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Expert Group on Resource Classification

Fifth session

Geneva, 29 April – 2 May 2014

Report of the Expert Group on Resource Classification

I. Introduction

1. The fifth session of the Expert Group on Resource Classification was held on 29 April – 2 May 2014.¹
2. This report summarizes the discussions on the work of the Expert Group at its fifth session. All the documents and presentations of the fifth session are available on the United Nations Economic Commission for Europe (ECE) website.

II. Attendance

3. The meeting was attended by experts from the following UNECE member countries: Azerbaijan, Czech Republic, Denmark, Georgia, Hungary, Kazakhstan, Norway, Poland, Romania, Russian Federation, Serbia, Spain, Turkey, Ukraine and United States of America.
4. Experts from Angola, Argentina, Brazil, Cameroon, China, Colombia, India, Iraq, Malawi, Mexico, Mongolia, Mozambique, Nigeria, South Africa, Thailand, and Uganda participated under Article 11 of the Commission's Terms of Reference.
5. From the United Nations system and Specialized Agencies, a representative of the International Atomic Energy Agency (IAEA) attended. Representatives from the European Commission, represented by the Directorate General (D.G.) Enterprise and Industry and D.G. Eurostat participated.

¹ Official documents of the session are available at <http://documents.un.org/>. Unofficial room documents and presentations delivered at the meeting are available on the ECE website at: <http://www.unece.org/index.php?id=33065>.



6. The following international organization was represented: Coordinating Committee for Geoscience Programmes in East and Southeast Asia (CCOP).

7. Representatives of the following non-governmental organizations participated: American Association of Petroleum Geologists (AAPG), Committee for Mineral Reserves International Reporting Standards (CRIRSCO), European Federation of Geologists (EFG), EuroGeoSurveys, Ibero-American Programme for Science, Technology and Development (CYTED), International Geothermal Association, Latin American Mining Organization (OLAMI), Pan-European Reserves and Resources Reporting Committee (PERC), Society of Petroleum Engineers (SPE), and Society of Petroleum Evaluation Engineers (SPEE).

8. In addition, the private sector was represented by experts from 42 companies. Academia was also represented by experts from six universities.

III. Opening of the session

9. The session opened with a welcome address by the Director of the Sustainable Energy Division of ECE, who congratulated the Expert Group on the finalization and endorsement of the Specifications for the Application of the United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources 2009 (UNFC-2009). He acknowledged with appreciation the very significant in-kind contributions (time, travel and sponsorship) of the members of the Expert Group and encouraged the Expert Group to consider the most effective means of resourcing activities going forward.

IV. Adoption of the agenda (agenda item 1)

Documentation: ECE/ENERGY/GE.3/2014/1

10. The provisional agenda as contained in the document ECE/ENERGY/GE.3/2014/1 was adopted without amendment.

V. Officers (agenda item 2)

11. The Expert Group elected a Bureau to take over from the end of the fifth session for a term of two years.

12. The Bureau comprises: Mr. David MacDonald (United Kingdom) as Chair, Mr. Michael Lynch-Bell (United Kingdom) as Chairman Ex-officio, Mr. Igor Shpurov (Russian Federation) as First Vice Chair, and Mr. Tunde Arisekola (Nigeria), Ms. Karin Ask (Norway), Mr. Fatih Birol (International Energy Agency (IEA)), Mr. Dan Di Luzio (SPE) Mr. Roger Dixon (CRIRSCO), Mr. David Elliott (Canada), Ms. Mucella Ersoy (Turkey), Ms. Gioia Falcone (Clausthal University of Technology and International Geothermal Association), Mr. Adichat Surinkum (CCOP), Mr. Kjell Reidar Knudsen (Norway), Mr. John Ritter (SPEE), Mr. James Ross (United Kingdom), Mr. Danny Trotman (United Kingdom), Mr. Harikrishan Tulsidas (IAEA) Mr. Brad Van Gosen (United States of America), Mr. Narendra Verma (India), and Ms. Claudia Wulz (European Commission D.G. Enterprise and Industry) as Vice-Chairs.

