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WWF Submission to the *Ad Hoc* Working Group on the Durban Platform for Enhanced Action Regarding Views on Options and Ways for Further Increasing the Level of Ambition

28 February 2012

WWF makes this submission in response to the AWG-DP decision, to submit "views on options and ways for further increasing the level of ambition"

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WWF would be happy to support any further consideration of these issues and to participate in any process for taking them forward.



Introduction

In 1992, at the Rio Earth Summit, world leaders agreed to the shared vision of:

"stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner."

Many Parties to the Convention have accepted that this objective requires limiting global average temperature increases to 2°C above preindustrial levels, as first asserted in 1995. A review of the objective to look at whether a 1.5°C limit is in fact needed, is scheduled for 2013-15. Over 100 highly vulnerable countries, for some of which climate change is an issue of survival, support such a lower average temperature limit.

The 2°C objective can be further expressed as a global carbon budget. Modeling done for the 2009 report "A Copenhagen Climate Treaty"¹ produced by WWF and collaborating NGOs, found that for both 2°C and 1.5°C goals to be possible with a high degree of probability, "the planet's annual global carbon budget from all sources of greenhouse gases would in 2020 be no higher than 36.1Gt CO₂e (gigatonnes of CO₂ and other greenhouse gas emissions), roughly equal to 1990 levels, and would need to be reduced to 7.2Gt CO₂e in 2050,"

Another 2009 study² found that two factors were robust indicators as to the probability of twenty-first century warming not exceeding 2°C above preindustrial levels: the carbon budget to 2050 and emissions levels in 2050. This study further found that "Limiting cumulative CO₂ emissions over 2000–50 to 1,000Gt CO₂ yields a 25% probability of warming exceeding 2°C and a limit of 1,440Gt CO₂ yields a 50% probability (given a representative estimate of the distribution of climate system properties)." A goal of halving global GHG emissions by 2050 from 1990 levels has as high as a 45% probability of exceeding 2°C rises to 53–87% if global GHG emissions are still more than 25% above 2000 levels in 2020". These figures clearly call for urgent, near-term action without any further procrastination.

Recent UNEP reports³ evaluated the emission reduction proposals of individual countries for 2020 and concluded that there remains a significant gap of approximately **6 to 11 GtCO₂e** between the aggregated effect of countries' current pledged GHG emission reductions by 2020 and aggregate emissions pathways consistent with a likely probability (more than 66%) of

holding warming below 2°C or 1.5°C above pre-industrial levels. The scientific findings in each

of the studies cited above indicate that global emissions have to peak before 2020 if we are to have any probability of achieving our stated temperature objectives. Figure 1 below illustrates the possible emission reduction pathways that are commensurate with the two temperature objectives. An even more urgent call for immediate action can be found in the IPCC AR4. In its

¹ Members of the NGO community, including colleagues from IndyACT, The David Suzuki Foundation, National Ecological Center of Ukraine, Germanwatch, Greenpeace and WWF (2009) "A Copenhagen Climate Treaty"

² Meinshausen, Meinshausen Hare, Raper, Friele, Knutti, Frame & Allen (2009) "Greenhouse Gas emission targets for limiting global warming to 2°C" **Nature**, 1158-1162

³ UNEP "The Emissions Gap Report" (2010) and "Bridging the Emissions Gap" (2011)

studies the intergovernmental panel concluded that a peak by 2015 is needed in conjunction with a reduction in global emissions of up to 85% below 2000 levels need to be attained by 2050.

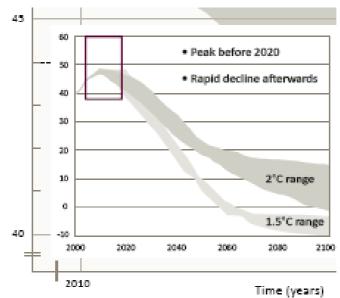


Figure 1: UNEP (2011): the need for a peak by 2020 at the latest and rapid transformational action afterwards.

The UNEP reports held out the clear hope that, by acting rapidly through pursuing a wide range of technically feasible measures, across different emitting sectors, it would be feasible to close the gap in 2020 between BAU emissions and the levels needed to be consistent with the 2°C goal.

