CLEAN DEVELOPMENT MECHANISM

CDM-2013ALY4-INFO

Fourth analysis report to the CDM Executive Board on the results of the DOE performance monitoring

Version 01.0

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Framework Convention on
Climate Change

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Table 1. Abbreviations

BE	Baseline Emissions
CAR	Corrective Action Requests
CC	Completeness Check
CDM	Clean Development Mechanism
CDM-AP	Clean Development Mechanism - Accreditation Panel
CDM-AT	Clean Development Mechanism- Assessment Team
CER	Certified Emission Reductions
CL	Clarification Request
DOE	Designated Operational Entity
E+/E-	E-Policy (e.g., E+/E-)
EB	Executive Board
ER	Emission Reductions
FAR	Forward Action Request
GEF	Grid Emission Factor
HFC	Hydro Fluoro Chloro
I_2	DOE Performance Indicator - Rate of requests for review
IRC	Information and Reporting Check
LOA	Letter of Approval
MAP	Management Action Plan
MP	Monitoring Plan
PA	Project Activity
PCP	Project Cycle Procedures
PDD	Project Design Document
PE	Project Emissions
POA	Programme of Activity
PS	Project Standard
Q	Quarter (e.g. Q4 means fourth quarter of the year)
UNFCCC	United Nations Framework Convention on Climate Change
VVM	Validation and Verification Manual
VVS	Validation and Verification Standard
Project 118	Standardized forms and guidelines for completing validation and verification reports (Annex 1, EB71)
Project 120	Simplification and streamlining of methodologies and tools (Annex 3, EB72)
Project 146	Top-down large-scale methodologies using standardized approaches (Annex 3, EB72)
Project 158	Accounting for uncertainties in measurements in methodologies (Annex 3, EB72)
Project 180	Revision and improvement of the PS, VVS and PCP (Annex 3, EB72)

1. Introduction

1. The Executive Board of the clean development mechanism (hereinafter referred to as the Board) at its fifty-eighth meeting adopted the "Procedure on performance monitoring of designated operational entities". The procedure requires that the Board be provided with an analysis report on DOE performance providing potential proposals for system-wide improvement.

2. This report provides information and analysis of DOE performance and proposals for system-wide improvement based on submissions of requests for registration and issuance since the first monitoring period from 1 January 2010 until the fifth monitoring period to 30 June 2012 and based on data finalized as of 31 December 2012.

2. Summary of analysis report

3. This section contains an executive summary of the detailed analysis of DOE performance, as provided in the next section. In this section, a summary and key points of the analysis for issues arising from registration of project activities will be dealt with first, followed by analysis of the issues arising from the issuance of CERs, and then followed by suggestions for potential areas for improvement.

2.1. Summary of analysis – Registration

4. The overview and summary for Registration is provided below:

   (a) The overall performance of the DOEs is seen to have improved in 2011 as compared to the previous year and the trend for 2012 based on the data of the first half of the year would indicate a stable or slightly better situation compared to 2011;

   (b) The improvement of performance of the DOEs between 2010 and 2011 is evident from the significant reduction, in the number of request for review issues raised, by about by 67% from 2010 to 2011 (446 request for review issues raised in 2010 compared to 148 in 2011), indicating an improvement in performance by the DOEs. The main reasons for the improvement in performance, in addition to potential external factors, may be due to: (i) new, improved and revised guidance/documents being provided by the Board; (ii) enhancement in the DOE interaction through various workshops and interactions;[1] (iii) the organization of training across various regions; (iv) the increase in overall experience and skills of the DOEs over a period of time; (v) the introduction of information and reporting checks[2] which detect issues related to information, reporting, repetitive and recurring "Summary Note" issues, earlier in the process prior to publication of the submitted requests; and (vi) a significant reduction in specific request for

[1] DOE Teleconference, interaction of the DOE/AE Coordination Forum with the Board and the CDM-AP, DOE dedicated email account.

[2] The revised guidelines of the completeness check, included checking of reporting requirements, implemented from 1 September 2009 (EB 48, paragraph 62 and 75), which later turned into two step process -completeness check (CC) and information and reporting check (IRC) from early 2010 as per the Board's decision (EB 54, Annex 28 and 35 dated 28 May 2010).

review issues from 2009–2010 (e.g. issues related to grid emission factor, wind/hydro tariff issues for projects from China, E^+/E^- issues, etc.) subsequent to the availability of Board guidance;

(c) The perceived improvement in performance of the DOEs in 2011 is also evident from the reducing trend of maximum value of I_2 Indicator[3] (rate of requests for review) in the registration process for eligible DOEs by 44% as compared to the previous year. In the first half of 2012, the value of I_2 Indicator for all DOEs is equal or lower than 1 except for one DOE which has the maximum value of 1.43;

(d) Given that the implementation of the Project cycle procedure (PCP), Project standard (PS), and Validation and verification standard (VVS) started from 1 May 2012, and also in view of the workplan on top-down improvement of the methodologies and the tools and the further development of standardized baselines, the future reporting periods are expected to capture the impact of the implementation of these new documents on the Indicator I_2;

(e) In 2011 and in the first half of 2012, a significant number of issues still continued to be raised on additionality (59.5% and 63.5%, respectively) and the application of the baseline methodology (31.1% and 33.3%, respectively), in particular on investment analysis (61.4% and 57.5%, respectively), algorithms and/or formulae to determine emission reductions (52% in 2011) and baseline identification (48%, in the first half of 2012);

(f) In 2011 and in the first half of 2012, the majority of issues still continue to be reporting issues and technical correctness and accuracy issues with regard to failure to identify non-compliance with the CDM requirements. However, the proportion of technical issues decreased from 68% in 2011 to 46% in the first half of 2012, while the percentage of reporting issues increased from 30% in 2011 to 54% in the first half of 2012. These figures are evidence of an overall improvement of DOE performance based on the decrease of technical issues;

(g) In the second half of 2011 and in the first half of 2012, the majority of the issues (62%) raised were related to compliance with the requirements of the Validation and verification manual (VVM) v.1.2, out of which reporting issues contribute to 34% (Jul-Dec 2011) and 67% (Jan-Jun 2012). During the period from 1 January to 30 June 2012, issues about non-compliance with 11 paragraphs (83, 84, 89, 91, 99, 104, 111, 112, 114, 119, 120) of the VVM constitute 66% of the total issues raised during requests for review, with paragraphs 111, 112 and 91 contributing 26%, 7% and 5%, respectively. The most recurrent request for review issues from the VVM are related to “investment analysis” (43%) and “algorithms and/or formulae to determine emission reductions” (10%).

2.2. Summary of analysis – Issuance

5. The overview and the summary for Issuance is provided below:

(a) The overall performance of the DOEs is seen to be improved in 2011 as compared to previous years. This is evident from the significant reduction, in the

[3] Indicator I_2 is the rate of requests for review adjusted by weight of the requests: Indicator I_2 = SUM (weights of requests for review)/Number of requests completed.

number of request for review issues raised, by about 56% from the previous year (171 request for review issues raised in 2010 compared to 75 in 2011), indicating an improvement in performance by the DOEs. The main reasons for the improvement in performance, in addition to potential external factors, may be due to: (i) improved, revised and new guidance/documents being provided by the Board; (ii) enhancement in the DOE interaction through various workshops and interactions; (iii) the organization of training across various regions; (iv) the increase in overall experience and skills of the DOEs over a period of time; (v) the introduction of information and reporting check, which detected issues related to information, reporting, repetitive and recurring "Summary Note" issues, earlier in the process prior to publication of the submitted requests; and (vi) a significant reduction in specific request for review issues from 2009 to 2010 (e.g. issues related to HFC projects, etc.) subsequent to the availability of Board guidance;

(b) The improvement in performance of the DOEs in 2011 is also evident from the reducing trend of maximum value of I_2 Indicator (rate of requests for review) in the issuance process for eligible DOEs by 60% as compared to the previous year when a spot-check was raised for one of the DOEs;

(c) The results in the first half of 2012 indicate that there is still room for improvement, as in comparison with 2011 a slightly higher number of issues were raised (64% of the total amount in 2011) in half of the period (Jan–Jun 2012). The major type of issues in this last period are related to technical correctness and accuracy issues with regard to the failure to identify non-compliance with CDM requirements, representing 50% of the total number of issues raised at the request for review stage. 21% of the issues are related to Reporting, 23% are related to Other issues, and 6% are related to failure to follow procedural requirements. The next biannual report will provide the figures considering the whole year 2012 and allow for annual comparison;

(d) Although the number of issues in the first half of 2012 might be higher than in the equivalent period in 2011, the maximum value of I_2 Indicator remains close to the value in 2011, showing a stable DOE performance in the issuance process;

(e) The results of the DOE performance in the first half of 2012 cannot be linked to the implementation of the Project cycle procedure (PCP), Project standard (PS), Validation and verification standard (VVS), which started on 1 May 2012 (this report covers an analysis up to June 2012 and only a few cases were submitted during this time) and includes the post-registration changes related to requests for temporary deviations, revision of the monitoring plan, change in project design, and the list of cases that do not need prior approval as contained in appendix 1 to the PS. The Board also provided guidance in appendix 1 to the PS to integrate changes which can be submitted together with the request for issuance and which do not require prior approval, which together with procedures are expected to reduce the timelines of issuance and requests for reviews on issues, which are procedural in nature. As mentioned previously in the Third Analysis Report, it is expected that the new procedures for post-registration changes may have an effect on this trend and the rate of reviews would vary, at least during the transition time during initial adjustment period;

(f) Divergent trends are observed in 2010, 2011 and in the first half of 2012 with respect to the classification of issues raised. However, a significant number of

issues still continue to be raised on compliance of monitoring with the monitoring plan and on assessment of data and calculation of greenhouse gas emission reductions. In the first half of 2012, the percentage of issues related to the Implementation of the project activity has decreased from 28% in 2011 to 6% in the first half of 2012, whereas issues related to Procedural and related requirements have increased from 9% in 2011 to 25% in the first half of 2012;

(g) A deeper analysis on the recurrent issues raised in the first half of 2012, on compliance of monitoring with the monitoring plan shows that the most frequent reporting issues are related to inconsistencies between the measurement methods and/or equipment used for monitoring with the registered/revised monitoring plan. With regard to technical correctness and accuracy issues on Compliance of monitoring with the monitoring plan, the most frequent issues raised are related to the accuracy of the equipment used which is not in compliance with the monitoring plan. All these accuracy issues were raised on methane content and biogas projects, applying e.g. AMS-III.D. Similarly to the reporting issues, several technical issues were raised because the measurement methods and/or the equipment used for monitoring were not in line with the monitoring plan;

(h) The specific recurrent issues raised on assessment of data and calculation of greenhouse gas emission reductions in the first half of 2012 are technical issues and are more divergent. These issues are mainly related to ex-post emission factor calculation not in compliance with the methodology and non-compliance with monitoring specific parameters as per the methodology in conjunction with the failure to request post-registration changes. Other issues raised are regarding the proper operational conditions of the equipment (flare) which were not considered to calculate ER and non-compliance with cross-checking records of monitored parameters for proper ER calculations;

(i) Divergent trends are observed in 2010, 2011 and in the first half of 2012 with respect to the categories of issues raised. While in 2011 the major number of issues raised were on the Failure to follow procedural requirements (35%), the major percentage of issues in 2010 and in the first half of 2012 are related to technical correctness and accuracy issues with regard to failure to identify non-compliance with the CDM requirements (37% and 50%, respectively), which is in the second place in 2011 (33%). The issues related to reporting gradually decreased from 2010 to 2012, corresponding to 21% of the total number of issues in the first half of 2012;

(j) In the 4th monitoring period (from Jul–Dec 2011, data as of Apr–Sep 2012) and in the 5th monitoring period (from Jan–Jun 2012, data as of Jan–Dec 2012), the majority of the issues raised are related to compliance with the requirements of the VVM (v.1.2), out of which issues related to technical correctness and accuracy issues with regard to failure to identify non-compliance with the CDM requirements contribute to more than 45% in both periods. During the period from 1 January to 30 June, issues about non-compliance with five paragraphs (179, 197, 204, 205, 208) of the VVM constitute 80% of the total issues raised during requests for review, with paragraphs 208 and 205 contributing 35% and 20%, respectively. The most recurrent request for review issues from the VVM are related to “compliance of monitoring with the monitoring plan in the registered or

revised PDD" (58%) and "Algorithms and/or formulae for calculation of emission reductions" (16%).

2.3. Potential areas of improvement

6. Taking into consideration the data gathered for the first, second, third, fourth and fifth monitoring periods of performance monitoring of DOEs and the analysis above, the following potential areas of improvement have been identified:

   (a) To further enhance the performance of the DOEs by:

      (i) Continuing to monitor the performance of the DOEs and report to the Board;

      (ii) Supporting that this information and analysis is used by:

         a. DOEs for system improvements including drafting checklists for auditors during validation and used as check points for focused technical reviews;

         b. The CDM-AP and CDM-AT for defining the focused audit scope during surveillance audits, performance assessments, etc.;

         c. The secretariat in supporting the Board in taking measures to bring clarity both in language and in substantive requirements in the respective paragraphs of the CDM rules – including the VVS/PS that are most frequently referred to in the request for review issues;

   (b) To continue addressing the issues related to investment analysis by:

      (i) Providing new guidelines and templates on investment analysis, by:

         a. Developing validation templates which shall include specific detailed reporting requirements on the validation of investment analysis to reduce the reporting issues;

         b. Developing generic standardized spreadsheets for investment analysis (e.g. for renewable energy projects such as wind, hydro-power, etc.) to reduce the reporting issues;

      (ii) Continuing to investigate the reasons why DOEs still face difficulties with the validation of investment analysis;

      (iii) Continuing to provide training on investment analysis for DOEs in future Regional Calibration workshops;

   (c) To continue exploring innovative and simple approaches for the demonstration of additionality;

   (d) To prioritize the work in preparing validation and verification forms and guidelines in order to reduce the number of requests for review related to reporting and missing data; and to include in the verification forms specific detailed reporting requirements on accuracy of the equipment, calibration, measurement methods and reporting of missing data in order to reduce these frequent reporting issues;

(e) In addition to the verification forms, to develop generic standardized spreadsheets for emission reduction calculations for some key sectors that cover the majority of projects (e.g. the use of biomass for electricity and heat generation, waste-heat recovery, landfill, methane recovery from waste water and animal waste management system (AWMS), etc.) to reduce the reporting and technical accuracy issues;

(f) To consider exploring the potential for coordination in Project 158[4] (accounting for uncertainties in measurements in methodologies) and Project 118[5] (validation and verification forms and guidelines) to explore the possibility of addressing major or commonly occurring reporting issues due to deficient monitoring or lack or uncertainty of monitoring data and calculation of emission reductions in such situations or accuracy or calibration of equipment by providing guidance on how to report monitoring uncertainties in validation and verification report templates;

(g) To provide guidance for distributed projects, on how to verify project implementation without visiting each site (to reduce transaction costs) and its correlation with the application of sampling;

(h) To consider the inclusion in Project 180[6] related to the revision of the PS, VVS and PCP, of: 1) a clear definition of temporary and permanent change (operational vs. physical/location); 2) the expansion of Appendix 1 of the PS to include common monitoring issues including those not under the control of the PPs/CMEs;

(i) To consider clarifying whether a clarification of a methodology is project- or version-specific, or generic;

(j) To consider clarifying which CDM document shall take precedence if there was an apparent contradiction between various standards (methodology vs. PS or VVS or PCP);

(k) To request DOEs to further strengthen their quality check procedures, their technical review process and train their personnel on the issues where most of the reviews are triggered, particularly with regard to investment analysis and Baseline identification (for requests for registration) and compliance of monitoring with the monitoring plan and assessment of data and calculation of greenhouse gas emission reductions (for requests for issuance);

(l) To continue to provide training and capacity-building for the DOEs focused on additionality including investment analysis, standardized baselines, PoAs, application of sampling, compliance of monitoring with the monitoring plan, assessment of data and calculation of greenhouse gas emission reductions and post-registration changes;

(m) To continue to provide clarification on the interpretation of existing CDM requirements, including standardized baselines, and guidance to the DOEs on

[4] Project 158 under the Workplan 2013 (Annex 3, EB 72).

[5] Project 118 under the CDM MAP 2013-2014 (Annex 1, EB 71).

[6] Project 180 under the CDM MAP 2013-2014 (Annex 1, EB 71).

day-to-day operational and other issues through the organization of web-based DOE teleconferences to facilitate and expedite validation and verification.

3. Detailed analysis of DOE performance

7. The Board at its fifty-eighth meeting adopted the "Procedure on performance monitoring of designated operational entities". This procedure provides for monitoring, classification and rating of all DOEs non-compliances. It is applicable from completion of the initial assessment process and accreditation of an entity by the Board until expiration of its accreditation. However, a DOE is eligible for monitoring only when it has finalized a tenth request for registration or issuance in a given six-month monitoring period.

8. In addition to the regular quarterly reports on individual DOE performance, the analysis report contains a detailed analysis of the issues arising from the DOE performance especially those identifying shortcomings in the CDM requirements, procedures and guidance to be provided to the Board on a biannual basis.

9. The present report is the fourth of such reports. It summarizes and analyses the finding from the first until the fifth monitoring periods running respectively: 1st, from 1 January 2010 to 30 June 2010; 2nd, from 1 July 2010 to 31 December 2010; 3rd, from 1 January 2011 to 30 June 2011, 4th, from 1 July 2011 to 31 December 2011 (accounting for data and submissions finalized as of 30 September 2012); and 5th, from 1 January 2012 to 30 June 2012 (accounting for data and submissions finalized as of 31 December 2012).

