

## Liechtenstein, Mexico, Monaco and Switzerland

### Ad Hoc Working Group on the Durban Platform for Enhanced Action (ADP)

#### Implementation of all the elements of decision 1/CP.17 Matters related to paragraphs 7 and 8 (ADP)

1. Liechtenstein, Mexico, Monaco and Switzerland welcome the opportunity to submit their views on actions, initiatives and options to enhance mitigation ambition consistently with the aspects indicated in paragraph 15 (a)-(c) of the ADP 1 part 2 conclusions. Our submission draws on previous submissions made by the Environmental Integrity Group (EIG) on these matters and makes additional proposals on thematic areas to be dealt with.
2. Raising ambition is central to ensure the climate regime delivers a level of response that is consistent with the level of the climate challenge. To this aim, concrete options shall be identified to increase mitigation action, deepen the technical understanding of these options and bring the adequate political attention to the issue, taking into account CBDR/RC and equity. Enhancing mitigation ambition should be also informed by the outcomes of efforts carried out in any other relevant fora.
3. In our view, enhancing mitigation is necessary because:
  - There is an emissions gap between current pledges and commitments by Parties under the UNFCCC process, including those under the second commitment period of the Kyoto Protocol. This gap will prevent the international community from achieving the target to keep global warming below 2 degrees with respect to historic levels.
  - Closing this gap will require increased action resorting to a range of different options within and outside the Convention.
  - Therefore, measures to further reduce emissions need to be implemented globally as soon as possible, i.e. before 2020 and continue after 2020.
  - The implementation of such mitigation measures will pave the way to low emissions development strategies and accelerate the transformation to a low carbon society.
4. Based on experience and available studies and assessments<sup>1</sup>, we consider that there is a potential to further reduce emissions in all sectors and in all countries. In particular, action is possible through:
  - Action-oriented complementary initiatives.
  - Technical measures (e.g. in the energy sector).
  - Policy measures (e.g. economy-wide or sectoral reduction objectives; enabling environments for climate friendly investment; fossil fuel subsidies removal).
  - Strengthening of environmentally integer market mechanisms (e.g. international carbon market mechanisms).
  - International cooperation (e.g. technology transfer).
  - Combination of the above.

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<sup>1</sup> UNEP Bridging the Emissions Gap (2011) and IPCC AR4 (2007).

5. Considering the measures listed above, some options to increase ambition pre 2020 are:
- Effective implementation of current pledges in a transparent and environmentally integer manner (addressing the current implementation gap and reducing the emission gap).
  - All countries should adopt the highest possible mitigation efforts.
  - Strengthen and better focus support for mitigation actions by developing countries.
  - Over-delivery of existing pledges.
  - Encouraging those countries that have not submitted a pledge to present such pledge.
  - Avoid lock-in of carbon intensive investments, infrastructure and technology.
  - Address domestic drivers of ambition. We have to insert ambition in the context of opportunities to develop and to grow.
6. Therefore, in view to enhance ambition we propose to have a common and focussed discussion under the ADP on concrete actions, initiatives and options. In practical terms, we propose:
- 6.1 To start our work by exploring the following specific thematic areas (see the Annex below for the reduction potential in these areas):
- Reducing short-lived climate pollutants.
  - Considering the phase out of fossil fuel subsidies.
  - Reducing emissions from bunker fuels.
  - Promoting renewable energies.
  - REDD+.
  - Ecolabels.

And welcoming work on other areas such as F-gases in cooperation with the Montreal Protocol, agriculture, etc., undertaken in other fora.

- 6.2 Considering the aspect of paragraph 15 (a)-(c) of the ADP 1 part 2 conclusions for the proposed thematic areas:

- Reducing short-lived climate pollutants.