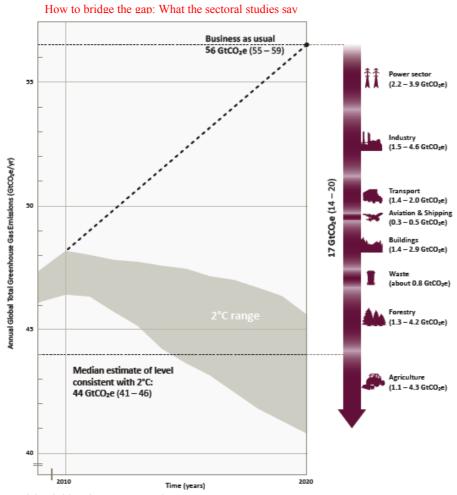


Figure 2: potential to bridge the gap, sector by sector

To date, while some countries have made some progress in reducing their emissions, overall global emissions continue to rise, with the IEA reporting that 2010 had the highest energy-related CO₂ emissions in human history, with a record 30.6Gt having been emitted⁴. It is clear that Parties will need to commit to, and implement, stronger mitigation actions for their agreed goal to be achieved. In some cases this is becoming necessary in order to ensure the very territorial survival of extremely vulnerable Parties.

The urgent need for expeditious action is clear from the peaking timeframes and the small amounts of remaining climate space. Waiting to increase ambition only until the results of the 2013-15 review are available, will be too late. The longer action is delayed the larger the scale and cost of interventions will be. Delayed action will also postpone the benefits of reduced air pollution, improved human health, job creation, especially from labor-intensive areas such as energy efficiency implementation, and the huge avoided costs of impacts of dangerous climate change. Continued rampant development of carbon intensive infrastructure will mean that many newly constructed fossil fuel power stations, mines, refineries etc. will have to be retired well before the end of their economic lifespans. This will translate into lost capital, energy and innovation that could have been much better invested in sustainable low-carbon infrastructure.

It is clear that we cannot delay increased ambition any longer. The agreement of the Durban Platform (DP) means that 2012 offers a clear opportunity to explore and agree ways to close the gigatonne gap between current pledges and needed action. Study after study demonstrates

⁴ <u>http://www.iea.org/index_info.asp?id=1959</u>, 30 May 2011

that there are many opportunities to reduce emissions. WWF is pleased to note that the mandate of the DP includes a workplan to increase ambition, which we understand to mean increasing ambition through decisions taken in 2012, as well as taking the results of the 2013-15 1.5°C science review and the IPCC AR5 forward as new climate QELROs, and targets and actions (respectively for developed and developing countries) in the greatly anticipated 2015 agreement. WWF believes that the best way to do this is through a legally-binding treaty that would enshrine the top-down science-based approach, and allow for equity and comparability of progress on decarbonization and to show that all are acting together and doing their fair share to address the greatest threat that the humanity and the planet faces.

This submission from WWF offers an overview of some ways in which the gap might be closed. It considers; the headline targets and pledges, the gigatonne loopholes being built into the UNFCCC architecture and points out options that are not currently being addressed, or addressed to their full potential. Some of these mitigation 'wedges' will overlap in scope with others, but all afford opportunities to reduce the amount of anthropogenic radiatively-active matter in our shared atmosphere. Some are areas that can be addressed and agreed this year in the UNFCCC; others will likely require a slightly longer timeline, while others still are more appropriately addressed in other fora.

1. Increasing countries' headline ambition

1.1 Developed country targets

Analysis of the emission reduction pledges on the table at the moment clearly demonstrates that developed countries' mitigation ambitions for themselves currently fall far below their fair share of the level of action needed. At present, the combined pledges amount to emission reductions of only 12-18% on 1990 levels by 2020, far short of the 25-40% reduction range for 2020 that the IPCC found was needed from developed countries in order to limit temperature increases to 2.0-2.4°C above pre-industrial levels. Worse, loopholes that hide even weaker ambition lurk in the proposed KP LULUCF accounting rules, use of offsets and surplus AAUs, weak additionality rules, and possible double countrig of mitigation actions in developed and developing countries. These loopholes are addressed more fully in section 2, but clearly even the headline pledges are woefully inadequate to avoid dangerous climate change.

According to the UNEP report on Bridging the Emissions Gap, if Annex I countries were to reduce their emissions by 25-40% below 1990 levels, in line with the findings of the IPCC AR4 for scenarios that keep 2°C on the table, , global emissions would be reduced by an additional 1.6-4.5 gigatonnes compared to UNEP's "strict conditional" case. This would be a major contributor to closing the gap.

