their socio-economic indicators and emission figures, such as GDP, GDP \textit{per capita}, Human Development Index, \textit{per-capita} emissions vulnerability assessment etc.\textsuperscript{136}

**Republic of Korea:** As part of the Environmental Integrity Group (along with Mexico and others) Korea has stated that the outcome in Paris is to be guided by the principles of the Convention and shall include a legally binding instrument (LBI) containing enduring elements of the 2015 Agreement, COP decisions containing dynamic and technical elements, and the nationally determined contributions for the period from 2020. According to EIG, the 2015 Agreement must be based on one common set of rules for all.

\textsuperscript{132} South Africa’s submission to ADP on design and elements of the 2015 Agreement, May 2014

\textsuperscript{133} Japan’s submission to ADP, May 2014

\textsuperscript{134} Australia’s submission to the ADP on 2015 Agreement, October 2014

\textsuperscript{135} \url{http://www.safranboluclimateconference.org/dosyalar/sayfa/6/dosya-6-3840.pdf}

\textsuperscript{136} Turkey’s submission on Workstream1 of ADP, August 2013
Large countries’ preparations and views for the 2015 Paris climate agreement
Final Report
ALA-070815 06.10.2015

Parties, but at different depths in terms of type, stringency, and timing among other according to CBDRRC and equity.\(^\text{137}\)

**Canada:** In Canada’s view the Paris outcome will be a package consisting of a concise core agreement that would be internationally legally binding, accompanied by a series of COP decisions, as well as Parties’ INDCs. It will be under the UNFCCC and applicable to all Parties. The core agreement must focus on those provisions that will remain unchanged over time. The accompanying COP decisions will further elaborate upon and support the implementation of the core agreement. These decisions may include technical details, including clarity concerning the rules underpinning contributions for the post-2020 period. As Parties will continue their work on these and other details from 2016-2020, it will be necessary to clarify when and how mitigation contributions become final and formally inscribed as part of the broader package.\(^\text{138}\)

**DRC:** The Democratic Republic of Congo has not made individual submissions on the issue, but has supported the submissions made by the African Group. The African Group has submitted that the core Agreement should contain the enabling provisions that enhance the achievement of the objective of the Convention, particularly Article 4. It should reflect a balance between all elements (mitigation, adaptation and loss & damage, finance, technology development and transfer) in terms of the legal nature of obligations. The Agreement should also contain provisions “to set-up international processes and conduct in respect of consideration, assessment, review and promote compliance of Party obligations in a differentiated manner.”\(^\text{139}\)

The DRC and CAR are also part of the LDC Group, which in Lima COP-20 highlighted that the Agreement should recall the principles and provisions of the Convention. The LDCs called for two Annexes in the 2015 Agreement, one for Parties taking quantified economy-wide emission reduction targets and the other for parties that take other forms of commitments. The LDCs also stressed loss and damage as a fundamental element of the Paris Agreement.\(^\text{140}\)

**Mitigation**

**China:** In its INDC, China stresses that developed countries shall, in accordance with their historical responsibilities, undertake ambitious, economy-wide and absolute quantified emission reduction targets up to 2030, while developing country Parties shall undertake diversified enhanced mitigation actions. Diversified mitigation actions include emission intensity targets, deviation from the business-as-usual (BAU) and low-carbon strategies, as well as related policies, plans, programmes and projects, in accordance with specific needs and special circumstances of developing country Parties.

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\(^{137}\) EIG (incl. Korea and Mexico) submission to ADP on June 2014
\(^{138}\) Canada’s submission to ADP about elements of the 2015 Agreement, June 2014
\(^{139}\) African Group’s Response to the Co-chairs proposal of 09 June 2015
\(^{140}\) IISD Earth Negotiations Bulletin, COP-20 summary
According to China’s submissions to the ADP, Parties’ contributions towards achieving the Convention’s ultimate objective in Article 2 must be in line with the Convention’s provisions, especially Article 4. Accordingly, developing countries’ mitigation contributions will be in the context of sustainable development, consistent with their special circumstances and specific needs, and dependent on the adequate finance and technology support provided by developed countries.  

US: US state that mitigation has six main elements:

1. Each Party has a ‘schedule’ reflecting its contribution to limit/reduce global GHG emissions. These contributions are nationally determined.
   - Initial contributions should relate to a common timeframe and be specific, going beyond the very general commitments in the Convention.
   - In general, contributions should be expressed in quantitative terms. If qualitative, they should be quantifiable in terms of anticipated effect on overall emissions. Countries with limited capabilities and whose contributions to global emissions are not significant can have purely qualitative commitment.
   - There can be more than one contribution (a hard cap in one sector with emissions that are easy to project, an intensity target in another sector, and policies in a third sector.)
   - Land sector is important and should be reflected as appropriate, including REDD+.
   - Schedule to be submitted upon joining the agreement
2. Schedule must be accompanied with information that helps to ensure it is readily understood.
3. Each Party must report periodically on progress in implementing the schedule.
   - There should be a single reporting system with built-in flexibility. Reporting requirement should be included in the Agreement while the guidelines can be in a decision.
4. Provisions are needed on certain aspects of accounting, such as land use, market mechanisms and baselines.
5. Implementation of schedules should be reviewed.
   - A single review system with details set out in a decision
6. Certain steps related to mitigation will take place before the Paris Agreement related to INDCs.

Brazil: According to Brazil all Parties shall include in their contribution quantified mitigation targets and actions. In Brazil’s view the targets or actions can be of one of the following types:

a) a quantified, economy-wide, absolute emission limitation or reduction target in relation to a baseline year (applicable to all Annex I Parties)
b) a quantified, economy-wide, emission limitation or reduction target relative to a projection of its emissions

141 China’s submission to the ADP, March 2014
142 US submission on the Elements of the 2015 Agreement, February 2014
c) a quantified, economy-wide, emission limitation or reduction target relative to unit of GDP in relation to a previous year

d) a quantified, economy-wide, emission limitation and reduction target per capita,

e) non-economy wide actions (applicable to LDCs).

Brazil has also proposed a “concentric approach” to differentiation of countries’ nationally determined contributions in regards to mitigation\(^{143}\). This approach is illustrated in Figure 5 below. In its 2013 submission Brazil also proposed that each Party should have as reference in its INDC its historical responsibilities for climate change. The country suggests that the IPCC could be invited to develop guidelines to allow Parties to provide simplified estimates of their historical emissions since 1850.

**Figure 5: Brazil’s approach to NDC differentiation with regards to mitigation (from November 2014, new submission expected before Paris)**

**Russia:** In its ADP submission\(^ {144}\) Russia indicates that the new agreement should create incentives for all countries to implement mitigation measures and policies in an economically-sound way. It emphasizes the importance of agreeing on the general criteria applicable to country commitments (regulated gases, total volume of CO\(_2\) emissions, country’s regulated emissions as a share of its total emissions, energy efficiency, etc.). The mitigation commitments should not be enforced “top-down”. Instead, the only reasonable method is for each country to set its own commitments pursuant to its level of socioeconomic development, natural and geographical characteristics, and financial and technical capacity. Land-use and forests should be duly accounted for when

\(^{143}\) Brazil’s submission to the ADP on November 2014

\(^{144}\) Russia’s submission to ADP on approaches to the 2015 Agreement, May 2014
setting targets. Quantified targets should be accompanied by sufficient explanatory information to ensure transparency and enable comparison.

**Japan:** In Japan’s view, mitigation should form the core of the INDCs. All Parties should contribute to the global reduction of GHG emissions. Each Party should be accountable for how it contributes to global emission reduction. In order to effectively deal with climate change, major economies are highly expected to present quantified economy-wide emission reduction targets. This ensures a fair level playing field, while avoiding categorization of Parties. All Parties are subject to international review through an effective transparency mechanism with ex ante and ex post reviews.

**South Africa:** South Africa proposes a common long-term goal in the form of a trajectory of reducing global greenhouse gas emissions by 50% below 1990 levels by 2050 with ambitious mid-term targets and equitable burden-sharing paradigm. All Parties should formulate and implement mitigation commitments. All developed countries (Convention Article 4.2) will take quantified, economy-wide reduction commitments or targets from base year 1990 with an annual trajectory to 2030. Zero carbon emissions pathways for developed countries should decline up to 2030, and a long-term goal for each developed Party in 2050 should be defined. All commitments, targets and actions should be subject to monitoring, reporting and verification (MRV). Developing countries should indicate support needs for nationally appropriate mitigation actions (NAMAs).

**India:** India’s view regarding mitigation is that the distinction made in the Convention between Annex I and non-Annex I Parties must be maintained in accordance with the principles of the Convention. According to India Annex I Parties must continue to take quantified emission limitation and reduction objectives, while non-Annex I Parties will take NAMAs enabled by finance and technology transfer. The work under the mitigation pillar must address adequately and with due priority the issue of response measures, inter alia, discouraging Parties from taking unilateral trade and other measures.

**Mexico:** According to Mexico, mitigation forms a central component of the 2015 Agreement, and all Parties must take appropriate mitigation commitments of same international legal form and under same rules (e.g. same time periods, under same MRV provisions) at different depths according to the principles of CBDRRC and equity, and commensurate to the scientific recommendations for reducing global greenhouse gas emissions. In Mexico’s view, developed country Parties must take the lead with quantified economy-wide emission reduction targets, and developing country Parties shall adopt either absolute reduction targets, intensity targets, deviation from BAU targets or sectoral mitigation plans. LDCs should engage in low-emissions development planning processes.