Global ambition has also to be increased by expanding our coverage of gases and emitting sectors. Concerning the coverage of gases, key short-lived climate pollutants (SLCPs), including methane, black carbon, tropospheric ozone, and many hydrofluorocarbons (HFCs), are responsible for a substantial fraction of global warming with significant detrimental health and environmental impacts. According to UNEP, implementing ambitious and coordinated measures to reduce Short-Lived Climate Pollutants (SLCPs) could slow down the warming expected by 2050 by as much as 0.5 Celsius while delivering local benefits on air quality, health and productive activities.

Provided the high potential of reducing SLCP to effectively address climate change, a number of countries have come together to address the issue in a coordinated manner under the Climate and Clean Air Coalition, as an action oriented initiative gathering today 56 state and non-state members. Actions undertaken under this and other initiatives on the issue shall contribute to increase ambitions and reduce the current mitigation gap.

- Progressive phase out of subsidies for fossil fuels.

Benefits of removing reducing and progressively considering the phase out of fossil fuel subsidies are, inter alia, enhancement of development and diffusion of new technologies and economic resilience. Studies and modelling show that removing subsidies to fossil fuel production and use would foster energy efficiency and therefore would contribute to decreasing GHG emissions.

Barriers to the removal of fossil fuel subsidies in the short to medium terms vary between world regions due to variations in national legislation, the stage of economic development and national policy choices and priorities. Opposition to the removal of fossil fuel subsidies is often justified because they are supposed to support important domestic policy objectives such as rural development, energy access, energy security or poverty reduction. Nevertheless, it has to be taken into account that: i) alternatives may exist and may achieve identical policy objectives either at a lower fiscal cost than with targeted subsidies for the poor or at a comparable fiscal cost with less environmental adverse impacts; ii) subsidies are an inefficient allocation of resources and create costly long-term distortions and weaknesses in the economy; iii) subsidies introduce delays in technology innovation and diffusion, and prevent energy efficiency.

For these reasons, considering the phase out of fossil fuel subsidies needs to start with addressing some important methodological issues such as the evaluation of the level of subsidies and their economic and environmental impact and the availability of reliable statistics. Countries need to periodically assess alternative ways to meet policy goals that were supported by fossil fuel subsidies against re-allocating fiscal resources freed by phasing out fossil fuel subsidies to targeted poverty eradication, health, education infrastructure and other policies. Addressing these challenges can be facilitated by the exchange of information, methodological tools and experience in the context of the UNFCCC and the Kyoto Protocol by drawing on existing experience from numerous countries as well as multilateral institutions such as Bretton Woods. Technical assistance to the considering the phasing out of fossil fuel subsidies may also be considered in the framework of bilateral and multilateral aid cooperation and in view of low emission development pathways.

- Reducing emissions from bunker fuels.

Mitigation in these sectors fosters environmental, technological and health benefits through the greenhouse gas emission, development and diffusion of new technologies and air quality improvement. The use of market-based mechanisms by aviation and maritime transports can benefit and enhance climate change mitigation.

ICAO assists (tools, information, training) countries in the preparation of their action plans on CO<sub>2</sub> emissions reduction from international aviation<sup>2</sup>. IMO<sup>3</sup> also assists countries for the uniform implementation of mandatory measures to increase energy efficiency and reduce emissions of greenhouse gases from international shipping (EEDI and SEEMP) from 1 January 2013. Both ICAO and IMO should take the lead, based on their expertise and their policy approaches in reducing GHG emissions from their respective sectors, informed and considering the level of ambition required by the UNFCCC process.

- Promoting renewable energies.

Renewable energy use offer not only environmental benefits but also air pollution and, therefore, health benefits. It provides also for technological advancement and may provide, as in the case of bioenergy, substantial benefits for rural economies in terms of employment and diversified energy services.

Barriers to the development and market penetration of renewable energy arise from a number of legal, regulatory, institutional, financial and capacity-building factors as well as from technology and the limited local resource (e.g. wind, water) potential of some renewable energies. In some instances, a barrier may also be the limited capability of the existing infrastructure to absorb high share of fluctuating renewable energies. Climate policies may promote renewable energy and energy efficiency but renewable energy is being and can be implemented independently of broader climate policies. Climate policies can

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<sup>2</sup> FCCC/SBSTA/2012/MISC.7 ICAO Submission to SBSTA 36 May 2012.