It is imperative that developed countries clarify their pledges, remove conditionalities and specify accounting approaches for their 2020 targets. Using strict accounting approaches gives confidence that the target will account for what the atmosphere really sees. This is particularly true for Annex I countries that will not take part in the KP second commitment period. Strong common approaches for all countries need to be developed, based on, and improving, the KP accounting rules and the CBDR principles.

 Increasing Pledges: As a start in 2012, developed countries should increase their pledges to the top ends of their pledged ranges by COP 18/ CMP 8. While some, like Japan's 25% promised reduction, are relatively ambitious, most do not currently fall even within the bottom end of the 25-40% reduction range: in aggregate, developed country emissions reductions need to amount to -40% on 1990 levels by 2020.

- Clarification of underlying assumptions: Developed countries should come to the May session in Bonn prepared to provide clarity on the assumptions made in their respective pledges and on the calculations behind their corresponding QELROs to give clarity on the net domestic emissions to be achieved. This should include planned levels of domestic decarbonization versus use of offset credits and the methodologies used for land-use accounting. Developed country Parties not taking part in a second commitment period must also calculate their QELROs for the period 2013-2020 and agree to do so in such a way that they are comparable capable of being compared and comparable in degree of ambition to QELROs from Parties in the KP second commitment period. In doing so, Parties should remove any loopholes and clarify all uncertainties. Certainty is required that Parties will not adopt an approach where they increase their emissions between now and 2019, and then suddenly meet the target in 2020 through the purchase of emission credits from elsewhere. As indicated by the studies cited in the introduction, cumulative emissions are critically important for whether the 2°C (or 1.5°C) goals remain possible.
- Common Base year: Currently, developed country 2020 targets are stated with various base years (1990, 1992, 2000, 2005). Parties need to formulate their commitment in relation to 1990 emission levels, with an option to use an additional reference year for a country's own internal emission reduction objectives.
- Low Carbon Development Strategies: In addition to the work towards achieving their short-term 2020 QELROs, developed countries need to show that they have begun the analysis towards their zero carbon development strategies in the Bonn workshops and with regular updates, so that they are demonstrably on a trajectory consistent with near-complete decarbonization of their economies by 2050. Such long-term planning is needed to avoid costly lock in to unsustainable high-carbon infrastructure. It would also allow for a fair and socially sustainable transition and mainstream low carbon development and climate resilience into development planning
- Common accounting and reporting standards: To ensure that the emissions that actually reach the atmosphere are accounted for, developed countries need to conform to rigorous common accounting and reporting standards, based on those agreed under the Kyoto Protocol

1.2 Developing country pledges and NAMAs

The developing countries have currently pledged more emissions reductions on aggregate than the developed countries as a group. However, while some countries have hugely ambitious plans for sustainable low-carbon development, others have yet to come forward with NAMAs. Further actions that WWF believes are necessary are discussed below:

- Clarifying underlying assumptions: Developing countries that have submitted NAMAs to the UNFCCC for inclusion in the registry should come to the Bonn session ready to present the details of all relevant assumptions behind their pledges, if appropriate to the type of NAMA. Key information should include the assumptions used to define any business as usual trajectory, including on energy prices and use, economic growth rates, population etc.
- Submission of NAMAs by other parties: Developing countries that have not yet submitted NAMAs to the UNFCCC for inclusion in the registry should come to Bonn with proposals for these. WWF notes that there are a number of relatively high-

capability developing countries that have not submitted NAMAs or elaborated their plans further, and hopes that these, including Argentina, Brazil, DRC, Indonesia, Iran, Malaysia, Nigeria, Saudi Arabia, Thailand and Venezuela, will be ready to do so by May.

- Information about how actions could be enhanced with support: For most developing countries, more information is needed on what each country anticipates being able to do through its own efforts and resources, and what additional scope there is for action when/ if appropriate capacity building, technological and financial support is made available.
- Enhancing MRV: To ensure improved understanding of the levels of emissions reaching the atmosphere, developing countries need to work to develop their measuring and reporting capabilities. In Bonn they should indicate how this can be achieved and what would be required in terms of capacity building and financial and technological support.
- Low Carbon Development Plans: In line with the Cancun and Durban outcomes, developing countries should begin to build up long-term low-carbon climate resilient development plans while climate proofing existing plans as appropriate. These plans should be developed with good stakeholder participation and serve to build up a suite of NAMAs as wedges towards achieving long term sustainable development.