10. The trends observed in the first and second monitoring periods of 2010 and 2011 are similar, therefore for the present report the data from the first and second monitoring periods of each year were combined. Hence, it is possible to analyse the performance of the DOEs for the years 2010, 2011 and 2012 (Q1 and Q2), as well as compare them with each other.

11. In this section, issues arising from the registration of project activities will be dealt with first and then an analysis of the issues arising from issuance of CERs will be described in detail.

3.1. Registration

3.1.1. Overview of DOE Performance

3.1.1.1. DOE Performance Indicator (I_2 - Rate of requests for review)

12. A trend of I_2 Indicator (Rate of requests for review) in the registration process for eligible DOEs and a trend of DOE-wise I_2 Indicator for major DOEs for the monitoring periods of 1 January 2010 to 31 December 2010, 1 January 2011 to 31 December 2011 and 1 January 2012 to 30 June 2012 are presented below. Both of the graphs indicate that during this period, the maximum value of the indicator I_2 has never crossed the higher threshold and is in the "yellow zone". In the first half of 2012, the value of I_2 Indicator for all DOEs is equal to or lower than 1, except for one DOE which has the maximum value of 1.43. This also indicates the improvement in performance of the DOEs in this period. The second graph indicates that DOE performance in the registration process of the major DOEs has improved over the past two-and-a-half years.

Figure 1. I_2 Indicator for the Registration Process

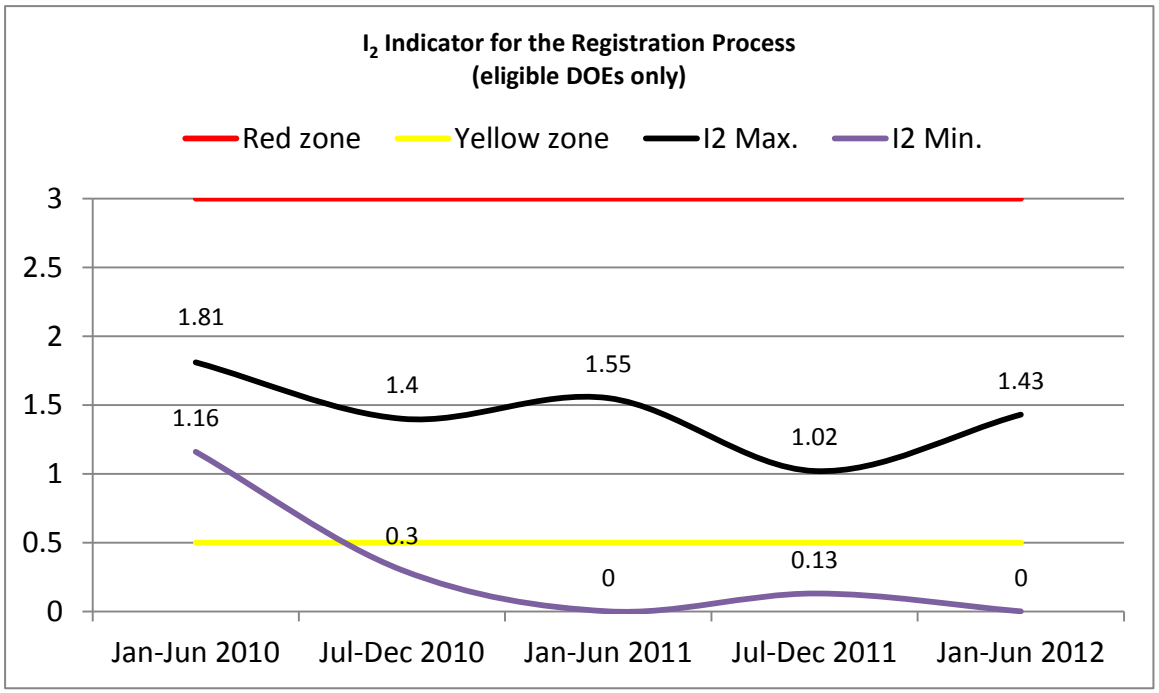
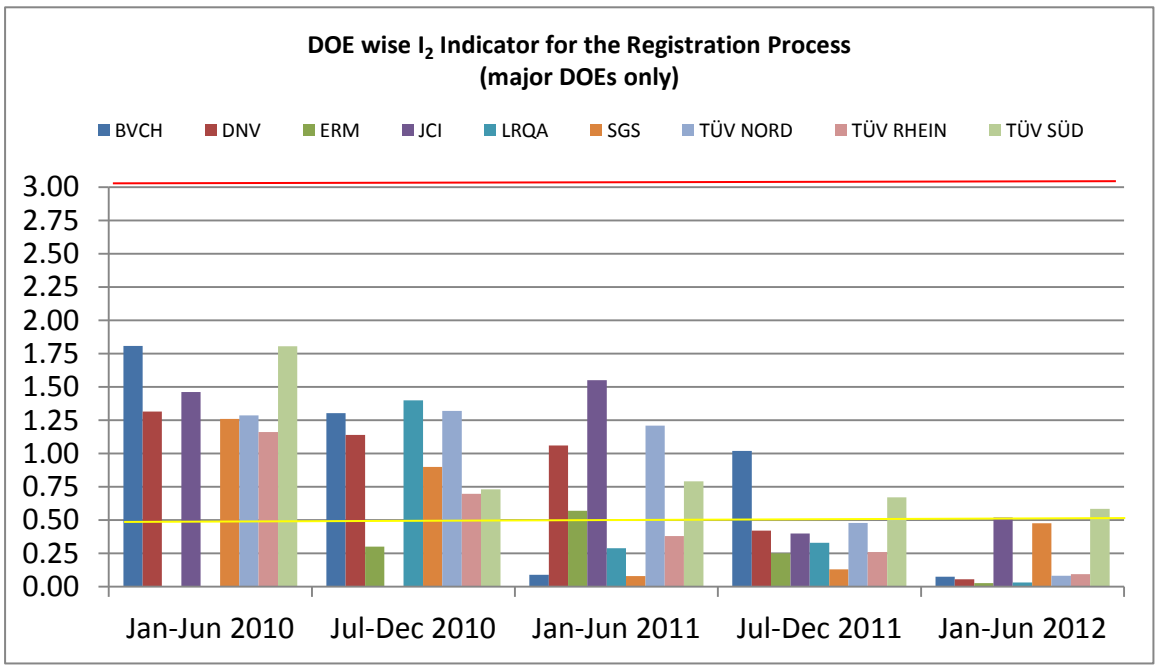


Figure 2. DOE-wise I2 Indicator for the Registration Process

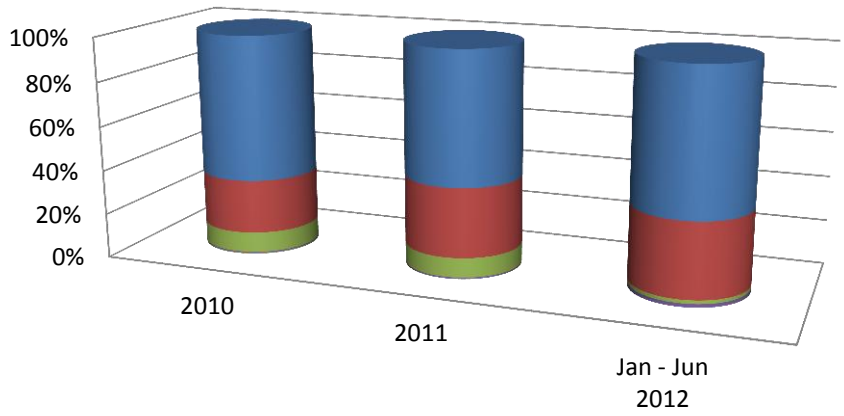


13. From the above graphical analysis, it is evident that the upper threshold is far away from the value of the indicator I_2. Given that the implementation of the project cycle procedure (PCP), project standard (PS), validation and verification standard (VVS) started from 1 May 2012, the future reporting periods are expected to capture the impact of the implementation of these new documents on the indicator I_2.

3.1.1.2. DOE Performance Indicator (I_2) - Classification of issues raised

14. An overview matrix compiling the issues raised in registration requests for all DOEs (eligible for monitoring and non-eligible for monitoring) for the monitoring periods of 1 January 2010 to 31 December 2010, 1 January 2011 to 31 December 2011 and 1 January to 30 June 2012 are provided in appendices 1, 3 and 5, and graphics illustrating these results are presented below.

Figure 3. Registration - request for review issues – Topic-wise



	2010	2011	Jan - Jun 2012
Additionality	293	88	40
Application of baseline methodology	108	46	21
Application of the monitoring methodology	41	13	1
Project description	2	1	1
Procedural and related requirements	1	0	0
Other CDM requirements	1	0	0

15. For the year 2010, the analysis of the matrix and the graphic shows that 66% of the issues raised are related to the additionality of the project activity, 24% related to applicability of the baseline methodology, 9% related to the application of the monitoring methodology and less than 1% are related to the other categories (project description, procedural and related requirements and other CDM requirements).

16. For the year 2010, the analysis of the matrix and the graphic show that 59.5% of the issues raised are related to the additionality of the project activity, 31.1% related to applicability of the baseline methodology, 8.8% related to the application of the monitoring methodology and 0.7% are related to project description.

17. In the first half of 2012, 63.5% of the issues raised are related to the additionality of the project activity, 33.3% related to applicability of the baseline methodology, and the same proportion of 1.6%, related to the application of the monitoring methodology and to project description.

18. From the graph, it can be concluded that the same trends in 2010 are still observed in 2011 and in the first half of 2012 with regard to the proportion of different issues. However, the number of requests for review and the number of issues raised dropped significantly by 67% from 2010 to 2011 (446 request for review issues raised in 2010 compared to 148 in 2011), indicating a yearly improvement in performance by the DOEs, in the areas monitored by this activity. The figures in the first half of 2012 may show that the DOE performance is relatively stable in comparison with 2011, as around half of the issues were raised (43% of total amount in 2011) in half of the period (Jan–Jun 2012). It is therefore likely that by the end of the second half of 2012, a similar number of issues may be raised as in 2011. The next biannual report will provide the figures for the whole year 2012 and allow for annual comparison between 2011 and 2012. The main reasons for the improvement in performance could be due to: (i) new, improved and revised guidance/documents being provided by the Board; (ii) enhancement in the DOE interaction through various workshops and interactions[7]; (iii) the organization of training across various regions; and (iv) the increase in overall experience and skills of the DOEs over a period of time.

19. In 2011 and in the first half of 2012, the number of issues on additionality, in particular on investment analysis, and on the application of the baseline methodology, in particular the algorithms and/or formulae to determine emission reductions, still continue to be raised in a major proportion. Therefore, this report provides deeper analysis on the issues raised on these during the 4th (Jul–Dec 2011) and 5th (Jan–Jun 2012) monitoring periods, accounting for data and submissions finalized as of 30 September 2012 and as of 31 December 2012, respectively.

3.1.2. Analysis of the issues raised

20. This section provides a summary and analysis of the issues raised within the main components checked for registration submissions:

    (a) Additionality;

    (b) Application of the baseline methodology; and

    (c) Application of the monitoring methodology.

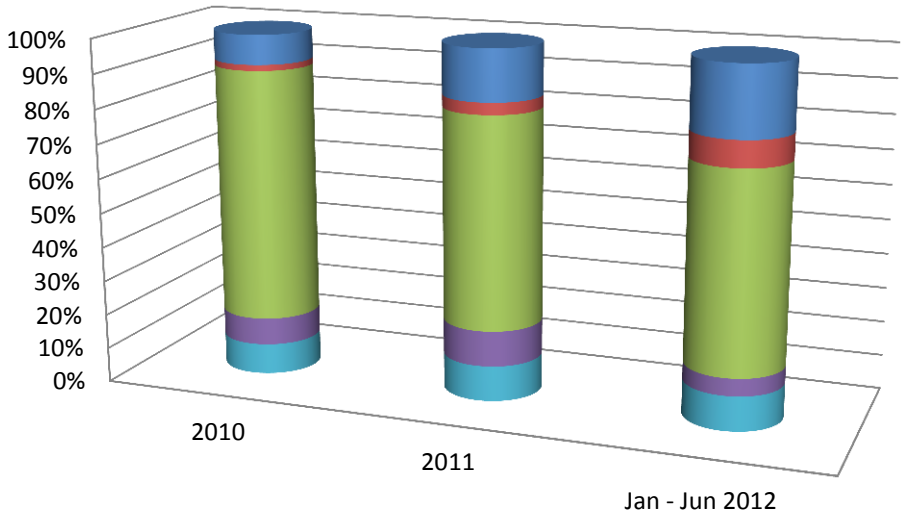
21. It is to be noted that, for project description, only two issues in 2010 and one issue in 2011 and in the first half of 2012 were raised; consequently, no analysis was carried out.

3.1.2.1. Additionality

22. The following chart illustrates the distribution of the issues raised that are related to additionality.

[7] DOE Teleconference, interaction of the DOE/AE Coordination Forum with the Board and the CDM-AP, DOE dedicated email account.

Figure 4. Additionality



	2010	2011	Jan - Jun 2012
Prior consideration	25	13	8
Identification of alternatives	5	3	3
Investment analysis	214	54	23
Barrier analysis	23	9	2
Common practice analysis	26	9	4

3.1.2.1.1. Investment analysis

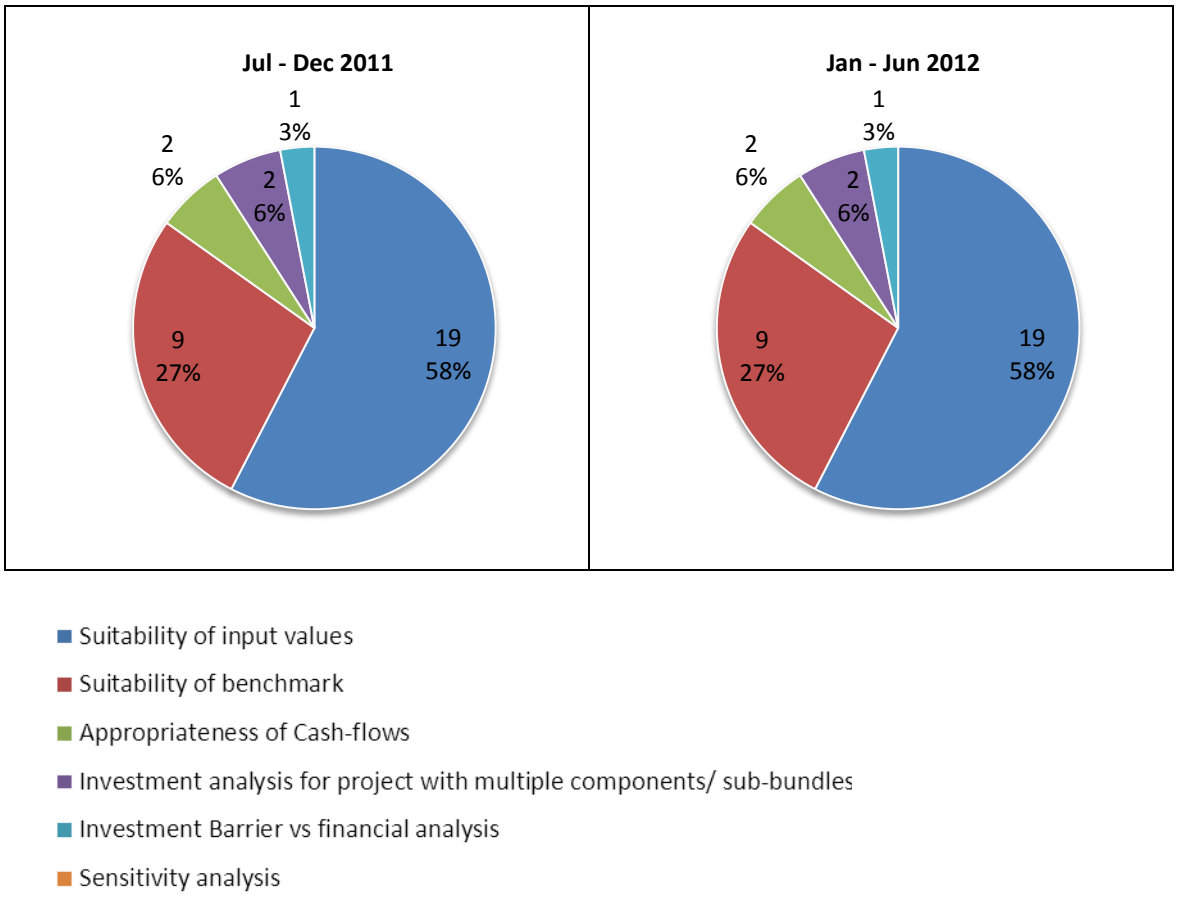
23. The analysis shows that the majority of the issues raised (73% in 2010, 61.4% in 2011 and 57.5% in the first half of 2012) are related to investment analysis. Particularly, with reference to paragraphs 110 to 114 of the VVM version 01.2; the Guidelines on the assessment of the investment analysis version 3 (EB 51, Annex 58), version 4 (EB 61, Annex 13) and version 5 (EB 62, Annex 5); and the Tool for the demonstration and assessment of additionality version 5.2 (EB 39, Annex 10) and version 6 (EB 65, Annex 21).

24. However, the number of requests for review and the number of issues raised have reduced significantly by about 75% from 2010 to 2011 (214 request for review issues raised in 2010 compared to 54 in 2011), indicating an improvement in performance by the DOEs on investment analysis. The figures in the first half of 2012 may show that the DOE performance is relatively stable in comparison with 2011, as almost half of the issues were raised (43% of total amount in 2011) in half of the period (Jan–Jun 2012) and therefore it is likely that by the end of the second half of 2012 a similar amount of issues are raised as in 2011. The next biannual report will provide the exact figures of the whole year 2012 and allow for annual comparison between 2011 and 2012. The Regional Calibration workshops in India and China in 2011 and India, China and Brazil in 2012 focused on investment analysis adopting a case-study approach and therefore may be a reason, among many others including the revisions in the investment analysis guidelines, for maintaining the same trend of reduction in the requests for review issues on additionality, particularly on investment analysis.

