UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

Subsidiary Body for Scientific and Technological Advice Thirty-fourth session Bonn, 6–16 June 2011

Item X of the provisional agenda

Views on the issue of materiality under the clean development mechanism

Submissions from Parties and relevant organizations

- 1. The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, by its decision 3/CMP.6, paragraph 31, invited Parties, intergovernmental organizations and admitted observer organizations to submit to the secretariat, by 28 March 2011, views on the issue of materiality under the clean development mechanism.
- 2. The secretariat has received four such submissions from Parties and intergovernmental organizations. In accordance with the procedure for miscellaneous documents, these submissions are attached and reproduced* in the language in which they were received and without formal editing.
- 3. The secretariat has also received submissions from admitted observer organizations. In line with established practice, the secretariat has posted these submissions on the UNFCCC website.¹



^{*} These submissions have been electronically imported in order to make them available on electronic systems, including the World Wide Web. The secretariat has made every effort to ensure the correct reproduction of the texts as submitted.

¹ http://unfccc.int/parties_observers/ngo/submissions/items/3689.php.

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^{*} This submission is supported by Albania, Bosnia and Herzegovina, Croatia, Iceland, Serbia, the former Yugoslav Republic of Macedonia, Montenegro, Serbia and Turkey.

Paper no. 1: China

China's Submission on the Matter of Materiality

The Conference of the Parties at its sixteenth session held in Cancun invites Parties, intergovernmental organizations and admitted observer organizations to submit to the secretariat, by 28 March 2011, their views on the matter of materiality related to CDM. China welcomes this opportunity and would like to submit the following views.

- The introduction of the concept of materiality should help to improve the efficiency of the CDM system, especially to provide more flexibility to the DOE in their validation and verification work by allowing them to rely more on their sectoral expertise, and should in no case increase the workload of the DOE.
- The concept of materiality, if introduced, should be translated into clear requirements and should not create more ambiguities and more risks for the DOEs and project participants.

Paper no. 2: Hungary and the European Commission on behalf of the European Union and its member States

Submission by Hungary and the European Commission on behalf of the European Union and its Member States

This submission is supported by Albania, Bosnia and Herzegovina, Croatia, Iceland, the Former Yugoslav Republic of Macedonia, Montenegro, Serbia and Turkey.

Budapest, 23 March, 2011

Subject: The concept of Materiality in the CDM

Introduction

- 1. We welcome the decision on CDM CMP6 in Cancun to request the Subsidiary Body for Scientific and Technical Advice to consider the issue of materiality and we look forward to engaging in discussions with other Parties at the meeting of the Subsidiary Body for Scientific and Technical Advice in June.
- 2. Despite its technical nature, this is indeed an important issue and we look forward to a timely implementation of the materiality concept in the CDM, noting the mandate assigned by the CMP to the Executive Board at CMP5 (decision 2/CMP.5, paragraph 22), and we welcome the draft standard on the use of the concept of materiality in the CDM ¹.
- 3. Progress on the application of materiality in the CDM is essential in order enhance the efficiency, consistency and predictability of the CDM process. The concept of materiality is well known to the carbon market, including in the Kyoto project-based mechanisms and the concept of materiality in verification of JI projects was adopted by the JISC in June 2010². In the European Union, the Emission Trading Scheme monitoring and reporting of emissions is also conducted with an assessment of materiality of emission reductions.

¹ Draft Standard on the Use of the Concept of Materiality and Level of Assurance in the Clean Development Mechanisms" EB 56 Proposed agenda. Annotations Annex 2.

² Standard for Applying the Concept of Materiality in Verifications (Version 01)" adopted on June 16, 2010 at the 22nd meeting of the JISC.