13. The Expert Group noted that Ms. Leesa Carson (Australia), Mr. Yuri Podturkin (Russian Federation) and Mr. Tim Smith (SPEE) are stepping down from the Bureau. The Expert Group placed on record its thanks and profound appreciation for their significant contribution and support.

14. The Expert Group further noted that the Bureau membership is reflective of the stakeholders/UNFC-2009 end users represented in the Expert Group, including with respect

to commodity type and geography. In view of the nature of the global work of the Expert Group and the need for the Bureau to be representative of all UNFC-2009 stakeholders, the Expert Group noted that not all Bureau members can be nominated by ECE member States as per paragraph 7 of the Guidelines on procedures and practices for ECE bodies “Candidates for the Bureaux of the Sectoral Committees and other subsidiary bodies shall be nominated by member States based on the person’s expertise, professionalism, and expected support from the membership.”

VI. Workshop on the United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources 2009 (agenda item 3)

15. The Chair provided a brief summary of the workshop held on 29 April noting that it was attended by over 70 participants representing all UNFC-2009 end-users. There was broad representation from the solid minerals sector, including nuclear fuel resources, as well as the petroleum sector. Academia, and the renewable energy and financial reporting sectors were also represented. The final programme and presentations delivered at the workshop are available on the ECE website.²

16. Interest was expressed by the participants in the event being repeated as part of the sixth session of the Expert Group. The Expert Group requested the secretariat to organize such a workshop. It was requested that efforts be made to ensure the event is as interactive as possible.

VII. Opening remarks from the Chair (agenda item 4)

17. The Chair opened the meeting by welcoming participants, noting the large number of attendees taking part for the first time. He observed that the level of interest in and support for UNFC-2009 and the Expert Group is continuing to grow worldwide. He also noted that a large number of countries and companies had sent apologies, but all had underlined their strong support for the work of the Expert Group and requested to be informed on the outcome of the fifth session.

18. The Chair noted that he and many of the Vice Chairs, as well as other members of the Expert Group, had delivered presentations at a number of minerals, petroleum and renewable energy-related conferences and workshops around the world and that these all served to promote greater understanding of the benefits of UNFC-2009.

19. Since the fourth session of the Expert Group, the work of the Bureau has been conducted through eight meetings (audioconferences) and regular e-mail correspondence. He noted that the minutes of the conference calls of the Bureau are available on the ECE website.

20. The Chair thanked the Bureau members and their alternates for their efforts and commitment since the fourth session. He also thanked the Chairs and members of all sub-groups of the Expert Group on Resource Classification:

- (i) Communications Sub-Committee
- (ii) Task Force on Application of UNFC-2009 to Nuclear Fuel Resources
- (iii) Task Force on UNFC and Recipient Reservoirs

² <http://www.unece.org/index.php?id=35413>

- (iv) Task Force in Application of UNFC-2009 to Renewable Energy Resources, and
- (v) Technical Advisory Group, which became operational in February 2014.

21. The Chair provided a brief update on the status of the development of UNFC-2009, and, in particular, the areas where progress has been made: (i) the finalization and endorsement of the specifications for UNFC-2009 and the issuing of the publication UNFC-2009 incorporating Specifications for its Application (ECE/ENERGY/94 and ECE Energy Series No. 42); (ii) the establishment of the Technical Advisory Group; (iii) the work of the Task Force on UNFC and Recipient Reservoirs to explore if UNFC-2009 can be used to classify injection projects; (iv) the work of the Task Force on Application of UNFC-2009 to Nuclear Fuel Resources to develop a draft bridging document; (v) the work of the Task Force on the Application of UNFC-2009 to renewable energy resources, which has concluded that UNFC-2009 can be applied to renewable energy resources: and (vi) the work on testing and case studies, including the case studies on application of UNFC-2009 to solid minerals and to uranium in Argentina.

22. The Chair drew attention to the draft set of conclusions and recommendations circulated prior to the meeting, noting that this was a new method of working for the Expert Group adopted at the fourth session and which is in line with the Guidelines on Procedures and Practices for ECE Bodies that were adopted by ECE at its sixty-fifth session in April 2013. He emphasized that the draft conclusions and recommendations are not intended in any way to prejudice the discussions but rather to provide a draft text to facilitate discussions.