25. As concluded in the second and third analysis reports, these graphics show that should the Board address the investment analysis requirements adequately, the rate of reviews will drop significantly. Post-2012, it is expected to receive fewer registrations than issuance requests; however, it is recommended that the Board may wish to address this area as a high-level priority, considering that some issuance requests, particularly related to post-registration changes on change in project design, require application of the investment analysis. Likewise, the current approach of assessing additionality is increasingly being criticized and may also be considered a priority.

26. Most of the issues raised regarding investment analysis during the 4th monitoring period (Jul–Dec 2011, data as of Apr–Sep 2012) and during the 5th monitoring period (Jan–Jun 2012, data as of Jan–Dec 2012) are related to the DOE's lack of substantiation of the suitability of the validated input values to the investment analysis and suitability of benchmark.

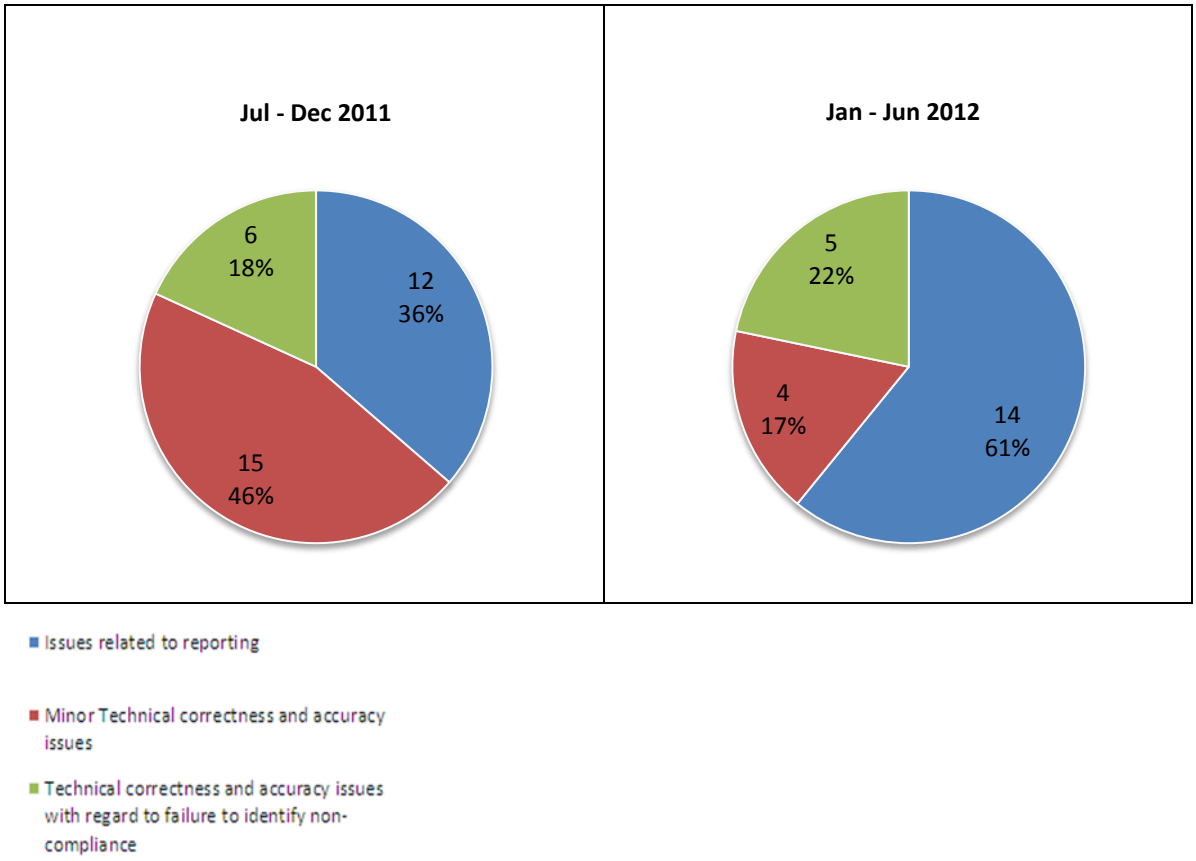
Figure 5. Requests for review issues on investment analysis



27. According to the following graphs, the issues raised on investment analysis during the 4th monitoring period (Jul–Dec 2011, data as of Apr–Sep 2012) and during the 5th monitoring period (Jan–Jun 2012, data as of Jan–Dec 2012) are mostly due to technical correctness and accuracy issues (including minor technical issues), 64% in the second half of 2011 and 39% in the first half of 2012; and reporting issues, 27% in the second half of 2011 and 61% in the first half of 2012. These figures show that the severity of the

issues has decreased in 2012, as the main percentage of issues are reporting issues whilst the technical issues dropped down.

Figure 6. Investment analysis – categories of issue



28. The Board revised the "Guidelines on the assessment of the investment analysis" (version 05.0/ EB 62/ Annex 5) in 2011, which may need to be reviewed for adequacy given that a significant number of request for review issues are still raised on investment analysis.

29. The following actions could further reduce the request for review issues on investment analysis:

(a) Develop validation templates which include specific detailed reporting requirements on the validation of investment analysis to reduce the reporting issues;

(b) Develop generic standardized spreadsheets for investment analysis for some key sectors that cover the majority of projects (e.g. for renewable energy projects such as wind, hydro-power, etc.) to reduce the reporting issues. The renewable energy projects supplying electricity to the grid mostly apply benchmark investment analysis, constitute the majority of CDM projects and therefore have the potential to reduce requests for review further; and

(c) Conduct training on investment analysis for DOEs. Such training could also be part of the Regional Calibration Workshops in 2013 with a focus on the investment analysis applying a case-study approach.

30. The CDM MAP 2013–2014 (Annex 3 to EB 72 report) has mandated the secretariat to further simplify and streamline additionality approaches for projects and PoAs in underrepresented regions while ensuring environmental integrity (Project 164). The secretariat will continue investigating the reasons why DOEs continue facing difficulties with the validation of investment analysis.

3.1.2.1.2. Prior consideration of CDM

31. 8.5% in 2010, 14.8% in 2011 and 20% in the first half of 2012 of the issues raised in the Additionality category are related to Prior consideration, especially to VVM paragraphs 98–104, the Glossary of CDM terms and the "Guidelines on the demonstration and assessment of prior consideration of the CDM" version 3, EB 49, Annex 22 and version 4, EB 62, Annex 13. The issues raised are related to the project start date, final investment decision, and continuous and real actions.

32. The Board in July 2011 revised the "Guidelines on the demonstration and assessment of prior consideration of the CDM" (EB 62, Annex 13), focusing on the validation of real and continuing actions. In the first half of 2012 only one issue was raised on this particular version of the guidelines and it is expected that future periods will provide a more complete picture on the usability of this guideline.

3.1.2.1.3. Common practice analysis

33. 8.9% in 2010, 10.2% in 2011 and 10% in the first half of 2012 of the issues raised in the additionality category are related to common practice analysis especially to VVM paragraph 119, 120, 121 and to the "Guidance on common practice" version 01.0, EB 63, Annex 12.

34. In 2011, the Board at its sixty-fifth meeting revised the additionality tool (version 6, EB 65, Annex 21) to include requirements from the guidelines on common practice to address the issue raised by stakeholders on the new approach and inconsistency due to change of application from being voluntary to mandatory and other concerns on application and interpretation. The tool was further amended in September 2012 (version 6.1.0, EB 69, Annex 20) and revised in November 2012 (version 7.0.0, EB 70, Annex 8) to include the reference to the latest approved "Guidelines on additionality of first-of-its-kind project activities" (version 02.0, EB 69 Annex 07) and the "Guidelines on common practice" (version 02.0, EB 69 Annex 08). It is expected that there may be a comparative increase in the requests for review on common practice and first-of-its-kind in Q4 of 2012, given the transition time that may be required to adjust to the new approach stipulated in the revised tool in which the requirements are now mandatory and the project participants need to comply with the requirements of the standard instead of a guideline.

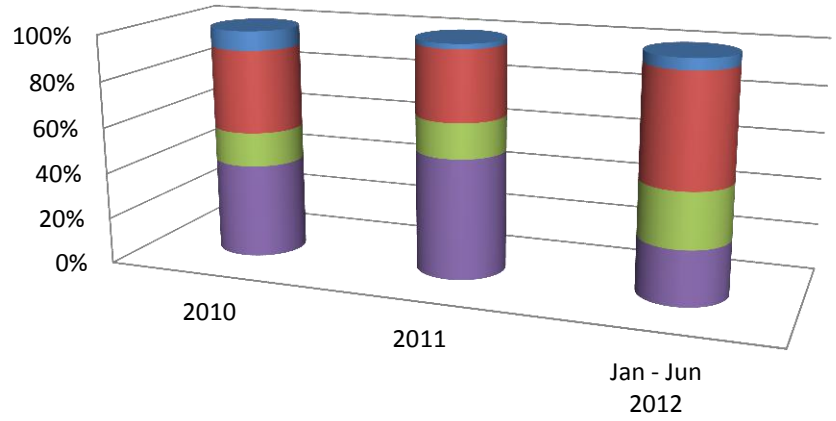
3.1.2.2. Application of baseline methodology

35. 24.2% in 2010, 31.1% in 2011 and 33.3% in the first half of 2012 of the issues are related to the application of baseline methodology, indicating an increase in the proportion of issues raised related to application of baseline methodology.

Notwithstanding, the overall amount of issues and the percentage in each category may vary when considering the results of the second half of 2012. The next biannual report will include data of the whole year 2012 and allow for annual comparison between 2010, 2011 and 2012.

36. The chart below illustrates the distribution of the issues raised that are related to the application of the baseline methodology. The number of requests for review and the number of issues raised decreased significantly by about 57% from 2010 to 2011 (108 request for review issues raised in 2010 compared to 46 in 2011), indicating an improvement in performance. The trend shown by the figures in the first half of 2012 would indicate that the performance is relatively stable in comparison with 2011, as slightly less than half of the issues were raised as compared to the previous year for the equivalent period. The decrease in 2011 in issues raised in this sub-category might be linked to the Regional Calibration workshops held in 2010 and more clarity provided by the revision of existing requirements.

Figure 7. Application of baseline methodology



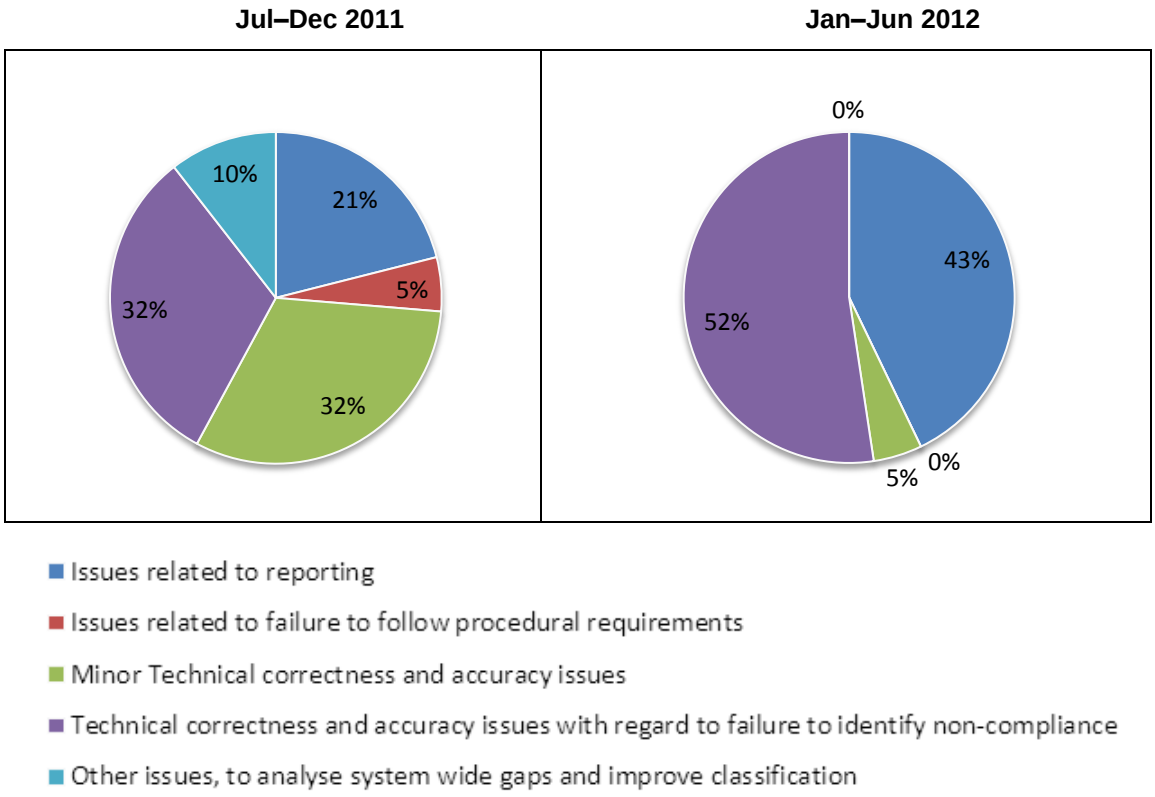
	2010	2011	Jan - Jun 2012
Project boundary	9	1	1
Baseline identification	39	14	10
Compliance with applicability conditions	16	7	5
Algorithms and/or formulae to determine emission reductions	44	24	5

37. Among the issues raised in this category, 41% in 2010, 52% in 2011 and 24% in the first half of 2012 are related to algorithms and/or formulae to determine emission reductions and 36% in 2010, 30% in 2011 and 48% in the first half of 2012 are related to baseline identification. 15% of the issues in 2010 and in 2011 and 24% in the first half of 2012, were related to compliance with applicability conditions on the application of the baseline methodology. In comparison with previous years, in the first half of 2012, while the proportion of issues raised on baseline identification increased, the proportion of issues related to algorithms and/or formulae to determine emission reductions clearly declined.

3.1.2.2.1. Algorithms and/or formulae for the calculation of emission reductions

38. The issues raised from Jul–Dec 2011 (data as of Apr–Sep 2012) and from Jan–Jun 2012 (data as of Jan–Dec 2012) are mostly due to technical correctness and accuracy issues (including minor technical issues), corresponding to 64% of the issues in the second half of 2011 and 57% of the issues in the first half of 2012. In the second place, 21% are reporting issues in the second half of 2011 and 43% in the first half of 2012. These issues are related to the calculation of the grid emission factor (GEF), establishing the alternative and credible baseline scenarios and calculation of emission reductions (baseline, project and leakage emissions), including the data requirements and calculation methods.

Figure 8. Registration - categories of issues - algorithms and formulae to determine ER



39. The graphs above show a slight improvement by reduction in the number of issues from Jul–Dec 2011 to Jan–Jun 2012, as the percentage of issues related to technical correctness and accuracy dropped from 64% to 57%.

40. With the implementation of the PCP, PS, and VVS started from 1 May 2012, and the workplan on top-down improvement of the methodologies it is expected that the rate of reviews related to technical correctness and accuracy issues (on application of baseline methodology and algorithms and/or formulae to determine emission reductions) will drop significantly. Standardized templates and spreadsheets on calculation of grid emission factors have been developed (available on the UNFCCC website). Work on the development of the grid emission factors of many countries is also in progress. The proposed standardized baseline on Southern African Power Pool, submitted by

Botswana on behalf of nine African countries, and another by Uzbekistan, Uruguay, Morocco and Sri Lanka, have been approved by the Board at it seventy-third meeting.

41. Generic standardized spreadsheets for emission reduction calculations for some key sectors that cover the majority of projects (e.g. for biomass electricity and heat generation, waste-heat recovery, landfill, methane recovery from waste water and AWMS, etc.) could reduce the reporting and technical accuracy issues and also contribute to a reduction in transaction costs for the development of PDDs and emission reduction calculations, particularly in least developed countries.

3.1.2.2.2. Baseline identification

42. Most of the issues identified in this category are related to the substantiation of the elimination of other baseline alternatives and selection of credible baseline scenario.

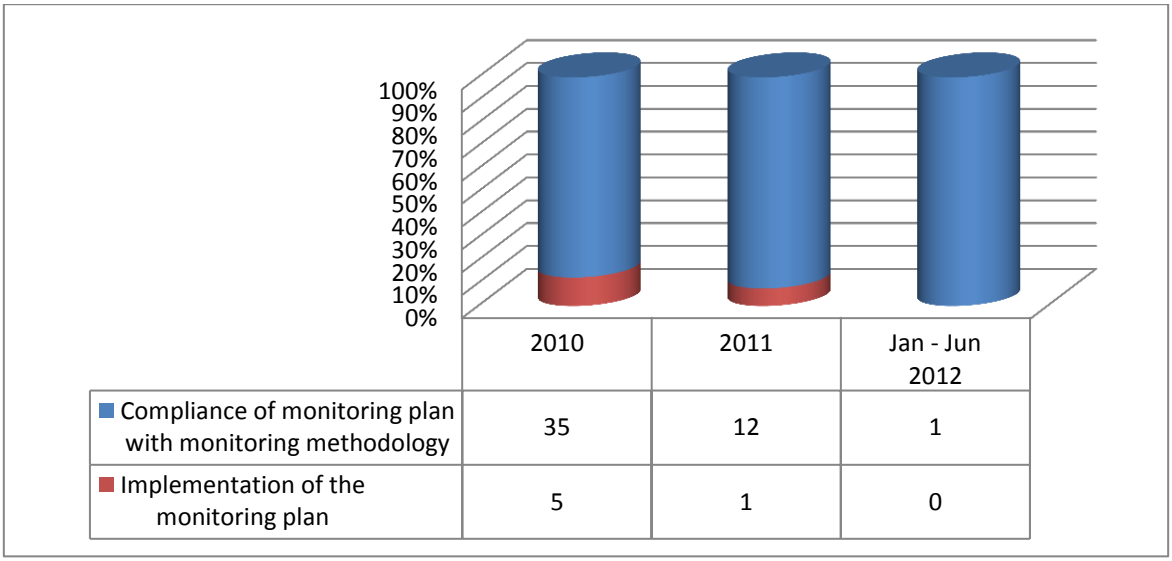
43. The issues raised on baseline identification in 2012 are similar compared to 2010 and 2011, and are related to the demonstration of credible baseline alternatives by providing the sound justification supported with credible evidence.

