





& Environmental Studies

# Latvian Climate Policy in the Context of International Negotiations A Primer for COP17

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The following report discusses Latvia's climate change policy as it relates to the next UNFCCC Conference of Parties to be held in Durban, South Africa from November 28 to December 10, 2011. It begins with an overview of the current state of international climate negotiations, discusses the official EU position and prospects for the AWG-LCA and AWG-KP tracks at Durban, highlights key points for Latvia under the AWG-KP track, and concludes with a discussion of domestic sector-specific mitigation and financing issues not breached by the EU official position but relevant to Latvian climate policy in the context of international negotiations.

The purpose of this report is to determine Latvia's unique needs and potential contribution to pushing a more progressive climate policy in the international arena. It is the result of collaboration between the Yale School of Forestry and Environmental Studies and the Latvian Environmental NGOs, and it aims to increase the capacity of environmental NGOs and activists in Latvia to facilitate debate about national climate policy considering international climate negotiations. The abstract of the paper will be translated into Latvian and used to raise awareness about international climate negotiations during COP17 in Durban; we hope it may also find use elsewhere in Europe, especially among other states of the former Soviet bloc. The final page of the report provides several observations and recommendations for future positions and actions that Latvia and the European environmental movement can take following Durban.

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### I. Scientific Evidence and Background on the International Negotiations

According to the latest IPCC Special Report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation, several extreme weather events including heat waves, heavy precipitation, and cyclone maximum wind, and droughts (in medium confidence levels) are likely to increase either in frequency, intensity or both by the end of the 21<sup>st</sup> century based on current emission and climate projection models. Furthermore, the report predicts that "changes in heat waves, glacial retreat and/or permafrost degradation will affect high mountain phenomena such as slope instabilities, movements of mass, and glacial lake outburst floods [and]...mean sea level rise will contribute to upward trends in extreme coastal high water." Several climate related sectors will be affected as a result, including water, agriculture and food security, forestry, health, and tourism. This will cause social and economic losses in different regions of the world, further proving that the problem of climate change requires an immediate and sufficient response from all global actors.<sup>1</sup>

In an attempt to reach a long term solution to climate change, international climate change negotiations have taken place under the aegis of the UNFCCC since its founding in 1988. The most famous product of these negotiations, the Kyoto Protocol, was drafted in 1997 and came into force in 2005. In 2007, the 13th Conference of the Parties to the UNFCCC (COP 13)

<sup>&</sup>lt;sup>1</sup> IPCC (2011) "IPCC SREX Summary for Policymakers", pp. 9-13

adopted the Bali Road Map. The Road Map and the Action Plan within it aimed to design a negotiation and implementation process which would enable a final and effective solution to the climate problem in the following years within the UNFCCC deliberation framework. Two subsidiary bodies to the convention were formed to lead the process: The Ad Hoc Working Group on Long-Term Cooperative Action (AWG-LCA), and the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP). AWG-LCA (and its subsidiary groups) negotiates and advances five main themes: shared vision, mitigation, adaptation, technology and finance. AWG-KP focuses on the future of the Kyoto Protocol once its first commitment period expires in December 2012.

COP 15 at Copenhagen in 2010 was expected to mark the completion of the AWG-LCA efforts, culminating in a binding mitigation agreement and a comprehensive resolution regarding global action toward dealing with climate change. As this goal was not reached, AWG-LCA's mandate was extended an additional year. The deliberation of the AWG-KP was also extended. Nevertheless, COP 15 did result in several achievements. It resulted in a better understanding of what a global climate agreement must entail, it raised the political profile of climate change by involving many heads of state in the negotiation process, and it produced the Copenhagen Accord, which expressed areas of agreement between national governments of the major emitters. Key components of this accord included a long-term goal of limiting global warming to no more than 2 degrees Celsius above pre-industrial levels, \$30 billion in funding pledges from developing countries for emissions reduction and adaptation for the period of 2010-2012, and an additional \$100 billion a year by 2020. The Accord also established four new functional bodies: a mechanism on Reducing Emissions on Deforestation and Forest Degradation (REDD+), a High-Level Panel to study implementation of financial provisions, the Green Climate Fund, and a Technology Mechanism aimed at spreading climate-friendly technologies.<sup>2</sup>

Expectations were lower and more manageable at COP 16 at Cancun in 2010. Instead of aiming to achieve a comprehensive agreement in a short period, the COP tried to lay the basis for such an agreement, placing emphasis both on the target (reaching a comprehensive climate agreement), and the process. The COP reiterated and formalized some of the points declared in

<sup>&</sup>lt;sup>2</sup> UNFCCC (2011) "Copenhagen Climate Change Conference - December 2009"

the Copenhagen Accord through the Cancun agreements, and added on to them as well. The Green Climate Fund and Technology Mechanism were actualized, developed countries submitted emission reduction targets and agreed on a reporting mechanism, and developing countries filed nationally appropriate mitigation actions (NAMAs), to be implemented subject to financial and technical support. COP parties also took steps to strengthen capacity for REDD in developing countries and included new carbon capture and storage projects under the Clean Development Mechanism. But, at the end of COP16, the two tracks did not resolve their work, mandating another extension of their deliberation period and leaving open the question of a second commitment period for the Kyoto Protocol.<sup>3</sup>

To manage expectations, the goals of COP 17 in Durban, South Africa, were expressed in much more cautious terms: "the discussions will seek to advance, in a balanced fashion, the implementation of the Convention and the Kyoto Protocol, as well as the Bali Action Plan, agreed at COP 13 in 2007, and the Cancun Agreements, reached at COP 16 last December."<sup>4</sup>

It is important to note that UNFCCC Executive Secretary Christina Figueres, has recently called upon member states to aim at a 1.5 degrees warming benchmark, instead of the 2 degrees warming benchmark formalized through the Cancun agreements. In an address to carbon market leaders, she warned against the victims of predicted sea level rise and damaged agriculture in small Island nations and in South Africa.<sup>5</sup> With this statement in mind, the following section examines the European Union and Latvian positions for Durban with special attention given to the AWG-LCA and AWG-KP tracks of which they have been strong proponents.