VIII. Introduction of participants (agenda item 5)

23. A tour de table was conducted during which all participants introduced themselves.

IX. Activities and priorities of the Committee on Sustainable Energy and any matters for consideration by the Expert Group on Resource Classification (agenda item 6)

Documentation: ECE/ENERGY/91

24. The Director of the Sustainable Energy Division of ECE provided an update on the relevant outcomes of the twenty-second session of the Committee on Sustainable Energy, 21–22 November 2013, including an overview of the new structure of the Committee's subsidiary bodies and their mandates. The subsidiary bodies include the Group of Experts on Cleaner Electricity Production, the Group of Experts on Coal Mine Methane, the Group of Experts on Energy Efficiency, the Group of Experts on Gas, the Group of Experts on Renewable Energy and the Expert Group on Resource Classification. The opportunities for cooperation and collaboration with the Group of Experts on Renewable Energy and the Group of Experts on Cleaner Electricity Production in the use of carbon dioxide were highlighted.

X. Mandate and Terms of Reference (agenda item 7)

Documentation: ECE/EX/7 (Annex II)

25. The Expert Group noted that its mandate is extended until December 2019.

26. The Expert Group took note of the revised terms of reference for the Expert Group as adopted by the Committee on Sustainable Energy at its twenty-second session and as approved by the Executive Committee at its sixty-fifth session, Annex III to ECE/EX/7.

XI. Review of the programme of work for 2013–2014 (agenda item 8)

Documentation: ECE/ENERGY/GE.3/2013/2, paragraph 89

27. The Chair provided a brief overview of the programme of work for 2013–2014 as agreed at the fourth session and contained in the meeting report (ECE/ENERGY/GE.3/2013/2).

XII. Technical Advisory Group (agenda item 9)

Documentation: ECE/ENERGY/GE.3/2013/5

28. The Chair of the Technical Advisory Group provided an update on the work carried out by the Technical Advisory Group since its establishment in February 2014.

29. The members of the Technical Advisory Group are Mr. John Etherington (SPE), Chair, Mr. Santosh Adhikari (Indian Bureau of Mines), Mr. John Barry (Irus Consulting Ltd), Mr. Per Blystad (Norwegian Petroleum Directorate), Ms. Leesa Carson (Geoscience Australia), Mr. Roger Dixon (CRIRSCO), Mr. Michael Lynch-Bell (Kazakhmys Plc), Mr. Alistair Jones (BP and Imperial College), Mr. Maksim Saakian (State Commission of Mineral Reserves of the Russian Federation), Mr. Danny Trotman (Ernst & Young), with the Chair and secretary of the Expert Group as observers.

30. The Expert Group noted the establishment of the Technical Advisory Group and approved its membership, including the nomination of Mr. John Etherington as Chair, as set out in the report of the meeting. The Expert Group expressed its thanks for the work undertaken since February 2014.

31. The Chair of the Technical Advisory Group summarized the Technical Advisory Group's mission, activity areas and objectives, followed by a discussion of some of the issues affecting the review of bridging documents and new specifications.

32. The Chair advised the Expert Group of the range of projects expected to be required to be addressed by the Technical Advisory Group over the coming year, including mapping of other systems to UNFC-2009 and review of presented bridging documents. The Chair of the Technical Advisory Group expressed some concern over the potential workload for the Technical Advisory Group. The Expert Group recommended that the Technical Advisory Group should call on expertise from the Expert Group as required to fulfil its tasks.

33. The Expert Group requested the Technical Advisory Group to review its Terms of Reference and modify if appropriate and then submit them to the Expert Group for approval.

34. The Expert Group agreed that the Specifications Task Force has successfully completed its tasks. The Expert Group placed on record its appreciation for the work undertaken by the Chair, Mr. James Ross, and the other members of the Specifications Task Force.

XIII. Application of the United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources 2009 to solid minerals (agenda item 10)

35. The representative of CRIRSCO provided a summary of the changes made to the November 2013 version of the CRIRSCO Template compared to the July 2006 version. The Specifications for the Application of UNFC-2009 refer to the latter.