44. The CDM MAP 2013–2014 workplan has provided a mandate to the secretariat to further work on simplification and streamlining of methodologies and tools (Project 120), which is expected to contribute to reducing requests for review on issues on baseline identification as well as the development of standardized forms and guidelines for completing validation and verification reports (Project 118).

3.1.2.3. Application of the monitoring methodology

45. The issues related to application of the monitoring methodology represent a small portion of the total of issues raised on requests for reviews of registration submissions. 9.2% in 2010, 8.8% in 2011 of the issues identified are related to the application of the monitoring methodology. The graphic below illustrates the distribution of the issues raised and related to the application of the monitoring methodology.

Figure 9. Application of the monitoring methodology



	2010	2011	Jan - Jun 2012
Compliance of monitoring plan with monitoring methodology	35	12	1
Implementation of the monitoring plan	5	1	0

46. The vast majority of the issues identified within the area of the application of monitoring methodology are related to the compliance of the monitoring plan with monitoring methodology (88% in 2010, 92% in 2011 and 100% in the first half of 2012).

47. The issues raised are, however, very diverse but fundamentally are raised because the monitoring plan in the submitted PDD is either not in compliance with the monitoring methodology or the monitoring plan is not complete or the monitoring requirements are not clearly defined in the PDD.

48. The fact that only one issue was raised on the application of monitoring methodology in the first half of 2012 is evidence of the improvement of the performance of the DOEs in this area. With the implementation of the PCP, PS and VVS that started from 1 May 2012, the workplan on top-down improvement of the methodologies and the tools and the further development of standardized baselines, the future reporting periods are expected to capture the impact of the implementation of these new documents on the Indicator I_2.

3.1.3. Other classification and analysis of the issues

49. This section provides a summary and analysis of the issues raised within the main components checked for registration submissions on:

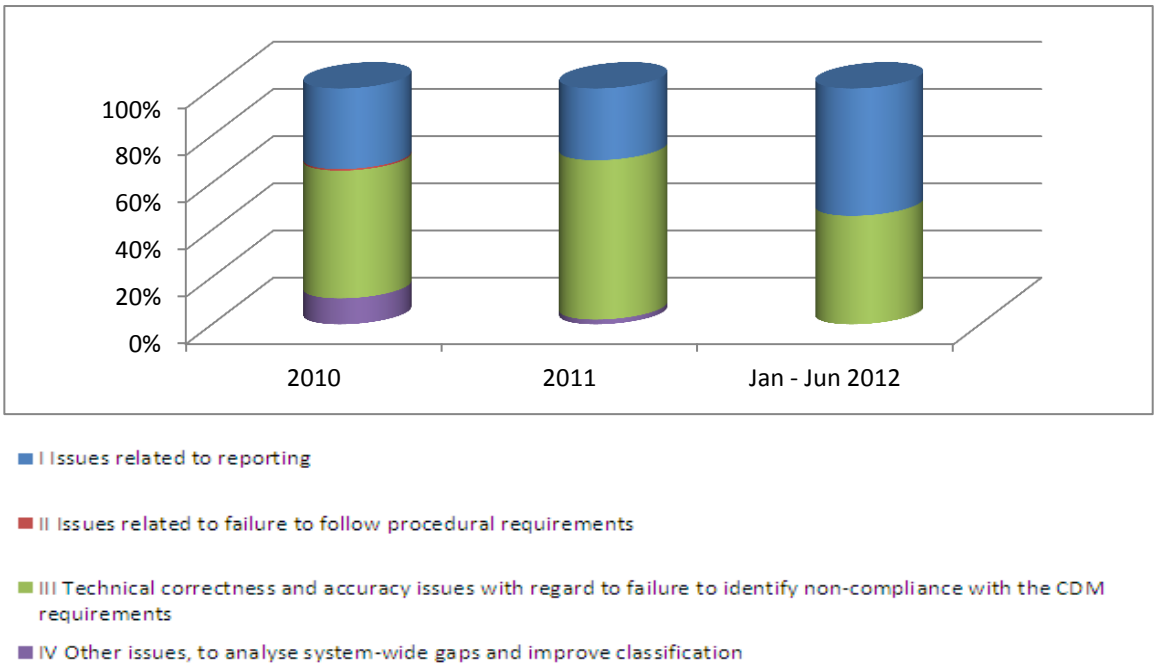
(a) Categories of issues; and

(b) Document-wise distribution of issues.

3.1.3.1. Categories of issues

50. The current report presents the issues identified classified by category. The graphics below illustrate the distribution of the issues raised for registration cases.

Figure 10. Registration 2010–2012



51. Technical correctness and accuracy issues with regard to failure to identify non-compliance with the CDM requirements and issues related to reporting are preponderant. In 2010 54% of the issues were related to technical correctness and accuracy issues with regard to failure to identify non-compliance with the CDM requirements and 34% related to reporting. In 2011 the percentage of issues related to technical correctness and accuracy increased, representing 68% of the issues and 30% of the issues are related to reporting. In the first half of 2012 the performance of DOEs shows an improvement, as the 54% of the issues are related to reporting and the percentage of issues on technical correctness and accuracy issues with regard to failure to identify non-compliance with the CDM requirements decreased to 46%.

52. Issues related to reporting continue to be high. The CDM MAP 2013–2014 workplan has mandated the secretariat to develop standardized templates for validation and verification which is likely to reduce reporting issues.

3.1.3.2. Document-wise distribution of issues

53. The graphics below illustrate the distribution of the issues raised in the 4th (Jul–Dec 2011, data as of Apr–Sep 2012) and 5th monitoring periods (Jan–Jun 2012, data as of Dec 2012) with respect to various CDM documents. The majority of the issues (62%) raised are related to compliance with the requirements of the VVM in both periods.

Figure 11. Registration - request for review issues - CDM documents (Jul–Dec 2011)

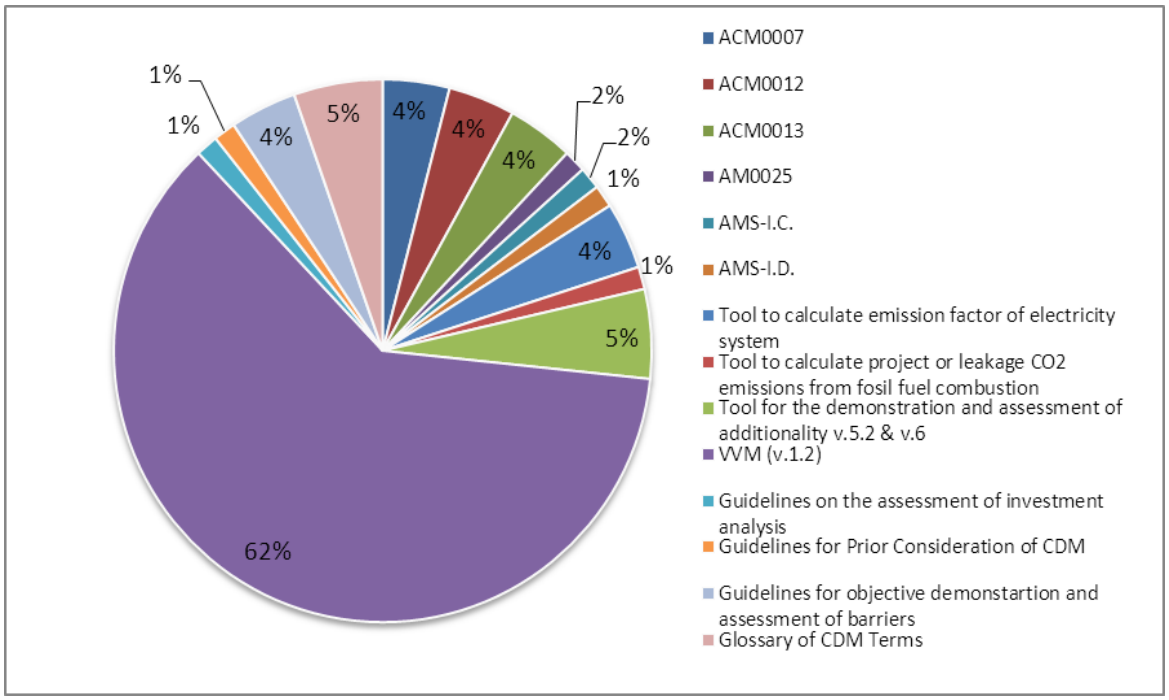


Figure 12. Registration - request for review issues - CDM documents (Jan–Jun 2012)

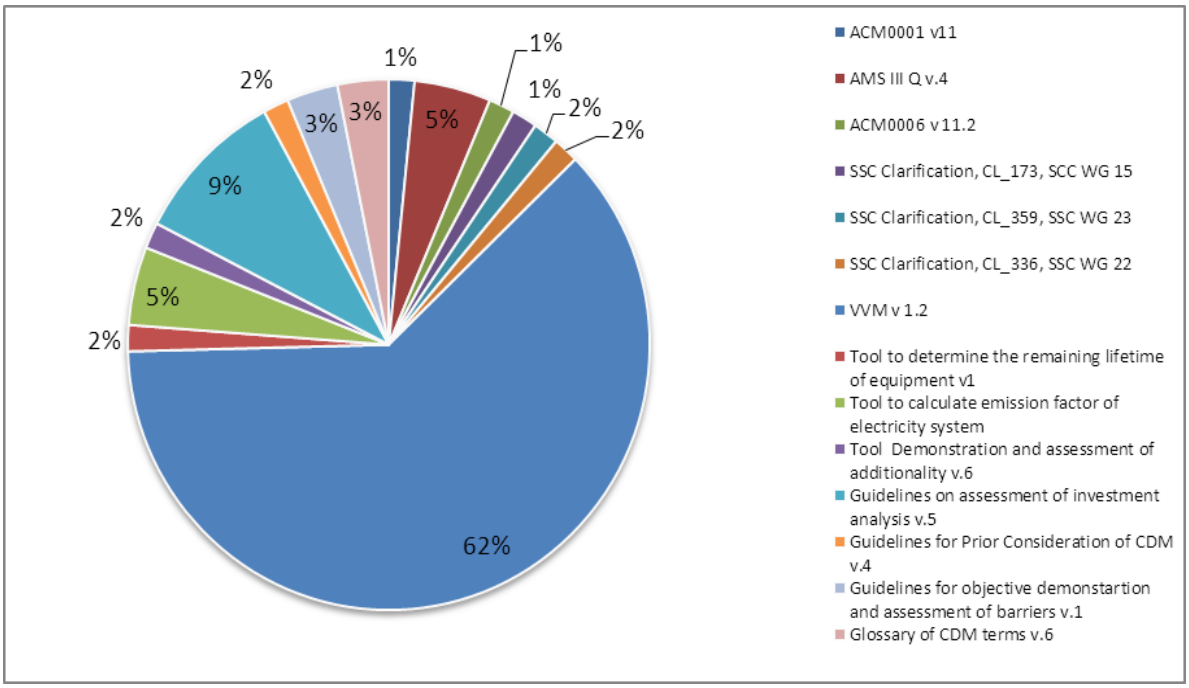


Figure 13. Registration - request for review issues – VVM paragraph-wise (Jul–Dec 2011)

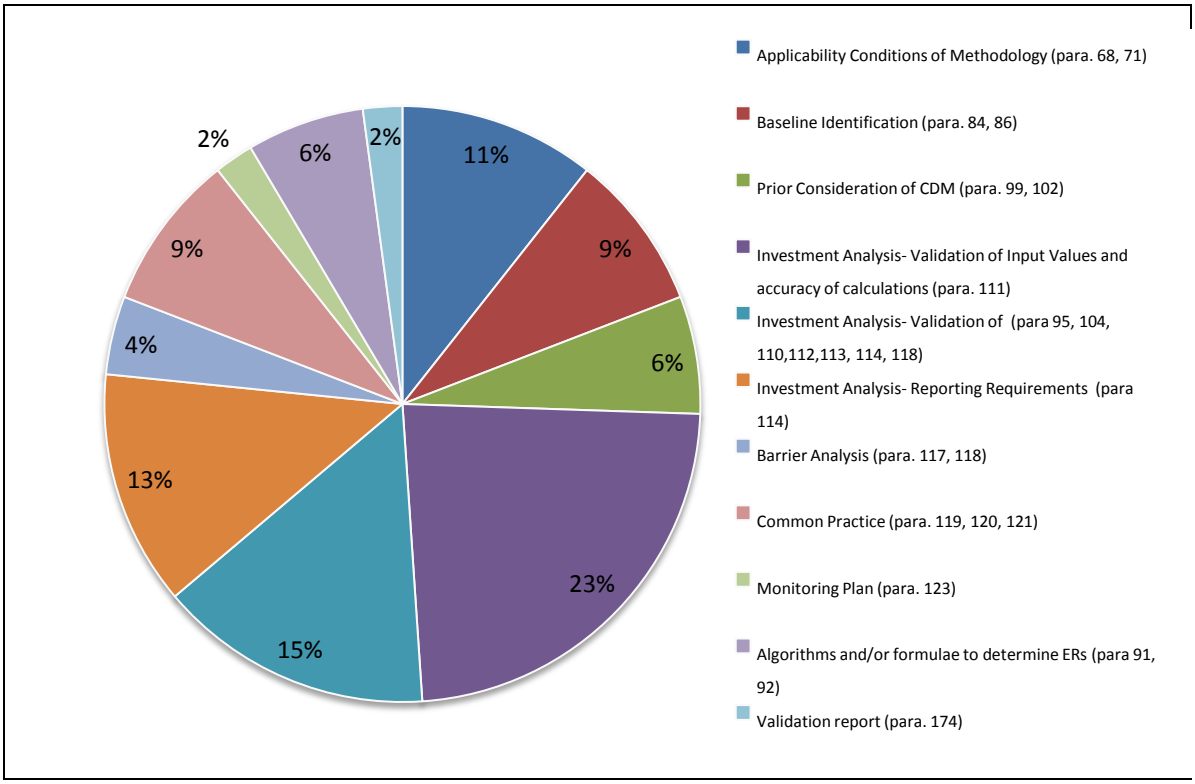
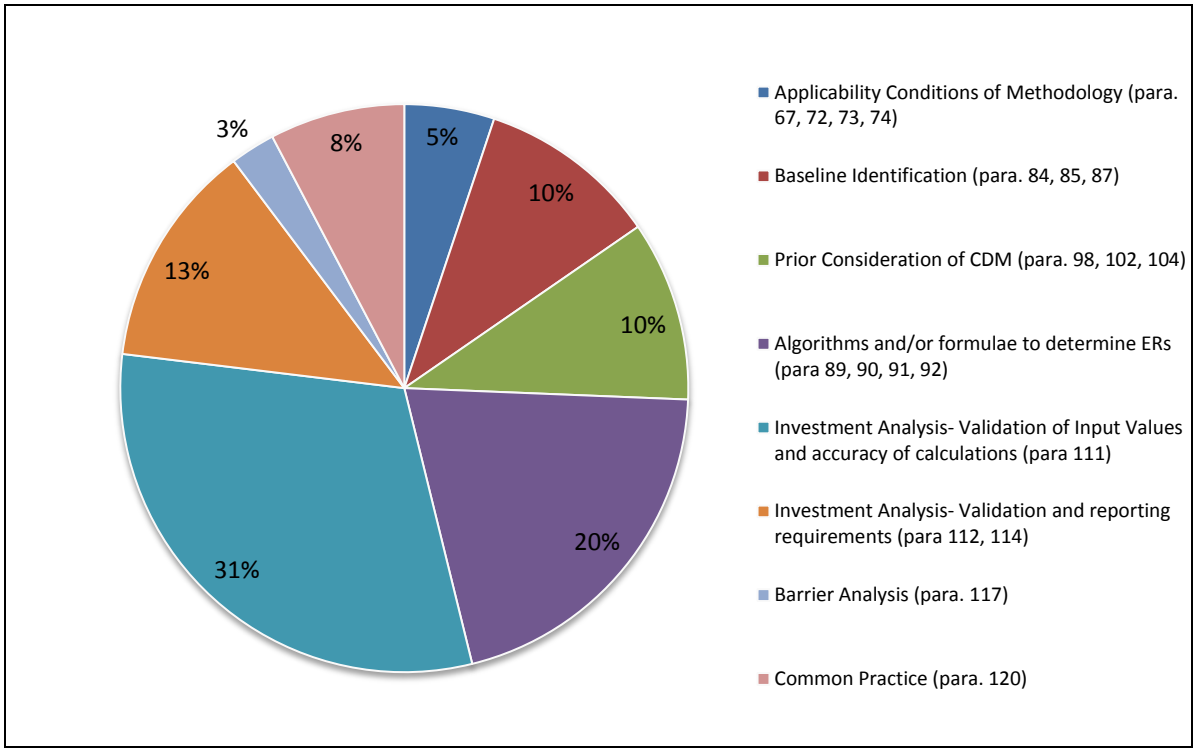