2. Closing loopholes

A low-carbon future is only possible if loopholes that undermine action plans in developed countries are closed. While allowing these countries to speed up their transformative efforts it would also improve trust amongst parties and encourage developing countries to be more ambitious in the development of their own low carbon action plans. As long as developed country commitments remain undermined by extensive loopholes it remains difficult for developing countries to trust that the developed world is taking their fair and equitable share in dealing with the threat of climate change.

2.1 KP LULUCF

Accounting rules for LULUCF need to be improved, and those adopted for the KP CP2 should be reviewed. The Durban KP outcome was a missed opportunity for greater rigor in this important sector. Even using current accounting rules, and matching the conclusions put forward by scientists, WWF estimates the size of the LULUCF loophole to be 1Gt CO₂eq per year by 2020. New mandatory rules need to be negotiated which reliably account for all emissions and removals compared to a historical base period. Mandatory rules are needed to ensure comparability, complete coverage is needed so that what is measured is what the atmosphere sees, and a historical base period helps to remove the counterfactual gaming that projected baselines allow. The rules should ensure that LULUCF contributes to emissions reductions and should include complete accounting of bioenergy emissions. The Ad-hoc Working Group on the Durban Platform negotiations should be informed by the new SBSTA work program on 'more comprehensive accounting of anthropogenic emissions by sources and removals by sinks from LULUCF'.

2.2 KP AAUs

The issue of banking of AAUs between KP commitment periods was unresolved in Durban and will be an important loophole to close in Doha. The extent of the surplus credits may be as large as 10 Gt CO₂e. They present an evident and substantial danger for carbon prices. While

there are differences in views on how the carryover issue should be addressed, the African proposal of limiting AAU carry over to 1% is one with a good degree of environmental integrity and should be considered further.

2.3 KP Mechanisms

Currently, the CDM allows developed countries to meet their KP emission reduction targets partly through purchase of emission credits from projects in developing countries, cheaply buying up the low-hanging fruit of emission reduction actions in these countries. Developed countries are projected to use at least 1.5Gt CO₂eq per year of these CDM and other offset credits by 2020. This, combined with weak targets (see section 1.1) will slow down efforts to modernize and transform their economies, and risk lock-in to high-carbon infrastructure.

In any case, the carbon budget studies imply that there is very little space in the global carbon budget for offsetting at all and that urgent transformative domestic action is needed. While these mechanisms continue, strong additionality rules are needed for CDM and JI. Estimates for the number of CDM offsets that do not lead to emissions reductions range between 0.7 to over 3 Gt CO₂e by 2020⁵ and addressing this is an obvious and important way to help close the gap.

The issue of an oversupply of credits in the market also needs to be addressed. This needs to be addressed including by increasing demand through higher targets (section 1.1) and through ending use of non-additional credits.

Double counting of mitigation NAMAs in developing countries towards developed country targets is also a loophole in the CDM that needs to be addressed through good accounting rules and the common frameworks on new bilateral or regional market mechanisms. Another double counting risk is that developed countries count their offsets not only towards their mitigation obligations, but also toward their financial ones, and again rigorous accounting frameworks are needed to ensure that offsetting is indeed additional.

3. Other opportunities to close the gap

As well as increasing ambition within the UNFCCC and closing the loopholes that water down the headline targets, there are additional ways of addressing radiatively-active emissions that are not currently addressed within the UNFCCC framework. Some may be appropriate to do so in future, while others are better served being reduced through other policy instruments.

Provision of climate finance

Developing countries can implement substantial mitigation and adaptation actions by drawing on existing financial resources, both domestic and international. Indeed, many have put forward targets and actions based on their own resources that are at least as ambitious as most developed countries. However, to make their maximum contribution to global mitigation efforts and accelerate their shift to sustainable, low carbon, climate resilient development paths, massively scaled up new and additional financial resources will need to be provided. The ADP can build on the progress achieved under the Bali Action Plan in terms of establishing the institutional building blocks for mobilizing the resources to support truly ambitious actions.