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145 Japan’s submission to ADP on May 2014
146 Japan made a more specific submission on review in September 2013.
147 South Africa’s submission to ADP on mitigation, September 2013
148 India’s submission to ADP workstream 1, March 2013
**Indonesia:** In Indonesia’s view the 2015 Agreement shall include a spectrum of commitments of each Party in terms of mitigation. The principles of the UNFCCC should be applied to mitigation actions.\(^{149}\)

**Canada:** According to Canada’s submission, mitigation will need to be at the forefront of the 2015 Agreement. The core legal text should lay out several obligations on mitigation that are common to all Parties, including putting forward their NDCs, periodically updating their national schedule, and a common obligation that the contributions are quantifiable and be accompanied by sufficient information to facilitate their clarity, transparency, and understanding. Canada also sees that the core legal text should acknowledge that the land sector is an important part of global mitigation efforts, and encourages Parties to take land use into account in their contributions.\(^{150}\)

**Australia:** According to Australia, the 2015 Agreement should include clear, credible and quantifiable emissions reduction commitments by all Parties, in particular from major economies, that deliver real global outcomes. It must establish a durable rule-based architecture that creates transparency and accountability around countries’ emissions and actions, and confidence that claimed emissions cuts are real. The Agreement should let countries take action that is appropriate to their national circumstances and policy choices, while delivering effective environmental outcomes. Nationally determined contributions should let countries decide the effort appropriate to their national conditions.\(^{151}\)

**Turkey:** According to Turkey, “inclusiveness” necessitates all Parties to take commitments in accordance with their respective capabilities and national priorities. The agreed outcome should allow Parties to determine their own mitigation commitments taking their special circumstances, capacities and other relevant factors into consideration. The new climate regime should also be flexible and allow the usage of both “bottom up” and “top down” approaches. In this respect, no Party should be compelled to commit mitigation, but each Party should decide their level of contribution as it deems realistic, scientifically possible and nationally appropriate.\(^{152}\)

**Republic of Korea:** The EIG has stated that all Parties should submit quantified or quantifiable expected overall emission reductions and levels. For example, a BAU target needs to include expected BAU emissions with the start year and GDP related target needs to include GDP projections, so that targets are quantifiable.\(^ {153}\)

**DRC and CAR:** The African Group, where the Democratic Republic of Congo participates, sees that a differentiated approach across all mitigation elements (form of commitment, counting, accounting, adequacy, fairness and compliance) as per relevant Convention principles is needed in the 2015 Agreement. According to the Group Annex I countries need to take on absolute and economy-wide emission reduction commitments

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\(^{149}\) Indonesia’s submission to ADP, March 2013  
\(^{150}\) Canada’s ADP Submission, June 2014  
\(^{151}\) Australia’s submission on the Elements of the 2015 Agreement, October 2014  
\(^{152}\) Turkey’s submission to ADP Workstream 1, August 2013  
\(^{153}\) Environmental Integrity Group submission to ADP 2.5, June 2014
(covering all sectors and gases), as well as zero carbon emission pathways. Non-Annex I countries could take on relative emission reduction targets, including through NAMAs. The Group also thinks that there should be a quantification of the "global carbon budget" at the start of any commitment period to meet the agreed global goal. The African Group stresses that the level of action by developing countries should be linked to the level of support provided by Annex II Parties, taking into consideration that any commitment in mitigation by developing countries should be balanced by a commitment on finance and technology transfer by developed countries. The group also thinks that the 2015 Agreement needs to define the required aggregate emission reduction goal.

In Lima COP-20 the African Group lamented the overall lack of reference to equity, CBDR, mitigation obligations of developed countries, and specific national and regional development priorities in the 2015 Agreement negotiations.

Adaptation

China: According to China, post-2020 enhanced actions are to comprehensively implement the provisions of the Convention, covering mitigation, adaptation, finance, technology development and transfer and capacity building. All those elements shall be addressed on an equal footing and in a holistic, balanced and coordinated manner. Practical actions on adaptation shall be further enhanced for post-2020, building on the exiting institutional arrangements. Developed countries shall continue to support developing countries to formulate and implement national adaptation strategies and plans so as to effectively adapt to the impacts of climate change.

India: In India’s view work under the adaptation pillar must draw upon work already done in the Ad Hoc Working Group on Long-term Cooperative Action (AWG-LCA). There must be predictable and adequate Annex II funding for adaptation, and the means must be put in place to ensure this. The Cancun Adaptation Framework and the Doha decision for setting up an institutional mechanism for ‘loss and damage’ must be carried forward and implemented.

Indonesia: The post 2020 agreement should ensure the effective implementation of actions under the UNFCCC, namely mitigation, adaptation and means of implementation. The 2015 agreement shall continue the effective implementation of the existing principles of the UNFCCC. These principles will be applied to actions, not limited to mitigation, but

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154 African Group submission to ADP on mitigation, June 2014
155 African Group submission on elements in draft negotiating text, June 2014
156 IISD Earth Negotiations Bulletin, COP-20 summary
157 http://unfccc.int/files/documentation/submissions_from_parties/adp/application/pdf/adp_china_workstream_1_20130305.pdf
http://unfccc.int/files/documentation/submissions_from_parties/adp/application/pdf/adp2_3_lmdc_workstream_1_20131118.pdf
also on adaptation and means of implementation. In addition to this, Indonesia has made submission on support for National Adaptation Plans (NAPs) and the LDC arrangement. In the context of adaptation, Indonesia supports priority support for LDCs through the following considerations:

1. They have been scientifically and potentially threatened by climate change on the main source of economic, food security and water areas in the country.
2. All stakeholders on the territory of a country including parliament and private sector should support implementation of National Adaptation Plan.

Indonesia shared its experience on adaptation policy formulation and gave the following lessons learned for LDCs:

1. National Adaptation Plan should include the analysis of funding needs and technology, as well as assess mitigation requirements that can affect the success of adaptation.
2. Approach and the need for adaptation should be able to take a commitment between sectors as well as private sector as common agenda.

**United States**: Adaptation should be an essential part of the 2015 outcome. The United States will continue to provide significant support post-2020 to the most vulnerable countries and communities as a key component of its broader climate support efforts (on adaptation). The US sees a post-2020 timeframe with parties needing to enhance efforts on adaptation. To support this submission, the USA has made several submissions putting an emphasis on linking adaptation into development priorities.

Based on its submission in 2012, on the support of the National Adaptation Plan process in LDCs, the US presented its position on the process to enable least developed country (LDC) Parties to identify medium and long-term adaptation needs, and develop and implement strategies and programs to address those needs.

**Russia**: The negotiation process under the ADP framework, while elaborating the draft legal instrument for the international legal regime, should include adaptation as one of the thematic building blocks.

**Mexico**: Mexico made a joint submission with AILAC which mentioned that the adaptation component of the 2015 agreement needs to include the following elements:

- A global goal on adaptation,
- Collective and individual adaptation commitments,
- Means of implementation,

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159 [http://unfccc.int/files/documentation/submissions_from_parties/adp/application/pdf/adp_indonesia_workstream_1_20130308.pdf](http://unfccc.int/files/documentation/submissions_from_parties/adp/application/pdf/adp_indonesia_workstream_1_20130308.pdf)

160 [http://unfccc.int/files/documentation/submissions_from_parties/adp/application/pdf/adp_usa_workstream_1_20131017.pdf](http://unfccc.int/files/documentation/submissions_from_parties/adp/application/pdf/adp_usa_workstream_1_20131017.pdf)

• Institutional arrangements.

With respect to a global goal for adaptation, a much higher level of mitigation ambition increases the likelihood of staying within a 2°C or 1.5°C global mean temperature increase scenario, and the related impacts and adaptation needs and costs will be lower.

Mexico also made is submission with the Environmental Integrity Group (EIG), which identifies adaptation as an important component of the 2015 Agreement and it should be addressed with the same priority as mitigation and in a differentiated manner as required.

Means of implementation must adequately underpin:

- the 2015 Agreement in view of mitigation, adaptation, and transparency;
- Ad-hoc multilateral arrangements such as the Adaptation framework are effectively articulated with the 2015 Agreement.

Under the Environmental Integrity Group, a submission was made in 2013 on Means of Implementation (MoI) which said that developed parties and those in a position to do so, should support country-driven mitigation and adaptation actions in developing countries.

**Brazil:** According to Brazil, Parties should be encouraged to include in their NDC policies, actions and plans, including NAPs, aimed at reducing vulnerability to climate change, as well as promoting resilience of ecosystems and sustainable development, with a view to adapt to negative impacts of climate change. Brazil suggests that the communication of the NDC on adaptation may follow the processes and timelines for the development of NAPs, as appropriate. This component of the NDC, therefore, does not follow the same timelines required for mitigation.

Brazil also proposes that the Secretariat maintain and update an online registry/clearing house of adaptation policies and actions communicated through the NDCs, with a view to enhance cooperation on this matter through the relevant mechanisms and channels of the Convention. The online registry should form an integral part of the Paris Agreement. Parties shall enhance cooperation through the Cancun Adaptation Framework to strengthen action on adaptation and the coherent consideration of matters relating to adaptation under the Convention with a view to strengthen the implementation of adaptation actions, policies and National Action Plans. Further rules and institutional components related to transparency, adaptation, finance, technology and capacity-building will need to facilitate the fulfilment of mitigation commitments.

**Japan:** Adaptation should be treated as a key element of the post-2020 framework, taking into consideration the progress of existing arrangements such as the Cancun Adaptation Framework, which consists of the Adaptation Committee, NAPs, and work

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http://unfccc.int/files/documentation/submissions_from_parties/adp/application/pdf/adp_eig_workstream_1_20130923.pdf

programme to consider approaches to address loss and damage, in addition to the Nairobi Work Programme on impacts, vulnerability and adaptation to climate change.