36. The Expert Group recommended that the Technical Advisory Group review the changes made to the November 2013 version of the CRIRSCO Template and subsequently document any needed amendments/updates to the Bridging Document between the CRIRSCO Template and UNFC-2009 for presentation to the sixth session.

37. Ms. Kathryn Campbell provided an overview of Social Policy Initiatives through Public Company Disclosures. It was indicated that although serious questions remain about the appropriateness of using the United States Security and Exchange Commission's (SEC) public disclosure requirements as the route to highlight social policy issues, this appears to be an area of growing interest for investors and regulators

XIV. Application of the United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources 2009 to petroleum (agenda item 11)

38. The representative of the Norwegian Petroleum Directorate (NPD) presented the work of NPD to map the Norwegian Resource Accounts of 2013 to UNFC using the PRMS Bridging Document. Details were provided on how the exercise was undertaken, as well as the results. It was found to be possible to present the NPD Resource Accounts (a total of 800 projects) using the Bridging Document. However, it was noted that it would be necessary to review at a project level to convert historic resource accounts.

39. The representative of SPE provided an update on the Petroleum Resource Management System (PRMS), including an overview of the SPE Oil and Gas Reserves Committee (OGRC) and its governance model. The OGRC has agreed to consider the need for revision of the PRMS and agreed a Terms of Reference for this process at its meeting in February 2013. It was confirmed that the Expert Group would be provided the opportunity for early review and comment on any proposed changes to PRMS.

40. The representative of the Ministry of Land and Resources of China provided an update on the Chinese Petroleum Classification System, including the development of the new regulation regarding Shale Gas Resources and Reserves Estimation that will enter into effect on 1 June 2014. An overview of mapping between the Chinese Petroleum Classification System and UNFC-2009 was also given.

41. The Expert Group recommended that the Technical Advisory Group should map the new classification system of the Russian Federation, when published, to UNFC-2009.

XV. Application of the United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources 2009 to nuclear fuel resources (agenda item 12)

Documentation: ECE/ENERGY/GE.3/2014/L.1

42. The Chair of the Task Force on Application of UNFC-2009 to Nuclear Fuel Resources provided an update on the work of the Task Force to develop the final version of

the draft Bridging Document between the Organisation for Economic Co-operation and Development (OECD) Nuclear Energy Agency (NEA)/IAEA Uranium Classification (“Red Book”) and UNFC-2009 (ECE/ENERGY/GE.3/2014/L.1). It was noted that the Bridging Document specifies the process for the transfer of resources reported in the “Red Book” system to UNFC-2009 and vice-versa. The Bridging Document, which has been prepared following wide consultation and preliminary testing, will be included as an appendix in the “Red Book”.

43. Based on feedback provided a number of changes will be made to the Bridging Document, including: the addition of a short glossary explaining terms used in the “Red Book” that do not appear in either UNFC-2009 or the CRIRSCO Template, and development of a Guidebook on “Application of UNFC-2009 for uranium and thorium projects”.

44. The former and current members of the Task Force are: Australia (Ms. Leesa Carson, Mr. Ian Lambert, Mr. Yanis Miezitis), Brazil/CYTED (Mr. Roberto Villas-Bôas), China (Mr. Mingkuan Qin, Mr. Shengxiang Li), India (Mr. Prem Ballabh Maithani, Mr. Prathap Singh Parihar), Kazakhstan (Ms. Ayim Mukusheva, Mr. Marat Alimov), Portugal (Mr. Luis Martins), United Kingdom (Mr. Julian Hilton), United States (Mr. Bradley Van Gosen), CRIRSCO (Mr. Paul Bankes and Mr. Ferdi Camisani), NEA (Mr. Robert Vance), Expert Group on Resource Classification (Mr. Michael Lynch-Bell, Mr. David MacDonald and Mr. James Ross), IAEA (Ms. Adrienne Hanly, Mr. Harikrishnan Tulsidas (Chair)) and the secretary of the Expert Group on Resource Classification.

45. A case study was presented by Mr. Luis Lopez from the National Atomic Energy Commission (CNEA) of Argentina on considerations related to the application of UNFC-2009 to uranium resources in Argentina. In Argentina, a number of companies are using the CRIRSCO Template and the UNFC-2009 is being used by CNEA to convert the data to the Red Book system.