### II. Latvia's Stake in International Negotiations

As a member of the European Union, Latvia will adopt the EU's official negotiating position at Durban as its own. The EU position emphasizes its preference for "a single global and comprehensive legally-binding instrument" in the LCA track and confirms its "openness to" a

 <sup>&</sup>lt;sup>3</sup> UNFCCC (2011) "Cancun Agreements; and UNFCCC (2011)"Cancun Climate Change Conference - November 2010"
 <sup>4</sup> UNFCCC (2011) "Durban Climate Change Conference - November 2011"

<sup>&</sup>lt;sup>5</sup> Harvey (2011) "UN Chief challenges world to agree tougher target for climate change"

second commitment period under the Kyoto Protocol "as part of a transition to a wider legallybinding framework" in the KP track.<sup>6</sup>

This strong stance is promising in the long-term, but problematic in the short. A single binding framework is the type of global solution that is needed to solve climate change, but seems unachievable in the current international environment. A second commitment period of Kyoto (2CP) would help fill the gap, but it too will be difficult to achieve.

A single legally binding framework would require all actors to participate, even if commitments vary on a country- or bloc-specific basis. Reports indicate the BASIC negotiating bloc, which includes China, India, Brazil, and South Africa, will refuse to commit to internationally binding emissions targets of any form.<sup>7</sup> Part of this reluctance stems from concern that emission reduction policies would inhibit the betterment of their nations and people by slowing or stalling economic growth. The members of the BASIC bloc would prefer to set their own commitments at a national level and remain free from international monitoring or verification regimes. BASIC also refuses to agree to binding commitments without more stringent commitments from developed nations such as the United States, Canada, Australia, and Japan. If these more developed nations do not take significant steps to reduce emissions - many of whom are currently associated under the "Umbrella Group" - will not commit to a legally binding framework that excludes major emitters, especially members of the BASIC bloc. They argue that all emitters must be included to ensure a scientifically-sound and politically-palatable agreement.

The EU falls somewhere in between the positions of BASIC and the Umbrella Group and is trapped by the stalemate as a result. The EU has prioritized the goal of achieving a single legally binding framework, but also recognizes that this solution must involve all major emitters. If the Umbrella Group and the BASIC countries are not on board, neither will be the EU. Likewise, the EU has shown its willingness to take part in a second commitment period of Kyoto, but only

<sup>&</sup>lt;sup>6</sup> Council of the European Union (2011) "Preparations for the 17th session of the Conference of the Parties"
<sup>7</sup> Bodansky, "W[h]ither the Kyoto Protocol? Durban and Beyond."; Vidal, "Cancun climate change summit: Japan accused of threatening Kyoto Protocol."

as a part of a "global and comprehensive framework engaging all major economies."<sup>8</sup> In this way, the EU's position and the challenges of a second commitment period are very similar to the problems of reaching a single, legally-binding framework. What differs is the commitment of members of the BASIC bloc and the Umbrella Group.

BASIC countries, led by China and India, seek a renewal of the Kyoto Protocol under similar conditions to the first commitment period. Such an agreement would enable them to avoid binding legal commitments and it would ensure continued flows of financing for mitigation and adaptation from Annex I parties to non-Annex I parties. This position is stringently opposed by members of the Umbrella Group, especially Canada and Japan. Japan argues that the current Kyoto agreement only covers 15% of emissions, and would like to see the major voluntary pledges of the Copenhagen Accord, which cover 80% of emissions, transformed into the new international mitigation instrument. Japan has even expressed its opposition to a provisional extension of Kyoto, a so-called "political commitment period" that would not require binding targets, because it could lock the international community into the current Kyoto targets and make the shift to more meaningful targets all the harder. With Japan and Canada pushing in this direction, and the United States opting out of the Protocol altogether, the EU, and therefore Latvia, is unlikely to participate.

Even if it could be achieved, the smaller goal of achieving a second commitment period would also fall short of meeting the targets set by the Intergovernmental Panel on Climate Change (IPCC) to prevent global temperature rise above 2 degrees Celsius. By adopting the UNFCCC Annex I and non-Annex I categories as a basis for binding emission reductions, the Kyoto framework allows major emitters to avoid accountability for emissions, even as their emissions are expected to rapidly rise. While historical emission levels are important, they cannot serve as the whole basis for future emission reduction commitments. The global problem of climate change requires a global solution that takes into account past, present, and future emissions. Developing countries, like developed countries, are a diverse group. Rapid growth among emerging economies such as China, India, and Brazil and high levels of development in non-

<sup>&</sup>lt;sup>8</sup> Statement of the European Union to the 16th Session of the Ad Hoc Working Group on Further Commitments under the Kyoto Protocol, Apr. 5, 2011.

Annex I nations such as Singapore, Qatar, and Brunei demonstrate that the current UNFCCC framework cannot ensure a fair, equitable, and ultimately successful science-based solution to global climate change. It must be revised, whether for the purposes of a single framework agreement or a second commitment period of Kyoto.