Means of implementation (finance, technology and capacity-building) should be addressed in a series of relevant decisions, which takes into account discussions and progress in existing arrangements such as the GCF, Standing Committee, work programme on long-term finance, Technology Executive Committee, CTCN, Durban Forum on capacity-building and so on in order to ensure continuity and avoid duplication. Each party should formulate, implement, publish and regularly update national adaptation plans.164

**Australia:** The scope of the 2015 Agreement should cover areas where a new international compact can add to the effectiveness and coherence of the global regime. It should work in concert with the range of ongoing international and national implementation arrangements that have been developed to deliver action on mitigation, adaptation and means of implementation. The post-2020 international climate change regime will be designed to promote both mitigation and adaptation responses to climate change, with means of implementation helping countries deliver mitigation and adaptation goals.165

**Republic of Korea:** The Republic of Korea submits that the 2015 Agreement should have mitigation put at the core; it will also address adaptation and means of implementation in balance with mitigation. For the 2015 agreement to be effective and applicable to all, differing national circumstances have to be properly reflected in it with respect to mitigation as well as adaptation and needs for means of implementation. The 2015 Agreement should enable and catalyze adaptation actions on the ground by setting out clear global vision, encouraging commitments/contributions from Parties and relevant organizations, and strengthening institutional arrangements. The Republic of Korea sees developing a global goal for adaptation as key element in the 2015 Agreement to further advance Article 2 of the Convention.166

**Turkey:** The agreed outcome (in 2015) should contain all elements of climate change, namely mitigation, adaptation, finance, technology, capacity building and reporting.167

**Canada:** Canada calls for recognizing the importance of the many existing and new initiatives and institutions that we have established to comprehensively address these
issues, such as the Adaptation Committee, the Green Climate Fund, and the Technology Mechanism. Moving forward, we should allow these processes to unfold according to the work plans we have agreed and concentrate our efforts under the ADP on mitigation and ambition.168

South Africa: The 2015 Agreement should address adaptation with the same priority as mitigation. All Parties must commit to a common global goal for adaptation. Parties should agree to develop a Strategic Framework for a coherent and consolidated international response and work programme on adaptation for the period 2020 to 2030. The Strategic Framework must be a flexible mechanism under the Cancun Adaptation Framework. The Agreement should balance funding for mitigation and adaptation in the long-term, as one way of specifically addressing the concerns of the most vulnerable countries. More generally, it should give priority to adaptation at the same level as mitigation. All Parties have responsibility for adaptation in their countries, with those in need being supported. Funding for adaptation is at the heart of the new instrument. Balance of adaptation and mitigation must be maintained operationally.169

Central African Republic (CAR): In its submission to the ADP Workstream 1 (October 2013), the CAR joined Burundi, Cameroon, Chad, Congo, Gabon, Equatorial Guinea, Republic of Congo, Rwanda, and Sao Tome and Principe, to express their view that adaptation to the impacts of climate change were most important and a priority focus for these countries.170

African Group (South Africa, DRC and CAR): The views and positions of Central African Republic, Democratic Republic of Congo and South Africa, are also represented under the African Group, which has made a number of submissions and position statements on behalf of CAR, DRC and South Africa:

The submission by Swaziland on behalf of the African Group on adaptation in the 2015 Agreement (2013) This submission reflects the rationale, definition and approach to integrating an adaptation goal in the 2015 Agreement; proposes an approach for the quantification of a Global Goal for Adaptation (GGA); and concrete steps for addressing adaptation elements in the 2015 Agreement. The African group proposes that the adaptation costs associated with the long-term goal shall constitute the GGA, where there will be an ex ante determination of such costs based on the long-term goal, envisaged climate impacts and the required finance and technology support. With respect to the Operationalization of the Global Goal for Adaptation, The African Group proposes a Ministerial Roundtable to examine the operationalization of the Global Goal for Adaptation in the 2015 Agreement at COP 19 in Warsaw; as well as the implementation of adaptation action going to 2020. In addition, the African Group further proposes an

168 http://unfccc.int/files/documentation/submissions_from_parties/adp/application/pdf/adp_canada_workstream_1_and_2_en_20130412.pdf
169 http://unfccc.int/files/bodies/application/pdf/adp_south_africa_workstream_1_20130427.pdf
http://unfccc.int/files/documentation/submissions_from_parties/adp/application/pdf/adp_south_africa_workstream_1_and_2_adaptation_20130930.pdf
170 http://unfccc.int/files/documentation/submissions_from_parties/adp/application/pdf/adp_chad_workstream_1_20131026.pdf

14 (134)
agenda item under SBSTA to evaluate methodological approaches to the quantification of adaptation costs with a view of arriving at a Global Goal for Adaptation.

**Finance**

**China:** China argues in its submissions to the ADP and its INDC that developed countries must provide new, additional, adequate, predictable and sustained public funds to support developing country Parties in the post-2020 period to meet the agreed full costs or incremental costs of the preparation and implementation of their enhanced action. Developed countries’ financial commitments should be scaled up in the post-2020 period with a clear roadmap, including specific targets, timelines and identified sources. Institutional arrangements, especially the GCF, should be further elaborated with developed countries contributing at least 1% of GDP to the GCF from 2020 onwards. In its INDC China says that scale of financing should increase yearly starting from US$100 billion per year from 2020, and this financing should come primarily from public sources. According to China, the GCF shall be under authority of, guided by, and accountable to the COP.

In Lima COP-20 China called for acknowledging that South-South financial cooperation is not a commitment of Parties, and suggested that mobilization and provision of finance be enhanced as “additional to” official development assistance.

**US:** The US emphasizes that climate finance has substantially evolved since the Convention’s early days, including in terms of institutions, namely the GCF, Standing Committee on Climate Finance and Climate Technology Centre and Network (CTCN). More attention is also being paid to private sources. The US notes that adaptation funding is now a major part of climate finance and the magnitude of climate finance “has greatly increased”. Furthermore, transparency has improved and recipient countries are improving their enabling environments. The US submits that such institutional and other advances will continue in the post-2020 period.\(^{171}\) In the Geneva session US stressed the need to strengthen recipient country reporting of climate finance flows.\(^{172}\)

**Japan:** Japan notes that developed countries undertake efforts to mobilize US$100 billion of annual climate finance. Given the magnitude of the climate challenge, it is important to encourage all responsible and capable Parties to provide financial support. Scaled-up finance should better address the needs of particularly vulnerable countries, such as SIDS, LDCs and African countries. The financing should come from a broader donor base in line with changing capabilities of Parties since the establishment of the Convention. Mobilization of private finance is crucial, and both donor and recipient countries should collaborate to achieve this. Donor countries should mitigate climate risk of the private sector by offering risk insurance and guarantees. Recipient countries should improve enabling environments.\(^{173}\)

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\(^{171}\) US submission to ADP on elements of the 2015 agreement, February 2014

\(^{172}\) IISD Earth Negotiation Bulletin, Summary of Geneva Climate Change Conference, February 2015

\(^{173}\) Japan’s submission to ADP Workstream 1, May 2014
South Africa: According to South Africa, the 2015 agreement must contain common global commitments to mobilise climate finance on the scale necessary to achieve the ultimate objective of the Convention and to support the implementation of developing country Parties’ individual commitments under this agreement. The Paris Agreement should include pathways to mobilizing developed countries’ long-term finance commitment. For developed countries (under Convention Article 4.3) there should also be an assessed contribution arrangement based on an agreed percentage formula (GDP, income or other) for calculating contributions. South Africa also proposes, inter alia, systems to ensure predictability and delivery of climate finance, and national coordinating bodies.\(^{174}\)

Russia: According to Russia’s submission to ADP in April 2014, it would be best if the financial mechanism of the UNFCCC/KP serves as the financial mechanism for the new instrument. Otherwise Russia states that each country should set its own commitments pursuant to its level of socio-economic development, including financial capacity.\(^ {175}\)

Australia: According to Australia, the Paris Agreement should proceed from the understanding that the great majority of financial flows that drive future low-emissions economic growth will come from private or other non-government sources. In its view the Convention will be “peripheral” to how these funds are mobilised and directed. Policy signals by governments will be more important, such as efforts by export credit agencies to help investors manage risk; and efforts by countries wanting to attract investment to improve economic governance and other aspects of their enabling environments. These signals will aid sustainable economic growth globally. The Agreement should encourage this activity in ways that are non-prescriptive and build confidence. It should include a responsibility for all countries to co-operate on climate finance issues, and commit countries to further work on transparency of financial flows.\(^ {176}\)

Brazil: In Brazil’s view the financial mechanism of the UNFCCC shall support developing country parties in the implementation of all aspects of the Paris Agreement, with the GCF in a key role. Furthermore, the Standing Committee on Climate Finance shall continue to assist the COP in exercising its functions in relation to the financial mechanism in improving coherence and coordination in the delivery of finance, the rationalization of the financial mechanism, mobilization of financial resources, and the MRV of the support provided to the implementation of the contributions by developing country Parties.\(^ {177}\) In Lima COP-20 Brazil highlighted the importance of text to capture the importance of an agreement on scaled-up, new and additional, predictable, adequate and improved access to finance for developing countries to enable and support enhanced action on mitigation, adaptation and means of implementation.\(^ {178}\)

\(^ {174}\) South Africa’s submission to ADP on elements of the 2015 agreement, May 2014  
\(^ {175}\) Russia’s submission to ADP on views on the 2015 Agreement, May 2014  
\(^ {176}\) Australia’s submission to the ADP on the 2015 Agreement, October 2014  
\(^ {177}\) Brazil’s submission to the ADP on the elements of the 2015 Agreement, November 2014  
\(^ {178}\) IISD Earth Negotiations Bulletin, COP-20 summary
**Mexico:** According to Mexico’s submissions, financial commitments should be part of the INDCs of developed countries and also developing countries in a position to do so. Financial resources need to be mobilized from both private and public sources. To achieve this, the Agreement should include commitments to mobilize public funds and means to facilitate and encourage private investment. The 2015 Agreement must provide definitions, respective roles, and give guidance on the mechanisms to achieve a useful balance of public and private sources. Mexico states that it is important to ensure that public funds effectively catalyze private sector co-financing and co-investment through mechanisms that ensure reasonable returns and full transparency. The financial mechanism of the 2015 Agreement should be built based on improved existing institutions and funds, such as the GCF, the Standing Committee on Climate Finance, the Adaptation Fund and the Long-Term Finance Program. At COP 20, Mexico stated that “results-based” should not be a precondition for access to finance, and stressed prioritizing both mitigation and adaptation finance.