Figure 14. Registration - request for review issues – VVM paragraph-wise (Jan–Jun 2012)

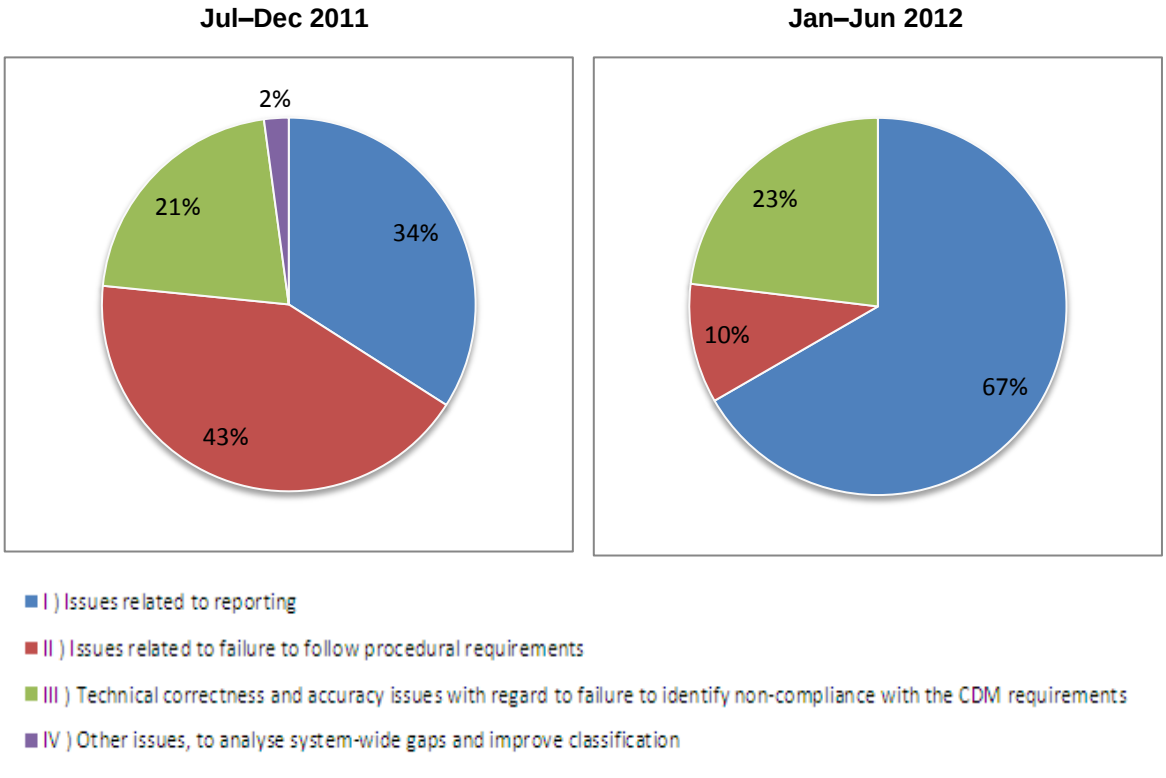


54. The graphics presented above provide comparative frequency of the issues raised against the corresponding paragraphs of the VVM.

55. Given that the graphics above define the paragraphs on which most of the issues are raised during assessment of request for registration, this information and analysis provided may be used by various actors, including DOEs, to further reduce the requests for review or define the focused audit scope or define improvements in the language in the VVS. The analysis in graphics above may be used by the DOEs for drafting checklists for auditors during validation and used as a check points for focused technical reviews. Similarly, the CDM-AP and CDM-AT team may use this analysis in defining the focused audit scope during regular surveillance audits and performance assessments. Similarly, the Board and the secretariat may use this information in bringing clarity both in language and in substantive requirements in the paragraphs mentioned to be most frequently referred.

56. According to the graphic below, in the second half of 2011 the issues raised regarding compliance with the requirements of the VVM are mostly due to technical correctness and accuracy issues (64%, including minor technical correctness and accuracy issues and) and reporting issues (34%). However, in the first half of 2012, issues due to technical correctness and accuracy (including minor technical correctness and accuracy issues) are only 33% and the reporting issues represent the major percentage, 67%. This implies an improvement in DOE performance based on the decrease of technical issues.

Figure 15. Categories of issues related to VVM v. 1.2



57. From the analysis, issues are raised on reporting and the technical accuracy issues, which is an area of improvement for the DOEs. The issues on reporting can be addressed by means of standardized templates for validation and verification, which will be developed during 2013. For reducing technical accuracy issues, DOEs may further strengthen their quality check procedures prior to sending submissions to the Board, strengthen their technical review processes and train their personnel on the issues where most of the request for review issues are triggered.

3.2. Issuance

3.2.1. Overview of DOE performance

3.2.1.1. DOE Performance Indicator (I_2 - Rate of requests for review)

58. A trend of I_2 Indicator (rate of requests for review) in the issuance process for eligible DOEs and a trend of DOE-wise I_2 Indicator for major DOEs for the monitoring periods of 1 January 2010 to 31 December 2010, 1 January 2011 to 31 December 2011 and 1 January 2012 to 30 June 2012 are presented below. Both of the graphs indicate that DOE performance in the issuance process has improved over the past two-and-a-half years. During this period, the maximum value of the indicator I_2 has crossed the higher threshold once and triggered a spot-check.

59. From the first graph below, it is evident that the upper threshold is higher than the maximum values of the indicator I_2, except for one case in 2010. Given that the implementation of the PCP, PS and VVS started from 1 May 2012, it is expected that the implementation of these new documents may have an impact on the Indicator I_2 which is expected to become visible for submissions made in Q1–Q2 of 2013.

Figure 16. I_2 Indicator for issuance process (eligible DOEs only)

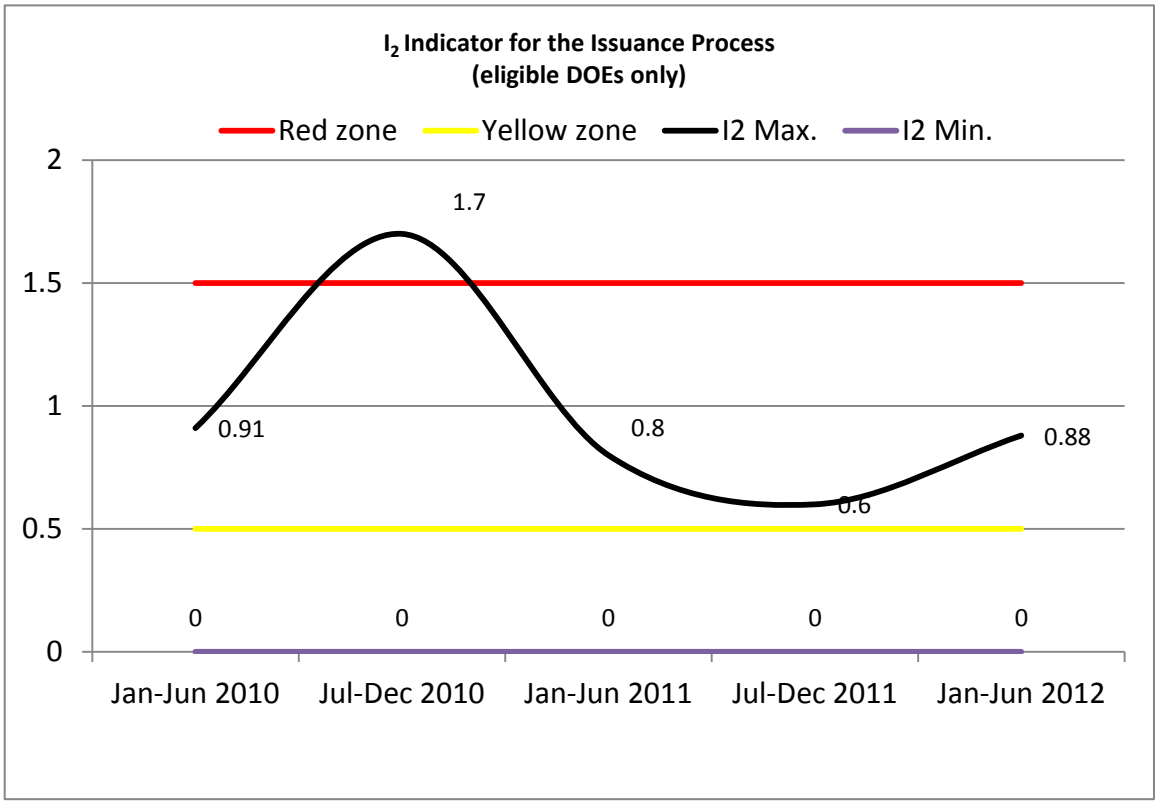
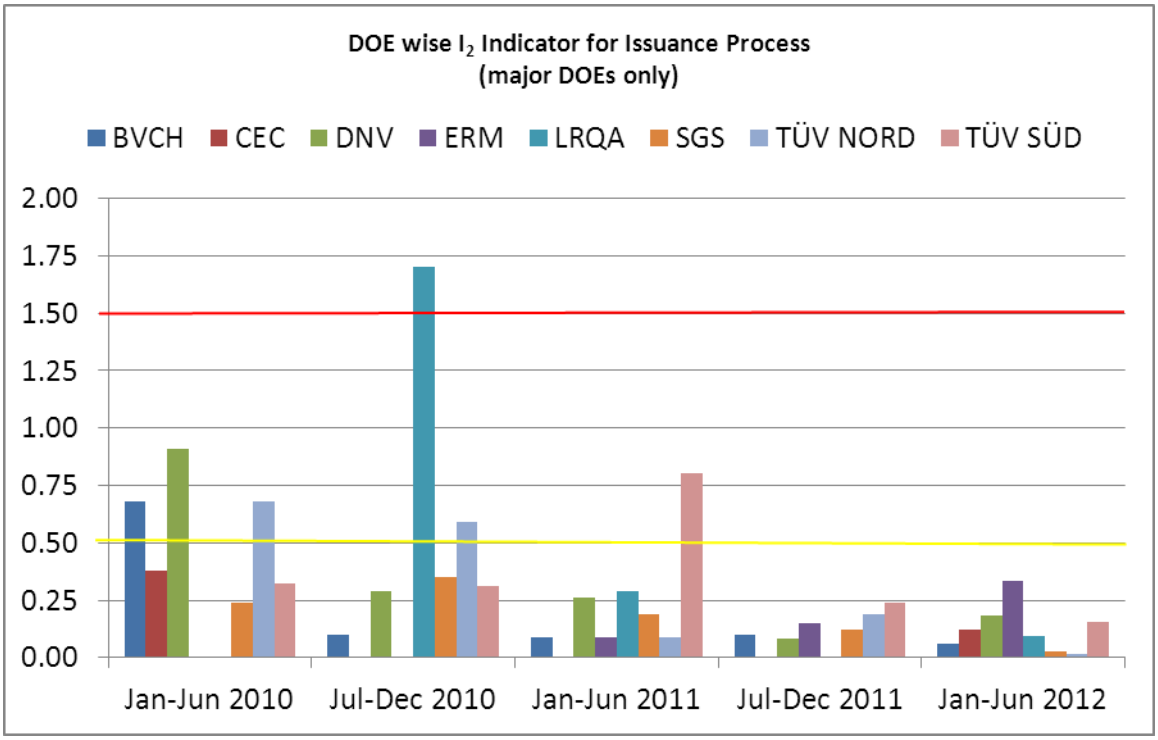


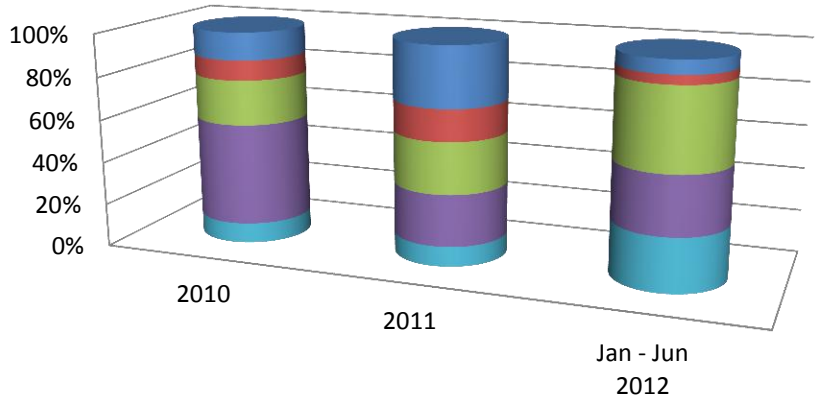
Figure 17. DOE-wise I_2 indicator for issuance process (major DOEs only)



3.2.1.2. DOE Performance Indicator (I_2): - classification of issues raised

60. An overview matrix compiling the issues raised in issuance requests for all DOEs (eligible for monitoring and non-eligible for monitoring) for the monitoring periods of 1 January 2010 to 31 December 2010, 1 January 2011 to 31 December 2011 and 1 January 2012 to 30 June 2012 are provided in appendices 2, 4 and 6 and the graphics picturing these results are presented below.

Figure 18. Issuance



	2010	2011	Jan - Jun 2012
Implementation of the PA	22	21	3
Compliance of the monitoring plan with the monitoring methodology	16	11	2
Compliance of monitoring with the monitoring plan	36	18	18
Assessment of data and calculation of greenhouse gas emission reductions (BE,PE, ER calculation)	81	18	13
Procedural and related requirements	16	7	12

61. Analysis of the matrix and the graphic show that 47% of the issues raised are related to the assessment of data and calculation of greenhouse gas emission reduction, 21% related to compliance of monitoring with the monitoring plan, 13% related to implementation of the PA, 9% related to the compliance of the monitoring plan with the monitoring methodology, 9% Procedural and related requirements for the year 2010.

62. Different trends are observed in the issues raised in 2011. There, 28% of the issues are related to implementation of the PA, 24% are related to the assessment of data and calculation of greenhouse gas emission reductions, 15% related to compliance of the monitoring plan with the monitoring methodology, 24% are related to compliance of monitoring with the monitoring plan, and 9% procedural and related requirements.

63. In the first half of 2012, the issues related to implementation of the PA have decreased to 6%, the main percentage of issues (38%) is related to compliance of monitoring with the monitoring plan, 27% of the issues are related to the assessment of data and calculation of greenhouse gas emission reductions, in the third place (25%) the issues are procedural and related requirements and only 4% are regarding to compliance of the monitoring plan with the monitoring methodology.

64. From the graphs, it can be concluded that divergent trends are observed in 2011 and in the first half of 2012. The number of requests for review and the number of issues raised have decreased significantly by about 56% from 2010 (171 request for review issues raised in 2010 compared to 75 in 2011). The figures in the first half of 2012 would indicate a slightly higher number of issues raised in comparison to 2011, as 64% of the total amount of issues in 2011 were raised in half of the period (Jan-Jun 2012). The next biannual report will provide the figures of the whole year 2012 and allow for annual comparison. The main reasons for the improvement in performance from 2010 to 2011, in addition to potential external factors, may be due to: (i) more, improved, revised and new guidance/documents being provided by the Board; (ii) enhancement in the DOE interaction through various workshops and interactions; (iii) the organization of training across various regions; and (iv) the increase in overall experience and skills of the DOEs over a period of time.

65. The main type of issues raised in requests for review, in the whole period, are related to non-compliance of monitoring with the registered monitoring plan and the assessment of data and calculation of greenhouse gas emission reductions. In 2012, the Board introduced the procedures on the post-registration changes, in particular on the changes in the monitoring plan of registered project activity, temporary deviations, changes in project design and methodology. The Board also provided guidance in appendix 1 to the PS to integrate changes which can be submitted together with the request for issuance and which do not require prior approval, which together with the procedures are expected to reduce the requests for review on these issues. Moreover, DOEs could be trained on the application of post-registration changes. The Regional Calibration Workshops in 2012 included sessions on this topic and could continue to include this in 2013 and beyond, through a case-study approach.

3.2.2. Analysis of the issues raised

66. This section provides a summary and analysis of the issues raised within the main components checked for issuance submissions in the first half of 2012:

    (a) Compliance of monitoring with the monitoring plan; and

    (b) Assessment of data and calculation of greenhouse gas emission reductions.

67. It is to be noted that, for others, only a small number of issues were raised in the first half of 2012, consequently no analysis was carried out. Issues categorized as other issues, to analyse system-wide gaps and improve classification, particularly related to “absence of requirement/guidance by the Board” exceptionally represent 23% of the total number of issues in 2012 (Q1–Q2). These issues were raised at request for review on HFC projects (methodology AM0001), due to the absence of clear requirements or guidance by the Board. After the Board provided guidance with the clarification AM_CLA_0191, the issues raised were accepted and closed.

3.2.2.1. Compliance of monitoring with the monitoring plan

68. The table below describes the issues raised on compliance of monitoring with the monitoring plan, which are reporting and technical correctness and accuracy issues. The table also summarizes the current activities and further options to reduce the request for review issues on this area.