The EU surely recognizes these faults but continues to support a second commitment period in part because it would not require its member states to make more aggressive commitments than they already have. As of 2010, the original EU-15 signatories to Kyoto stood at 11.4% below their 1990 levels and 3.4 percentage points above the Kyoto target of 8%.<sup>9</sup> Latvia's move toward more sustainable energy sources, deindustrialization following the fall of the Soviet Union, and transition from a centralized to a market-based economy combined with an increase in forest land cover enabled a decrease of almost 60% in GHG emissions between 1990 and 2009, and an increase of almost 35% in emission removal by LULUCF at that same time period (A closer look Latvian emission reductions can be found in Appendix A).

The EU-27 has also moved beyond the most ambitious international standards and has already adopted an internal goal of reducing carbon emissions by 20% compared to 1990 levels by 2020. It is on track to complete that goal and has indicated its willingness to consider expanding its target to 30% if an international agreement on GHG emission reduction is reached. Meanwhile, a second commitment period would require much more from countries that were either signatories and did not meet their commitments, or were not signatories during the first round. EU support for a second commitment period, therefore, is much more of political tool than a policy one. It is used to emphasize that Europe has made its commitments and that it is now looking for other parties to commit. Its efficacy as a bargaining chip is low, and many countries who were participants in the first round of Kyoto will not be as enthusiastic about the idea of its renewal.

### III. Key Points for Latvia under the KP Track

Though a second commitment period is neither guaranteed nor ideal, Kyoto is the only international legally binding instrument with emission reduction targets and timetables. The EU

<sup>&</sup>lt;sup>9</sup> European Commission, "Report from the Commission to the European Parliament and the Council: Progress Towards Achieving the Kyoto Objectives."

and other global actors have an interest in ensuring that Kyoto is maintained to prevent the global community from regressing in its commitment to emission reductions and to ensure that some emissions reduction regime is in place until a more comprehensive agreement can be reached. Whether or not second commitment period will be agreed upon at COP17, there are several concerns that Latvia must be aware of as the EU negotiates the future of the international climate regime: rollover of assigned amount units (AAUs), mitigation costs and finance, LULUCF accounting and forest management, and emission mitigation in the international aviation and maritime transportation sectors.

### Rollover of Assigned Amount Units (AAUs)

As a major holder of AAU's from the first period of Kyoto, Latvia has a concerted interest in rolling these credits over to a second commitment period. AAUs, or assigned amount units, are tradable national emission "quotas" that allow Annex B countries to minimize the overall cost of reaching KP targets through the sale and purchase of emission credits under the International Emissions Trading scheme (Article 17 of the Kyoto Protocol).

Latvia began its participation in the International Emissions Trading regime on 12 April 2006 when it designated 40 million units (out of the 119,182,230 units initially allocated to Latvia) to be earmarked for potential sale during Kyoto's first commitment period. Latvia's Cabinet of Ministers also decided at that time that the Latvian AAUs would be "greened", meaning that AAU revenues would be used to finance environmental programs to increase energy efficiency and contribute to GHG mitigation.

Since 2008, Latvia has signed several AAU purchase (sale) agreements (AAUPAs) with countries including the Netherlands, Austria, Spain, Japan, and Portugal. These sales have generated over  $\notin$ 200 million to date. Of this amount, Latvia has made  $\notin$ 174.9 million available for the funding of a broad array of greening projects.<sup>10</sup> These projects include, but are not limited to, an increase in the energy efficiency in municipal buildings ( $\notin$ 37 million), use of renewable energy sources in the household sector ( $\notin$ 16.2 million), complex solutions for GHG emission

<sup>&</sup>lt;sup>10</sup> Ministry of the Environmental Protection and Regional Development of Latvia, "Summary about Latvia's GIS and AAUs".

reduction in state and municipal vocational education establishment buildings ( $\notin$ 14.5 million), technology conversion from fossil to renewable energy sources ( $\notin$ 11.5 million), complex solutions for GHG emission reduction in municipal buildings ( $\notin$ 12.1 million) and production buildings ( $\notin$ 14 million), public campaigns to raise awareness about the importance of reducing GHG emissions ( $\notin$ 0.8 million) and other projects aimed at GHG emission reduction. Demand for this financing is evidently very high and in most tenders the number of applications by far exceeded the available financing.

It is important to note that a vast proportion of Latvia's AAUs originate from LULUCF. Decision 13/CMP.1, annex, paragraphs 15, 16 and 49 state that AAUs can be carried over without limitation—however any units issued on the basis of LULUCF activity, specifically RMUs, tCERs, ICERs and ERUs generated by Joint Implementation (JI) LULUCF projects (and hence converted from RMUs), may *not* be carried over. Latvia, therefore, stands to lose significantly in a second commitment period of the Kyoto Protocol as it is currently structured.

Latvia's interest in rolling over other AAU's is part of a lively debate within the EU and will serve as a key pressure point during the negotiations at Durban. The European Union must decide whether or not unused first commitment period AAUs accumulated by Russia, Ukraine, and other Eastern European states should be rolled over into a second period. These states were able to obtain such credits in the in the wake of massive deindustrialization that followed the fall of communism. They now find themselves with huge stockpiles of unused AAUs, worth substantial sums of money.

The system, it is said, is full of "hot air." Stefan Singer, director of global energy policy at the World Wildlife Fund, warned that the possibility for Russia and Ukraine to carry over their surplus credits after 2012 would probably "sink" international climate talks. "This amount is more than the entire annual emissions of the EU-27 and may—if traded and sold—sink any environmental integrity of targets for developed countries," Singer remarked. Britain and Germany have publicly stated that they wish to kill off the excess permits, arguing that they undermine the system.