1.1.1 Definition of Materiality

- 4. For the purpose of the emission monitoring and reporting in the context of the CDM, the proposed draft standard on Materiality adopts the International Accounting Standards Board (IASB) definition: "An information is **material** if its omission or misstatement could **influence** the economic **decisions** of users taken on the basis of the financial statements. Materiality depends on the size of the item or error judged in the particular circumstances of its omission or misstatement. Thus, materiality provides a threshold or cut-off point rather than being a primary qualitative characteristic which information must have if it is to be useful." Having introduced in the EU legislation (2004/156 EC decision) the notion of 'materiality', meaning the professional judgment of the verifier as to whether an individual or aggregation of omissions, misrepresentations or errors that affects the information reported for an installation will reasonably influence the intended users' decisions.
- 5. In general, a 'materiality level', meaning the quantitative threshold or cut-off point, is one that could influence the decision making process made by the CDM EB with regard to registration of the CDM project or issuance of CERs from the project, consequentially to the application of the materiality threshold by a DOE. This means that non-material issues, if in aggregate do not exceed the material threshold, are only those facts that are deemed insignificant for this decision and which would not have affected its outcome, "above the threshold level".
- 6. Threshold level means the quantitative threshold or cut-off point to be used to determine the appropriate verification opinion on the emission data reported (in the case of DOE) It should be pointed out that the threshold level, in the context of determining whether an issue is material or non-material, always relates to the potential impact, in relative terms, on emission reductions that could be claimed.

Scope of the application of materiality

7. The concept of materiality is present in the stages of validation, verification and review of a CDM project. As noted in the draft CDM EB standard, the concept of materiality is already taken into account in all CDM methodologies. The EU acknowledges that and recommends that further improvements should be considered. However, adopting a required threshold would increase the transparency and consistency of the myriad of judgements that have to be made by DOEs, secretariat and the EB and would result in a more predictable assessment overall. Applying a formal concept of materiality would increase transparency to each stage where the quantitative threshold or cut-off point is applicable in relation to a CDM project assessed: It should apply to the level of detail in the PDDs, validation and verification by DOEs but also in the review process and decisions by the Secretariat, the RIT and the CDM EB.

- 8. Materiality in relation to the review process will require that the EB, Secretariat and RIT consider the thresholds when deciding whether or not to send back a project document at completeness check or to trigger reviews of projects. Materiality in relation to decisions by the CDM EB requires that the EB considers the thresholds applied by a DOE when deciding on registration and issuance. Another problem that the EB has to take into serious consideration when addressing materiality, is how to prevent inconsistency between documents that can occur when non-material issues are ignored in each stage, for example between the PDD, the verification and the monitoring report.
- 9. The concept of materiality should be applied to both prescriptive and non-prescriptive CDM requirements as defined in the draft standard on materiality in the CDM.

Threshold for determining materiality

- 10. In the CDM EB draft standard on materiality it is stated that "information related to a CDM project is considered material if its omission might lead, at an aggregated level, to a total estimation of the emission reductions achieved by a CDM project equal or higher than:
 - 0.5% of the emission reductions for projects achieving a total emission reduction according to the PDD of more than 500,000 tonnes of CO2 equivalents per year;
 - 2% of the emission reductions for large-scale projects achieving a total emission reduction according to the PDD of 500,000 tonnes of CO2 equivalents per year or less;
 - 5% of the emission reduction for small-scale projects.
 - In the draft standard on the use of the concept of materiality and level of assurance in CDM, the emission reductions achieved are per year and not based on average reported annual emissions like for instance in the EU-ETS. The EU can support the emission reduction per year approach as suggested for CDM in the draft standard. Furthermore, the EU proposes introducing a fourth level, applicable to micro-scale projects:
 - 10% of the emission reduction for micro-scale projects (< 5 MW or 20 GWh/a).
- 11. The EU would like the CDM EB to report to the COP/MOP 7 on the implementation of materiality, experiences from the use of the thresholds and if there is reason for revision of the levels.

How to implement the materiality concept in practice

12. The CDM EB and its support structures should start implementing the concept of materiality in validation, verification and review stages of the CDM as soon as possible. It should report on the implementation of the materiality concept in conjunction with the annual report from the CDM EB to the CMP.

