



## 国际航空与气候变化高级别会议

2009 年 10 月 7 日至 9 日，蒙特利尔

### 议程项目 2：实现减排的战略和措施的提案

#### 实现减排的战略和措施的提案

（由秘书处提交）

##### 摘要

本文件介绍了针对如何处理国际航空排放问题，由国际航空与气候变化组查明的措施、源于联合国气候变化框架公约进程的提案、以及业界的提案，以供高级别环境会议审议。

高级别环境会议的行动在第 7 段。

### 1. 引言

1.1 大会第 A36-22 号决议附录 K “国际民航组织关于国际航空与气候变化的行动方案”要求理事会制定一项积极进取的行动方案，其中涵盖了实现减排的战略和措施。

### 2. 国际航空排放的全球性质

2.1 国际航空的温室气体（GHG）排放是航空器机载化石燃料燃烧的直接结果。该部门的排放属于全球性质，不以国界为限。尽管燃料在一个国家进行装载，大部分燃料的耗用（以及其相关排放的释放）则在其他国家领土内，或在得到承认的国界之外的领域，如大气层上层和公海之上。因其全球性质所致，由一个国家就国际航空运输运行采取的行动，可能对前往或来自另一国家的航空器运行有直接影响。

2.2 国际航空（和海上运输）的温室气体排放目前不受气候变化框架公约及其京都议定书的限制/减少排放规定规范。在这两项多边协定之下，均要求各国政府估计国际航空的温室气体排放，但这些排放都被排除在国家总量之外并分别报告。虽然气候变化框架公约并不包括关于这些排放应如何加以处理的特定条款，但京都议定书（第二条第二款）表示：“附件一所列缔约方应分别通过国际民用航空组织和国际海事组织作出努力，谋求限制或减少航空和航海舱载燃料产生的《蒙特利尔议定书》未予管制的温室气体的排放。”。

2.3 鉴于全世界所有国家政府为了处理国际航空温室气体排放努力合作的强烈意愿，国际民航组织和气候变化框架公约进程必须一起合作，为该部门建立一个有效的全球框架。此种框架将必须考虑到国际航空的具体条件和所有相关国家的情况。

### 3. 源于联合国气候变化框架公约进程的提案

3.1 在气候变化框架公约进程下，以巴厘路线图<sup>1</sup>为背景正在进行的谈判，已将重点放在关键组成要素上，如共同愿景；由发达国家和发展中国家采取的减缓影响的工作；适应影响的工作；投资和财务需要；以及开发、部署、传播和转让技术等。

3.2 关于如何在未来的气候变化协定中处理国际航空（和海上运输）温室气体排放问题，这是气候变化框架公约进程中有争议性的诸多问题之一。目前在气候变化框架公约下就 2012 年后处理气候变化问题的新的全球协定正在进行的谈判，已经触及了国际航空温室气体排放的不同方面。这些方面包括：指标和基准线；指导原则（如在气候变化框架公约和京都议定书下的共同但有区别的责任及各自的能力等原则和规定）；实施办法（包括财务问题）；和国际民航组织与气候变化框架公约的具体作用等。目前尚未就上述任何问题取得一致意见。谈判正在进行，预计在未来几个月将更加紧锣密鼓，这是因为在即将于 2009 年 12 月在哥本哈根举行的气候变化框架公约会议上，预计将产生一项全球协定作为成果。

3.3 气候变化框架公约谈判案文草案的最新版本综合了各缔约方提出的提案。关于指标和基准线，草案案文所载的提案，提供了减少/限制排放指标以供通过，但并未明确这些减少/限制水平或目标年度（两者都有待谈判）。一个相关问题（也与指导原则的讨论有关）则是哪些缔约方（所有缔约方或仅限附件 1 缔约方）应做出这些承诺。还有，缔约方之间就如何制定这些目标意见不同，一些缔约方倾向在气候变化框架公约下进行谈判，其他的则支持由国际民航组织来协调与国际航空有关的所有方面。