In a memo dated 23 September 2011, the Council of the European Union underscored the importance of achieving in Durban a second commitment period of the KP that is ambitious, effective, and maintains incentive for overachievement—and it expressed that the "rules to deal with surplus Assigned Amount Units (AAUs) need to be consistent with this objective." The Council reiterated that surplus AAUs could affect the environmental integrity of the KP if they are not addressed appropriately. Notable for Latvia, they also emphasized the need to and to treat EU and non-EU countries equally and to avoid discrimination against any particular member state in deciding the final solution.

EU diplomats are considering possible solutions to the problem. One "extreme" option would be to cancel outright surplus AAUs after Kyoto's expiration, an option favored by many environmentalists. However, this option is likely to be met with fierce resistance from Russia and Eastern European states who can argue that the AAUs were granted under a legally binding international treaty. Also, it would be unfair to countries that have made sincere, substantive efforts to meet their KP targets. Furthermore, it may in fact be damaging to climate change mitigation efforts in countries like Latvia that have made "greening" commitments with regards to the use of revenue from the sale of AAUs.

Another option is to allow these credits to rollover in their entirety into a second commitment period. This would undoubtedly have dramatic consequences for the EU. A huge injection of unused credits could significantly reduce the probability of achieving ambitious GHG reductions. If AAUs are to be integrated into the EU Emissions Trading Scheme (EU ETS), the fledgling carbon market could come crashing down. Some countries, such as Hungary, have called for the EU to buy up the surplus from the Community budget—surely a substantial cost. A middle ground could be to apply a "discount factor" to surplus AAUs being carried over into the second period. A discount could be applied at rate of 80, 50, or 30% for example. A final option would be to selectively apply the compensation effort or the discount factor in certain countries and not others. Countries permitted to rollover units should be required to commit to "greening" of AAU-derived revenue by selling surplus AAUS under transparent and internationally monitored Green Investment Scheme (GIS) programs, which are subject to MRV.

### **Mitigation Costs**

A second commitment period of Kyoto would also involve a new round of mitigation goals for the EU and for Latvia. The European Council's COP17 negotiating position leaves a wide range on mitigation for EU members both by 2050 (80%-95%) and in the 2012-2020 period. The EU underlines the IPCC's finding from its Fourth Assessment Report that "developed countries as a group should reduce their greenhouse gas emissions by 25 to 40% below 1990 levels by 2020".<sup>11</sup> However, it also tries to leverage this range to incentivize a global comprehensive agreement, in which case the EU would reduce GHG emissions by 30% in the same time frame.

Though Latvia achieved much more than 30% reductions before the end of its first Kyoto commitment period, the binding EU emissions target for 2012-2020 is based on 2005 baseline and necessitates further reductions.<sup>12</sup> For sectors included in the European Trading Scheme (ETS) ETS, there is an EU-wide target of 21% reduction in emissions relative to 2005 levels. In non-ETS sectors GHG emissions in Latvia should not exceed a 17% increase in emissions compared to 2005 levels. Looking at the structure of the Latvian economy, the ETS sectors cover only 23% of GHG emissions. This statistic underlines the importance of non-ETS sectors such as transport, agriculture, household, waste and small industry. The biggest mitigation challenge, and the most difficult to tackle, lays in the transport and agriculture sectors (accounting for 62% of Latvia's non-ETS emissions). While the current economic crisis has reduced future emissions levels projects for 2012-2020, the business as usual scenario suggests that Latvia might not be able to limit its emissions growth by 17% (please see Appendix A for more information on Latvia's domestic emission reduction policies).

As for the costs, The International Institute for Applied Systems Analysis estimates that reducing Latvia's carbon emissions by 16.3% relative to 2005 levels, which is equal to a 60.9% reduction relative to 1990 levels at a carbon price of 50 Euro per ton, would cost 122 million Euro a

<sup>&</sup>lt;sup>11</sup> Council of the European Union (2011) "Preparations for the 17th session of the Conference of the Parties (COP 17) to the United Nations Framework Convention on Climate Change (UNFCCC) and the 7th session of the Meeting of the Parties to the Kyoto Protocol (CMP 7) (Durban, South Africa, 28 November - 9 December 2011) -Council conclusions" <sup>12</sup> European Commissioner for Climate Action, (2010) "Effort Sharing Decision"

year.13 This reduction accounts for only 0.25% of the  $\leq 48$  billion that would be required if the EU is to meet its 20% reduction goal, or 0.15% of the  $\leq 81$  billion required to meet the 30% goal.14 However, burdens within the EU vary across countries. According to calculations conducted by European Commission, the average costs for GHG emission reduction will be 0.61% from GDP whereas in Latvia it will be 1.5% GDP – the highest share among the EU-27. Internal calculations conducted in Latvia suggest that the marginal cost of CO2e savings in Latvia may be even higher – up to  $\leq 200$  per ton of CO2e, which is linked to the relatively clean energy sector in Latvia.

### IV. LULUCF and Reforms in the International Maritime and Aviation Sectors

COP 17 will also bring about debates in two sectors that have a special importance to the Latvian economy: forestry and international transportation (aviation and shipping). This section describes their share in national emissions and mitigation, and how they may be affected by developments in the international climate negotiations.

### LULUCF Accounting and Forest Management

LULUCF – land use, land-use change and forestry – is of enormous importance in Latvia. Latvia's emissions for 2009 were estimated to be 59.7 per cent below its base year level excluding LULUCF and 185.8 per cent below its base year level including LULUCF. Removals increased significantly between 1990 and 2009, from 15.2 Tg CO2 eq to 20.5 Tg CO2 eq.<sup>15</sup> The trend was mainly driven by increases in forest cover, which has more than doubled in the past 60 years and now covers half the land area of Latvia.