- 13. Applying the concept of materiality includes a proper documentation of the analysis made and the conclusions with regard to materiality drawn by the project developers and the DOE during the development of the project and the preparation of the relevant reports. For the EB and its support structure, appropriate justification for their decisions is also requested.
- 14. Materiality needs to be applied within the overall context of the CDM projects and Programs of Activities as a common understanding between the DOEs and the Secretariat and the EB. The materiality principle can be explained and accommodated by new instructions for drafting PDDs and by revisions in the Validation and Verification Manual. The DOE should apply the materiality level as part of its analysis in the validation/verification methodology under CDM. If an error is detected in how the validation and verification requirements have been applied, the error will have to be corrected but, if the potential impact of all of the mistakes are less than the given threshold, then it shall be considered immaterial and not influence the decision on the project by the CDM EB.
- 15. The concept of materiality may ease especially the situation for PoA under review according to the EB's procedures³. In case of a false inclusion of an activity by a DOE, the DOE should be liable for the amount of CERs resulting from the concerned activity only if the error in the sample is above the threshold values or if any error below the threshold values was concealed intentionally. In contrast, the DOE is not liable if it overlooked an error below the threshold. However, all detected errors have to be corrected and flawed activities have to be excluded. In this situation, a materiality standard will serve as a useful tool for DOE to focus their work and reduce their risks adequately, and by this way, remove a significant barrier for the widespread application of PoA in the CDM.
- 16. Minor (non-material) errors and omissions should be solved by simple, direct communication between the DOE and the Secretariat at the stages of the CDM project cycle where the materiality level is applicable, and not affect the assessment of compliance with validation and verification requirements nor lead to a determination that the request for registration or issuance is incomplete (building upon the decision of CMP 6, Further guidance relating to the clean development mechanism, para. 59).
- 17. In the CDM EB draft standard on materiality it is stated that "the level of assurance is a concept related to materiality. It defines the degree to which the DOE is confident in the validation or verification conclusion that the emission reduction claimed by a CDM project, taken as a whole, is free from material errors, omissions or misstatements". The EU considers it important that the level of assurance be defined. An absolute level of assurance would mean that every parameter has been checked to ensure that every material error has been taken into account. This level of assurance cannot reasonably been asked. In the EU-ETS scheme, as well as in the VCS, the level verification opinion shall be based on a reasonable level of assurance. The EU would be in favour of using this standard.

³ Procedures for review of erroneous inclusion of a CPA, see: http://cdm.unfccc.int/Reference/Procedures/PoA_proc02.pdf

Paper no. 3: United Nations Development Programme

Facilitator of the Subsidiary Body Scientific and Technological Advice

c/o: UNFCCC Secretariat Martin-Luther-King-Strasse 8 D 53153 Bonn Germany

Date 28 March 2011

Subject Inputs to SBSTA on considerations of the issue of materiality, as referred to in document FCCC/KP/CMP/2010/L.8, paragraph 31

UNDP thanks the CMP for the opportunity to comment on this key issue in 2011.

UNDP strongly supports the implementation of the Clean Development Mechanism (CDM), in particular paragraph 2 of Article 12 of the Kyoto Protocol: "The purpose of the [CDM] shall be to assist [non-Annex I] Parties in achieving sustainable development..." Social and economic development and poverty eradication are legitimately the first and overriding priorities of developing country Parties.

The CDM has demonstrated unequivocally that it can be an effective tool to rapidly scale-up and leverage private sector investment toward sustainable development goals of host countries. Nonetheless, there are clearly areas that need improvement, notably the uneven regional and sectoral distribution of CDM. There are many barriers to investment in developing countries, such as sovereign risk, lack of institutional or human capacity, infrastructure shortcomings etcetera, that the CDM cannot reasonably be expected to address. However, one of the key barriers to CDM uptake that *can* be addressed via adoption of materiality concepts, is the transaction costs of the CDM.

Since 2008, the Executive Board has successively tightened rules, and via Secretariat and DOEs, increased the fastidiousness of rule application in an attempt to improve the perceived lack of environmental integrity that had been widely discussed in the press. This approach did for some time improve perceptions, though these gains were scuppered by the more recent controversy associated with the dominance of HFC projects in the CDM.