<sup>3</sup> FCCC/SBSTA/2012/MISC.7 ICAO Submission to SBSTA 36 May 2012.

reinforce or trigger renewable energy policies, by leveraging i) financial support ii) carbon pricing iii) building a carbon-trading market and iv) promoting the clean development mechanism (CDM) and new market mechanisms. However, the up-front costs for deploying the new technologies are high and developers need to raise funds, by far the largest part of which will come from the private sector or public sector of the countries needing to develop their energy infrastructure.

National and international agencies promote the development and use of renewable energy. Among international bodies, the International Renewable Energy Agency (IRENA)<sup>4</sup> is specialised on renewable energy and provides knowledge, best practice examples, policy advice and capacity-building. Many developed countries have made renewable energy a priority in their bilateral cooperation with developing countries.

- REDD+.

Benefits provided by measures addressing REDD+ are manifold: environmental, economic and social. They strengthen sustainable forest management, reduce greenhouse gas emissions, provide financial revenues and enhance participation of stakeholders. Incentives related to revenue generation and sustainable forest management should enable overcoming existing methodological issues, current drivers of deforestation and institutional issues.

Barriers to further progress under REDD+ include: a still incomplete UNFCCC methodological guidance package (including e.g. reference levels, national forest monitoring systems, MRV, data on forest and associated CO<sub>2</sub> emissions and removals,; drivers of deforestation (private sector activities and international markets<sup>5</sup>); institutional issues (e.g. national forest governance and soil legislation, land-use policy, land tenure structure); financial issues.

A number of international initiatives support the engagement of developing countries in REDD+ activities (e.g. the World Bank forest Carbon Partnership Facility, the UN REDD Programme). These are complemented by the significant efforts being made by national governments in cooperation with the private sector to incentivize private finance toward sustainable forest management practices.

- Ecolabels.

Benefits provided by ecolabels are better consumers' information for public disclosure of environmentally related information and transparency on environmental impacts of products, on product origin and production processes. Energy labelling and efficiency standards have been quite effective and beneficial for efficient energy use in many countries in sectors such as appliances, equipment and buildings..

Barriers to the use of ecolabels are related to costs of implementation, transparency, biases, discrimination in trade and negative impact of ecolabelling on exports from countries. Ecolabels acceptance can be facilitated through the adoption of principles and procedures widely accepted both nationally and internationally<sup>6</sup>.

Facilitating the use of ecolabels entails a number of approaches such as: voluntary agreements with retailers and providers reinforcing the implementation of existing international standards, encouraging further work on international sustainability standards and ecolabelling with the relevant organisations and stakeholders; facilitation of information to economic sectors in view to comply with environmental standards.

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<sup>4</sup> [www.irena.org](http://www.irena.org).

<sup>5</sup> [http://www.ucsusa.org/assets/documents/global\\_warming/UCS\\_RootoftheProblem\\_DriversofDeforestation\\_FullReport.pdf](http://www.ucsusa.org/assets/documents/global_warming/UCS_RootoftheProblem_DriversofDeforestation_FullReport.pdf)

<sup>6</sup> "Eco-labels: Trade Barriers or Trade Facilitators?" CUTS Centre for International Trade, Economics & Environment (CUTS CITEE) 2009.

6.3 To explore these thematic areas and to identify specific actions and their implementation, by establishing a structured process consisting of:

- Focused technical discussions at expert level on actions, initiatives and options on the proposed thematic areas and conducted at the ADP sessions in April, June and other ADP sessions in 2013.