The EU has stressed the need for a robust LULUCF accounting framework to be adopted at Durban and has proposed accounting of forest management based on "reference levels including a semi-symmetrical cap at levels that provide incentives to improve carbon sequestration and

<sup>&</sup>lt;sup>13</sup> Amann, M. et al. (2008) "Emission scenarios for non-CO2 greenhouse gases in the EU-27 Mitigation potentials and costs in 2020"

<sup>&</sup>lt;sup>14</sup> European Commission "Analysis of options to move beyond 20% greenhouse gas emission reductions and assessing the risk of carbon leakage"

ensure environmental integrity, taking proper account of sustainable forest management and forest-related land-use change."<sup>16</sup>



Aggregate direct GHG emissions in 1990 – 2020, Gg CO2 - eq.

Source: Latvian Environment, Geology and Meteorology Agency

According to the UNFCCC Expert Review Team (ERT) reviewing Latvia's Fifth National Communication, Latvia has clearly reported on the methodology used for calculating the projections of GHGs for each sector, except the LULUCF sector.<sup>17</sup> The ERT took note of the recommendations made in the report of the individual review of the 2010 annual submission of Latvia. During the review, the ERT learned that the Party made some efforts to improve methods and arrangements for the consistent representation of land area for land-use categories. The ERT reiterated the recommendation that Latvia provide in its next annual submission further documentation to justify and ensure that all land-use change from and to forest land is attributable to direct human-induced afforestation and reforestation and to explain the changes in projections between national communications relative to changes in assumptions and methodologies. The ERT concluded, however, that the national system, overall, is performing its required functions as set out in decision 19/CMP.1. Considering that the inaccuracy of the

<sup>17</sup> UNFCCC, "Expert Review Team (ERT) report of the in-depth review of the fifth national communication of Latvia"

<sup>&</sup>lt;sup>16</sup> Council of the European Union, "Preparations for the 17th session of the Conference of the Parties..."

forestry sector data forms key challenges in the LULUCF methodology, Latvia is interested in the so-called *technical corrections and recalculations*.

One related issue of concern is Latvia's recent loss of Forest Stewardship Council (FSC) certification. The forests of Latvia cover thousands of square kilometers and are home to nearly 28,000 species of flora and fauna and some of the healthiest populations in Europe of wolf, lynx, lesser spotted eagle, and other threatened fauna.<sup>18</sup> Latvia's loss of certification was largely due to concerns about the transparency of certification procedures, the quality of the auditing process, and the sustainability of the rate of harvest. Latvia's progressive reputation for forest management has increased the market appeal of its LULUCF-derived AAUs and, therefore, a commitment to sustainable forest management should be upheld and the loss of FSC certification should be properly addressed.

### International Aviation and Shipping

Although their share in national emissions in Latvia is small, in recent years the international aviation and shipping sectors have displayed a rapid increase in emissions, especially as a result of growing economic activity and better data collection regarding gasoline consumption.<sup>19</sup> These sectors are of particular interest to Latvia, which relies heavily on both to maintain connection to other nations in Europe and around the world.

In its fourteenth session at Panama City on October 2011, AWG-LCA discussed different options to mitigate emissions from aviation and maritime shipping, as a way to enhance the implementation of Article 4, paragraph 1(c), of the UNFCCC. Article 4 abides all parties to promote and cooperate in the development, application and diffusion, of technologies, practices and processes that control, reduce or prevent anthropogenic emissions of greenhouse gases not controlled by the Montreal Protocol in all relevant sectors, including the energy, transport, industry, agriculture, forestry and waste management sectors. The Panama City working group suggested eight concrete options for a resolution which would accelerate mitigation in those sectors. All eight options acknowledge the need to increase mitigation in the maritime and

<sup>&</sup>lt;sup>18</sup> Al Jazeera (2011) "People & Power - Latvia's pulp fiction."

<sup>&</sup>lt;sup>19</sup> Latvian Ministry of the Environment (2009) "Fifth national communication of the Republic of Latvia to the United Nations Framework Convention on Climate Change"

aviation transport sector, and all eight recognize that the International Civil Aviation Organization and the International Maritime Organization should lead the professional work and debate on mitigation goals, process and policy options in this sector. However, disagreements persisted on how abiding the mitigation should be, how to treat these sectors in developing countries where they might be considered a vital part of their development strategy, and what kind of reporting would be necessary in this sector. Thus, option 2 in the latest draft calls for a 10%-20% reduction in the sector's emissions by 2020 relative to 2005 levels. In contrast, option 1 does not mention any specific goals, and instead emphasizes that mitigation would occur through Annex 1 countries based on the principle of "common but differentiated responsibility".<sup>20</sup>

The European Union has expressed its own position regarding the sector in three different articles on the Council resolution from October 2011, suggesting in article 16 that the maritime and aviation sector presents an opportunity to bridge the gap between commitments from parties regarding mitigation by 2012 and the 2 degrees objective; recalling in article 23 that aviation and maritime transport were not adequately covered by the Cancun agreement; and finally reaffirming in article 25 that there is a need to agree on a global emissions reductions target in that sector, to continue to work through the International Civil Aviation Organization (ICAO) and the International Maritime Organization (IMO), and to develop a policy framework in a manner that ensures a level playing field and that does not lead to competitive distortions or carbon leakage. The article also factors in differences in national capacity, stressing the need of taking into account national budgetary rules and the principles, and provisions of the UNFCCC in the use of potential revenues. The article positively mentions the IMO decision on an Energy Efficiency Design Index, and of the Ship Energy Efficiency Management Plan as a first step to limit emissions from international shipping.<sup>21</sup>