For practitioners in developing countries the (presumably unintended) consequence of this strategy was to greatly increase project documentation complexity and process times. Currently, transaction costs and times, particularly for unusual, unique or first-of-a-kind projects, can easily surpass \$100,000 and well over a year, just to reach registration. This

presents a clear and formidable barrier, particularly for development-oriented, community-based, or LDC-hosted projects. Transaction costs in UNFCCC Secretariat have also increased. Moreover, as amply demonstrated by the World Bank's *10 years of Experience in Carbon Finance* report of 2010¹, the increased complexity of procedures, and the pedantic application of meticulous rules has delivered **no significant improvement** in environmental integrity of the CDM. While perceptions may have improved somewhat, reality remained largely unchanged, except for increasing transaction costs and times, and hindering access for the poorest.

The judicious application of materiality can go some way to removing or at least reducing this barrier to investment in mitigation and sustainable development.

<u>Utilising established experience:</u> It should be recognised that materiality and the associated concept of 'level of assurance' are well established and familiar concepts in environmental auditing, as well as product and service certification, which have in turn been adopted from financial auditing. Without incorporating materiality, CDM is simply not operating at best practice. These concepts do not need to be re-invented by SBSTA, EB or UNFCCC. There is ample precedent, and indeed, **decades of experience** in the application of materiality within the very DOEs that the EB Accreditation Panel oversees.

The adoption of materiality seems to raise fears that somehow environmental integrity will be eroded. This fear is unfounded and misplaced. Why should projects in developing countries be measured to a much higher standard than the national inventories that Annex I countries use to determine whether or not they meet their Kyoto targets? Implementation of materiality need not be a cause for concern – rather, it is bringing CDM to modern professional standards. There should rather be concern that the CDM is being governed without utilising the benefits of well-proven tools that can improve efficiency and uptake (ie: materiality).

UNDP respectfully suggests that SBSTA work with the organisations with most experience with materiality, notably the ISO and the broader auditing community such as through IASB². Pragmatic implementation will also benefit from consultation with key stakeholders, particularly DOEs and project proponents (or their associations such as IETA, CMIA, and PD Forum). Additional consultation and lessons can also be learned from the Gold Standard's implementation of materiality in both CDM and voluntary Gold Standard certification procedures.

<u>Thresholds of materiality:</u> To further reduce transaction costs and direct resources toward mitigation and development rather than processes, materiality in the CDM should be harmonised with the most relevant schemes, namely the EU ETS and JI. These schemes have materiality thresholds of respectively 5% for the verification at installations with annual

¹ See http://www.worldbank.org/reference/

² See http://www.ifrs.org/Home.htm

³ See http://www.cdmgoldstandard.org/index.php

emissions smaller than $500ktCO_2e$ and 2% for installations with annual emissions of more than $500ktCO_2e$; and 5% for projects with emission reductions of less than $100ktCO_2e$ and 2% for all other activities.

A straightforward harmonised adoption would suggest a materiality threshold of 5% for Small Scale projects (and VSSC as applicable), and 2% for all other projects. It should be noted that these thresholds are in the range or lower than comparable carbon market applications, and lower than several national programmes and the oft used 10% threshold in environmental auditing. In other words, harmonising with the schemes most relevant to CDM is still conservative within the broader context of carbon markets.

<u>Scope of application:</u> The scope of application of materiality and level of assurance should be comprehensive. That is, it should be applied at validation and verification, and should be applied primarily by DOEs – that is – DOEs are given the professional responsibility to define which issues are material, and which are not. It should be recognised that this responsibility is already exercised by DOEs in other streams of their businesses (environmental auditing, product certification etc). In addition, the principles of materiality should be applied by any UNFCCC Secretariat staff, outsourced technical reviewers or EB members involved in project assessments. Further, an understanding and appreciation of the concepts should be embedded throughout the CDM, including in methodologies and processes in order to maximise CDM process efficiency. Recognising that implementation may need to be phased, the first phase should be associated with DOEs and CER issuance.

