



### Measurable, Reportable and Verifiable Mitigation Actions and Support

### A summary of OECD/IEA analyses for COP 15

The 2007 Bali Action Plan refers to "measurable, reportable and verifiable" (MRV) as an important part of the international process intended to deliver concrete national actions to address climate change. Gaps and weaknesses in current provisions to measure, report and verify greenhouse gas (GHG) emissions, mitigation actions and support have led to proposals for an enhanced framework for MRV in a post-2012 agreement. Such a framework could facilitate strategic and cost-effective decision-making; the implementation of mitigation actions; and the generation of transparent and comparable information.

## There is much uncertainty as to what exactly M, R and V will comprise post-2012, and to what it will be applied

The scope and scale of provisions to measure, report and verify GHG mitigation actions, commitments and support are still being negotiated. Key issues are to what extent MRV provisions are common for developed and developing countries; and whether these provisions are to vary within developing countries, depending for example on whether actions are supported by international finance. What a post-2012 framework for MRV focuses on -e.g. emission levels, mitigation actions and/or emission reductions from mitigation actions - will also have significant impacts, both in terms of what countries will need to do to satisfy MRV requirements as well as on whether new international guidance is needed to achieve a transparent system that generates comparable information.

#### The form of a post-2012 framework for MRV can have wide implications for the climate regime

Decisions regarding the purpose, coverage and form of a framework for MRV are not just technical issues – these can influence the legal characteristics of countries' GHG mitigation actions; how much needs to be negotiated and agreed to establish a post-2012 framework; and determine what information will need to be collected, and when. It can also affect how such information is used. For example, agreeing upon a set of planned mitigation actions and then recording them in a "national schedule" could potentially make their implementation legally binding.

Agreeing how countries' GHG mitigation actions are reported and recorded are also important as they can affect the transparency and consistency of information about national actions – and therefore also the ease of recognising and/or comparing actions across different countries (as well as commitments and support). Further, these decisions can affect which GHG mitigation actions are "eligible" to be recognised in a reporting/recording mechanism (*e.g.* the international community may decide to limit eligibility to actions whose effects can be measured in GHG terms), and the amount of information needed to be negotiated prior to a post-2012 agreement.

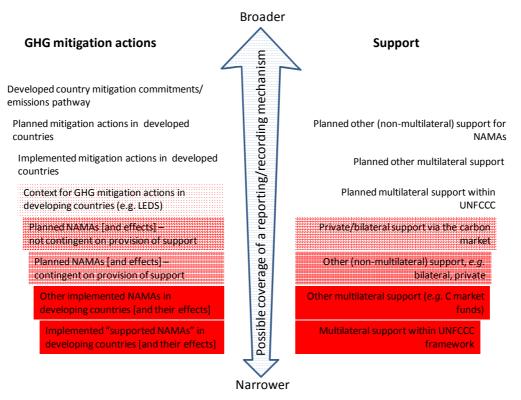
### The possible coverage of a post-2012 framework for MRV is very broad

A post-2012 framework for MRV could serve a wide range of functions. These could include collecting quantitative or qualitative information on mitigation actions and support, quantifying their impact (in GHG or other terms), and obtaining a more comprehensive picture of global emission trends. The coverage of a reporting or recording mechanism could vary, incorporating more or less information that may need to be measured and verified, depending on the mechanism's functions (Figure 1). Decisions on the coverage of a reporting/recording mechanism can also increase the effectiveness of GHG mitigation within a country (for example, policy coherence could be furthered by encouraging mitigation actions to be undertaken in the context of a national low-emissions development strategy).





Figure 1: Possible coverage of a reporting/reporting mechanism



Source: Ellis, J., S. Moarif and J. Kim (2009)

### Current levels of information on countries' GHG emissions and mitigation actions is patchy – especially for non-Annex I countries

Under the UNFCCC and the Kyoto Protocol, monitoring, reporting and review is fairly well developed for Annex I countries, in part due to their quantified emission limitations and reduction objectives (QELROs). Annex I countries report annually on inventories of GHG emissions and transfers, as well as every few years *i.a.* on descriptions of key policies and measures to mitigate GHG emissions. In contrast, provisions for non-Annex I countries allow for much more irregular reporting – both for actions and for emission levels. This means that the international community currently has no official, recent "snapshot" – either of global GHG emissions, or of actions being undertaken to mitigate climate change.

# The quality and availability of current information on the provision on financial support also varies, but can form the basis for a more comprehensive framework

Currently, financial support for mitigation actions flows through multiple channels: public (e.g. Official Development Assistance) and/or private (e.g. Foreign Direct Investment, investments via the Clean Development Mechanism); and may have different origins such as North-South, South-South and/or domestic. Financial support can be classified as either mitigation-relevant (i.e. flowing to sectors relevant to mitigation) or mitigation-specific. Mitigation-specific flows focus on reducing GHG emissions, while the impact of mitigation-relevant flows (e.g. support to the power sector) could have either a positive or a negative effect on GHG emission levels.

Information on mitigation-specific financial support is currently not comprehensive, and focuses on support provided by Annex II countries rather than on support needs or support received (although non-Annex I countries are encouraged to report this in their National Communications). The most complete measurement and reporting system to date is that of ODA through "Rio" climate markers, but this is





limited to the 23 donors of the OECD/DAC. In addition, little is known regarding the GHG impacts of the largest financial flows, which tend to be private rather than public. A post-2012 framework for MRV for financial support would need improved tracking of support, by both developed and developing countries. Such information could be reported, *e.g.* in a "registry" of mitigation actions and support, and could help to better "match" support with support needs.