46. A second case study was delivered on the application of UNFC-2009 to uranium deposits in India. It was noted that the uranium mining industry in India has been attempting to align with UNFC-2009. The industry is well-structured and well regulated, with a large base of experts/professionals to address complex issues on uranium exploration and mining in the country.

47. The IAEA representative provided an overview of the two-day consultation meeting held 28–29 April 2014 in Geneva to discuss practical issues related to application of the draft Bridging Document between the NEA/IAEA Uranium Classification and UNFC-2009 (ECE/ENERGY/GE.3/2014/L.1) and to start work on development of the Guidebook for Application of UNFC-2009 for Uranium and Thorium Projects. Practical aspects related to the application of the Bridging Document, including case studies, were discussed. Generic aspects, including social return, sustainable development framework and the environment, that should be considered when classifying resources were examined.

48. An overview of the draft scope and structure of the Guidebook was presented. The objective of the Guidebook is threefold: (i) to assist IAEA and United Nations Member States in the application of this bridging scheme to UNFC 2009; (ii) to provide case studies and examples, which will illustrate the application of the UNFC-2009 Bridging Document in a consistent manner in various situations; and (iii) to look into aspects of sustainability and the environment that should be considered when classifying the projects.

49. The Expert Group requested the Task Force on the Application of UNFC-2009 to Nuclear Fuel Resources to update the Bridging Document between the NEA/IAEA Uranium Classification and UNFC-2009 in the light of the comments received during the fifth session. The final bridging document should be reviewed by the Technical Advisory

Group and subsequently agreed by the Bureau of the Expert Group. Any significant changes will be agreed by the Expert Group following a written procedure, as outlined under the Conclusions and Recommendations for Item 24 “Other business”. Following this, the agreed document should be submitted to the Committee on Sustainable Energy at its twenty-third session in November 2014 for endorsement.

50. The Expert Group recommended that the Task Force on Application of UNFC-2009 to Nuclear Fuel Resources should continue. The Task Force should also focus on development of guidelines for the application of UNFC-2009 for uranium and thorium projects.

51. The Expert Group expressed its appreciation for the work undertaken by the Task Force.

XVI. Application of the United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources 2009 to renewable energy resources (agenda item 13)

Documentation: EGRC-5/2014/INF.1 – Unofficial room document: Draft Specifications for the Application of UNFC-2009 to Renewable Energy Resources *as at 18 April 2014*

52. The Chair of the Task Force on Application of UNFC-2009 to Renewable Energy Resources provided an update on the work of the Task Force and its membership. The current members of the Task Force are: Mr. Frank Denelle (Shell and Chair), Ms. Leesa Carson (Geoscience Australia), Ms. Raffaella Cristianetti (DuPont), Mr. Norbert Dolle (Shell), Ms. Gioia Falcone (Clausthal University of Technology and International Geothermal Association), Mr. Bernard Seiller (Total), Mr. Jean-Alain Taupy (Total), Mr. Danny Trotman (Ernst & Young) and the Secretary of the Expert Group on Resource Classification.

53. The draft specifications for the application of UNFC-2009 to renewable energy resources were presented.

54. A case study on the application of geothermal resources was presented using the example of a Hot Sedimentary Aquifer (HSA) Resource in Australia. An outline was provided as to how UNFC-2009 could apply to geothermal resources: align with and bridge to existing protocols, and/or develop new geothermal specifications.

55. It was noted that the application of UNFC-2009 to renewable projects could greatly facilitate the economic evaluation of projects and aid the raising of finance in appropriate circumstances.

56. The Expert Group requested the Task Force on the Application of UNFC-2009 to Renewable Energy Resources to finalize the draft generic specifications document following the document approval procedure outlined under the Conclusions and Recommendations for Item 24 “Other business”.

57. The Expert Group requested the Task Force to provide at least one draft renewable commodity-specific specifications for review at the sixth session.

58. It was noted that there are a broad range of renewable energy commodities and hence it will take some time to develop the range of commodity-specific specifications. It is important for the work to progress to meet the expectations of the renewable energy sector.