The CDM has shown it can be effective and deliver sustainable development, but for it to remain relevant in the future, and expand to new countries and new sectors, it must be substantially reformed to improve efficiency. The CDM should be accessible to the poorest and most vulnerable and UNDP believes that the inclusion of materiality in CDM is an important linkage that should be included in any outcome document from COP17/CMP7 in Durban.

UNDP would be happy to provide further elaboration on any of these points or related subjects as desired.

Paper no. 4: United Nations Human Settlements Programme

<u>Submission of views or information by Parties to the UNFCCC (Ref: ODES/COP 16/10): response prepared by UN-Habitat.</u>

12. Further guidance relating to the clean development mechanism (CMP -submission to SBSTA)

Submissions of views from Parties, intergovernmental organizations and admitted observer organizations on the issue of materiality.

(See FCCC/CMP/2010/L.8, paragraph 30 and 31) Deadline 28th March 2011

UN-Habitat informs the secretariat of the joint work undertaken with UNEP and the World Bank in developing a City-wide GHG standard and supports the methodology for a PoA for city-wide CDM. Cities lag far behind nations in reporting on GHG emissions and yet are crucial to global efforts in mitigating emissions as well as developing appropriate adaptation measures. In addition local governments are the key governmental stakeholders in global climate change efforts, and activities which will support local governments such as PoA for city-wide CDM application should be encouraged as critical steps to the development and maturation of a carbon market under CDM.

On the issue of materiality and assurance, and to increase the application of PoA for city-wide CDM as well as the number of cities in developing countries using an approved standard for GHG inventory, UN-Habitat supports the current IPCC guidelines on this issue.

13. Nairobi work programme on impacts, vulnerability and adaptation to climate change (SBSTA)

Further views and relevant information on progress made and gaps as well as views on new activities that may be needed to achieve the objective and expected outcomes of the Nairobi work programme, to inform the review. (See FCCC/SBSTA/2010/L.20, paragraph 5) Deadline 28th March 2011

UN-Habitat informs the UNFCCC secretariat of the Cities and Climate Change Initiative (CCCI) being implemented in cities in Africa, Asia and Latin America. Through this Initiative UN-Habitat has built local capacity to carryout vulnerability assessments and develop city wide mitigation and adaptation plans and strategies. It has also developed tools and knowledge products to assist countries in integrating climate change related issues into national, city and local level plans and policies.

In a separate communication UN-Habitat intends to submit an application to join the NWP.

15. Financial mechanism of the Convention (SBI)

Views from Parties on the synthesis report on the National Economic, Environment and Development Studies (NEEDS) for Climate Change Project. Note by the secretariat (FCCC/SBI/2010/INF.7) (See FCCC/SBI/2010/L.38, paragraph 2) Deadline 28th March 2011

UN-Habitat commends the UNFCCC initiative to undertaken in-depth NEEDS in 10 countries, it acknowledges that it is a way to start the process for countries to work towards a low-carbon economy, however it is within cities that mitigation and adaptation actions will be most effective. In this regard, UN-Habitat informs the secretariat of its work at the city level in two of the NEEDS countries, Pekalongan (Indonesia) and Sorsogon (Philippines). In these cities a two way approach, bottom-up and top-down, to assess mitigation and adaptation measures have been undertaken and as a result plans, policies and demonstration projects are now in place to address climate change. UN-Habitat recommends that, similar studies at the city level are undertaken and proposes that that the 'International Standard for measuring Greenhouse Gases in Cities' developed jointly by UN-Habitat, UNEP and World Bank be used as a standardized format for collecting information on emissions and allocating it to a specific sector. This approach will assist cities in not only quantifying GHG emissions but also serve as a basis for costing mitigation and adaptation measures.

Review of the Adaptation Fund (CMP)

Submission of views from Parties and international organizations and stakeholders on the review of the Adaptation Fund based on the terms of reference annexed in document FCCC/KP/CMP/2010/L.5 paragraph 4) 19th September 2011

UN-Habitat welcomes the review of the Adaptation Trust fund and the substantial progress made so far. We recommend that in future the review process should also consider reviewing and presenting an analysis of the sector and urban/rural scope of projects funded so far, as well as concept notes currently being considered. This shall facilitate the consideration of any further action needed especially in urban areas as over 70% of the population live in cities and towns affected by climate change issues.