3.4 在谈判期间，缔约方已辩论了如何协调芝加哥公约所规定的不歧视与发展国际航空的平等与公平机会的原则，以及气候变化框架公约及其京都议定书下关于共同但有区别的责任及各自的能力等原则和规定。关于实施的办法，谈判围绕着：可能使用部门合作的做法和特定的国际航空部门行动；可能制定出工具利用针对国际航空的财政政策（如征税）所筹集的资金为减缓和适应活动供资；并使用适合国情的减缓影响行动（NAMAs）以帮助对发展中国家的技术转让和财务支助排出优先。

3.5 虽然关于上述所有问题的辩论在未来几个月将会继续，从气候变化框架公约谈判中已总的感觉到，各国政府愿意一起合作查明处理国际航空温室气体排放的适当行动。此外，各方已广泛地认识到，在考虑所有这些不同做法时，应着眼于如何商定一个全面、有成本效益和详尽的国际航空框架。

3.6 谈判案文现行版本中所载的提案，是根据 2009 年 6 月于德国波恩举行的气候变化框架公约气候会谈成果而制定的，见于本文件附录。

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<sup>1</sup> 涵盖了巴厘行动计划（为了在《公约》下处理气候变化而制定）和就京都议定书附件 1 缔约方进一步的承诺持续进行的谈判进程。

## 4. 国际航空与气候变化组查明的措施

4.1 国际航空与气候变化组第三次会议同意成立一个基于市场的措施（MBMs）工作组来推进该领域的工作。在国际航空与气候变化组第四次会议上，基于市场的措施工作组提交了多份文件（GIACC/4-WP/3、IP/7 和 IP/8 号文件），并报告它已审查了国际民航组织过去的工作，收到了来自多方包括航空环保委和业界提交的意见，并商讨了可应用于国际航空的多种基于市场的措施。该工作组总体同意，在缺乏国际民航组织制定的框架下，由各国或各地区通过不同的政策和参数而实施基于市场的措施，情况并不理想。国际航空与气候变化组就基于市场的措施进行的讨论摘要载于 HML-ENV/09-WP/8 号文件中。

4.2 国际航空与气候变化组建议了可供各国选用以减少国际航空排放的一揽子措施，其中涵盖了与航空器有关的技术发展情况、改进空中交通管理和基础设施的使用、更高效的运行、经济/基于市场的措施和监管措施等。每一国家将保留最后权利，从措施组合中选择适合其国情、并符合全球理想目标的措施，并应鼓励各国制定各自的行动计划并将其报送国际民航组织。

4.3 还有，由国际航空与气候变化组商定、并经理事会通过的各项具体措施包括：改进燃油效率的理想目标（每年 2%，直到 2050 年）制定航空二氧化碳排放标准、和制定一个进程以便为国际航空基于市场的措施建立框架。

## 5. 业界的立场

5.1 在国际航空与气候变化组的审议期间以及在气候变化框架公约进程之下，多个航空运输观察员组织，如国际航空运输协会（IATA）、航空航天工业协会国际协调理事会（ICCAIA）和国际机场理事会（ACI）等，就如何处理国际航空排放的提案提交了意见，值得注意的是由国际航协和航空全球交易（AGD）集团提交的下列立场。提交给国际航空与气候变化组的所有信息都载于：  
[http://www.icao.int/env/meetings/Giacc\\_Root.html](http://www.icao.int/env/meetings/Giacc_Root.html)。

### 5.2 国际航空运输协会（IATA）

5.2.1 国际航协向国际航空与气候变化组第四次会议提交了文件（GIACC/4-IP/6 号文件），航空公司业界在其中重申了对国际民航组织的支持，并赞成由国际民航组织作为适当的联合国机构，向即将于哥本哈根举行的气候谈判做出针对航空的建议，以便为处理航空排放制定部门做法。