Table 2. Action plan and options to reduce requests for review on compliance of monitoring with the monitoring plan 2013/2014

Request for review issues on compliance of monitoring with the monitoring plan (Jan–Jul 2012)				N. of issues		Options for improvement	
					Evaluate the need to clarify/revise existing rules	New guidance	Training and capacity-building
Issues related to reporting	**8.3%**	Addressing Inconsistencies in Verification Reports	Inconsistency of the accuracy of the equipment (methane content and biogas projects, e.g. AMS-III.D)	1	Project 118 of CDM MAP 2013 will focus on developing validation and verification templates and guidelines.	Develop Verification Forms which shall include specific detailed reporting requirements on accuracy of the equipment, calibration, measurement methods and reporting of missing data which is expected to reduce the issues due to reporting.	Include in Regional Calibration Workshop recurrent issues raised at request for review stage
			Inconsistency in measurement methods and/or equipment used	3			
Technical correctness and accuracy issues with regard to failure to identify non-compliance	**27.1%**	Addressing Monitoring issues at verification	The accuracy of the equipment not in line with the monitoring plan (methane content and biogas projects, e.g. AMS-III.D)	5	Project 158 of CDM MAP 2013 will focus on issues related to monitoring uncertainties. Project 180 of CDM MAP 2013 on revision of PS, VVS and PCP	1) Project 158 may consider addressing the monitoring uncertainties in the methodologies and also coordinate with Project 118 to explore the possibility to address major or commonly reporting issues. 2) Provide clear definition of temporary and permanent change (operational vs. physical/location), 3) For distributed projects, provide guidance on how to verify	Include in Regional Calibration Workshop recurrent issues raised at request for review stage and how the current requirements address these issues (PS & VVS); also Post-Registration Changes with Case study approach.
			Measurement methods and/or equipment not in line with the monitoring plan	4			
			Monitoring of soil application of the sludge leaving the digesters not in line	1			

Request for review issues on compliance of monitoring with the monitoring plan (Jan–Jul 2012)				N. of issues		Options for improvement	
					Evaluate the need to clarify/revise existing rules	New guidance	Training and capacity-building
			with the monitoring plan			project implementation without visiting each site, to reduce transaction costs and its correlation with the application of sampling; 4) Clarify whether clarification of methodology is project or version specific or generic, 5) Clarify which CDM document shall supersede if there is a contradiction between various standards (methodology vs. 6) Project 180 may further explore expanding the Appendix 1 of PS to include common monitoring issues including those not under the control of the PP/CMEs.	
			Non-compliance with calibration requirements	2			
			Non-compliance with cross-checking data	1			

69. The most frequent reporting issues on compliance of monitoring with the monitoring plan are related to inconsistencies between the measurement methods and/or equipment used for monitoring with the registered/revised monitoring plan. Project 118 of the CDM MAP 2013–2014 (Annex 1, EB71) will focus on validation and verification templates and guidelines, and is expected to contribute to reduce the number of reporting issues raised. In addition, it is would be possible to develop verification forms which shall include specific detailed reporting requirements on accuracy of the equipment, calibration, measurement methods and reporting of missing data in order to reduce the issues due to reporting.

70. With regard to technical correctness and accuracy issues on compliance of monitoring with the monitoring plan, the most frequent issues raised are due to the accuracy of the equipment which is not in compliance with the monitoring plan. All these issues were raised on methane avoidance and biogas projects, applying e.g. AMS-III.D. As with the reporting issues, several technical issues were raised because the measurement methods and/or the equipment used for monitoring were not in line with the monitoring plan.

71. Two projects under the CDM MAP 2013–2014 (Annex 1, EB 71) and the Workplan 2013 (Annex 3, EB 72) aim to reduce these issues. Project 158 focuses on issues related to uncertainties in measurements in methodologies and project 180 covers the revision of the PS, VVS and PCP. Coordination between project 158 and project 118 (validation and verification templates and guidelines) may be considered so as to explore the possibility to address major or commonly occurring reporting issues. Guidance may be provided for distributed projects on how to verify project implementation without visiting each site, (to reduce transaction costs) and its correlation with the application of sampling. Project 180 may also include: 1) provision of clear definition of temporary and permanent change (operational vs. physical/location); 2) the expansion of appendix 1 to the PS to cover common monitoring issues including those not under the control of the PP/CMEs. It may also be helpful to clarify whether a clarification of a methodology is project- or version-specific or generic. It may be specified which CDM document shall take precedence if there was an apparent contradiction between various standards (methodology vs. PS or VVS or PCP).

72. Regional Calibration Workshops for DOEs can include these recurrent issues raised at the request for review stage and how the current requirements address these issues (PS and VVS); also training on post-registration changes following the case-study approach.

3.2.2.2. Assessment of data and calculation of greenhouse gas emission reductions

73. The table below describes the issues raised on assessment of data and calculation of greenhouse gas emission reductions, which are technical correctness and accuracy issues. The table also summarizes the current activities and potential options to reduce the request for review issues in this area.

Table 3. Action plan and options to reduce requests for review on assessment of data and calculation of emission reductions 2013/2014

Request for review issues on assessment of data and calculation of greenhouse gas emission reductions (BE,PE, ER calculation) (Jan–Jul 2012)				N. of issues	Evaluate the need to clarify/revise existing rules	Options for improvement	
						New guidance	Training and capacity-building
Technical correctness and accuracy issues with regard to failure to identify non-compliance	**14.6%**	Addressing ER calculation issues	Non-compliance with monitoring specific parameters as per the methodology - failure to request post-registration changes	2	Project 120 of CDM MAP 2013 will focus on Simplification and streamlining of methodologies and tools	Develop generic Standardized spreadsheets for Emission reduction calculations for some key sectors that cover majority of projects (e.g. biomass use for electricity and heat generation, waste-heat recovery, landfill, methane recovery from waste water and AWMS, etc.) to reduce the reporting and technical accuracy issues	Include in Regional Calibration Workshop recurrent issues raised at request for review stage and how the current requirements address these issues (PS & VVS); also Post-Registration Changes with Case study approach
			Calculation of ex-post emission factor not in line with methodology	3			
			Proper operational conditions of the equipment (flare) not considered to calculate ER	1			
			Non-compliance with cross-checking records of monitored parameters for proper ER calculations	1			

74. The technical issues raised on assessment of data and calculation of emission reductions are more diverse, the most frequent being the ex post emission factor calculation not in accordance with the methodology and the non-compliance of the monitoring of specific parameters with the methodology in conjunction with the failure to request post-registration changes. Other issues raised are regarding the proper operational conditions of the technology (e.g. flare) which were not considered in the calculation of ER and non-compliance with cross-checking records of monitored parameters for proper ER calculations.

75. Project 120 of CDM MAP 2013–2014 (Annex 1, EB 71) will focus on simplification and streamlining of methodologies and tools, with the aim of reducing transaction costs, especially those in regions underrepresented in the CDM. It is expected that this work will lead to a reduction in the number of issues raised on assessment of data and calculation of emission reductions under those methodologies. It may also be useful to develop generic standardized spreadsheets for emission reduction calculations for some key sectors that cover the majority of projects (e.g. the use of biomass for electricity and heat generation, waste-heat recovery, landfill, methane recovery from waste water and AWMS, etc.) to reduce the reporting and technical accuracy issues.

76. Regional Calibration Workshops for DOEs can include these recurrent issues raised at the request for review stage, and may also explain the current requirements to address these issues (PS & VVS); also training on post-registration changes following the case-study approach.

3.2.3. Other classification and analysis of the issues

77. This section provides a summary and analysis of the issues raised within the main components checked for issuance submissions on:

(a) Categories of issues; and

(b) Document-wise distribution of issues.

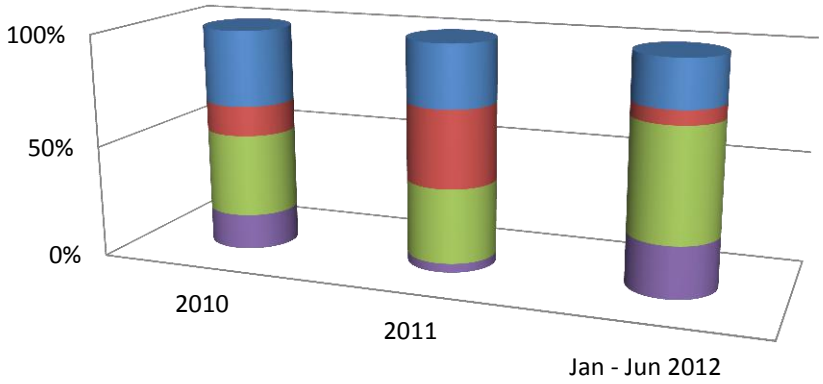
3.2.3.1. Categories of issues

78. This section presents the identified issues classified by category. The graphics below illustrate the distribution of the issues raised for issuance cases during the five monitoring periods of the DOE performance.

79. Analysis of the matrixes in appendices 2, 4 and 6 and the graphic show that 37% of the issues raised are related to the technical correctness and accuracy issues with regard to failure to identify non-compliance with the CDM requirements, 34% related to reporting, 16% related to other issues, and 13% related to failure to follow procedural requirements for the year 2010.

80. Different trends are observed in the issues raised in 2011 and in the first half of 2012. In 2011, 35% of the issues raised are related to the failure to follow procedural requirements, 33% related to the technical correctness and accuracy issues with regard to failure to identify non-compliance with the CDM requirements, and 28% related to reporting and other issues.

Figure 19. Issuance – Categories of issues



	2010	2011	Jan - Jun 2012
I) Issues related to reporting	58	21	10
II) Issues related to failure to follow procedural requirements	23	26	3
III) Technical correctness and accuracy issues with regard to failure to identify non-compliance with the CDM requirements	63	25	24
IV) Other issues, to analyse system-wide gaps and improve classification	27	3	11

81. In the first half of 2012, the major type of issues are related to technical correctness and accuracy issues with regard to failure to identify non-compliance with the CDM requirements, representing 50% of the total number of issues raised at request for review stage. 21% of the issues are related to reporting, 23% are related to other issues, and 6% are related to failure to follow procedural requirements.

82. All the categories for issuance in 2010 have a significant number of issues while a majority of submissions in 2012 have issues related to technical correctness and accuracy, which are also predominant in 2011 together with issues related to failure to follow procedural requirements.

83. The assessment efforts may therefore be focused on technical correctness and accuracy issues as mentioned in tables 2 and 3. However, it is expected that the new procedures for post-registration changes, particularly on corrections or deviation from the registered PDD on monitoring plan, assessment of data, or calculation of emission reductions, would also have an effect on this trend.

84. Issues related to reporting continue to be high. The 2013 CDM Workplan (Annex 3, EB 70) has mandated the secretariat to develop standardized templates for validation and verification, in order to decrease the reporting issues.

85. With the implementation of the PCP, PS and VVS that started from 1 May 2012, including the post-registration changes related to request for temporary deviations, revision of the monitoring plan, change in project design, and the list of cases that do not need prior approval as contained in appendix 1 to the PS, the future reporting periods are expected to capture the impact of the implementation of these new documents on the Indicator I_2. Further, providing focused training on the application of post-registration changes would contribute to reducing the requests for reviews and issues.

3.2.3.2. Document-wise distribution of issues

86. The graphics below illustrate the distribution of the issues raised in the 4th monitoring period (Jul–Dec 2011, data as of Apr–Sep 2012) and in the 5th monitoring period (Jan–Jun 2012, data as of Jan–Dec 2012), with respect to various CDM documents. The majority of the issues raised (67% in Jul–Dec 2011 and 75% in Jan–Dec 2012) are related to compliance with the requirements of the VVM. The percentage in the first half of 2012 is even higher considering the issues raised on the project standard v.1.0 and the validation and verification standard, i.e. 79%.

Figure 20. Issuance - request for review issues – CDM documents (Jul–Dec 2011)

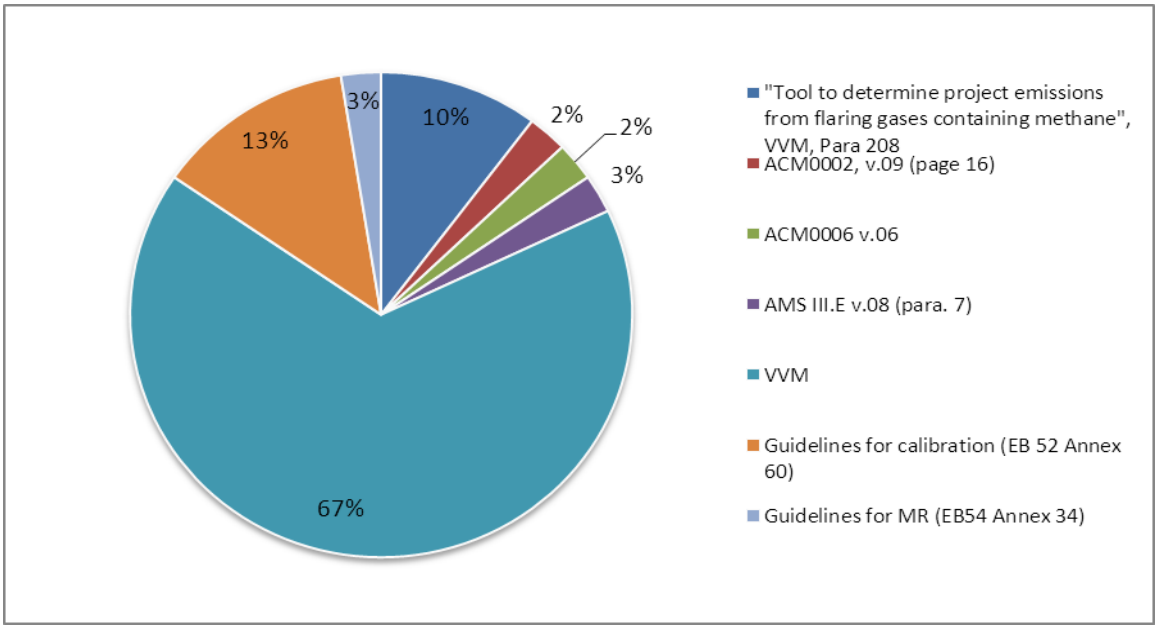


Figure 21. Issuance - request for review Issues – CDM documents (Jan–Jun 2012)

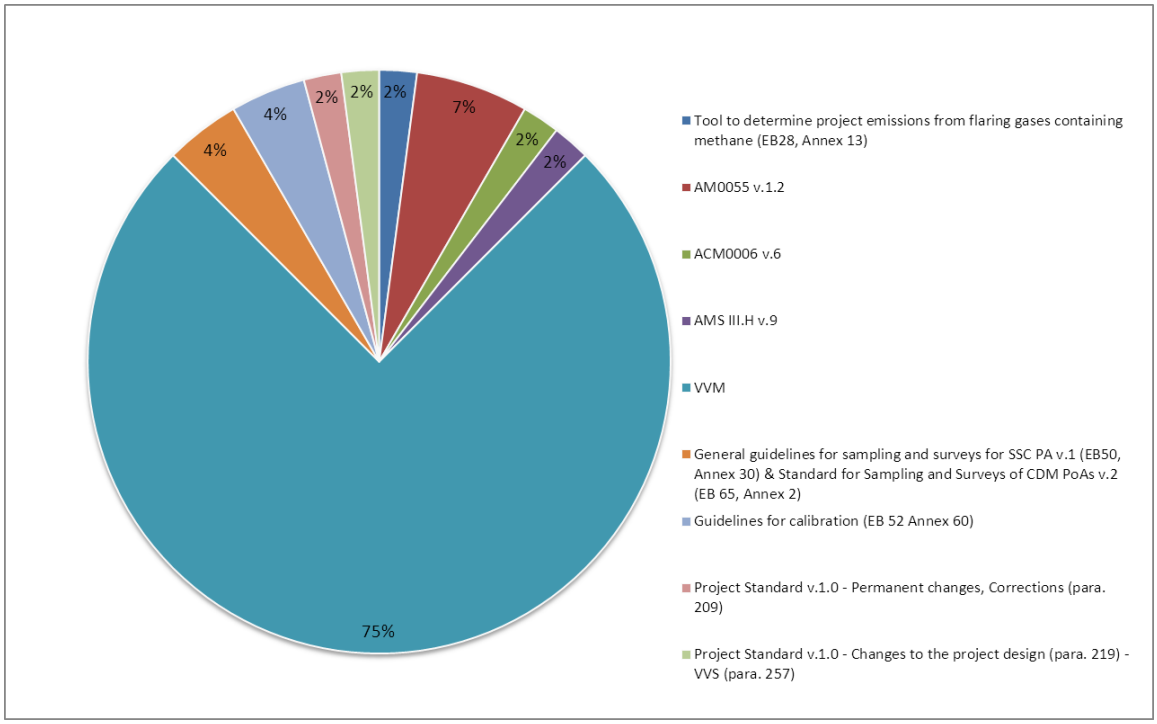
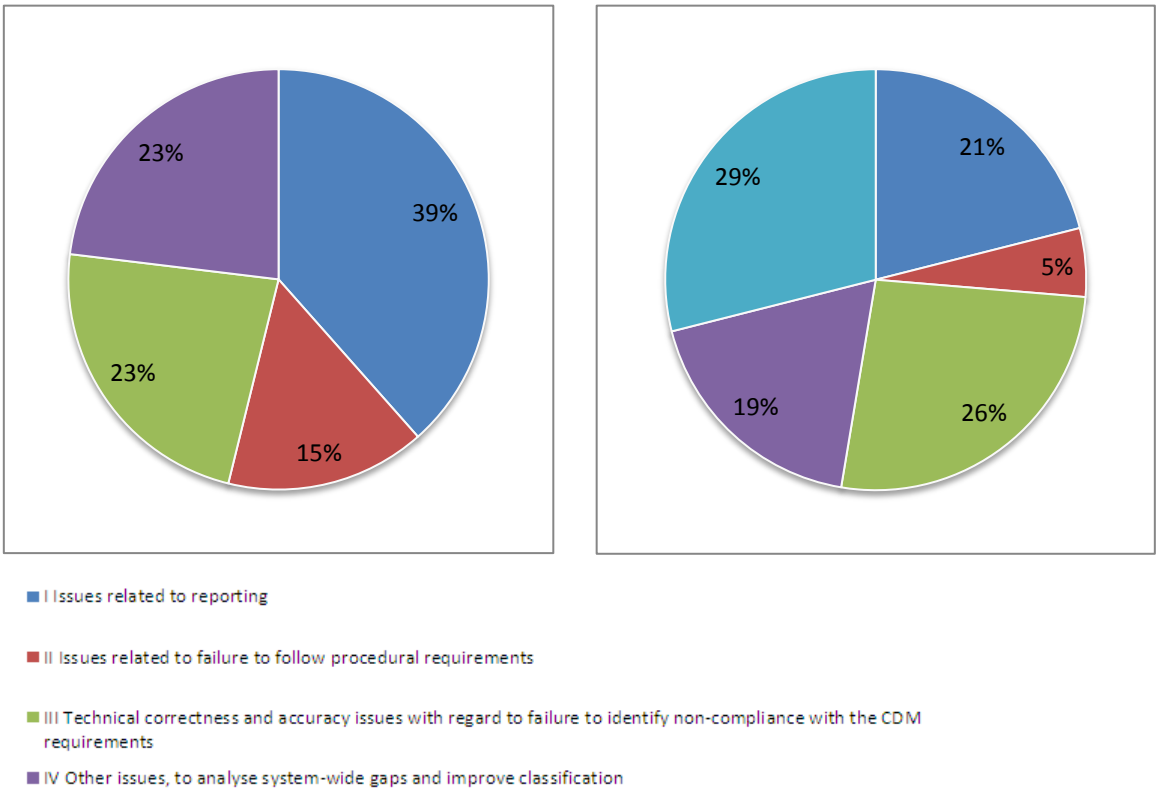


Figure 22. Issuance - request for review issues – VVM

Jul–Dec 2011 **Jan–Jun 2012**



87. With regard to the issues raised on compliance with the requirements of the VVM v.1.2, significant issues are raised on the technical accuracy issues (46% in the second half of 2011 and 45% in the first half of 2012, including minor technical issues) and reporting (39% and 21%, respectively), which is an area of improvement for the DOEs. The issues on reporting can be addressed by means of standardized templates for validation and verification. For reducing technical accuracy issues, it has been noted that DOEs could further strengthen their quality check procedures prior to sending submissions to the Board, strengthen their technical review processes, and train their personnel, particularly with regard to compliance of monitoring with the monitoring plan and assessment of data and calculation of greenhouse gas emission reductions, where most of the request for review issues are still triggered.