UN-HABITAT intends to submit an application to be considered for a role as international implementing agency of the Adaptation Fund.

BACKGROUND:

UN-Habitat's climate change activities are being developed in line with the agency's **Climate Change Strategy 2010-2013** and supported by the UN-Habitat **Governing Council's Resolution 22/3** on Cities and Climate Change, which was adopted at the UN-HABITAT Governing Council on 1 April 2009.

The above paragraphs relate to the UN-Habitats' Climate Change Strategy, work, mandate and climate change resolution, where the following paragraphs are of particular relevance.

A. UN-Habitat's Climate Change Strategy:

1.3 Cities are affected by Climate Change

Severe weather events, including tropical storms and related storm surges whose frequency, severity and location may differ significantly from past experience, are likely to have serious consequences for cities, including by contributing to an increase in local and inter-urban migration and by adding new challenges for urban development including, for example, issues of land use and land tenure.

The strategy also foresees addressing land degradation and desertification in connection with droughts, floods, erosion, sea level rise and inundation. Identifying causes of, and seeking solutions to, climate change induced migration leading to land degradation; and developing new and appropriate technologies for building materials, efficient energy production and use and renewable energy resources.

3.2 UN-Habitat's work related to Cities in Climate Change

Land issues:

Developing a legal framework of land use aimed at balancing the need for construction with the protection of the environment, minimizing risk and diversifying uses.

A recent GLTN e-discussion on Land, Environment and Climate Change revealed a wide range of areas where land legislation and policies impact on climate change.

In addition, UN-Habitat supports the UNCCD ten-year strategy and recognizes its important role in helping cities and urban areas to combat desertification and land degradation, in particular that related to climate change.

Water and Sanitation:

Urban rivers and wetlands that have been neglected or misused must be recognised as essential elements of the environmental health of cities. Campaigns to clean and protect these important water resources provide opportunities to citizens to become active partners with local authorities in environmental protection.

The treatment and disposal of Municipal Solid Waste (MSW) is another issue requiring attention. Careless disposal of MSWs contributes to air, land and water pollution and can be a source of GHGs. Safe disposal and recycling processes offer a contribution to climate change mitigation strategies as well as to overall environmental wellbeing.

Finance:

Adequate finance should be available to support city governments in developing countries to leverage international support for clean energy development and sustainable land-use practices. All these measures must aim at reducing greenhouse gas emissions and energy waste of cities.

B. Resolution HS 22/3: Cities and climate change

Recognizing also that cities are one of the major contributors of greenhouse gas emissions and that they have a key role to play in promoting energy efficiency, through more appropriate urban planning, management and building practices for sustainable urban development,

Recognizing that efforts to enhance sustainable urbanization also offer opportunities to enhance climate change strategies, including mitigation and adaptation, through promoting participatory planning, management and governance; pro-poor land and housing; and environmentally sound basic infrastructure and services.

- 3. *Invites* Governments to undertake further concerted and coordinated action to include the issue of cities and climate change as an integral part of their national climate change strategies, including mitigation and adaptation, in view of continuous urbanization and the fact that over half of humankind lives in urban areas and are particularly vulnerable to the effects of climate change;
- 4. *Invites* parties to the United Nations Framework Convention on Climate Change at the fifteenth session of its Conference of the Parties in Copenhagen to take into account the crucial role of cities and towns in climate change strategies, including adaptation and mitigation;
- 6. Invites Governments and other relevant partners to support developing countries through the appropriate mechanism in each country to strengthen their capacities in promoting, among other things, pro-poor clean and affordable technological options, innovative approaches to urban planning and management and education and training on climate change strategies, as they pertain to sustainable urban development, while encouraging all other national and local authorities to strengthen their capacities in the manner set out above;
- 7. *Invites* Governments which are in a position to do so to provide technical and financial support to the Cities and Climate Change Initiative, to widen the geographical scope of the initiative and to expand the range of capacity-development approaches in order to support local authorities in addressing climate change.

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