**Republic of Korea:** As part of the Environmental Integrity Group (EIG) Korea has stated that the means of implementation (finance, technology development and transfer and capacity building) should be an integral part of the 2015 Agreement. All developed country Parties and other Parties in a position to do, in accordance with CBDR, should provide enhanced, effective and transparent support for country-driven mitigation and adaptation actions in countries which need such support. The 2015 Agreement should include provisions regarding Parties’ enhanced cooperation in order to promote the development, deployment, diffusion and transfer of technology. Institutional arrangements on technology are needed in order to facilitate technology development and transfer to developing country Parties. In this regard, the 2015 agreement should build on the Technology Executive Committee (TEC) and Climate Technology Centre Network (CTCN) and the currently gained experience through its operationalization to foster Parties’ ambitious actions on mitigation and adaptation. At COP 20, the Republic of Korea stressed the importance of a practical approach for mobilizing finance from both public and private sectors, and creating synergies among different financial institutions. The EIG noted in the Bonn June 2015 session that different circumstances require different financial instruments and financing sources.

**India:** According to India’s submission to the ADP, work under the finance pillar must build on existing promises and institutions. In particular it must ensure that the agreed full incremental costs of meeting enhanced non-Annex I reporting obligations is met through additional funding. Overall, there is a need for an increase in the amount of financing provided by Annex II Parties. In Bonn June 2015 session India stressed that climate finance should come mainly from public sources.

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179 Mexico’s submission on indicative elements of the 2015 Legally Binding Instrument, May 2014

180 IISD Earth Negotiations Bulletin, COP-20 summary

181 EIG submission to the ADP on June 2014

182 Ibid.

183 IISD Earth Negotiations Bulletin, Summary of Bonn June 2015 session

184 India’s submission to the ADP on September 2013
Indonesia: In Indonesia's view the 2015 Agreement shall continue the effective implementation of the existing principles of the UNFCCC, and these principles will be applied also to means of implementation, including financial support.\textsuperscript{185}

Turkey: Turkey held an ADP opening speech in Bonn June 2014 session, in which it stated that Turkey needs equitable access to current and future technology and finance mechanisms under the Convention.\textsuperscript{186}

Canada: According to Canada, the mobilisation of financing will continue to play a role in enabling the implementation of a post-2020 agreement, taking into account the evolving capabilities of countries. The existing financial architecture, both within the UNFCCC and outside, already enables actions on mitigation and adaptation. An increasing number of countries are able to access sufficient flows of finance and investments on affordable terms directly from domestic and international private sources. However, this may not be true for some countries, including the poorest and most vulnerable countries. In Canada's view the 2015 Agreement should recognize and promote cooperation among relevant institutions as well as countries at various levels of development and encourage the provision of support by all Parties in a position to do so. The 2015 Agreement should further acknowledge that countries seeking financing to achieve transformative mitigation and adaptation results have the responsibility to dedicate sufficient domestic resources for this purpose, to put in place the conditions to mobilize, attract and absorb climate-related investments, and to report transparently on results achieved with support.\textsuperscript{187}

DRC: The African group has stated in its submissions to the ADP that the Paris Agreement needs to recall the provisions of the Convention that the Annex II Parties should provide the full incremental costs of developing country actions, and the full costs for their reporting and adaptation, recognising that the extent to which developing countries can fulfil their commitments depends on effective provision of finance and technology support. The African group also thinks the ADP should define and agree on quantified targets for provisions of finance related to the 2 degree goal, with a process for review of adequacy, predictability and sustainability, while providing clarity on the burden sharing process between developed countries.\textsuperscript{188} In Lima COP-20 the African Group, together with G77 and China and the LMDCs opposed text suggesting “all” parties mobilize climate finance through a diversity of actions. The African Group recalled the differentiation between developed and developing countries under the Convention, and the responsibility of developed countries to provide finance.\textsuperscript{189} In the February 2015 Geneva session the LDC group suggested that half of all adaptation finance should be allocated to small island developing states (SIDS) and LDCs.

\textsuperscript{185} Indonesia’s submission to ADP Workstream 1, March 2013
\textsuperscript{186} Turkey opening statement in Bonn ADP 2.5, June 2014
\textsuperscript{187} Canada’s submission to ADP on Elements of 2015 agreement, June 2014
\textsuperscript{188} African Group submission to ADP about Workstream 1 elements
\textsuperscript{189} IISD Earth Negotiations Bulletin, COP-20 summary
Technology

China: According to China’s submissions to the ADP, developed countries must promote and finance technology transfer to developing counties by removing obstacles, such as intellectual property rights (IPRs), and by supporting the research, development, demonstration and deployment of technologies as well as the strengthening of endogenous capacities in developing countries. Institutional arrangements for technology should be further developed, including by establishing an international mechanism on IPR and a window for technology development and transfer under the GCF.

In the Geneva session in February 2015 China proposed a long-term technology goal and that developed countries regularly assess and prepare a list of technologies that are “ready for transfer.” In Bonn June 2015 session China stated that a long-term technology goal would help motivate and develop a technology circulation process, as well as enable reviewing the gap between provision of support and technology needs.

US: The US submissions to the ADP do not address the issue of technology. In the Bonn June 2015 session, according to the Earth Negotiations Bulletin, US supported Mexico in noting that both developed and developing countries need to address barriers to technology transfer. US also called for clarifying language on regular assessments of “ready for transfer” technologies suggested by China. The US also stated, together with Australia and Norway that strengthening the Technology Mechanism or institutional arrangements should be addressed in the decision text.

India: In India’s view the technology provisions of the Agreement must operationalize technology transfer to developing countries, ensure Annex II financing for technology development, remove obstacles to and provide financing and incentives for transfer of technology, and facilitate R&D cooperation in climate technology. The issue of IPRs also need to be addressed, as many of the technologies that can help developing countries to move towards a lower emissions path are out of their reach due to IPRs and their costs. India strongly supports a facilitative IPRs regime that balances rewards for the innovators with the common good. In the Geneva session India proposed that the GCF should allocate funds to meet the full costs of developing country access to environmentally sound technologies. In the Bonn June 2015 session India called again for addressing barriers created by IPRs.

Mexico: According to Mexico, the 2015 Agreement needs to strengthen the Technology Mechanism and enhance its effectiveness by enabling it to support in-depth country-level identification and prioritization of technology for both adaptation and mitigation, and to provide technical expertise to support Parties’ development of policies instruments, and capabilities that enable technology innovation, transfer and uptake across the whole process of technological development. The Technology Mechanism should focus international public and private funds onto a portfolio of projects which represent the most

190 IISD Earth Negotiations Bulletin, Summary of Geneva February 2015 session
191 IISD Earth Negotiations Bulletin, Summary of Bonn June 2015 session
192 Ibid.
193 India’s submission to the ADP workstream 1, March 2013
compelling options for the creation of dynamic future markets, and foster enabling environments in both developed and developing countries.\textsuperscript{194}

**Brazil:** According to Brazil, Parties must enhance cooperation through the Technology Mechanism to support developing countries. All Parties committed under Article 4.5 of the Convention shall include, and update regularly, in their NDCs policies and measures for technology development and transfer, with a view to assist the implementation of the NDCs of developing countries. Brazil encourages developing country parties to include, and update regularly, in their NDC south-south cooperation initiatives encompassing e.g. technology development and transfer.\textsuperscript{195} In the February Geneva session Brazil proposed that parties include a technology component in their national contributions.\textsuperscript{196}

**South Africa:** South Africa indicates that developing countries should have an obligation to carry out a Technology Needs Assessment with Annex I country support, and to formulate national structures, strategies, systems and policies. In addition, South Africa proposes a number of technology commitments for developed countries. These relate, \textit{inter alia}, to humanitarian or preferential licensing, patent pools; not asserting patent rights against technology users in developing countries; enhancing access to technology through multilateral institutions; technical support; support for R&D; technology transfer financial facility, etc. According to South Africa, Parties must agree on an enabling policy and regulatory framework to facilitate access to technology. The 2015 Agreement must enhance the operation of the Technology Executive Committee and Climate Technology Centre and Network.\textsuperscript{197}

**Japan:** Japan’s submissions to the ADP do not address the issue of technology. In Bonn June 2015 Japan cautioned against creating new obligations for parties regarding technology transfer, stressing that providing incentives to the private sector would be more effective than new obligations.

**Republic of Korea:** The Environmental Integrity Group, which the Republic of Korea participates in, states that the 2015 agreement will include an independent chapter for means of implementation (MOI), including technology development and transfer. According to the EIG all Parties should commit to play their parts in developing and improving enabling environments for the enhanced delivery of MOI. Parties “in position to do so” are invited to offer MOI support to developing countries. The 2015 Agreement should approach the 3 MOI pillars (finance, technology and capacity building) in an integrated and coordinated manner. There are institutions and arrangements for finance, technology transfer and capacity building inside and outside UNFCCC, but better coordination among institutions is needed. According to EIG, the 2015 Agreement should include provisions regarding Parties’ enhanced cooperation in order to promote the development, deployment, diffusion and transfer of technology. Institutional arrangements on technology in the 2015 agreement should build on the Technology

\textsuperscript{194} Mexico’s submission to the ADP on elements of 2015 agreement, May 2014

\textsuperscript{195} Brazil’s submission on the elements of the 2015 Agreement, November 2014

\textsuperscript{196} IISD Earth Negotiations Bulletin, Summary of Geneva February 2015 session

\textsuperscript{197} South Africa’s submission on Elements of the 2015 Agreement, May 2014
Executive Committee (TEC) and Climate Technology Centre Network (CTCN) and the currently gained experience through its operationalization.\textsuperscript{198}

**Canada:** According to Canada the provision of technology and capacity building support will continue to play a role in enabling the implementation of a post-2020 agreement, taking into account the evolving capabilities of countries and their growing place in the global economy. The 2015 Agreement should recognize and promote cooperation among relevant institutions as well as countries at various levels of development and encourage the sharing of technology and capacity by all Parties in a position to do so.\textsuperscript{199}

**DRC:** The African Group has stated in its submissions to the ADP that there is a need to agree on non-Annex I country obligations to co-operate in the development, application and diffusion, including transfer of technologies, building on the Technology Needs Assessments and Technology Action Plans for mitigation and adaptation. Also the Annex I country obligations to cooperate in the development, application, diffusion and transfer of technologies, as well as the financing of transfer and access to technologies need to be addressed.\textsuperscript{200} The African Group stressed in Lima negotiations that institutional arrangements for technology transfer should be anchored in the TEC and the CTCN. In the February 2015 Geneva session the African Group called for a technology framework to consider technology needs assessments, research and development and enabling environments. In the Bonn June 2015 ADP session the African Group proposed text on this technology framework for scaling up technology development and transfer, explaining it would provide a strategy to guide the Technology Mechanism.