The discussions should address mitigation potentials, costs (mitigation costs and co-benefits), and readiness (national policies and implementation plans, technical knowledge and means, financial means and capacity for implementation) and the role of international cooperation and support. This technical level should facilitate and help actions. In order to allow for such a focused discussion and to bring in the specific technical expertise required therefore, a limited number of areas to be discussed should be identified early enough prior to the ADP sessions.

- A high-level political dialogue between Parties to guide consideration on options and ways to increase global ambition, taking into account CBDR/RC and equity.

This political dialogue shall benefit from, among other aspects the deepening of mutual understanding of Parties' opportunities and conditions to increase their national efforts and to engage in international measures and initiatives. At COP 19, a political dialogue in the form of a *high-level roundtable on ambition* could be held. Discussions should be informed by the technical dialogue and summarised in a report made available to all Parties. The COP may consider the work and the progresses achieved under the workplan, and provide guidance on further activities.

- Considering inputs from relevant initiatives such as the Summit on Ambition to be convened by the UN Secretary General in 2014, and the results of the IPCC Assessment Report to be delivered in 2014.

6.4 To ensure complementarity and transparency of actions:

- Consideration has to be given to the framework in which mitigation actions are undertaken at national and international level.
- Aspects related to reporting and verification of achievements of these actions in mitigating climate change should also be considered.

6.5 To organise our work along the above mentioned elements in view of ensuring a common and focussed discussion on concrete actions, initiatives and options to enhance ambition.

7. Each step we take forward is crucial, since delays in the emissions reductions needed will turn our future reduction actions more costly, challenging and even impossible. On the contrary, early action can open up a wealth of opportunities all countries can pursue.

Further analysis of the mitigation gap and clarification of the current mitigation pledges are needed. Continuously updated and increasingly detailed assessments of the remaining gap will be crucial in order to take informed decisions.

Increasing transparency in our actions will also be important as the lack of common accounting systems in the outcomes reached by all of us so far opens the door to light accounting and double counting. We cannot afford this kind of uncertainty to track our actions and goals.

## Annex

### Thematic areas: Greenhouse gas reduction potential of the proposed thematic areas

#### ***Reducing short-lived climate pollutants***

According to the Clean Air and Climate Coalition, fast action to reduce Short-Lived Climate Pollutants (SLCPs), especially methane and black carbon, has the potential to slow down the warming expected by 2050 by as much as 0.5 Celsius degrees, while deep and rapid cut in carbon CO<sub>2</sub> emissions are required. In fact, SLCPs cause 40 to 45 % of global warming. These pollutants include black carbon, tropospheric ozone, methane, and hydrofluorocarbons (HFCs). Reductions in all of these SLCPs can be achieved quickly, and in most cases by using existing technologies and existing laws and institutions.

#### ***Considering the phase out of fossil fuel subsidies***

Current levels of fossil fuel subsidies are high in many countries<sup>7</sup>. Studies and modelling<sup>8</sup> show that subsidizing fossil fuel production and use influences demand and supply and contributes to increasing GHG emissions. Models offer quantitative estimates of potential emission reductions obtained for gradual phase-out to 2020 of subsidies: global reduction of CO<sub>2</sub> and other GHG would be about 5%, in 2050 relative to 2005 level with values ranging from 3% to 35% in individual countries. These figures are confirmed by the IEA<sup>9</sup>: the phase-out of fossil fuel consumption subsidies would reduce global energy-related carbon emissions by about 6% in 2050 compared to 2005 level. Fossil fuel subsidies are a barrier to energy efficiency improvement, prevent technological progress towards reducing the carbon intensity of technologies using fuels and weaken the development of renewable energies. It should also be recalled that in the Rio+20 Outcome Document “Countries reaffirm the commitments they have made to phase out harmful and inefficient fossil fuel subsidies that encourage wasteful consumption and undermine sustainable development.”<sup>10</sup>. The G20 Summits in 2009 in Pittsburgh and Los Cabos also called for phasing out inefficient fossil fuel subsidies and increasing energy market transparency. Removing fossil fuel subsidies will enhance the development and diffusion of new technologies for mitigation and adaptation in particular in the energy sector, and enhance economic resilience. Removing fossil fuel subsidies both in developed and developing countries is needed. NAMAs by developing countries could include reforms of their fossil fuel subsidies.