5.2.2 航空公司业界相信，处理国际航空排放的政策措施必须在全球部门一级制定，以避免单边强行实行指标和措施，并避免东拼西凑地实施相互冲突和可能重复的国家和地区政策。要实现其中期碳中和增长目标，并接着实现二氧化碳绝对减排，这就需要多方面的做法，持续地投资于技术、运行和基础设施以及开发基于市场的措施，并得到所有航空利害攸关方，如航空公司、制造商、机场和空中航行服务提供商者等的强力承诺。

5.2.3 还有，航空公司业界相信，政府必须紧迫地做出必要的投资，对空中交通管理进行现代化，并制定出正确的法律和财政框架，以便促进对低碳可持续代用喷气燃料的投资，以及可能使用有成本效益的经济措施和毫无限制地获得所有部门外可用的减轻措施（抵消）。国际航协关于基于市场的措施的

立场，在 HLM-ENV/09-WP/8 号文件中做了归纳。

## 6. 未来的步骤

6.1 根据上文，显而易见的是，随着各国探索所有可供处理国际航空温室气体排放的措施，不同提案中的特定基本要素，尤其是应用范围广泛的做法，包括技术和运行措施组合，已得到广泛的同意。但最好还有更多的信息以便：通过全面评估所有可用的措施的影响，使各国，能够就最全面、有成本效益和详尽的战略和措施框架做出知情的决定以实现航空减排。

## 7. 高级别会议的行动

### 7.1 请高级别环境会议：

- a) 认可对国际民航组织，在充分处理所有与国际航空对气候变化的作用相关事宜方面之领导作用的承诺；
- b) 确认由航空减排的技术、运行和基于市场的措施组成的全面做法的承诺，这是促进国际航空可持续发展必不可缺的；
- c) 认识到有必要进一步评价上述每项措施在未来实现预期的全球减排的程度；和
- d) 要求国际民航组织紧迫地开展研究，进行上述 c) 分段所述的评价，以供 2010 年的国际民航组织大会第 37 届会议审议。

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## APPENDIX

### SPECIFIC PROPOSAL ON EMISSIONS FROM INTERNATIONAL AVIATION AND MARITIME TRANSPORT IN THE REVISED UNFCCC NEGOTIATING TEXTS

(Excerpt from FCCC/AWGLCA/2009/INF.1 dated 22 June 2009)

## II. Enhanced action on adaptation and its means of implementation

...

### C. Means of implementation

...

36. [Sources of new and additional financial support for adaptation [may] [shall] include assessed contributions, [auctioning of assigned amounts and/or emission allowances; [levies on CO<sub>2</sub> emissions] from Annex-I Parties in a position to do so; taxes on carbon-intensive products and services from Annex I Parties; [levies on international and maritime transport]]; shares of proceeds on the clean development mechanism (CDM), joint implementation and emissions trading; [levies on international transactions;] [fines for non-compliance with commitments of Annex I Parties and Parties with commitments inscribed in Annex B to the Kyoto Protocol (Annex B Parties)]; additional ODA and bilateral, regional and other multilateral channels (in accordance with Article 11.5 of the Convention).9]

*Alternatives to paragraph 36:*

...

#### *Alternative 3*

[Sources of new and additional financial support for adaptation may include assessed contributions from developed country Parties and other developed Parties included in Annex II of the Convention, auctioning of assigned amounts and/or emission allowances; taxes on carbon-intensive products and services from Annex I Parties; share of proceeds from measures to limit or reduce emissions from international aviation and maritime transport; shares of proceeds on the clean development mechanism (CDM), joint implementation and emissions trading; ; fines for non-compliance with commitments of Annex I Parties and Parties with commitments inscribed in Annex B to the Kyoto Protocol (Annex B Parties); additional ODA and bilateral, regional and other multilateral channels (in accordance with Article 11.5 of the Convention).]