#### Increasing information availability can lead to both national and international benefits

Increasing the availability of comparable information on GHG emissions and/or mitigation actions across countries could help provide the international community with a better picture of what current actions are and where they are taking place: an important first step in assessing the aggregate effects of national actions, whether action needs to be enhanced, and, if so, by how much.

Increased international reporting of this information could also help provide international recognition of mitigation actions – particularly those undertaken in developing countries, where reporting is currently sparse. Strengthening the reporting of actions will also help to build trust and understanding between developed and developing countries about their common efforts to mitigate GHG emissions. Similarly, stronger reporting on support provided will demonstrate that developed countries are meeting any commitments to provide support for such actions, as well as possibly how it is being used. These efforts could be presented in terms of estimated GHG reductions, if the effects of mitigation actions are quantifiable. Establishing guidelines to report and/or assess such emission reductions would facilitate comparable and transparent reporting on the effects of mitigation actions. However, these are not always easily quantifiable in terms of GHG emission reductions. Mitigation actions could also be reported, *e.g.* in a qualitative manner, or quantitatively by using non-GHG metrics.

National governments could also benefit from increased reporting on current and planned GHG mitigation actions. For example, reporting can provide information on lessons learned and help to spread good practice, and reporting on progress to date can help inform whether policies are achieving their intended objectives, or whether changes are needed. Increased reporting of planned actions and associated support needs could also facilitate "matching" support for developing country mitigation actions with actions that need such support.

### There are many MRV-related provisions in the UNFCCC and Kyoto Protocol on which a post-2012 framework can build...

There are relatively well developed systems for reporting on national emission levels, both in Annex I and non-Annex I countries. For example, monitoring, reporting and review provisions under the UNFCCC require all countries to develop a GHG emissions inventory, and all Annex I countries to develop a national system to estimate inventory data. For countries with emission commitments under the Kyoto Protocol, there are also requirements to monitor their GHG emissions and transfers, report these annually –alongside their national inventory - to the UNFCCC in a specified format, and to have these inventories reviewed.

Countries have also gained some experience with monitoring and reporting information at the level of individual, or grouped, mitigation actions. For example, both Annex I and non-Annex I National Communications (NCs) are required to report on implemented (and potentially also planned) mitigation actions. Annex I countries also need to estimate the overall impact of their mitigation actions will have on GHG emissions. Guidelines for Annex I countries lead to consistency in what countries report, when they report it, and how they make such reports. However, there is no centralised guidance on how to estimate emission reductions from individual mitigation actions, which means that information reported is not necessarily comparable. Reporting requirements are less stringent for non-Annex I countries. If more widespread reporting of such actions were to be required under a post-2012 climate regime, it could have





considerable resource implications, especially for non-Annex I countries. NCs also include information on *e.g.* financial support provided.

Experience with MRV also exists at a project level under the Kyoto Protocol's Clean Development Mechanism (CDM)). Whether these activities are of direct use as MRV instruments for possible post-2012 crediting mechanisms is unclear, however. In general, there is little consistent experience with reporting either emissions (or emission reductions) at a sectoral level: increased guidance would be needed if post-2012 MRV is to be carried out at a sectoral level.

### ... but new institutional structures, guidance and processes are also likely to be needed

Strengthening reporting and measurement provisions for information on mitigation actions, to include more countries, as well as GHG impacts, is likely to entail new institutional structures, guidance and/or processes at the national and international level. For qualitative reporting, a national "focal point" or leading body may be needed to collect and submit information on mitigation actions (and possibly support received and provided), whether the submission is a national-level action plan or strategy, or whether it comprises sector-level and individual mitigation actions. Institutional provisions for national-level measurement and verification activities could also be needed if quantitative reporting is included, particularly if actions and/or commitments are recorded in an appendix to a post-2012 agreement.

At the international level, at a minimum, an institution (*e.g.* within the UNFCCC, or other body) will need to receive the information submitted. If a review mechanism is put in place, institutional requirements will be greater, particularly if the information reported can be at the sector or individual mitigation action level. For improved MRV of international support, changes and co-ordination at the level of national institutions, multilateral and international organisations, and institutions that collect data, would likely be needed.

### -----

#### **Contacts**

Jan Corfee-Morlot, OECD, <u>jan.corfee-morlot@oecd.org</u> (in Copenhagen December 10 to 17) Jane Ellis, OECD, <u>jane.ellis@oecd.org</u>; (in Copenhagen December 6 to 12) Sara Moarif, IEA, <u>sara.moarif@iea.org</u> (in Paris, tel + 33 1 40 57 65 74)

References - all papers below can be downloaded from www.oecd.org/env/cc/mrv

- Corfee-Morlot, J., B. Guay and K.M. Larsen, 2009. Financing for Climate Change Mitigation: towards a framework for measurement, reporting and verification. OECD/IEA Information Paper
- Ellis, J. and K. Larsen, 2008, Measurement, Reporting and Verification of Mitigation Actions and Commitments, OECD/IEA Information Paper
- Ellis, J. and S. Moarif, 2009, *GHG Mitigation Actions: MRV Issues and Options*, OECD/IEA Information Paper
- Ellis, J., S. Moarif, and J.A. Kim, 2009. *Reporting and recording post-2012 GHG mitigation actions and support*. OECD/IEA Information Paper
- Kim J.A., J. Corfee-Morlot and P. de T'Serclaes, 2009. *Linking Mitigation Actions in Developing Countries with Mitigation Support: A Conceptual Framework*. OECD/IEA Information Paper