#### ***Reducing emissions from bunker fuels***

Currently, greenhouse gas emissions from international aviation and maritime sectors represent at least 5 percent of global emissions, and there are no globally agreed specific measures to address them. Under the UNFCCC and the Kyoto Protocol<sup>11</sup> there is agreement that measures in these sectors should be implemented working through the UN International Civil Aviation Organisation (ICAO) and the UN International Maritime Organisation (IMO).

Estimates<sup>12</sup> of CO<sub>2</sub> emissions from domestic and international aviation transport in 2010 represent between 2 and 3 % of global emissions. In 1999 the IPCC estimated<sup>13</sup> that if CO<sub>2</sub>

<sup>7</sup> The OECD estimates that the current level of budgetary support to fossil fuel is USD 40-60 billion per year in Annex I countries. Current level of fossil fuel consumer subsidies in emerging and developing economies is estimated by IEA (2011) at USD 409 billion in 2010.

<sup>8</sup> OECD «central policy scenario».

<sup>9</sup> Energy Technology Perspectives 2010. Scenarios & Strategies to 2050. IEA/OECD, Paris, France.

<sup>10</sup> A/RES/66/288 - The Future We Want.

<sup>11</sup> Article 2.2: “The Parties included in Annex I shall pursue limitation or reduction of emissions of greenhouse gases not controlled by the Montreal Protocol from aviation and marine bunker fuels, working through the International Civil Aviation Organization and the International Maritime Organization, respectively.”

<sup>12</sup> The IEA estimates that in 2010 CO<sub>2</sub> emissions emitted by international civil aviation represent 2.5 % of global CO<sub>2</sub> emissions, IEA (2012) CO<sub>2</sub> Emissions from Fuel Combustion 2012 Edition.

and non-CO<sub>2</sub> effects of aviation on the climate system are taken into account, the impact of aviation on the climate system could be as much as 3.5 % of the total anthropogenic warming, excluding the effect of contrails that may induce the formation of cirrus. Recent work<sup>14</sup> that considers cirrus effect suggests that this effect could even be 4.9 %. Current projections to 2020 and 2050 depend on assumptions but all consider a substantial increase of emissions in aviation (up to a factor 3 by 2050)<sup>15</sup>.

Currently, international agreements exempt bunker fuels from taxation. Estimates<sup>16</sup> show that a carbon tax of \$25 per tonne of emitted CO<sub>2</sub> would raise about USD 12 and USD 26 billion from aviation and shipping respectively by 2020 and could induce emission reductions of at least 5 to 10 percent. Like in other sectors, aviation and maritime transport emissions need a better understanding of their effects on the climate system. However, discussions on the feasibility of a global market based measures as well as the creation of a framework for market based measures among the 191 ICAO Contracting States show that taxation of aviation bunker fuels is not considered being a feasible approach in the near and midterm. In many States fuel for domestic aviation purposes accounting for approximately 40% of total aviation emissions is subject to taxation already today.

Measures for reducing emissions from the aviation sector include: policy and regulations (e.g. sectoral reduction objectives); technical measures (aircraft efficiency i.e increase in fuelburn efficiency; reduction of non-CO<sub>2</sub> emissions such as nitrogen oxides (NO<sub>x</sub>), particulate matter and unburned hydrocarbons (UHC); use of biofuels); management measures (route optimization; improved operating procedures in flight and on ground; reducing the carbon footprint of airports); market-based measures (e.g. Emission Trading Scheme). In 2010 the International Civil Aviation Organisation (ICAO) agreed on a non-binding, global aviation strategy to continuously improve fuel efficiency by an average of an ambitious 2 % per annum from 2009 until 2020 and out to 2050; to achieve carbon neutral growth from 2020; and to encourage States to submit their action plans outlining their respective policies and actions and to reporting annually on international aviation CO<sub>2</sub> emissions to ICAO by June 2012. In addition, regional efforts such as those of the EU (inclusion of aviation emissions in the EU ETS) to control emissions from aviation are underway.