59. The Expert Group expressed its appreciation for the work undertaken by the Task Force.

XVII. Use of the United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources 2009 for classifying injection projects (agenda item 14)

Documentation: EGRC-5/2014/INF.2 – Unofficial room document: Classification of injection projects and possible application of UNFC-2009 *as at 23 April 2014*

60. The Chair of the Task Force on UNFC and Recipient Reservoirs provided an update on the work of the Task Force since the fourth session.

61. The members of the Task Force are: Ms. Karin Ask (Chair and Statoil), Ms Michelle Bentham (British Geological Survey (BGS)), Mr. Simplicio Caluyong (CCOP), Ms. Eva Halland (Norwegian Petroleum Directorate), Mr. Scott Frailey (Illinois State Geological Survey). Mr. Wolf Heidug (International Energy Agency), Mr. Sam Holloway (BGS), and Mr. Martin Hubbig (OMV).

62. The Expert Group recommended that the Task Force on UNFC and Recipient Reservoirs prepare draft specifications for the use of UNFC-2009 to classify injection projects, in particular for the storage of carbon dioxide, and submit them to the sixth session.

63. The Expert Group expressed its appreciation for the work undertaken by the Task Force.

XVIII. Other potential applications of the United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources 2009 (agenda item 15)

64. The application of UNFC-2009 to abandoned mines and mine waste facilities was raised and it was noted that the existing system can be applied to such projects.

65. Discussion focussed on whether UNFC-2009 could be applied to a number of areas including to downstream petroleum products and groundwater. Whilst it was agreed that it would be useful to provide additional guidance in the future, there were no specific recommendations under this item.

XIX. Case studies and testing of the United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources 2009 (agenda item 16)

Documentation: ECE/ENERGY/GE.3/2014/4
ECE/ENERGY/GE.3/2014/5
ECE/ENERGY/GE.3/2014/5/Corr.1

66. A series of presentations were delivered relating to testing of and mapping to UNFC-2009:

(a) A comprehensive solid minerals case study (ECE/ENERGY/GE.3/2014/4) was undertaken and presented by Mr. Stephen Henley. The evaluation was based on an analysis of companies' annual reports and reserves and resources estimates using CRIRSCO aligned codes. In the vast majority of cases, the translation to UNFC-2009 using this data was straightforward and clear. However in some cases, project level detail would

be required to ensure the proper classification. The study identified some issues in the application of UNFC-2009 that the Expert Group agreed to forward to the Technical Advisory Group for further consideration;

(b) An update on the Chinese classification system for solid mineral reserves and resources was provided by the Mr. LI Jian of the Mineral Resources and Reserves Evaluation Center of the Ministry of Land and Resources of China. The system is currently being updated and this falls under the responsibility of the Center. It is intended to map the new system once published to UNFC-2009; the Expert Group will be contacted to be involved in this work;

(c) The status of the harmonization of the Ukrainian Mineral Resource Classification to UNFC-2009 was delivered by Mr. Georgii Rudko, Chairman of the State Commission of Ukraine on Mineral Resources. The representative of the State Commission indicated that it is still planned to organize a national workshop, during which the experience of Ukraine in mapping to UNFC-2009 would be presented;

(d) An overview on Training and Institutional Strengthening in the Mining Sector of Latin America was provided by Mr. Roberto Sarudiansky, San Martin National University, Argentina. The speaker expressed the need to engage more closely with mining authorities in Latin America on UNFC-2009;

(e) Mr. Zoltán Horváth of the Geological and Geophysical Institute of Hungary presented on the classification of selected Hungarian mineral resources according to UNFC-2009, CRIRSCO Template and PRMS. The importance of a common language for mineral resources in countries of South East Europe was highlighted. Details of the Project “Sustainable Aggregates Planning in South East Europe” (SNAP SEE Project) were also provided;

(f) The Road Map for Transition to UNFC-2009 from UNFC of 1997 in India was delivered by Mr. Naresh Kumar, Joint Secretary, Ministry of Mines and Mr. Santosh Adhikari, Indian Bureau of Mines.;

(g) An overview of the progress in the application of UNFC-2009 to mineral resources in Thailand was delivered by Ms. Kwanjai Yuangdetkla, Department of Mineral Resources (DMR), Ministry of Natural Resources and Environment of Thailand. Thailand plans to apply UNFC-2009 for the estimation of mineral resources nationally. A workshop involving CCOP, national agencies and companies is planned to be held in Bangkok, Thailand, in November 2014;

(h) Mr. Cassius Chiwambo, Ministry of Energy and Mines of Malawi, provided a case study on application of UNFC-2009 in Malawi. Plans are underway to implement UNFC-2009 nationally for solid minerals and petroleum. The capacity building needed for this was outlined.