88. In the first half of 2012, a significant number of issues related to the VVM (29%) were raised on other issues, to analyse system-wide gaps and improve classification, mainly linked to paragraphs 179 and 205 (b), which prescribe that the DOE shall assess and verify that the implementation of the project activity complies with the relevant guidance provided by the CMP and the CDM Executive Board. These issues were raised at request for review on HFC projects (methodology AM0001), due to the absence of requirements or guidance by the Board. After the Board provided guidance with clarification AM_CLA_0191, the issues raised were accepted by the Board.

Figure 23. Request for review issues – VVM paragraph-wise (Jul–Dec 2011)

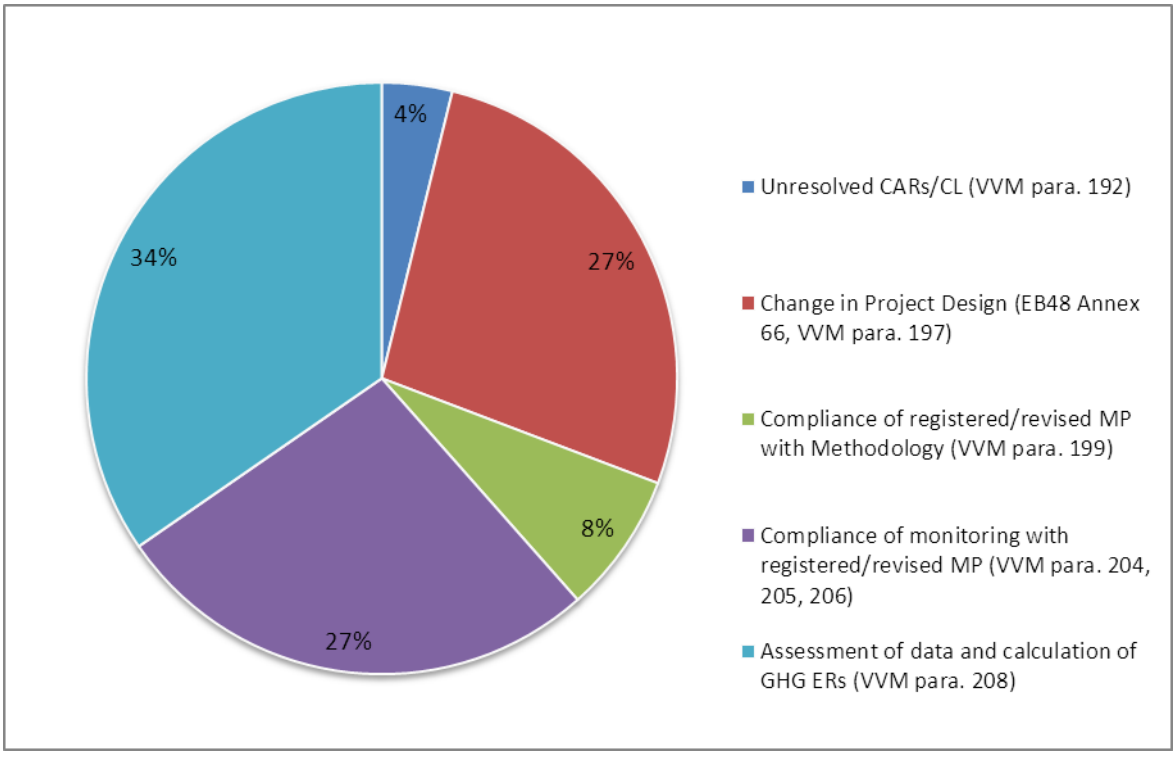
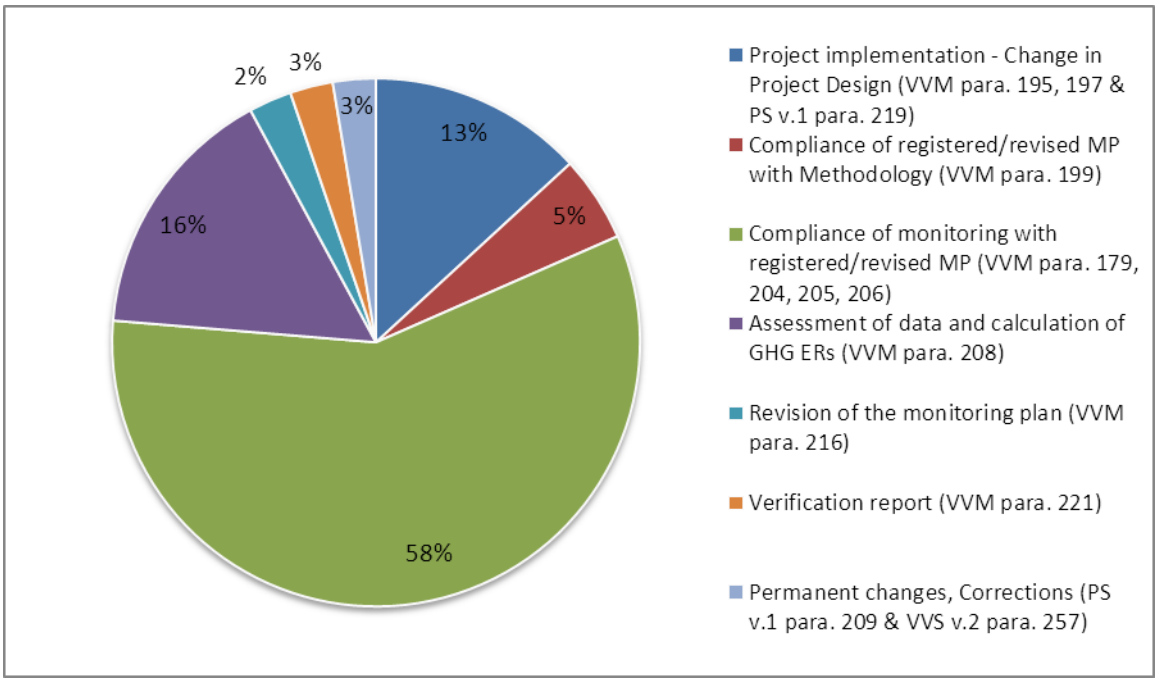


Figure 24. Issuance - request for review issues – VVM v.1.2, PS v.1 & VVS v.2 paragraph-wise (Jan–Jun 2012)



89. Given that the graphics above define the paragraphs on which most of the issues are raised during assessment of request for issuance, this information and analysis provided may be used by various actors to further reduce the requests for review or define the focused audit scope or define improvements in the language in the VVM, VVS, and PS. The analysis in the graphics above may be used by the DOEs for drafting checklists for auditors during verification and used as check points for focused technical reviews. Similarly, the CDM-AP and CDM-AT may use this analysis in defining the focused audit scope during surveillance audits, performance assessments, etc. Similarly, the Board and the secretariat may use this information to bring clarity both in language and in substantive requirements in the paragraphs most frequently referred to.

90. As mentioned in section 3.2.1, the most recurrent paragraphs of the VVM v.1.2 in both monitoring periods are related to compliance of the monitoring with the registered monitoring plan (paragraphs 204–206) and assessment of data and calculation greenhouse gas emission reductions (paragraph 208).

91. The options for reducing request for review issues in issuance during 2013 are provided in Appendix 12.

Appendix 1. Compilation of the issues raised for all DOEs (eligible for monitoring and non-eligible for monitoring) - Registration submissions from 1 January 2010 to 31 December 2010

CRITERIA FOR CLASSIFICATION OF REGISTRATION ISSUES		*Additionality*					*Application of baseline methodology*				*Application of the monitoring methodology*		*Project description*		*Procedural and related requirements*	*Other CDM requirements*			
		Prior consideration	Identification of alternatives	Investment analysis	Barrier analysis	Common practice analysis	Project boundary	Baseline identification	Compliance with applicability conditions	Algorithms and/or formulae to determine emission reductions:	Compliance of the Monitoring Plan (i.e. list of parameters complete or not)	Implementation of the Monitoring Plan (i.e. monitoring arrangement feasible or not)	Scale of project	Bundling & De-bundling		Letter of Approval (LoA)	Achievement of Sustainable development	Local stakeholder consultation	Environmental impacts
I	**Issues related to reporting**																		
1	Inconsistencies in the information presented in the documents presented/information supplied;			10			1			2	1				1				
2	Incomplete information/missing data;	4		24		6	4	7	1	11	6	3	2						
3	DOE has not fully reported how the compliance to the requirements are being met;	4	1	26	6	3		7	6	9	7								
4	Not the latest PDD template is used;																		

II	**Issues related to failure to follow procedural requirements**																		
1	Failure to submit the corrections on time;																		
2	CAR/CLs in validation reports which are not closed out correctly: - Where the CAR resolution indicates that the PDD has been updated but it has not; - Where a CAR is marked as closed without explanation;	1																	
3	Failure to carry out the global public stakeholder consultation in line with the CDM requirements;																		
4	Failure to visit project site or provide justification;																		
5	Failure to request a deviation when non-compliance of the project activity with the requirements of the methodology has been identified						1		1										
III	**Technical correctness and accuracy issues with regard to failure to identify non-compliance with the CDM requirements;**																		
1	This sub-category includes cases for which the DOE has not precisely validated the project in accordance with the requirements of the VVM, however the failure is not likely to alter the validation opinion - Failure to ensure precise project start date where the change in	6	2	97	5	16	1	15	1	10	2								

	the date does not impact additionality - Failure to fully validate all minor input values in an investment analysis - Failure to ensure that the common practice analysis has been conducted fully in accordance with the requirements - Failure to ensure that LoA refers to the precise title of the propose project activity - Failure to assess compliance with environmental impacts and/or local stakeholder consultation																	
2	This sub-category includes cases for which the DOE has failed to ensure compliance with a requirement which may ultimately be resolved during verification/issuance: - The monitoring plan is incomplete; - The validation report or PDD contain conflicting information regarding the baseline which may lead to a request for review at issuance		1	1			1	4	2	6	12	1						

3	This sub-category includes cases for which the DOEs failure to ensure compliance with CDM requirements is likely to have an impact of the projects, or similar future projects, eligibility to receive the estimated quantity of CERs: - Errors in validation of additionality that would lead to the failure to identify non additional projects - Failure to apply or the misapplication of the requirements of the methodology that would lead to a non-applicable methodology being applied or the baseline being incorrectly established	9	1	23	8	1		6	4	4	2								
IV	**Other issues, to analysis system-wide gaps and improve classification:**																		
1	Absence of requirement / guidance by the Board	1		32	3		1			1						1			
2	Ambiguity of interpretation of requirements of methodology / guidance			1	1				1	1	5	1							

Appendix 2. Compilation of the issues raised for all DOEs (eligible for monitoring and non-eligible for monitoring - Issuance submissions from 1 January 2010 to 31 December 2010

Categorization and weighting of issues identified at requests for issuance		Implementation of the PA	Compliance of the monitoring plan with the monitoring methodology	Compliance of monitoring with the monitoring plan	Assessment of data and calculation of greenhouse gas emission reductions (BE,PE, ER calculation)	Procedural and related requirements
I	**Issues related to reporting**					
1	This category includes errors covering - Inconsistencies in the information presented in the documents presented/information supplied; - Incomplete information/missing data; - DOE has not fully reported how the compliance to the requirements are being met	7	7	18	21	5
II	**Issues related to failure to follow procedural requirements**					
1	Failure to submit the corrections on time					
2	This sub category covers: - CAR/CLs in verification reports are not appropriately closed out; - Failure to follow up FAR from previous verification			1	1	1
3	This sub category covers failure to conduct site visit as per requirements of verification process; or provide justification					5

4	This sub category covers the failure to request, as appropriate: - Deviation; - Revision Mon Plan; - Changes from PDD	12		2		1
III	**Technical correctness and accuracy issues with regard to failure to identify non-compliance with the CDM requirements;**					
1	This sub category covers basic verification to ensure to ensure the quality of required data measured and reported : - Failure to verify equipments/system/protocols/procedures; - Failure to cross check reported data/No clear audit trail (data generating,aggregating,reporting); - Calculation errors	2	2	7	2	
2	This sub category covers failure to apply conservativeness approach when required				5	2
3	This sub category covers failures to correctly apply methodology requirements which may lead to incorrect CERs: - Failure to verify installation of monitoring system not per methodology; - Parameters required by methodology not being monitored; - Incorrect application of meth formulae, factors, default values	1	6	8	26	2

IV	Other issues, to analysis system-wide gaps and improve classification					
1	Absence of requirement/guidance by the Board				25	
2	Ambiguity of interpretation of requirements of methodology/guidance		1		1	

Appendix 3. Compilation of the issues raised for all DOEs (eligible for monitoring and non-eligible for monitoring) - Registration submissions from 1 January 2011 to 31 December 2011

	CRITERIA FOR CLASSIFICATION OF REGISTRATION ISSUES	*Additionality*					*Application of baseline methodology*				*Application of the monitoring methodology*		*Project description*		*Procedural and related requirements*	*Other CDM requirements*			
		Prior consideration	Identification of alternatives	Investment analysis	Barrier analysis	Common practice analysis	Project boundary	Baseline identification	Compliance with applicability conditions	Algorithms and/or formulae to determine emission reductions:	Compliance of the Monitoring Plan (i.e. list of parameters complete or not)	Implementation of the Monitoring Plan (i.e. monitoring arrangement feasible or not)	Scale of project	Bundling & De-bundling		Letter of Approval (LoA)	Achievement of Sustainable development	Local stakeholder consultation	Environmental impacts
I	**Issues related to reporting**																		
1	Inconsistencies in the information presented in the documents presented/information supplied;			6				2		1	1								
2	Incomplete information/missing data;	5	2	5		2		1	3	3	1								
3	DOE has not fully reported how the compliance to the requirements are being met;			4	2		1	1		2	2			1					
4	Not the latest PDD template is used;																		

II	**Issues related to failure to follow procedural requirements**																		
1	Failure to submit the corrections on time;																		
2	CAR/CLs in validation reports which are not closed out correctly: - Where the CAR resolution indicates that the PDD has been updated but it has not; - Where a CAR is marked as closed without explanation;																		
3	Failure to carry out the global public stakeholder consultation in line with the CDM requirements;																		
4	Failure to visit project site or provide justification;																		
5	Failure to request a deviation when non-compliance of the project activity with the requirements of the methodology has been identified																		
III	**Technical correctness and accuracy issues with regard to failure to identify non-compliance with the CDM requirements;**																		
1	This sub-category includes cases for which the DOE has not precisely validated the project in accordance with the requirements of the VVM, however the failure is not likely to alter the validation opinion - Failure to ensure precise project start date where the change in the date does not impact additionality - Failure to fully validate all minor input values in an investment analysis - Failure to ensure that the common practice analysis has been	6		26	2	4		5	1	11	1								

	conducted fully in accordance with the requirements - Failure to ensure that LoA refers to the precise title of the propose project activity - Failure to assess compliance with environmental impacts and/or local stakeholder consultation																		
2	This sub-category includes cases for which the DOE has failed to ensure compliance with a requirement which may ultimately be resolved during verification/issuance: - The monitoring plan is incomplete; - The validation report or PDD contain conflicting information regarding the baseline which may lead to a request for review at issuance										7	1							
3	This sub-category includes cases for which the DOEs failure to ensure compliance with CDM requirements is likely to have an impact of the projects, or similar future projects, eligibility to receive the estimated quantity of CERs: - Errors in validation of additionality that would lead to the failure to identify non additional projects - Failure to apply or the misapplication of the requirements of the methodology that would lead to a non-applicable methodology being applied or the baseline being incorrectly established	2	1	12	5	3		5	3	5									