**Capacity building**

**China:** China states in its submissions to the ADP that all Parties need to enhance their action on capacity building to address climate change, and developed countries need to provide support in all areas of capacity building to developing countries. Institutional arrangements resulting from the process under the Bali Action Plan (Decision 1/CP.13) related to capacity building are to be further elaborated in order to enhance the capacities of developing countries, through establishing an international mechanism on capacity building and a separate window for capacity building under the GCF.\textsuperscript{201}

In the Bonn June 2015 session China, for the G77 and China, called for a capacity-building body or center to, \textit{inter alia}: provide a more structured and holistic approach to capacity building; analyze gaps in, and support implementation of, activities; monitor implementation; increase coherence and synergies among activities; publicize financing

\textsuperscript{198} Environmental Integrity Group submission on Elements of the 2015 Agreement, June 2014

\textsuperscript{199} Canada’s submission to the ADP on June 2014

\textsuperscript{200} African Group submission to the ADP Workstream 1

\textsuperscript{201} China’s submission to the ADP on March 2014
opportunities; assist the LDCs in building climate resilience; and support country-driven actions.202

US: The US has not mentioned capacity building in its submissions to the ADP. In Lima the US stated that all Parties in a position to do so should provide capacity building for Parties with lower capabilities. The US opposes the establishment of an international capacity-building mechanism, and mandatory commitments on capacity building.203

In the Bonn June 2015 session the US listed the TEC, the CTCN and the Climate Technology Initiative Private Financing Advisory Network as means for capacity building. Regarding the proposal of the G77 and China about establishing a capacity-building body or center the US enquired how such an institution would coordinate all capacity-building activities globally, and recalled that previous discussions on MRV of support had indicated difficulties in measuring capacity-building support.204

Mexico: In Mexico's view the 2015 Agreement should advance the existing provisions under the UNFCCC regarding capacity building by learning from the last 20 years, and proving the climate regime with tools to make capacity building more effective. These include traditional cooperation modalities as well as south-south and triangular (north-south-south) cooperation schemes. In particular, capacity building should go beyond the support of capabilities within government and implementing agencies, and should extend into the support of pioneer projects, programs and actions which promote new modes of operation in specific low-emission or adaptation-related markets.205

Brazil: In Brazil's view all Annex II Parties shall include, and update regularly, in their NDCs policies and measures to promote capacity building, with a view to assist the implementation of the NDCs of developing countries. Developing country Parties should be encouraged to include, and update regularly, in their NDCs south-south cooperation initiatives on capacity building. According to Brazil, the Secretariat shall keep and update accordingly an online registry of NDCs related to finance, technology and capacity building, with a view to enhance transparency of support. The online registry shall form an integral part of the 2015 agreement.206

South Africa: According to South Africa, the 2015 Agreement must contain common global commitments to enhance capacity in all areas of climate change action to achieve the ultimate objective of the Convention, and to support the implementation of developing country Parties’ individual commitments. In South Africa’s view the framework for capacity-building and the further development of human and institutional capacity in developing countries should be enhanced.207

202 IISD Earth Negotiations Bulletin, Summary of Bonn June 2015 session
203 IISD Earth Negotiations Bulletin, Summary of COP-20
204 IISD Earth Negotiations Bulletin, Summary of Bonn June 2015 session
205 Mexico’s submission on the elements of the 2015 Agreement, May 2014
206 Brazil’s submission elements of the 2015 Agreement, November 2014
207 South Africa’s submission on the Elements of the 2015 agreement, May 2014
Japan: According to Japan, means of Implementation (including capacity building) are important elements of the 2015 Agreement; however they are better suited to be prescribed in COP decisions, and should not become legal obligations under the 2015 Agreement.208

Australia: Australia has not addressed this issue in its own submissions to the ADP. In Bonn June 2015 Australia proposed national climate change capacity-building plans for articulating countries’ needs.209

Republic of Korea: According to the EIG (which Korea and Mexico belong to), capacity building is an important pillar of means of implementation for mitigation and adaptation. Capacity building is a core basis for effective use of finance and technology. The operating entities of the financial mechanism play an important role in funding capacity building through their funding of climate relevant projects with integrated capacity building components in developing countries, in particular, the most vulnerable countries. Therefore, the 2015 Agreement should recognize the importance of the operating entities of the financial mechanism, including the GCF, for capacity building.

DRC: The African Group sees a need for defining a capacity building mechanism under the Convention, which would include institutional arrangements such as a Capacity Building Committee to provide normative guidance to the Convention on capacity-related issues and to inform other mechanisms under the Convention. The African Group also states that ADP negotiations need to agree on MRV of support received for capacity building against needs identified by Parties, and assessment of the effectiveness of implementing capacity building activities including clear performance indicators on an international level.210

Transparency

China: Concerning reporting and transparency, China argues in its submissions that information provided by Parties must be differentiated between developed and developing country Parties, and guided by relevant guidelines for National Communications. In the February 2015 Geneva session China proposed that information on MOI by developed countries should be verified through a technical review process, followed by a multilateral assessment process and conclusions with compliance consequences.

US: Each Party must report periodically on progress (with respect to mitigation) in implementing its national schedule. There should be a single reporting system with built-in flexibility. Reporting requirement should be included in the Agreement while the

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208 Japan’s submission to the ADP on October 2014
209 IISD Earth Negotiations Bulletin, Summary of Bonn June 2015 session
210 African Group submission on the Elements of the draft negotiating text under the ADP
guidelines can be in a decision. Implementation of mitigation schedules should also be reviewed through a single review system.\textsuperscript{211}

**Japan:** In Japan's view each should be Party subject to an effective transparency mechanism common to all Parties composed of ex-ante consultation as well as ex-post international evaluation and review of each Party’s performance based on internationally agreed rules.\textsuperscript{212} In the February 2015 Geneva session Japan proposed removing references to monitoring and evaluation of adaptation from the 2015 Agreement.

**South Africa:** According to South Africa there should be common accounting rules for all Parties in the future; there should be a common accounting framework for developed countries’ commitments from 2020, and over time developing countries can phase in similar accounting rules as for developed countries. However developing countries need time to make the transition. Regarding the (I)NDCs there should be an ex-ante multilateral assessment process and regular reporting of progress in implementation of commitments including international assessment and review (IAR) and international consultation and analysis (ICA) during the commitment period. In addition, developed countries should apply common base year (1990), and rules on treatment of LULUCF and carbon credits. MRV of support should be enhanced drawing on the outcomes of the review by the COP of the function of the Standing Committee on Finance in 2015. Enhanced transparency is required on the levels of financing, what financing is used for, which countries are benefiting, and whether funds are new and additional. Recognition of contributions to international cooperative initiatives (ICIs) as part of the commitment by Parties should also be considered.\textsuperscript{213}

**Australia:** The 2015 Agreement must establish a common MRV system for mitigation to apply from 2020. This means reforming the current system of split reporting guidelines and review processes into a single set of guidelines and processes, to apply from 2020. The system should encourage all Parties to implement the most robust MRV standards as their capacity allows, but include flexibilities where countries are still developing their national systems and capacities. The Agreement should include a single article establishing the common post-2020 MRV system: this would cover national greenhouse gas inventories and mitigation action, improved monitoring and evaluation of adaptation, and reporting of delivery of, and outcomes achieved through support for climate action. Detailed rules would be developed through decisions after 2015.\textsuperscript{214} The transparency and accountability framework should include a common end date (such as 2030) and use of metrics and methodologies from latest IPCC guidance.\textsuperscript{215}

**Republic of Korea:** According to EIG, all Parties shall use in accounting emissions and removals an agreed common set of metrics and methodologies and a common accounting framework for the land sector has to be built. There should be differentiated MRV requirements for different type of mitigation commitments or actions and for different capabilities of Parties. All Parties shall participate in a verification process and

\textsuperscript{211} US submission on elements of 2015 Agreement, February 2014

\textsuperscript{212} Japan's submission to ADP on September 2013

\textsuperscript{213} South Africa’s submission to ADP on mitigation, September 2013

\textsuperscript{214} Australia’s submission to the ADP on the 2015 Agreement, October 2014

\textsuperscript{215} Australia’s submission to the ADP on the 2015 Agreement., May 2014
compliance regime. The 2015 Agreement should also have the transparency system for support. The 2015 agreement should mandate the COP to ensure a transparency system of support, reflecting progress made in Standing Committee for Finance and other international fora such as OECD and MDBs by imbedding an MRV system of MOI and receipt and use of MOI throughout their entire cycle.216

**Brazil:** According to Brazil, accounting rules under the 2015 Agreement must ensure the highest standards for environmental integrity. Brazil states that nationally determined contributions with regards to mitigation and means of implementation shall be MRV:d at the individual country level according with the modalities and procedures already adopted by the COP. Accounting is to be considered a “top down” element of the Agreement and, “as such, Brazil does not favor its inclusion in the scope of the NDC”. Brazil also notes that inclusion of means of implementation in the NDC is paramount to ensure transparency of support.217 In Lima Brazil said transparency is not a substitute for accountability, and that it is linked not only to mitigation, but also to adaptation and the means of implementation.218

**Mexico:** In Mexico’s view the 2015 Agreement should incorporate transparency as a thematic area, although it should be applicable to every other element. According to Mexico transparency is an obligation, but the MRV procedures need to be tailored to fit diverse commitments. Building upon existing provisions for MRV, an improved set of accounting rules must be used by different sectors and under defined criteria. For LDCs and SIDS there should be some differentiation in the MRV requirements.219

**India:** In India’s view work under the transparency of action pillar must extend to the Durban Agreements, in particular by further fleshing out MRV requirements in relation to Annex I mitigation and Annex II provision of finance and technology. India states that it is important to have common accounting rules for MRV of developed country mitigation targets, for such arrangements to be effective and inspire confidence. MRV of the flow of finance as per Convention obligations is also important for India.220

**Canada:** According to Canada the core legal text of the 2015 Agreement should include a common transparency and accounting framework providing visibility of Parties’ GHG emissions and actions to address climate change, regular reporting on their progress with common reporting guidelines by all Parties, and participating in a regular review of this process. The transparency and accounting framework for the post-2020 period should also include reporting on adaptation and means of implementation. Specific details of this framework would need to be elaborated in 2016-2020, taking into account lessons learned through existing processes and provisions. The 2015 core agreement could mandate the COP to undertake work to develop guidelines for reporting and review provisions under this common framework.