<sup>&</sup>lt;sup>20</sup> AWG-LCA, (2011) "Work of the AWG-LCA contact group, Agenda item 3.2.4 Cooperative sectoral approaches and sector-specific actions in order to enhance the implementation of Article 4, paragraph 1(c), of the Convention version for 7 October 2011 @ 12:00"

<sup>&</sup>lt;sup>21</sup> Council of the European Union. "Preparations for the 17th session of the Conference of the Parties (COP 17) to the United Nations Framework Convention on Climate Change (UNFCCC) and the 7th session of the Meeting of the Parties to the Kyoto Protocol (CMP 7) (Durban, South Africa, 28 November - 9 December 2011) - Council conclusions",

Following the IPCC recommendations regarding mitigation in the Aviation sector, earlier this year, the European Union enacted the inclusion of Aviation in the EU ETS, creating a cap and trade system on flights coming into and departing from Europe starting January 1st 2012. The cap was based on an average annual usage base line of 2004-2006.<sup>22</sup> Though it is not expected to significantly raise ticket prices, this move has created considerable objections from other countries and airlines - The ICAO released a white paper warning of trade wars over payments, recommending exemption of non-European carriers.<sup>23</sup>

While it is important for Latvia to Latvia to ensure that these measures do not infringe upon its need to develop its own economy, it is equally important that it supports the EU's efforts in promoting a global cap on emissions in this sectors. Thus, Latvia's own comparative advantage isn't undermined, and a more sustainable path toward cleaner technologies and fewer miles travelled is ensured.

### V. How can the international regime help achieve Latvian Climate policy goals?

Parties must reach a middle ground in order to ensure that an international agreement on climate change is both equitable and consistent with science in order to prevent a global temperature rise above 2 degrees Celsius. While that middle ground may not come in the form of a single legally-binding framework agreement or a second commitment period to Kyoto, progress can still be made at Durban. Agreements at this COP can serve as pillars for future agreements and hopefully lead to the fulfillment of the AWG-LCA. What is more, Latvia can still look to the international community and international negotiation framework as way to further its commitment to reducing climate change.

### Financing for Mitigation and Adaptation in Latvia

Latvia's position as a member of the EU, an Annex I party to the KP, and an Economy in Transition (EIT) creates special challenges for the procurement of mitigation and adaptation funding. Latvia has one of the lowest GDPs in the EU, yet it is not a developing economy. Not

<sup>&</sup>lt;sup>22</sup> European Commission, "Taxation of aircraft fuel"; Europa Press Release Rapid, "Inclusion of aviation in the EU ETS: Commission publishes historical emissions data on which allocations will be based"

<sup>&</sup>lt;sup>23</sup> Aero News Network, "EU Holds Firm On Emissions Scheme"

having developing economy designation precludes Latvia from accessing the vast majority of climate change funds: the World Bank Climate Investment Fund, the Adaptation Fund of the KP, the Clean Development Mechanism.

Notably, the Global Environment Facility (GEF) and the World Bank Carbon Finance Unit (CFU) do provide funding to EITs. Since 1991, the Global Environment Facility has been a major climate fund that has provided over \$7.4 billion in grants to support over 1,950 projects in 160 developing countries and EITs. Although, as the financial mechanism of the UNFCCC, GEF allocates and disburses about \$250 million dollars per year in projects in energy efficiency, renewable energies, and sustainable transportation, it played a minor role in Latvia. Support from GEF was phased out after Latvia joined the EU. The CFU uses money contributed by governments and companies in OECD countries to purchase project-based GHG reductions in developing countries and EITs. The emission reductions are purchased through one of the CFU's carbon funds on behalf of the contributor, and within the framework of the KP's CDM or JI. Latvia has received financing from the World Bank Prototype Carbon Fund (PCF) for the Liepaja Regional Solid Waste Management Project, which was implemented starting 2000. The Liepaja project as a JI project involved several elements that contribute to GHG emission reduction, for example building a new landfill and installing energy cells to capture methane for power generation, then selling the electricity to the national grid; closing existing landfills and installing methane gathering systems; and closing smaller waste disposal facilities located around the Liepaja region. Emission reductions from these projects have been validated.

Perhaps most promisingly, Latvia will continue to be eligible for EU Funds, especially the Structural and Cohesion Funds and climate related Commission expenditures. These funds play a key role in leveraging action on climate change at Member State and regional level. The EU maintains that investment in energy efficiency is important for reducing GHG emissions and other environmental impacts as well as contributing to economic growth and competitiveness – especially in the new EU Member States, which are expected to claim the greater part of the Structural and Cohesion Funds. Over €340 million has already been allocated to Latvia by the EU to fund clean energy and efficiency measures.

Latvia's National Reform Program for implementation of "EU 2020" strategy also acknowledges that developing of low carbon production and services are key to ensure Latvia's international competitiveness in the long term. However, this program emphasizes that substantial investment will be necessary to foster the GHG emission reduction measures. In the EU funds programming period 2007-2013, a number of measure have either directly or indirectly supported GHG emission reductions. Activity "Improvement of Heat Insulation of Multi-apartment Residential Buildings" (EUR 63,09 million), activity "Energy efficiency increase in Centralised Heat Supply Systems" (EUR 78,73 million), activity "Development of Cogeneration Power Plants Utilising Renewable Energy Sources" (EUR 30,40 million) should be highlighted.