⁵ CDM Watch Policy Brief, 2011, available at <u>http://www.cdm-watch.org/?p=2969</u>

The commitment made by developed countries to mobilize \$100 billion by 2020 to support actions in developing countries could potentially make a substantial contribution to financing needs. However, the lack of definition of the sources and composition of these funds, and of the trajectory for scaling up between 2013 and 2020, raises concerns about the contribution of this commitment. Most credible assessments show that the requirements for new and additional financing for developing countries are in the order of several hundred billion dollars. Clearly the Green Climate Fund and other UNFCCC institutions will have a key role to play as the central channel for scaled up public finance, and overcoming the fragmentation of multiple, uncoordinated financing flows.

Specifically WWF makes the following recommendations in relation to financing to ensure the success of the Durban Platform in scaling up ambition between now and 2020;

- Developed countries must meet or exceed their commitments to provide \$30 billion in fast-start finance by the end of 2012;
- Developed countries must commit to rapidly scaling up financing from fast-start levels, including by scaling up public finance by \$10 billion per year starting in 2013 to ensure early and rapid progress towards the \$100b goal;
- Parties should agree on a process for projecting the total financing requirements associated with action between now and 2020 in line with meeting agreed climate targets, and the optimal composition (public and private, etc.), sources, rate of scaling up, and distribution of this funding, as a basis for assessing the adequacy of existing financing commitments;
- As inputs to its work on scaling up near and mid-term ambition, the Durban Platform should consider the work and outputs of the Work Programme on mobilizing long term finance, as well as other relevant work including other bodies of the UNFCCC, the AGF, World Bank and IMF, G20, etc.

Many of these steps do not require further negotiation or new commitments from countries. They simply require that developed countries fulfill the fairly modest financing commitments that they have already made.

For the longer term, and to contribute to a balanced and ambitious agreement in 2015 for the period of 2020 and beyond, WWF recommends:

- The ADP consider the need for continuing to scale up financing requirements beyond 2020, and the optimal sources, composition and distribution of this finance;
- The ADP continue emphasis on the rapid operationalizion of the institutions of the UNFCCC, and draw lessons from experiences between now and 2015 for the further strengthening and optimizing of the financing architecture of the UNFCCC for the post 2020 period;
- The ADP consider responsibilities for mobilizing financing in the context of changing global patterns of development and distribution of wealth and the anticipated realities in the post-2020 period, in the context of the Convention principal of common but differentiated responsibilities and respective capabilities;
- Consider options for formally reflecting these emerging realities under the UNFCCC, by moving beyond or revising the current Annexes of the Convention, and introduction of indicators or thresholds for assuming different kinds of financing responsibilities based on equity and respective responsibilities and capacities/capabilities;
- To scale up financing sufficiently on a global basis, pursue agreement on new international sources of financing that can contribute at the scale required, including sources related to carbon pricing and other appropriate sources such as FTTs and SDRs.

International Aviation and Shipping

The UNEP "Bridging the Gap" report noted that emissions from the aviation and shipping sectors were significant; together they accounted for approximately 1.6Gt CO₂e, or around 5.4% of total CO₂ emissions in 2005. International aviation was responsible for 62% of total aviation emissions, while the analogous figure for international shipping was 83%. The report found that "the two sectors together could help narrow the ambition gap by around 0.3–0.5Gt CO₂e. These potential reductions represent a significant fraction of projected emissions from these sectors under BAU conditions."

Aviation emissions contain significant quantities of non-CO₂ gases that multiply the warming effects considerably. It is very important that ICAO move to develop a fair agreement to address emissions from this rapidly-growing sector. Recent developments with regard to the inclusion of aviation in the EU-ETS have illustrated how necessary it is for the United Nations to take a multilateral approach to addressing the emissions from international transport sector. WWF notes that moves to consider a multilateral approach to address international aviation emissions appear to be gaining some pace, after some 14 years of extremely slow progress. However, we would remind Parties that strong ambition is urgently needed. More ambitious parties may continue to take unpopular unilateral steps if there are no clear indications that multilateral processes will lead to an ambitious global framework for dealing with emissions from international transport. Furthermore, WWF believes that a mechanism to ensure no net incidence on developing countries would be necessary to ensure that an agreement on international transport is broadly acceptable and in line with the principles of CBDR.