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216 EIG’s submission to the ADP on the 2015 Agreement, June 2014
217 Brazil’s submission to the ADP in November 2014
218 IIISD Earth Negotiations Bulletin, COP 20 summary
219 Mexico’s submission to ADP on indicative elements of 2015 Agreement, May 2014
220 India’s submission to ADP, March 2013
Turkey: In Lima COP-20 Turkey opposed the US proposal for a single transparency system, and called for a common framework with common MRV provisions applicable to all parties, with flexibility for developing countries on the level and depth of the application of the common MRV provisions. In its submission in 2013 Turkey states that the new agreed outcome should incorporate a robust review, assessment and compliance system.

DRC: According to the African Group, the 2015 Agreement needs to define common accounting rules for all Annex I Parties for their post-2020 emission reduction targets, as well as on the commitments on finance and technology support by Annex II Parties. The Agreement should also define and provide further guidance to the operational mechanisms of the Convention in accordance with Article 12.1 and 12.2 on transparency in a differentiated manner, including provisions of Article 12.3 on the assessment of finance, technology and capacity building support. The Agreement text should recall reporting systems already agreed under the Convention, including National Communications, Biennial Update Reports, the IAR and the ICA as a sound platform for transparency in the 2015 Agreement through facilitative compliance.

Interpretation of equity and responsibility in the post-2020 period

China: China sees the principles of equity and CBDRRC, taking differentiated historical responsibilities and distinct national circumstances, development stages and capabilities of developing and developed countries into account, as key for the outcome of the negotiations for the Paris Agreement. According to China, the Paris outcome must be in line with the Convention's principles, and the Convention’s Annexes continue to apply in the post-2020 period. The 2015 Agreement should be based on the Convention's structure, including Articles 4 (commitments) and 12 (communication about implementation) and the Annexes. This includes differentiation between developed and developing countries with developed countries taking the lead in reducing GHG emissions and honouring their obligations to provide finance and technology transfer to developing countries. According to China developed countries are responsible for the current and future concentration of greenhouse gases in the atmosphere because of their historical, current and future emissions, and developing countries have the right to equitable development opportunities and sustainable development. In the US-China joint statement the wording "in light of different national circumstances" is added to the CBDRRC wording of the Convention.

The US: The Convention’s principles, including the CBDRRC, continue to apply to efforts in the post-2020 period and beyond. National efforts will be differentiated across a broad continuum of all Parties based on a range of factors, including circumstances, level of development, mitigation opportunities, capabilities, etc. However, the US does not support a bifurcated approach to the new agreement, particularly one based on

221 IISD Earth Negotiations Bulletin, COP 20 summary

222 Turkey’s submission to ADP Workstream 1, August 2013

223 African Group submission about Elements of the draft negotiation text under the ADP
groupings that may have made sense in 1992, which will be nearly 30 years old when the Agreement would come into force.\textsuperscript{224}

**Japan:** According to Japan the 2015 agreement should be durable by appropriately reflecting current and future evolutions of the international community. Because of this Japan suggests that the principle of CBDRRC must be interpreted in a “dynamic context.”\textsuperscript{225}

**South Africa:** According to South Africa, the Convention’s principles and objectives will apply to the 2015 Agreement. Submission includes common global goals on mitigation, adaptation, finance and technology. Individual commitments addressing these pillars are differentiated between developed and developing countries.\textsuperscript{226}

**Brazil:** Brazil believes that the principle of CBDRRC can be operationalized into the 2015 Agreement primarily through differentiation in the types of NDC and the level of effort expected, with a view to demonstrate that developed country parties are effectively taking the lead in addressing climate change, and take fully into account the economic and social development and poverty eradication priorities of developing countries. In Brazil’s view differentiation is key also to ensure that there is no backtracking from previously assumed commitments.\textsuperscript{227} Brazil has put forward an idea of “concentric differentiation”, see above in Figure 5.

**Australia:** The Paris Agreement must establish a common playing field for all countries to take coordinated climate action. In Australia’s view the Annex I vs. non-Annex I division of the UNFCCC is no longer a viable basis for defining the elements or rules of the 2015 Agreement, INDCs or up-front information. However, a common platform for all countries does not mean holding all to the same standard, as countries should be able to act in a way that appropriately reflects their current and evolving circumstances and capacities. The Agreement must sustain economic growth and let countries take action that is appropriate to their national circumstances and policy choices, while delivering effective environmental outcomes.\textsuperscript{228}

**Republic of Korea:** According to EIG, the outcome in Paris should be guided by the principles of the Convention: equity and common but differentiated responsibilities and respective capabilities.\textsuperscript{229}

**Mexico:** According to Mexico all Parties must take appropriate commitments of same international legal form and under same rules at different depths according to the principles of common but differentiated responsibilities and respective capabilities

\textsuperscript{224}US submission on elements of the 2015 agreement
\textsuperscript{225}Japan’s submission to the ADP, May 2014
\textsuperscript{226}South Africa’s submission to the ADP on design and elements of 2015 agreement, May 2014
\textsuperscript{227}Brazil’s submission to ADP on the 2015 Agreement, November 2014
\textsuperscript{228}Australia’s Submission to the Ad-Hoc Working Group on the Durban Platform for Enhanced Action (ADP) on the 2015 Agreement, October 2014
\textsuperscript{229}EIG’s Submission to the Ad-Hoc Working Group on the Durban Platform for Enhanced Action (ADP) on the 2015 Agreement, June 2014
(CBDR/RC) and equity, and commensurate to the scientific recommendations for reducing global GHG emissions.\textsuperscript{230}

**India:** According to India a successful outcome in Paris must be built on equity and duly incorporate requirements of common but differentiated responsibilities, according to the principles of the UNFCCC. In India’s view this is necessary not only to raise the level of ambition of Parties to the common goal of climate stabilization, but also to ensure that the goal of social and economic development and poverty eradication in developing countries is not compromised. The actions and commitments of Parties in the post 2020 period must be differentiated on the basis of equity in terms of historical responsibilities and the needs for social and economic development and poverty eradication. In India’s view the term ‘applicable to all Parties’ does not signal a dilution of differentiation, or a move away from the balance of responsibilities as established in the Convention.\textsuperscript{231}

**Canada:** Canada recognizes that Parties need to continue to grow their economies in order to achieve sustainable development while reducing emissions well into the future. Various domestic factors will shape Parties’ efforts to reduce emissions, including for example the structure of their economy, population growth, the cost of abatement, geography and climate. By accommodating a diversity of approaches, in line with Parties’ capabilities, the 2015 agreement will maximize participation and ambition.

**Russia:** In its Russian language submission to the ADP on September 2013 Russia states that “The principle of Common But Differentiated Responsibilities shall not be interpreted as a basis for rejecting the assumption of legal obligations by all UNFCCC Parties, first of all, by those who are the major greenhouse gas emitters. It is vital for the consolidated agreement to include not only developed countries’ obligations but also measures which could be undertaken by developing countries. The content of developed countries’ obligations and developing countries’ actions may be different but they should be reflected in the scope of the single international legal document.” (Unofficial GreenStream translation).\textsuperscript{232} In its submission to ADP in April, Russia underlines the need for involvement of major GHG-emitters, and calls for taking into the realities of the 21st century. Russia states that the future climate regime should provide equal opportunity for the socio-economic development while not creating unfair competition for business.\textsuperscript{233}

**Turkey:** Turkey sees that a dynamic differentiation among the Parties in accordance with the principles CBDRRC is required to make the Agreement fair, equitable, effective and enduring. National circumstances need to be evaluated in an objective manner taking into account the country’s development level, economic and social indicators, including

\textsuperscript{230} Mexico’s Submission to the Ad-Hoc Working Group on the Durban Platform for Enhanced Action (ADP) on the 2015 Agreement, June 2014

\textsuperscript{231} India’s submission to the ADP workstream 1, March 2013

\textsuperscript{232} “http://unfccc.int/files/documentation/submissions_from_parties/adp/application/pdf/adp_russian_federation_20130903.pdf

\textsuperscript{233} Russia’s Submission of information, views and proposals on the work of the Ad Hoc Working Group on the Durban Platform for Enhanced Action: approaches to 2015 Agreement
per capita GHG emissions, carbon intensity and energy demand. In Turkey’s view historical responsibilities should not be overlooked in the negotiations, and suggests that the IPCC could develop a reference methodology for assessing historical responsibilities. In designing the new legal instrument, Turkey sees as extremely important to consider the changing circumstances as well as individual levels of development and economic conditions of all Parties. In this sense, the Agreement should be built on the principles of the Convention, especially the common but differentiated responsibilities.

**DRC:** The African group demands to the preamble of the Agreement a specific reference to equity, CBDRRC and historical responsibility, whilst taking into account national circumstances. The group states that recognition of sustainable development, gender issues, and poverty eradication that are the priorities for Africa and other developing countries, and therefore the agreement should reinforce a fair, multilateral rule-based regime that brings to effect the right to equitable access to sustainable development, further recognizing developmental context of environmental policies, and that standards applied by some countries may be inappropriate and/or unwarranted economic and social cost to other countries, in particular developing countries, in line with the principles and provisions of the Convention.  