The Financial Instrument for Environment (also called LIFE+) was created to support activities which "have European added value, have a leverage or multiplier effect and demonstrative or catalytic character". The Commission proposes to allocate €3.2 billion to the LIFE+ program (0.8bn on climate and 2.4bn for environment) for 2014-2020. Latvia could look to this program for funding as well.

The Commission published proposals for regulations on October 6, 2011 that lay down key principles and conditions for allocation of funding through Cohesion policy.<sup>24</sup> The Commission suggests applying climate-proofing to most investments from EU funds and has proposed to earmark certain amount of funding from the European Regional Development Fund (ERDF) for climate change mitigation investments, which in the case of Latvia would amount to 6%. Latvia, however, opposes earmarking of funding and wants to decide independently where the funding should be invested. Priorities for investments will be established during 2012 and activities will be programmed. However, considering Latvia's commitments towards the EU and shortage of other public funding, it is expected that EU funds will be used to support energy efficiency projects and to increase of use of renewable energy resources.

<sup>&</sup>lt;sup>24</sup> These included a Proposal for a Regulation of the European Parliament and of the Council laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund covered by the Common Strategic Framework and laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund and repealing Regulation (EC) No 1083/2006 and proposals for each fund.

Funding is also available for the period 2009-2014 via the "Adaptation to climate change" program through the European Economic Area Financial Mechanism and Norway Financial Mechanism. This program will be managed by the Ministry of Environment and Regional Development and the total allocation according to the Memorandum of Understanding is €10,36 million.<sup>25</sup> The program aims to support elaboration of national climate policy, data collection for inventories, capacity building, pilot projects and studies. Detailed activities are still awaiting approval. The program is under elaboration and should be finalized by the end of November, 2011.

Latvia has some options within the international and regional framework to obtain support for further mitigation and adaptation efforts. But Latvia can also do much at international negotiations to better set the stage for more progressive and more attainable climate policy. With this thought in mind, the final page of this report forms several conclusions and key recommendations for Latvia at the upcoming Conference of Parties in Durban, South Africa.

<sup>&</sup>lt;sup>25</sup> Reference: www.eeagrants.lv. Documents not yet available in English for the 2009-2014 period.

### VI. Conclusions & Recommendations

The Yale School of Forestry & Latvian NGO report "Latvian Climate Policy in the Context of International Negotiations: A Primer for COP17" puts forward the following recommendations regarding Latvia's climate policy at the international, European, and national level.

A copy of the report can be found at: http://www.homoecos.lv/en/climate & http://www.zalie.lv

### At COP17:

- Latvia should emphasize the progress it has made and the projects it has pursued using AAUderived funds. At the same time, Latvia needs to make concessions on the full rollover of AAUs to ensure that the carbon market is not flooded and that mitigation efforts are not undermined by an influx of rollover units. Ideally, Latvia should adopt a hybrid approach that would require a commitment to "greening" of AAU sales, as Latvia has already done, and use a discount factor for AAU rollover.
- Concerning aviation and maritime shipping, Latvia should advocate for the involvement of the IMO and ICAO, but ultimately support an effort to set stringent goals through the UNFCCC framework. Latvia should also, as an economy in transition, advocate for a viable financing scheme that can ensure that mitigation in these sectors does not infringe upon its own economic development or that of other nations with a similar profile.
- Representing the unique needs and abilities of former Soviet states, Latvia should engage with the Cartagena Dialogue, a group of twenty seven nations devoted to overcoming the polarized rhetoric of international climate change negotiations and arriving at tangible solutions to the problem.

### **Regional:**

- Considering there may not be a second commitment period and therefore no rollover of AAUs, Latvia must expand and diversify the sources of funding, discussed in detail in the full report, it can use to ensure continued progress in the area of GHG emission reductions.
- Regardless of the outcome of the KP track negotiations, Latvia and the EU should push for a commitment of 30% reduction in GHG emissions by 2020, thus creating trust among other parties to the convention, and perhaps creating the possibility of further mitigation on a bilateral or region to region basis.

### **Domestic:**

- Taking into consideration recent IPCC findings that might require more dramatic action to prevent catastrophic effects of global climate change, Latvia should develop a national mitigation strategy. This strategy should be supplemented by an adaptation plan that takes into account a greater possibility for severe weather events and the dangers of sea level rise.
- Latvia should strengthen its national climate policy by formalizing its many initiatives into a coherent strategy with a long-term vision that extends until 2050 and by embedding its goals and principles in national decisions regarding social and economic social development.

### **Appendix A: GHG Mitigation in Latvia**

Latvia has been able to reduce its emissions by almost 60% between 1990-2009.<sup>26</sup> This decrease can be explained in several external factors – a drop of 16.03% in population between 1990-2010,<sup>27</sup> a substantial drop in economic activity and industrial production in particular during the initial years after the collapse of the Soviet Union,<sup>28</sup> rising prices of oil, and a warming climate in the Baltic basin which meant a smaller need for artificial heating.<sup>29</sup> However, between 1995-2007, annual growth rates in GDP grew from -1% to 12%, marking a shift in the opposite direction in economic activity.<sup>30</sup>

Several internal factors are also to account for the drop in emissions. One area that underwent significant change was the energy sector, which in 2007, contributed to 73% of GHG emissions in Latvia. But whereas in 1990 the energy sector consumed 320.7 PJ, it consumed only 193.54 PJ in 2007. Fuel composition dramatically changed as well. Comprising 27.7% of energy sources in 1990, heavy oil, shale oil, and coal usage dropped to merely 3.1% in 2007. In their stead, natural gas became the primary source for heating, power plants, and industrial enterprises. Another rising alternative source of energy was fuelwood, climbing from 8.6% in 1990 to 25.2% in 2007. These combined shifts in fuel usage allowed GHG emissions from energy to drop from 18,700 Gg in 1990 to 8,300 Gg in 2007. Nevertheless, there are still many areas for improvement. This is particularly true of the transportation sector, where emissions rose from 3000 Gg in 1990 to close to 3900 Gg in 2007 due to an increase inroad transport, explained mostly by the growing number of vehicles due to economic growth in the country.<sup>31</sup>

<sup>&</sup>lt;sup>26</sup> UNFCCC (2011) "Summary of GHG Emissions for Latvia"

<sup>&</sup>lt;sup>27</sup> World Bank. "World Development Indicators Report".