In addition to CO₂ emissions shipping is a significant source of black carbon, a short-lived climate forcer. Therefore addressing emissions from this sector will have immediate, multiple climate benefits. On CO₂ alone, a 2009 IMO report estimated that 250 MtCO₂ reductions in 2020 are achievable with no-regret measures⁶. The IMO has made more progress on a multilateral approach than ICAO, and seems more ready to agree on a market-based mechanism implementing carbon pricing in the shipping sector, that will lead to ambitious emissions reductions and generate financing to support climate actions in developing countries. The IMO must agree at its Assembly in the fall of 2013 to move quickly to implement the legal instrument needed to implement that agreed mechanism.

WWF notes also that the aviation and shipping sectors hold great potential as sources of climate finance, so action in these sectors, if appropriate structures and modalities are agreed, would afford a double opportunity to contribute towards closing the ambition gap. In a report to the G20⁷ the Bill Gates foundation found that shipping and aviation fuel taxes could respectively yield \$37 billion and \$27 billion.

In Doha, the UNFCCC should reach an agreement to invite ICAO and IMO to agree global mechanisms to respectively address emissions from international aviation and shipping. Revenues from these mechanisms should be channelled through the Green Climate Fund as a source of climate finance for developing countries

Energy Efficiency and Renewables

⁶ with an uncertainty range from 130 to 360 MtCO₂

⁷ Available at http://www.gatesfoundation.org/g20/Documents/g20-report-english.pdf

Any scenario that is compatible with achieving the 1.5°C/ 2°C goals will require decarbonization of the energy sector, and this will need to be achieved through a combination of energy efficiency measures and rapid and large-scale deployment of renewable energy sources.

WWF's Energy Report,⁸ has demonstrated that it is possible to transition towards an energy sector using almost 100% renewable energy, based mostly on technologies that are commercially available today. The report also calculated that the additional net cost to society (compared to a BAU energy scenario) would not exceed 2 trillion EUR (not more than 2% of projected GDP) and would actually deliver a net financial gain for society after 2035 with almost 4 trillion EUR benefit by 2050. Other reports confirm these findings, for instance Stern (2006) calculating that it would cost 1% of global GDP for keeping global emissions between 500 and 550 ppm CO₂eq globally while inaction would cost between 5 and 20% of annual GDP.

Energy efficiency plays a huge role in every ambitious renewable energy scenario. The Energy Report suggests that we can bring down global energy demand in 2050 by 15% compared to 2005, with technologies already on the shelf today and with some life style changes. The IPCCs Special Report on Renewable Energy Sources and Climate Change Mitigation last year compared 164 scenarios on renewable energy. This most comprehensive analysis ever of trends and perspectives for renewable energy confirmed the rapid growth, low-cost potential for renewable energy.

WWF would like to see these critical interventions in the Energy sector to be a critical element of countries individual Low Carbon Development Strategies and Plans.

⁸http://wwf.panda.org/what_we_do/footprint/climate_carbon_energy/energy_solutions/renewable_energy/sustaible _energy_report/

REDD+

Emissions from forests and forest degradation, account for approximately 15% of global emissions. Addressing this source is important not only to reduce CO₂ emissions or of black carbon, but also to conserve biodiverse ecosystems that play important roles in modulating global climate, as well as contributing to local and regional resilience to climate impacts. WWF advocates a goal of zero net deforestation and degradation (ZNDD) by 2020⁹, as this is a target that reflects the scale and urgency of the threats to forest ecosystems and to climate. Achieving ZNDD will stem the depletion of forest-based biodiversity and ecosystem services, as well as associated greenhouse gas emissions. In addition to contributing o the ultimate objective of the UNFCCC, it addresses many targets of the Millennium Development Goals, Convention on Biological Diversity.

F-gases

With the inclusion of NF₃ as a gas to be reported by developed country Parties from 2015, Parties should formulate an independent target for NF₃ reductions. A target for reductions of NF₃ should be additional to the economy-wide 2020 targets to increase the environmental integrity of the system. Such measures would help to increase mitigation and continue to promote transformative change towards zero- or low-carbon economies respectively for developed and developing countries by 2050.