#### *Alternative 5*

[Sources of new and additional financial support for adaptation must meet the full agreed incremental costs of adaptation and initially be within a minimum range of USD 50–86 billion per annum and regularly updated in light of new emerging science, financial estimates and the degree of emissions reductions achieved. Providing financial support shall be additional to developed countries' ODA targets and may include assessed contributions, auctioning of assigned amounts and/or emission allowances; levies on CO<sub>2</sub> emissions; taxes on carbon-intensive products and services from Annex I Parties; levies on international and maritime transport; shares of proceeds on the clean development mechanism (CDM), joint implementation and emissions trading; levies on international transactions; fines for non-compliance with commitments of Annex I Parties and Parties with commitments inscribed in Annex B to the Kyoto Protocol (Annex B Parties); additional to ODA targets and bilateral, regional and other multilateral channels (in accordance with Article 11.5 of the Convention).]

### III. Enhanced action on mitigation

...

#### A. Mitigation [commitments] by [developed countries] [Parties]

*Proposals for an additional section on Policies and measures by all Parties*

...

x.2 The Parties 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.

#### D. Cooperative sectoral approaches and sector-specific actions

...

*International bunker fuels*

135. [All sectors of the economy [, in particular those of Annex I Parties,] should contribute to limiting emissions, including international maritime shipping and aviation. [Multilateral collaborative action would be the most appropriate means to address emissions from international aviation and the maritime transport sector, the International Civil Aviation Organization and the International Maritime Organization dealing with this issue should prevent the adoption of trade restrictions and take into account the special economic conditions of developing countries and the principles of equity and of common but differentiated responsibilities and capabilities.] [Global][Sectoral approaches could address emissions that cannot be attributed to any particular economy, and multilateral collaborative action by all Parties would be the most appropriate means to address emissions from international aviation and the maritime transport sector.]]

Alternative to paragraph 135:

[Those developed country Parties that are not Parties to the Kyoto Protocol shall undertake measures within the context of their national appropriate mitigation commitments to reduce emissions from international aviation and international maritime transport.

Developing country Parties may undertake actions to reduce emissions from international aviation and international maritime transport within the context of nationally appropriate mitigation actions.]

136. [Option 1]

The International Maritime Organization shall be encouraged to continue without delay its activities for the development of policies and measures to reduce GHG emissions, and specifically:

(a) [To achieve, through the use of its policies and mechanisms, total GHG emission reductions which are at least as ambitious as the total GHG emission reductions under the Convention;]

[To establish an ambitious global goal for the reduction or limitation of greenhouse gas emissions from ships to be achieved through the implementation of its policies and measures.]

(b) To report regularly to the COP {and its subsidiary bodies as appropriate} on relevant activities, emission estimates and achievements in this respect;

(c) To report to the COP {at its seventeenth session} on policies, established measures, measures under development, and expected emission reductions resulting from these measures.]

Alternative to paragraph 136 [in the form of a draft decision by the COP]:

[Reduction of greenhouse gas emissions from international shipping

The Conference of the Parties,

[Being aware of the role of the IMO established in the IMO Convention, the UN Charter and UNCLOS....]

Recognizing that in order to achieve a necessary two degree scenario, global greenhouse gas emissions should follow a pathway that includes a peak year no later than 2015 and results in emission reductions of 50- 85per cent by 2050, in accordance with findings in the 4th Assessment Report of the IPCC,

Welcomes the report presented by the Secretary General of the International Maritime Organization (IMO) on policies and activities related to reduction of Greenhouse Gas Emissions from international shipping,

Recognizing the role of the International Maritime Organization in developing global actions to limit or reduce greenhouse gas (GHG) emissions from international shipping,

Recognizing further that the IMO has undertaken a comprehensive assessment of the total greenhouse gas emissions from international shipping, and that these emissions constitutes a significant share of the global anthropogenic emissions,

Recognizing the need to develop a long-term goal as well as intermediate targets for emission reductions from the maritime sector, in order to facilitate transformation to a low carbon economy,

Being aware that the IMO activity has identified technical and operational measures which can contribute significantly to emission reductions,