<sup>&</sup>lt;sup>28</sup> World Bank Group, Initiated report at: <u>http://databank.worldbank.org/ddp/html-jsp/QuickViewReport.jsp?RowAxis=WDI\_Ctry~&ColAxis=WDI\_Time~&PageAxis=WDI\_Series~&PageAxisCapt ion=Series~&RowAxisCaption=Country~&ColAxisCaption=Time~&NEW\_REPORT\_SCALE=1&NEW\_REPOR</u>

T\_PRECISION=0&newReport=yes&ROW\_COUNT=1&COLUMN\_COUNT=21&PAGE\_COUNT=1&COMMA\_ <u>SEP=true</u> <sup>29</sup> The BACC Author Team (2008) "BALTEX Assessment of Climate Change for the Baltic Sea Basin"

<sup>&</sup>lt;sup>27</sup> The BACC Author Team (2008) "BALTEX Assessment of Climate Change for the Baltic Sea Basin" <sup>30</sup> World Bank Group, Initiated report at: <u>http://databank.worldbank.org/ddp/html-</u>

jsp/QuickViewReport.jsp?RowAxis=WDI Ctry~&ColAxis=WDI Time~&PageAxis=WDI Series~&PageAxisCapt ion=Series~&RowAxisCaption=Country~&ColAxisCaption=Time~&NEW REPORT SCALE=1&NEW REPOR T\_PRECISION=0&newReport=yes&ROW\_COUNT=1&COLUMN\_COUNT=21&PAGE\_COUNT=1&COMMA\_ SEP=true

<sup>&</sup>lt;sup>31</sup> Latvian Ministry of Environment (2009) "Latvia's national inventory report Submitted under United Nations Convention on Climate Change, Common Reporting Formats (CRF) 1990 – 2007"

# What has the government done recently to promote further GHG emission reduction? First, the Latvian government committed itself to various legally binding reduction goals – 8% reduction of 1990 levels by 2012 in the Kyoto protocol, limiting emissions increase to 17% of 2005 levels by 2020 in the European effort sharing mechanism, and participation in the European emission cap and trade system (ETS) which covers multiple industries including power stations, combustion plants, oil refineries and iron and steel works among others.<sup>32</sup> In its national climate policy, Latvia is following the EU's positions, and its GHG emission reduction goals are part of the effort sharing mechanism among EU member states. While the government created a "Climate change mitigation program" for 2005-2010, its role in national policy making has been minor. As of 2011, there is no national climate policy apart from fulfilling Latvia's commitments under KP and as part of the EU.

Second, the government initiated multiple laws, policies and projects to enable the transition to a carbon neutral economy and society in different sectors. In the energy sector, the government has been promoting use of biomass for energy production through fuel switch projects using straw, wood, and other local biomass residue; creating a tariff for waste biogas capture for electricity production purposes; supporting small hydropower plants in renovation and high tariffs; providing financial support for manufacturers of bio-diesel fuel and bio-ethanol; replacing small inefficient boiler houses with cogeneration plants which provide both heating and electricity; renovating thermal energy distribution systems to prevent leakage; and developing a system for determining energy consumption in buildings, followed by audits and certifications. In the transport sector, the government has focused on efforts to reduce emissions in the Riga metropolitan area, where almost third of the population live. It has implemented measures to optimize traffic flow, planned development of the public transport system including a low floor tram and an electric transport network, and developed a bicycle infrastructure which would allow use of bicycle for commuting rather than solely for recreation and sports (though this project is lacking in funds according to the communication). <sup>33</sup>

<sup>33</sup> Latvian Ministry of the Environment (2006) "Fourth National Communication of the Republic of Latvia to the United Nations Framework Convention on Climate Change"

<sup>&</sup>lt;sup>32</sup> Commissioner for Climate Action (2010) "Effort Sharing Decision", "European Trading Scheme"

Other sectors that contribute relatively less emissions are also being considered. In the growing industry sector, a permitting process under the provisions of the "Law on Pollution" enhances environmental efficiency in production processes, taking into account GHG emission among others. In the agriculture sector, the government has not taken any direct actions toward emission reduction, but other policies might indirectly positively affect it, such as construction of manure storage facilities, reducing ammonia emission by encouraging famers to use closed facilities for the storage of organic and mineral fertilizers, among other best practices. In the forestry sector, investments are being made into afforestation and in increasing stand productivity, as well as preservation of protected forests through national legislation. As a result of the change in land use structure, in 2007, LULUCF removed 50% more than it did in 1990. Finally, in the waste sector, the government has been promoting recyclables collection facilities, the installation of sorting, processing and disposal equipment in municipal landfills, and collection of biogas emitted from them. It has also created a voluntary program for packaging waste management, which constitutes 20%-30% of municipal waste.<sup>34</sup>

<sup>&</sup>lt;sup>34</sup> Ibid.

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