HFCs should not be addressed under the UNFCCC, but instead production and consumption should be urgently reduced under the auspices of the Montreal Protocol. HFCs have very large global warming potential – hundreds to thousands of times higher than that of CO_2 – and so all developed countries should commit to an immediate ban on the use of the HFC-23 offsets for traded and non-traded sectors. Phasing out of HFCs could contribute considerably towards closing the gap by 2020 by preventing the emission of as much as 1.3GtCO₂e. A global phase-out could avoid 88-140 GtCO₂e by 2050¹⁰.

The large uncertainties and methodological considerations identified in Professor Forster's presentation to the eighth session of the AWG-KP in June 2009, combined with the fact that most are still very small in terms of climate impacts, mean that additional F-gases should not be included in measures towards achieving climate targets but instead regulated through other means with a view to phasing them out.

Short-lived climate forcers

In addition to, and not substituting for enhanced actions on CO_2 and the KP GHGs, WWF recommends strong and early actions on black carbon. Black carbon is not listed as a greenhouse gas but according to new science contributes extraordinarily to global warming. A recent UNEP report¹¹ concluded that ambitious actions to cut black carbon and tropospheric ozone could reduce global warming by about 0.5°C by 2050 (compared to a reference case) and even by up to 0.7°C in the Arctic. Such reductions would make it possible to achieve a 1.5°C warming target (as long as appropriate CO_2 reductions are pursued as well) while

⁹ http://wwf.panda.org/what_we_do/how_we_work/conservation/forests/

¹⁰ Information note submitted by the United States of America on hydrofluorocarbons, Open-ended Working Group of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer Thirty-first meeting, August 2011; Velders et al. 2009 '*The large contribution of projected HFC emissions to future climate forcing*' PNAS Vol. 106, No. 27, pp.10949-10954

¹¹ Integrated Assessment of Black Carbon and Tropospheric Ozone, 2011

avoiding more than 2 million premature deaths and the loss of more than 50 million tons of cereal and soybean production.

The forcing effects of black carbon are complex, depending on factors including altitude, latitude and chemical composition. For this reason, it would be best accounted for by addressing sources, not trying to account for emissions using Kyoto-style methodologies. Some of the most important measures, as identified in the UNEP report, are very important for sustainable development and could also be taken forward under Rio+20 sustainable development goals. These could include a program to ensure universal access to clean cookstoves, which would, in addition to clear climate benefits, have greatly positive impacts on women's health, but reducing exposure to health-damaging particulates in the home.

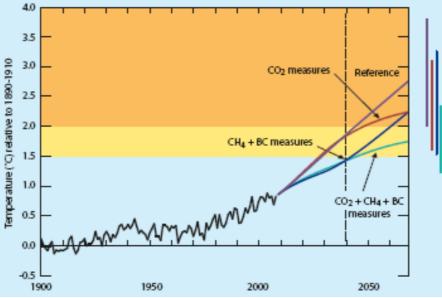


Figure 3: temperature impacts of enacting CO₂, MeH and BC measures in concert

UNEP found the biggest methane emissions cuts would come from reducing emissions from coal mines and processes related to the production and transportation of oil and gas: not only will not consuming fossil fuels help solve the climate crisis, not producing them in the first place will also have a significant positive effect, with the co-benefit of reducing photochemical smog and other troposphere pollution. The report **reinforces the clear need to move from a fossil economy to one based on maximizing energy efficiency and moving to renewables.** One key way to reduce fossil fuel production and consumption would be to start to phase out fossil fuel subsidies and instead investing the finance into renewables. The UNFCCC should encourage the G20 to continue its work on this issue, and it should additionally be considered as one of the sustainable development goals anticipated from the Rio +20 conference.

Low Carbon development strategies

In Cancun and Durban parties noted the potential of low carbon development strategies. Such plans are critical to help reduce emissions and will help to lay out a strategic way forward for low-carbon and climate resilient development, while the long term trajectory encourages more strategic decision- making and ensures less chance of lock-in. Experience in countries that have comprehensive climate legislation, such as the UK, shows that such planning encourages greater cooperation between ministries, increasing the likelihood of implementation and mainstreaming of climate thinking across government departments while facilitating greater internal capacity building. Such plans help to focus on national decarbonization and clean

development, and, if there is strong stakeholder participation, they are nationally appropriate and have societal buy-in.

In Doha, decisions should be made that give stronger parameters on what is meant by a low-carbon development strategy.