Encourages the IMO to continue without delay the ongoing activities to develop policies and measures to reduce GHG emissions, and in doing so invites the IMO to:

1. achieve, through the use of its policies and mechanisms, total GHG emission reductions which are at least as ambitious as the total GHG reductions to be achieved by the UNFCCC Copenhagen agreement,

2. report regularly to COP [and its subsidiary bodies as appropriate] on relevant activities, emission estimates and achievements in this respect, and especially

3. report to COP [17] on IMO policies, established measures, measures under development, and expected emission reductions resulting from these measures, and

Requests the Secretariat of the UNFCCC to continue co-operating with the Secretariat of the International Maritime Organization.]

#### 137. [Option 2]

Parties shall take the necessary action to reduce emissions of GHGs not controlled by the Montreal Protocol from aviation and marine bunker fuels.

[Global reduction targets for such emissions from aviation and marine bunker fuels shall be set as equal to, respectively, {X per cent} and {Y per cent} below {year XXXX} levels in the commitment period {20XX to 20XX}. Units from existing and potential new flexibility mechanisms may contribute towards achieving these targets.]

Parties shall work through the International Civil Aviation Organization and the International Maritime Organization to enable effective international agreements to achieve these targets to be approved by 2011. Such agreements should not lead to competitive distortions or carbon leakage. Parties shall assess progress in the implementation of this work, and take action to advance it, as appropriate.]

#### 138. [Option 3]

[Taking into account the interests of developing countries,][All Parties][Developed country Parties][Parties][Annex I Parties] shall pursue limitation or reduction of emissions of GHGs 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.]

#### 138.1 Option 4

[The Parties should pursue a collective reduction of [X per cent] below [year XXXX] for emissions of anthropogenic greenhouse gases not controlled by the Montreal Protocol from international aviation bunker fuels and [Y per cent] below [year XXXX] levels for emissions of anthropogenic

greenhouse gases not controlled by the Montreal Protocol from international marine bunker fuels in the commitment period [20XX to 20XX].]

The Parties should commence negotiations on two global sectoral agreements to address, respectively, international aviation and maritime emissions in 2010 with a view to concluding by COP-17 in 2011, taking into account work already done in ICAO and IMO.

## **IV. Enhanced action on financing, technology and capacity-building**

### **A. Enhanced action on the provision of financial resources and investment**

...

#### **2. [Generation][Provision] of financial resources**

172. [The [generation][provision]of financial resources [shall][should] be guided by agreed objective criteria the principles of the Convention the economic capacity of Parties, and the objective of internalizing appropriate climate change costs [, in particular the principles of equity and common but differentiated responsibilities and respective capabilities, taking into account the ability to pay and emissions [[and take into account [the consideration of] [[the polluter pays principle,] [and] historical responsibilities]]]].The public sector shall be the major source of funds, while market mechanisms and other private sector sources would play a complementary role in addressing climate change.

#### **Alternatives to paragraph 172:**

...

##### **Alternative 3**

[Funding for the Multilateral Fund for Climate Change (defined below) shall be provided by the following sources:

...

(b) A levy placed on international maritime transport and international aviation. Such a levy shall be developed in collaboration with the International Maritime Organization and the International Civil Aviation Organization;  
...]

173. [New and additional financial resources {shall}{should} be generated through a combination of various sources, including, inter alia :

...

##### **[Option 4**

[Levies on] [Funding from instruments addressing] emissions from international aviation {and maritime transport}, [for developed countries] may be auctioned through emission allowances under an international regulation scheme.

##### **[Option 5**

[An international air passenger [ adaptation levy/green] levy on air fares [, except on journeys originating in and destined for LDCs].]

##### **Alternative to Options 4 and 5:**

[Share of proceeds from measures to limit or reduce emissions from international aviation and maritime transport; ]

##### **Alternative to Option 5:**

[An international air adaptation levy on airfares except on journeys originating from LDCs and SIDS.]

...]

— END —