**Land use and forests**

**United States:** According to the US mitigation efforts in the land sector, including REDD+, are an important contribution to overall ambition and should, as appropriate, be reflected in schedules. Land use accounting should include all significant land use sinks and sources. It should also require a Party to take the same approach in the base year(s) and target year(s).  

**Mexico:** Mexico made a joint submission on adaptation and mitigation with AILAC in November 2014, and noted that there are benefits of mitigation and adaptation potentially for forests. Although in some cases adaptation and mitigation might not go always hand in hand, often they can be carried out in synergy. For instance, reforestation can decrease landslide risk and at the same time increase carbon dioxide sequestration. In this sense, mitigation may also have impact on enhancing vulnerability reduction and strengthening adaptive capacity.

**Brazil:** Brazil presented its view on the post 2015 agreement, and made reference to REDD+, for which developing countries implementing REDD+ activities may utilize the positive incentives and results-based finance provided in accordance with the Warsaw

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234 African Group submission to the ADP about Workstream 1 elements


Framework for REDD+, and any other related decisions, to support the implementation of their nationally determined contributions.

**Russia:** Land-use and forests should be duly accounted for when setting targets. 238

**Turkey:** In its submission on loss and damage Turkey believes that risk transfer systems should be established to eliminate the agricultural risks which are encountered by the state and the producers. Within these systems, called Agriculture Insurance, to provide sustainable guarantee for plants, crops, greenhouses, agricultural equipment and livestock which should be targeted. 239

**Canada:** In its submission to ADP 2014240, Canada states that the core legal text should also acknowledge that the land sector is an important part of global mitigation and adaptation efforts and countries, and encourages Parties to include the land sector as part of their nationally-determined contributions. Furthermore, the agreement should stipulate that market mechanisms should meet standards of environmental integrity and avoid double-counting.

The agriculture sector continues to be the largest source of methane emissions and is responsible for significant emissions of black carbon due to open burning practices. At the same time, crop losses from tropospheric ozone exposure are very important, ranging between 7-12 percent for wheat, 6-16 percent for soybean, 3-4 percent for rice, and 3-5 percent for maize.

**Democratic Republic of Congo:** The DRC presented its views on REDD+ in a post 2015 Agreement as part of the Coalition of Rainforest Nations joint submission, which states that REDD+ should be fully integrated in the 2015 agreement as one of the its key elements and the outcome of the ADP should be adequately informed by the work of other subsidiary bodies under the Convention, and build upon important results achieved through past COP decisions. The Warsaw REDD+ Framework should therefore be at the foundation of a REDD+ mechanism in the 2015 agreement, including both the methodological, financial and institutional elements.

While REDD+ is mature and some rainforest nations are already implementing REDD+ actions on the ground, REDD+ in the 2015 agreement should be fully supported by a wide broad variety of financing sources, primarily from developed country Parties. Those sources should include public, private, market, Market linked, and Non-market sources. In order to achieve coherence, the REDD+ mechanism in the 2015 agreement should guide and eventually absorb and replace some existing multilateral initiatives on REDD+ outside the UNFCCC such as UN-REDD, FCPF, FIP, Interim REDD+ Partnership.

239 https://unfccc.int/files/meetings/ad_hoc_working_groups/lca/application/pdf/submission_from_turkey_on_adaptation.pdf
241 http://www4.unfccc.int/submissions/SitePages/sessions.aspx
Wetlands are, together with forests, the most important Carbon sink and reservoirs that can be managed, in the short-term, for mitigating and adapting to climate change. The recent publication of the IPCC on guidance to estimate anthropogenic emissions and removals from Wetlands (Supplement to the 2006 Guidelines for National Greenhouse Gas Inventories: Wetlands), testifies that scientific and technical knowledge is mature for accounting anthropogenic GHG emissions and CO2 removals from wetlands and coastal marine ecosystems as well as the impact on such ecosystems of mitigation actions. In light with the above, the Coalition invites the ADP to start considering at its next session a framework for incentivizing mitigation actions of these ecosystems.242

**Time frames and process related to commitments/contributions**

**China:** At COP 20 China stressed the importance of the timing of the agreement, including precise dates for the starting and ending of its implementation, and a time frame related to commitments.243 In the February 2015 Geneva session China suggested a 10 year cycle for commitments focusing on enhanced ambition in 2020-2030 to build trust, during which: developed countries take the lead on emissions reduction and provide MoI to developing countries, and developing countries follow that leadership, using MoI to increase their level of ambition in mitigation and adaptation. China also stressed the importance of domestic cycles and said developing countries will conduct domestic reflections on their enhanced actions.244

**US:** According to the US' submissions the issue of setting forth new mitigation contributions over time is vitally important in relation to the long-term environmental objective. The Agreement should be built for the long term, with regular updating of mitigation contributions. According to US the core Agreement would provide for each Party to submit, upon joining the agreement, and to maintain thereafter, a schedule reflecting its mitigation contribution. These schedules would compiled in a document maintained by the Secretariat and updated over time as additional Parties joined the Agreement and as new contributions were added for subsequent time periods.245 In the Geneva session the US supported 5 year cycles for the commitments, expressing preference for synchronizing Parties' national cycles, so as to gather public attention to drive ambition. The US also proposed text to provide clarity on how Parties engage in consultations on future cycles of contributions, specifying that "parties to submit INDCs no

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243 IISD Earth Negotiation Bulletin, Summary of COP 20

244 IISD Earth Negotiations Bulletin, summary of Geneva Climate Change Conference February 2015

245 US submission on further elements of 2015 agreement, September 2014
later than six months before the beginning of each cycle.”246 In the Bonn June 2015 session the US stated the adaptation and mitigation cycles may be different.247

**South Africa:** According to South Africa the implementation periods could be 10 years each. In South Africa’s view Parties need to determine whether mitigation contributions for periods from 2030 will be inscribed in an annex to the Agreement and its legal nature. South Africa supports them to be an integral part of the 2015 Agreement. The country also proposes a regular reporting process of progress in implementation of commitments including though the international assessment and review (IAR) and international consultation and analysis (ICA) during the 10 year period. The adjustment process of mitigation commitments would be triggered by a call for new intended contributions for the next 10 year period, followed by an ex ante assessment of the contributions. Mitigation commitments need to intensify over time, meaning that each commitment needs to be more ambitious than the previous one for each country.248

**Brazil:** Brazil recognizes it is important to avoid “locking in” contributions in the long term. Brazil argues in its November 2014 submission that a mid-term review or a light consultation process would possibly not provide incentives to adjust the contributions towards higher ambition levels, and that it’s also important to avoid that successive cycles of contributions become subject to renegotiations and political bargain. Therefore Brazil proposes a “dynamic contribution cycle”, based on ten-year periods, with two five-year contribution terms. In Brazil’s proposal each 10 year cycle includes a 5 year contribution term, followed by a 5 year indicative term. Before the end of each contribution term, the indicative term would be either confirmed or adjusted upwards, and an additional indicative term would be communicated for the following period.249

Brazil also states that during the implementation phase of the Agreement, the COP shall regularly assess the aggregate effect of the NDCs towards achieving the objective of the Agreement, and to inform Parties in adjusting their NDCs towards enhancing ambition in all pillars of the Convention. Brazil calls this assessment process the “Aggregate Consideration Process”, and states that the first session of this process should start in 2020 and finish by 2023. In the Geneva session Brazil warned against requiring progressively more ambitious contributions, because this could lead to low ambition in the first term.250

**Japan:** Japan called in the Geneva session for a 10 year cycle as a stronger signal to investors, and expressed willingness to consider a mid-term review focused on enhancing and understanding the contributions.251

**India:** India said in the Geneva negotiations on this issue that Parties should consider adjustments of their mitigation commitments based on, e.g. historical responsibilities and

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247 IISD Earth Negotiations Bulletin, summary of Bonn June 2015 Climate Change Conference
248 South Africa’s submission to the ADP on the Elements of the 2015 Agreement
249 Brazil’s submission to the ADP in November 2014
250 Ibid.
equitable sharing of the global carbon budget. In Bonn June 2015 session India said the review of implementation should be addressed in post-Paris decisions.

**Australia:** In Australia’s view the MRV system will need to be adapted from 2020 onwards so it establishes common timetables that work in sequence with other review processes to give a ‘rolling picture’ of countries’ performance, to inform later commitment rounds.  

**Mexico:** According to Mexico the 2015 Agreement should incorporate a compliance mechanism to allow for the periodic review of progress in the fulfilment of commitments, which should be of a facilitative nature and with the objective of assessing the incremental performance and effectiveness of measures with respect to scientific information and facilitate the up-scaling of efforts.

**Russia:** In Lima, the Russian Federation cautioned that a review process in the middle of a 10-year commitment period could make ratification challenging, as legislators require a clear understanding of what they are agreeing to. In Russia’s view adopting timeframes may “backfire” or cause “backsliding”.

**Republic of Korea:** In the Bonn June 2015 session Republic of Korea supported the 10 year commitment period with a review process in the middle, and on a process in the mitigation cycle with e.g. a strategic review of implementation in the context of science.

**DRC:** The LDC group have called for parallelism in the cycles for mitigation and MOI and supported 5-year cycles. The LDCs emphasize that countries can increase their contributions in the middle of a cycle.

### Adaptation – Loss & Damage

**Turkey:** In its submission on loss and damage, Turkey links loss and damage with agriculture, and calls for the consideration of research concerning the subvention of insurance with respect to the agriculture sector. In addition, Turkey believes that defining vulnerability is something which should be done when planning for loss and damage which directly threatens the food safety and security as a result of land degradation, forest degradation and desertification that are especially caused by the extreme and unexpected climatic events.