4. Proposed workplan to close the Gap

The Durban Workplan will have to deal with two distinct periods. The first is between now and 2020, where existing emissions reductions pledges are often vaguely defined not sufficiently ambitious, and in aggregate are woefully inadequate and are putting the world on a path towards global average warming of more than 4°C. The second is post-2020, where there are no internationally recognized country-specific targets as yet. The Durban Platform has laid the groundwork for a new phase of the UNFCCC negotiations and in 2012 it should ensure that the outcome of the UNFCCC negotiations is a climate deal that has a realistic chance of avoiding more than 2°C of global warming.

In 2012 UNFCCC BONN	Other
 in their May submissions, and in the Bonn workshop, developed countries should provide full clarity on the assumptions behind their QELROs developed countries should show the progress they have made in analysis and consultation on their zero carbon development strategies developing countries should provide full clarity on the assumptions behind their NAMAs high-capability developing countries that have not yet submitted NAMAs should do so 	 All countries shall put in place new and implement, and strengthen as appropriate, existing policies and measures and work towards such actionable coverage of all emitting sectors IMO and ICAO to further develop global frameworks for international maritime transport and aviation to reduce emissions and generate financial resources for climate change action while ensuring no net incidence on developing countries through appropriate provisions, in accordance with the principles of the UNFCCC and report on their progress to
[INTERSESSIONAL]	the Conference of Parties at its
 an autumn intersessional should be convened solely to explore ways and means of increasing ambition with a view to agreeing decisions in Doha 	 eighteenth session Montreal Protocol should start to work on including HFCs within its frameworks
DOHA	
 developed countries should increase the ambition of their economy-wide quantified emissions reduction commitments at least to the top ends of their pledged ranges, and so that their aggregate emissions of anthropogenic greenhouse gases not covered by the Montreal Protocol are reduced by at least 	

40% , using 1990 as a base year	
 developed counties, including those not participating the in KP second 	
participating the in KP second commitment period, need to have	
developed their QELROs, using common	
standards	
 developed countries need to agree to 	
conform to agreed rigorous common	
accounting and reporting standards,	
based on those of the Kyoto Protocol	
 developing countries need to give greater 	
clarity on what it anticipates being able to do by own effort and what additional	
actions support can achieve	
 agreement on rules for limiting carryover 	
of surplus AAUs to close the hot air	
loophole	
 agreement on strong additionality rules 	
for JI and CDM, and for rules that avoid	
 double counting developed countries must commit to 	
 developed countries must commit to rapidly scaling up financing from fast- 	
start levels, including by scaling up public	
finance by \$10 billion per year starting in	
2013 to ensure early and rapid progress	
towards the \$100b goal	
agreement to continue work program on	
LTF under ADP including on the total	
financing requirements associated with action between now and 2020 in line with	
meeting agreed climate targets	
 agreement on parameters to define zero 	
and low carbon development strategies	

In 2013-14

UNFCCC	Other
 Agreement of LULUCF rules under the ADP First tranches of scaled up public finance flowing Continued work on mobilizing financing for developing countries 	 All countries shall put in place new and implement, and strengthen as appropriate, existing policies and measures and work towards such actionable coverage of all emitting sectors IPCC AR5 and the 1.5°C Review to inform a further review of the gigatonne gap IMO to move quickly to implement the needed legal instrument establishing a new market based mechanism

In 2015	
UNFCCC	Other
 Summit of world leaders well in advance of the COP to come to agreement on the key political issues of how to capture different types of action, from developed country QELROs to developing country NAMAs of various kinds in a protocol, the contribution to the global mitigation effort of each country and the provision of financial resources scalable to the promised \$100bn per year by 2020 agreement of a comprehensive, fair, ambitious and binding agreement in protocol form with ambition consistent with a high probability of staying under 1.5°C and very high probability of staying below 2°C to enter into force as soon as possible thereafter 	 peak in global emissions is achieved

Conclusion

WWF has made this submission in the hope that Parties will be able to use the ideas to urgently address the inadequacy of emission reduction ambition well before 2015. We have included concrete ideas for how to address the gigatonne gap as well as ideas for a work plan to do so. Global emissions need to peak by 2015 according to the IPCC and urgent implementation is required now. Waiting for the conclusion of a new global agreement in 2015 for entry into force by 2020 will not put the world on a path to prevent dangerous climate change.