IV	Other issues, to analysis system-wide gaps and improve classification:																		
1	Absence of requirement / guidance by the Board			1						1									
2	Ambiguity of interpretation of requirements of methodology / guidance									1									

Appendix 4. Compilation of the issues raised for all DOEs (eligible for monitoring and non-eligible for monitoring) - Issuance submissions from 1 January 2011 to 31 December 2011

Categorization and weighting of issues identified at requests for issuance		Implementation of the PA	Compliance of the monitoring plan with the monitoring methodology	Compliance of monitoring with the monitoring plan	Assessment of data and calculation of greenhouse gas emission reductions (BE,PE, ER calculation)	Procedural and related requirements
I	**Issues related to reporting**					
1	This category includes errors covering - Inconsistencies in the information presented in the documents presented/information supplied; - Incomplete information/missing data; - DOE has not fully reported how the compliance to the requirements are being met	5	1	8	4	3
II	**Issues related to failure to follow procedural requirements**					
1	Failure to submit the corrections on time					
2	This sub category covers: - CAR/CLs in verification reports are not appropriately closed out; - Failure to follow up FAR from previous verification					
3	This sub category covers failure to conduct site visit as per requirements of verification process; or provide justification					

4	This sub category covers the failure to request, as appropriate: - Deviation; - Revision Mon Plan; - Changes from PDD	15	7	2		2
III	**Technical correctness and accuracy issues with regard to failure to identify non-compliance with the CDM requirements;**					
1	This sub category covers basic verification to ensure to ensure the quality of required data measured and reported : - Failure to verify equipments/system/protocols/procedures; - Failure to cross check reported data/No clear audit trail (data generating, aggregating, reporting); - Calculation errors	1	1	2	4	1
2	This sub category covers failure to apply conservativeness approach when required					
3	This sub category covers failures to correctly apply methodology requirements which may lead to incorrect CERs: - Failure to verify installation of monitoring system not per methodology; - Parameters required by methodology not being monitored; - Incorrect application of meth formulae, factors, default values		2	6	7	1

IV	Other issues, to analysis system-wide gaps and improve classification					
1	Absence of requirement/guidance by the Board					
2	Ambiguity of interpretation of requirements of methodology/guidance				3	

Appendix 5. Compilation of the issues raised for all DOEs (eligible for monitoring and non-eligible for monitoring) - Registration submissions from 1 January 2012 to 30 June 2012

CRITERIA FOR CLASSIFICATION OF R&I ISSUES		*Additionality*					*Application of baseline methodology*				*Application of the monitoring methodology*		*Project description*		*Procedural and related requirements*	*Other CDM requirements*			
		Prior consideration	Identification of alternatives	Investment analysis	Barrier analysis	Common practice analysis	Project boundary	Baseline identification	Compliance with applicability conditions	Algorithms and/or formulae to determine emission reductions:	Compliance of the Monitoring Plan (i.e. list of parameters complete or not)	Implementation of the Monitoring Plan (i.e. monitoring arrangement feasible or not)	Scale of project	Bundling & De-bundling		Letter of Approval (LoA)	Achievement of Sustainable development	Local stakeholder consultation	Environmental impacts
I	**Issues related to reporting**																		
1	Inconsistencies in the information presented in the documents presented/information supplied;			3							1		1						
2	Incomplete information/missing data;	1	1	8		2		4	1	2									
3	DOE has not fully reported how the compliance to the requirements are being met;	1	2	3		2		1		1									
4	Not the latest PDD template is used;																		

II	**Issues related to failure to follow procedural requirements**																		
1	Failure to submit the corrections on time;																		
2	CAR/CLs in validation reports which are not closed out correctly: - Where the CAR resolution indicates that the PDD has been updated but it has not; - Where a CAR is marked as closed without explanation;																		
3	Failure to carry out the global public stakeholder consultation in line with the CDM requirements;																		
4	Failure to visit project site or provide justification;																		
5	Failure to request a deviation when non-compliance of the project activity with the requirements of the methodology has been identified																		
III	**Technical correctness and accuracy issues with regard to failure to identify non-compliance with the CDM requirements;**																		
1	This sub-category includes cases for which the DOE has not precisely validated the project in accordance with the requirements of the VVM, however the failure is not likely to alter the validation opinion - Failure to ensure precise project start date where the change in the date does not impact additionality - Failure to fully validate all minor input values in an investment analysis - Failure to ensure that the common practice analysis has been	2		4			1												

	conducted fully in accordance with the requirements - Failure to ensure that LoA refers to the precise title of the propose project activity - Failure to assess compliance with environmental impacts and/or local stakeholder consultation																		
2	This sub-category includes cases for which the DOE has failed to ensure compliance with a requirement which may ultimately be resolved during verification/issuance: - The monitoring plan is incomplete; - The validation report or PDD contain conflicting information regarding the baseline which may lead to a request for review at issuance							1		1									
3	This sub-category includes cases for which the DOEs failure to ensure compliance with CDM requirements is likely to have an impact of the projects, or similar future projects, eligibility to receive the estimated quantity of CERs: - Errors in validation of additionality that would lead to the failure to identify non additional projects - Failure to apply or the misapplication of the requirements of the methodology that would lead to a non-applicable methodology being applied or the baseline being incorrectly established	4		5	2			4	4	1									

IV	Other issues, to analysis system-wide gaps and improve classification:																		
1	Absence of requirement / guidance by the Board																		
2	Ambiguity of interpretation of requirements of methodology / guidance																		

Appendix 6. Compilation of the issues raised for all DOEs (eligible for monitoring and non-eligible for monitoring) - Issuance submissions from 1 January 2012 to 30 June 2012

Categorization and weighting of issues identified at requests for issuance		Implementation of the PA	Compliance of the monitoring plan with the monitoring methodology	Compliance of monitoring with the monitoring plan	Assessment of data and calculation of greenhouse gas emission reductions (BE,PE, ER calculation)	Procedural and related requirements
I	**Issues related to reporting**					
1	This category includes errors covering - Inconsistencies in the information presented in the documents presented/information supplied; - Incomplete information/missing data; - DOE has not fully reported how the compliance to the requirements are being met	1	1	4	3	1
II	**Issues related to failure to follow procedural requirements**					
1	Failure to submit the corrections on time					
2	This sub category covers: - CAR/CLs in verification reports are not appropriately closed out; - Failure to follow up FAR from previous verification					
3	This sub category covers failure to conduct site visit as per requirements of verification process; or provide justification					

4	This sub category covers the failure to request, as appropriate: - Deviation; - Revision Mon Plan; - Changes from PDD				1	2
III	**Technical correctness and accuracy issues with regard to failure to identify non-compliance with the CDM requirements;**					
1	This sub category covers basic verification to ensure to ensure the quality of required data measured and reported : - Failure to verify equipments/system/protocols/procedures; - Failure to cross check reported data/No clear audit trail (data generating, aggregating, reporting); - Calculation errors	2		11	1	
2	This sub category covers failure to apply conservativeness approach when required			1		
3	This sub category covers failures to correctly apply methodology requirements which may lead to incorrect CERs: - Failure to verify installation of monitoring system not per methodology; - Parameters required by methodology not being monitored; - Incorrect application of meth formulae, factors, default values		1	2	6	

IV	Other issues, to analysis system-wide gaps and improve classification					
1	Absence of requirement/guidance by the Board				2	9
2	Ambiguity of interpretation of requirements of methodology/guidance					

Appendix 7. Analysis of the issues raised for all DOEs (eligible for monitoring and non-eligible for monitoring) - Registration submissions from 1 January 2011 to 31 December 2011

CRITERIA FOR CLASSIFICATION OF REGISTRATION ISSUES (Total issues = 148)		*Additionality*					*Application of baseline methodology*				*Application of the monitoring methodology*		*Project description*		*Procedural and related requirements*	*Other CDM requirements*			
		Prior consideration	Identification of alternatives	Investment analysis	Barrier analysis	Common practice analysis	Project boundary	Baseline identification	Compliance with applicability conditions	Algorithms and/or formulae to determine emission reductions;	Compliance of the Monitoring Plan (i.e. list of parameters complete or not)	Implementation of the Monitoring Plan (i.e. monitoring arrangement feasible or not)	Scale of project	Bundling & De-bundling		Letter of Approval (LoA)	Achievement of Sustainable development	Local stakeholder consultation	Environmental impacts
I	**Issues related to reporting**	5	2	15	2	2	1	4	3	6	4			1					
		3.4%	1.4%	**10.1%**	1.4%	1.4%	0.7%	2.7%	2.0%	4.1%	2.7%			0.7%					
II	**Issues related to failure to follow procedural requirements**																		
III	**Technical correctness and accuracy issues with regard to failure to identify non-compliance with the CDM**	8	1	38	7	7		10	4	16	8	1							
		5.4%	0.7%	**25.7%**	4.7%	4.7%		6.8%	2.7%	**10.8%**	5.4%	0.7%							

	requirements																		
IV	**Other issues, to analysis system-wide gaps and improve classification**			1						2									
				0.7%						1.4%									

Appendix 8. Analysis of the issues raised for all DOEs (eligible for monitoring and non-eligible for monitoring) - Issuance submissions from 1 January 2011 to 31 December 2011

Categorization and weighting of issues identified at requests for issuance		Total issues = 75	Implementation of the PA	Compliance of the monitoring plan with the monitoring methodology	Compliance of monitoring with the monitoring plan	Assessment of data and calculation of greenhouse gas emission reductions (BE,PE, ER calculation)	Procedural and related requirements
I	**Issues related to reporting**	No. of Issues	5	1	6	4	3
		%	7%	1.5%	8.5%	5.5%	4%
II	**Issues related to failure to follow procedural requirements**	No. of Issues	15	7	2	0	2
		%	**20.0%**	**9.3%**	2.7%	0.0%	2.7%
III	**Technical correctness and accuracy issues with regard to failure to identify non-compliance with the CDM requirements;**	No. of Issues	1	3	8	11	2
		%	1.3%	4.0%	**10.7%**	**14.7%**	2.7%
IV	**Other issues, to analysis system-wide gaps and improve classification**	No. of Issues	-	-	-	3	-
		%	-	-	-	4%	-

Appendix 9. Analysis of the issues raised for all DOEs (eligible for monitoring and non-eligible for monitoring) - Registration submissions from 1 January 2012 to 30 June 2012

CRITERIA FOR CLASSIFICATION OF REGISTRATION ISSUES (Total issues = 63)		*Additionality*					*Application of baseline methodology*				*Application of the monitoring methodology*		*Project description*		*Procedural and related requirements*	*Other CDM requirements*			
		Prior consideration	Identification of alternatives	Investment analysis	Barrier analysis	Common practice analysis	Project boundary	Baseline identification	Compliance with applicability conditions	Algorithms and/or formulae to determine emission reductions;	Compliance of the Monitoring Plan (i.e. list of parameters complete or not)	Implementation of the Monitoring Plan (i.e. monitoring arrangement feasible or not)	Scale of project	Bundling & De-bundling		Letter of Approval (LoA)	Achievement of Sustainable development	Local stakeholder consultation	Environmental impacts
I	**Issues related to reporting**	2	3	14		4		5	1	3	1		1						
		3.2%	4.8%	**22.2%**		6.3%		7.9%	1.6%	4.8%	1.6%		1.6%						
II	**Issues related to failure to follow procedural requirements**																		
III	**Technical correctness and accuracy issues with regard to failure to identify non-**	6		9	2		1	5	4	2									
		9.5%		**14.3%**	3.2%		1.6%	7.9%	6.3%	3.2%									

	compliance with the CDM requirements																		
IV	**Other issues, to analysis system-wide gaps and improve classification**																		

Appendix 10. Analysis of the issues raised for all DOEs (eligible for monitoring and non-eligible for monitoring) - Issuance submissions from 1 January 2012 to 30 June 2012

Categorization and weighting of issues identified at requests for issuance		Total issues = 48	Implementation of the PA	Compliance of the monitoring plan with the monitoring methodology	Compliance of monitoring with the monitoring plan	Assessment of data and calculation of greenhouse gas emission reductions (BE,PE, ER calculation)	Procedural and related requirements
I	**Issues related to reporting**	No. of Issues	1	1	4	3	1
		%	2.1%	2.1%	**8.3%**	6.3%	2.1%
II	**Issues related to failure to follow procedural requirements**	No. of Issues				1	2
		%				2.1%	4.2%
III	**Technical correctness and accuracy issues with regard to failure to identify non-compliance with the CDM requirements;**	No. of Issues	2	1	14	7	0
		%	4.2%	2.1%	**27.1%**	**14.6%**	0.0%
IV	**Other issues, to analysis system-wide gaps and improve classification**	No. of Issues	-	-	-	2	9
		%				4.2%	**18.8%**

Appendix 11. Action plan and options for reducing request for review issues in Registration - 2013

Categorization of issues identified at requests for Registration		Period	Issues related to reporting	Technical correctness and accuracy issues with regard to failure to identify non-compliance with the CDM requirements	Options for Improvement – 2013			
					Existing Measures	Measures by DOE	New Guidance/Templates	Trainings
1	Additionality – Investment Analysis	2010	13.5%	27%				
		2011	10.1%	-				
			-	25.7%				
		Q1-Q2 2012	22.2%	-			Standardized forms and guidelines for completing validation and verification reports with focus on reporting of investment analysis (Project 118)	Focus on Investment Analysis with Case study approach including the recurrent issues
			-	14.3%	- Revision of additionality tools in 2012 - Guidelines on the demonstration of additionality of small-scale project activities (Project 125) 2012	Strengthen quality check procedures, technical review process and train their personnel on assessing suitability of the input values to the investment analysis and suitability of benchmark	Develop generic standardized spreadsheets for Investment Analysis for some key sectors that cover majority of projects (e.g. for renewable energy projects such as wind, hydro-power, etc.) to reduce the reporting issues	

					- Revision of Guidelines for demonstrating additionality of microscale project activities (Project 125) 2012			
2	**Application of baseline methodology- Algorithms and/or formulae to determine emission reductions**	**2010**	**5%**	**5%**				
		2011	**4.5%**	**-**			Standardized forms and guidelines for completing validation and verification reports (Project 118)	
			-	**10.8%**	- Workshops / Case Studies 2011 - Top-down large-scale methodologies using standardized approaches (Project 146)	- Request for deviation	Develop generic standardized spreadsheets for emission reduction calculations for some key sectors that cover majority of projects (e.g. for biomass electricity and heat generation, waste-heat recovery, landfill, methane recovery from waste water and AWMS, etc.) to reduce the reporting and technical accuracy issues	
	Application of baseline methodology- Baseline identification	**Q1-Q2 2012**	**7.9%**	**-**	- Guidelines for determining baselines for measure(s) (Project 120)	- Strengthen quality check procedures, technical review process and train their personnel	Simplification and streamlining of methodologies and tools (Project 120)	
			-	**7.9%**				

Appendix 12. Action plan and options for reducing request for review issues in Issuance 2013

Categorization of issues identified at requests for issuance		Period	Issues related to reporting	Issues related to failure to follow procedural requirements	Technical correctness and accuracy issues with regard to failure to identify non-compliance with the CDM requirements	Options for Improvement – 2013-2014		
						Existing Measures	New Guidelines / documents New Templates	Trainings
1	Implementation of the PA	2010		7%		Procedures and guidelines for Change in PDD		
		2011	7%	20%	1.3%			
		Q1-Q2 2012	2.1%		4.2%	Standardized forms and guidelines for completing validation and verification reports (Project 118)		
2	Compliance of the monitoring plan with the monitoring methodology	2010				1). Post Registration Changes implemented since 1 May 2012 2). Project 158 of	1). Develop verification forms which shall include specific detailed reporting requirements on accuracy of the equipment, calibration, measurement methods and	Include in
		2011	1.5%	9.3%	4%			
		Q1-Q2 2012	2.1%	2.1%	4.2%			

3	**Compliance of monitoring with the monitoring plan**	**2010**			**9%**	CDM MAP 2013 will focus on issues related to monitoring uncertainties.	reporting of missing data which is expected to reduce the issues due to reporting. 2). Project 180 of CDM MAP 2013 on revision of PS, VS and PCP may further explore expanding the Appendix 1 of PS to include common monitoring issues including those not under the control of the PP/CMEs. 3) Project 158 may consider addressing the monitoring uncertainties in the methodologies and also coordinate with Project 118 to explore the possibility to address major or commonly reporting issues. 4) Provide clear definition of temporary and permanent change (operational vs. physical/location), 5) For distributed projects, provide guidance on how to verify project implementation without visiting each site, to reduce transaction costs and its correlation with the application of sampling; 6) Clarify whether clarification of methodology is project or version specific, or generic;	Regional Calibration Workshop recurrent issues raised at request for review stage and how the current requirements address these issues (PS & VVS); also Post Registration Changes with Case study approach
		2011	**8.5%**	**2.7%**	**10.7%**			
		Q1-Q2 2012	**8.3%**	**-**	**27.1%**			

							7) Clarify which CDM document shall supersede if there is an apparent contradiction between various standards (methodology vs. PS or VVS or PCP)	
4	**Assessment of data and calculation of greenhouse gas emission reductions (BE,PE, ER calculation)**	**2010**			**19%**		Develop generic standardized spreadsheets for Emission reduction calculations for some key sectors that cover majority of projects (e.g. for biomass electricity and heat generation, waste-heat recovery, landfill, methane recovery from waste water and AWMS, etc.) to reduce the reporting and technical accuracy issues	
		2011	**5.5%**		**14.7%**			
		Q1-Q2 2012	**6.3%**		**14.6%**	Project 120 of CDM MAP 2013 will focus on Simplification and streamlining of methodologies and tools.		

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