Estimates<sup>17</sup> of CO<sub>2</sub> emissions from international maritime transport in 2010 represent about 4 % of global emissions. Projections<sup>18</sup> to 2020 and 2050 depend on assumptions but all consider a substantial increase of emissions in international maritime transport (up to a factor 2 by 2050).

Measures for reducing emissions from the marine sector<sup>19</sup> consider similar approaches as for aviation: operational policies (e.g. the mandatory IMO Ship Energy Efficiency Management Plan (SEEMP); technological policies (e.g. mandatory IMO CO<sub>2</sub> standard in 2011, known as the Energy Efficiency Design Index (EEDI) for major classes of new ship built from 2013 and expected reduction of emissions stepwise to 30% below the reference level (which is defined as the average energy efficiency index for existing ships of a specific type and size)); market-based mechanisms (such as levy-type, cap-and-trade or baseline-and-credit trading scheme setting a fleet average fuel efficiency target).

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<sup>13</sup> Aviation and the Global Atmosphere, IPCC (1999).

<sup>14</sup> David S. Lee et al. (2010) Transport Impacts on atmosphere and climate: Aviation, Atmospheric Environment 44 (2010) 4678–4734.

<sup>15</sup> MODTF/FESG (2009) 'Global aviation CO<sub>2</sub> emissions projections to 2050, Agenda Item 2: Review of aviation-emissions related activities within ICAO and internationally', *Group on International Aviation and Climate Change (GIACC) Fourth Meeting*. Montreal, 25 - 27 May. Montreal, Canada: International Civil Aviation Organization, Information paper GIACC/4-IP/1.

<sup>16</sup> High-level Advisory Group on Climate Financing (AGF) and that of the World Bank (WB)/International Monetary Fund (IMF) under the G20 process.

<sup>17</sup> Second IMO Greenhouse Gas Study 2009.

<sup>18</sup> Second IMO Greenhouse Gas Study 2009.

<sup>19</sup> UNEP Bridging the Emissions Gap Report 2011.

### ***Promoting renewable energies***

The recent IPCC Special Report on Renewables (2011) indicates that there is a potential to reduce emissions through the development and diffusion of renewable sources of energy: till 2050 renewable energies could avoid one third (220-560 Gt) of the projected cumulated fossil fuel CO<sub>2</sub> emissions (1'530 Gt CO<sub>2</sub>). This is because the global technical potential for renewable energy is substantially higher than both current and projected future global energy demand. In the electricity sector, recent scenarios suggest that renewable energy sources could contribute to electricity production in 2020 by as much as 32 to 38 %<sup>20</sup>.

### ***REDD+***

It is estimated that about one fifth of global emissions are currently caused by deforestation and forest degradation in developing countries<sup>21</sup>. Estimates of the annual emission reduction potential by REDD+ range from 3.2 to 6.4 Gt CO<sub>2</sub>. i.e. between four to eight times the annual reductions provided by the Kyoto Protocol. The cost of such reductions is moderate (around USD 10 per t CO<sub>2</sub>).

### ***Ecolabels***

Ecolabels contribute positively to greenhouse gas emission reduction. They could be a highly cost-effective mitigation approach since they could potentially achieve CO<sub>2</sub> abatement at a cost less than EUR 1 per tonne CO<sub>2</sub><sup>22</sup>.

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<sup>20</sup> UNEP Bridging the Emissions Gap Report 2011.

<sup>21</sup> IPCC Fifth Assessment Report 2007.

<sup>22</sup> "The Direct and Indirect Benefits of the European Ecolabel", ENV.D.3/SER/2002/0092r, 2004.