**Republic of Korea:** Republic of Korea in its submission on its views for adaptation in the 2015 agreement, addressed loss and damage under operationalizing the Global Adaptation Goal with Commitments, and suggested, an operational target, which states

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252 Australia’s submission to the ADP on October 2014
253 Mexico’s submission on indicative elements of the 2014 Agreement, May 2014
254 IISD Earth Negotiations Bulletin, summary of Bonn June 2015 Climate Change Conference
255 IISD Earth Negotiations Bulletin, highlights of Geneva session on 12 February 2015
256 [https://unfccc.int/files/meetings/ad_hoc_working_groups/lca/application/pdf/submission_from_turkey_on_adaptation.pdf](https://unfccc.int/files/meetings/ad_hoc_working_groups/lca/application/pdf/submission_from_turkey_on_adaptation.pdf)
that loss and damage should address loss and damage of people and assets from climate-related extreme events. To do this it is suggested that:

1. The Executive Committee of the Warsaw International Mechanism further develops and clarifies the concept of loss and damage associated with climate change impacts and its differences from that of adaptation by 2022.

2. The Executive Committee of the Warsaw International Mechanism conducts analysis on loss and damage of people and assets from climate-related extreme events, and reports them to the governing body of the 2015 Agreement on regular basis.

3. The Executive Committee of the Warsaw International Mechanism develops guidelines for comprehensive climate risk management, in collaboration with other institutional arrangements within and outside the Convention.

4. All Parties, under the guidance of the Executive Committee of the Warsaw International Mechanism, develop risk management plans for loss and damage associated with climate change.

5. Developed country Parties provide support to developing country Parties that are particularly vulnerable to the climate-related extremes.

**Canada:** Based on its submission June 2014 to the ADP, Canada believes that the work on Loss and Damage should continue to be anchored in the Cancun Adaptation Framework and be guided by the Warsaw International Mechanism. This work should be undertaken in the context of supporting Parties in their own national efforts to take appropriate actions to increase their resilience to and prepare for the adverse effects of climate change.

**LDCs represent the views of DRC** on loss and damage. Nepal on behalf of LDCs June 2014 presented a submission which states that loss and damage associated with the adverse effects of climate change should be part of the 2015 Agreement. The 2015 Agreement should provide for corresponding costs, including investment needs for risk assessment, risk management, insurance and compensation, including the associated overall costs and impacts of the residual damages (occurring in the form of loss and damage).

In a separate submission for LDC’s in 2014, the view that the Warsaw International Mechanism for Loss and Damage and related institutions shall operate under the post 2015 agreement once it enters into force. Revisions to the operations of the Warsaw Mechanism for Loss and Damage and its related institutions shall be determined by the Conference of Parties. They encourage countries to develop early warning systems to address climate change related disasters, and to develop climate change risk

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259 http://unfccc.int/files/bodies/awg/application/pdf/submission_by_nepal_on_behalf_of_ldc_group_on_views_and_proposals_on_the_work_of_the_adp.pdf

management planning for climate change related disasters. In addition, An international climate change displacement coordination support mechanism is established.

The LDC view is that a clearinghouse for insurance and risk transfer systems should be established. The purpose of the clearinghouse for insurance and risk transfer systems is to:

1) Provide a repository of information on available of insurance and risk transfer schemes that are available to regions, nations and communities;
2) Provide guidance on developing comprehensive climate change risk management strategies;
3) Provide a free service brokerage to assist Parties find the best insurance and risk transfer schemes to meet their circumstances;
4) Facilitate financial support to assistance Parties find the best insurance and risk transfer schemes to meet their circumstances;
5) Facilitate financial support to assist Parties rehabilitate after the impacts of climate change disasters

The clearing house for insurance and risk transfer systems shall be coordinated by the Executive Committee of the Warsaw International Mechanism for Loss and Damage Board.

**Carbon Pricing and Carbon Markets**

**China:** In its INDC China does not mention the use of carbon markets in the Paris agreement. In the February 2015 Geneva session China indicated that there is no reason for including a market mechanism in the 2015 Agreement. However, if a market mechanism is included in the Agreement, it should be voluntary for developing countries to participate in such a mechanism. China also stressed that there is a need for eligibility requirements for participating in such mechanism.261

Domestically China is active in the development of carbon markets – it has 7 regional pilot Emissions Trading Schemes (ETS) in place.262 In its Joint Presidential Statement with US on 25 September 2015, China announced that it will start rolling out in 2017 its national emission trading system, covering key industry sectors such as iron and steel, power generation, chemicals, building materials, paper-making, and nonferrous metals.263 The regional schemes are going to be integrated to the national system. Therefore China sees carbon markets as a measure to reach its mitigation targets on the national level.

**US:** In its INDC the US states that at this time, it does not intend to utilize international market mechanisms to implement its 2025 target. In the February 2015 Geneva session the US envisaged that the 2015 Agreement will approach markets differently from the Kyoto Protocol, which is based on legally-binding commitments and transfers of units reflecting assigned amounts. Suggesting that importing and applying elements from the Kyoto Protocol is not a simple matter, the US emphasized the need to agree on how to

261 IISD Earth Negotiations Bulleining, Summary of Geneva February 2015 session
use international markets in order to avoid inconsistencies between bilateral mechanisms, and noted a lack of clarity on how markets are designed and implemented.

**Japan:** In the Geneva session Japan suggested that in the post-2020 period also mechanisms developed jointly by Parties may be used, not only centralized market mechanisms administered by the UN. Japan stressed the importance of accounting rules applicable to all Parties and the avoidance of double counting. In its INDC Japan states that it intends to use market mechanisms, namely its own bilateral Joint Crediting Mechanism (JCM), in achieving its mitigation target.

**South Africa:** According to South Africa the mechanisms and institutions under the Convention and the Kyoto Protocol should be available for the 2015 Agreement. This means that South Africa supports the possibility of using CDM and JI also under the Paris Agreement. It also supports establishing the New Market Mechanism. South Africa is expected to launch its own carbon tax scheme in 2016. In the tax scheme emitters will be allowed to use carbon offsets from South African projects to help meet the tax requirements, meaning that offsets can be used to help spur investment in projects that reduce emissions at a lower cost than the carbon tax.

**Australia:** According to Australia, Parties may use units from credible market mechanisms to meet commitments they choose, with rules to avoid double-counting and allow tracking of unit transfers. Subsequent COP decisions could elaborate details on the use of market mechanisms.

**Brazil:** Brazil proposes that an economic mechanism be included in the 2015 Agreement, in order to create incentives for further action in developing countries, mobilize financial support to developing countries; and assist with the implementation of their nationally determined contributions. The economic mechanism shall be comprised of general guidelines related to an emission trading system (ETS) and an enhanced Clean Development Mechanism (CDM+). Methodologies, modalities and procedures of such mechanism should be developed by the COP after the adoption and before entry into force of the Agreement. In Brazil’s view an ETS system can help countries with absolute emission reduction targets to fulfill their commitments. The new market mechanism defined in decision 2/CP.17, paragraph 83, should be established under the Agreement, incorporating the modalities, procedures and methodologies of the CDM, and to allow trading of Certified Emission Reduction (CER) units among all Parties. In the February 2015 Geneva session Brazil proposed that that projects under the CDM+ cover projects also in the aviation and maritime transport sectors. In the Geneva session Brazil also stressed that actions in the land-use sector should not be linked to markets.

Brazil also supports the voluntary cancellation of CERs from the CDM by all Parties. Brazil suggests, that Parties that put forward a financial pledge or target in their NDC...
would be entitled to use the amount of CERs cancelled on their behalf to comply with their financial targets and pledges, but not their mitigation obligations. However, Brazil does not support the inclusion of bilateral or voluntary emission trading schemes as part of a country's contribution to the Paris Agreement.  

**Canada:** According to Canada, in the core legal text of the 2015 Agreement there needs to be a commitment for Parties using market mechanisms to regularly report on the tracking of carbon units traded between Parties to ensure transparency of effort, in particular that they deliver real, permanent, additional and verified mitigation outcomes.  

**Mexico:** Mexico's INDC states that a robust global market-based mechanism will be essential in order to achieve rapid and cost efficient mitigation. Achieving Mexico's conditional -40% mitigation target would require “fully functional bilateral, regional and international market mechanisms”. Mexico approved in October 2013 a carbon tax on fossil fuel production. The tax scheme also includes an option for covered entities to use certified emissions reduction (CER) credits from Mexican projects for compliance. Mexico's General Climate Change Law enables, but does not mandate, the implementation of an ETS. The ETS scheme is currently under consideration.  

**Indonesia:** In its INDC Indonesia welcomes bilateral, regional and international market mechanisms that facilitate and expedite technology development and transfer, payment for performance, technical cooperation and access to financial resources. However, the country has stated that it will not use mechanisms in achieving its unconditional mitigation target.  

**India:** India has not submitted its views on carbon markets or carbon pricing to the ADP. However, it has some related national initiatives in place, as since July 2010 there has been a nationwide carbon tax on coal for 50 rupees/ton of coal produced in and imported to India. The country has also established a ‘Perform Achieve and Trade’ (PAT) initiative for energy efficiency, which resembles an ETS, and a Renewable Energy Credit (REC) trading system. India has also been one of the major host countries of CDM projects under the Kyoto Protocol.  

**Republic of Korea:** Republic of Korea has established a national Emissions Trading Scheme (ETS), as the first non-Annex I country. The first commitment period of the ETS started in January 2015. The third commitment period will be 2021-2025, so it will partly help Korea in achieving its emission reduction targets under the Paris Agreement. Offsets form international sources will be excluded from the first two phases of the

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269 Ibid.  
270 Canada's Submission to the ADP in June 2014  
271 Mexico's Intended Nationally Determined Contribution, March 2015  
273 Indonesia's Intended Nationally Determined Contribution, 24 September 2015  
274 EDF and IETA: India case study, May 2013  
Korean ETS, but in the post-2020 period international units will be allowed to be used up to 10% of the allowance obligations.

**Russia:** In its Russian language submission to the ADP on September 2013 Russia states that the use of market mechanisms needs to be considered when drafting the legal instrument for the 2015 Agreement (unofficial translation).²⁷⁶

**DRC:** The African group states in its submission to the ADP Workstream 1 that the ADP negotiations should, building on existing mechanisms under the Convention, agree on market and non-market mechanisms, LULUCF rules, implementation of REDD+, further guidance to the NAMA Registry, and a mechanism for Response Measures in order to enhance environmental integrity.