67. An update on the Project on Statistical Information on European Union (EU) Raw Material Deposits (Minventory) and other EU projects and activities of relevance to the Expert Group was provided by Mr. Slavko Solar, D.G Enterprise and Industry, European Commission. The use of UNFC-2009 as a harmonizing tool was emphasized during the presentation.

68. Mr. Radoslav Vukas, Ministry of Natural Resources, Mining and Spatial Planning of Serbia, provided an overview of mineral reserves and resources in Serbia, as well as issues related to geological exploration and exploitation and legal aspects.

69. The Expert Group recommended that the case studies presented at the fifth session be issued as an electronic ECE publication.

70. The Expert Group further recommended that a database of UNFC-2009 case studies be prepared and made available on the ECE website.

XX. United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources 2009 E axis – environmental and social considerations (agenda item 17)

71. Several presentations were made on the issues relating to environmental concerns and social considerations and their impact on the development of projects. Detailed discussions of these points highlighted the importance of these issues for many stakeholders and the benefit of some generic guidance for all commodities.

72. The Expert Group recommended the formation of a subgroup to the Bureau that should include representatives from a wide range of interested stakeholders from around the world. The Expert Group requested this subgroup to prepare guidance on accommodating environment and social considerations in “UNFC-2009 and the Specifications for its Application” (ECE/ENERGY/94 and ECE Energy Series No. 42) for the sixth session.

73. The Expert Group noted that environmental and social considerations involve many diverse and complex issues. Recognizing that a wide range of material is already available on these issues from a number of organizations, the Expert Group requested that any guidance produced should revolve around high-level principles that are practical, useful and add value to UNFC-2009.

XXI. United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources 2009 delivering on the Sustainable Energy for All initiative (agenda item 18)

74. The Director of the Sustainable Energy Division and Mr. Sigurd Heiberg jointly presented an overview of the Sustainable Energy for All (SE4ALL) initiative and the linkage to ECE and UNFC-2009. Data was presented on gas that is being lost through flaring.

75. Following discussion, it was recommended that the Expert Group should remain available to cooperate with the World Bank Group and the SE4All Global Facilitation Team to explore how UNFC-2009 can contribute to the goals of SE4ALL by facilitating improved energy (resources) management.

XXII. Education and outreach and activities of the Communications Sub-Committee (agenda item 19)

Documentation: ECE/ENERGY/GE.3/2014/6

EGRC-5/2014/INF.4 – Unofficial room document: Expert Group on Resource Classification Stakeholders

76. An update was provided on the work and activities of the Sub-Committee since the last Expert Group meeting (ECE/ENERGY/GE.3/2014/6), covering the membership, communications and education strategy, current activities, events attended in 2013 and 2014, and future events and work plans.

77. The membership of the Communications Sub-Committee is: Mr. John Brooks (Chair and AAPG), Ms. YANG Hua (PetroChina), Mr. David MacDonald (Chair, Expert Group

on Resource Classification), Mr. Jan Roelofsen (IHS CERA), Mr. Jean-Alain Taupy (Total), Mr. Daniel Trotman (Ernst & Young) and the secretariat. It was noted that Mr. Stephen Henley (CRIRSCO) and Mr. Tim Smith (SPEE) will both step down from the Sub-Committee effective the end of the fifth session. The intent is to identify new members to represent both the CRIRSCO Template and PRMS.

78. The Communications and Education Strategy for the Expert Group encompasses: conferences and workshops; the relationship with other industry bodies and associations; publications, technical journals and articles; media; the website; and the membership of the Expert Group.

79. The Expert Group approved the revised mandate and terms of reference of the Communications Sub-Committee as contained in Annex I to ECE/ENERGY/GE.3/2014/6.

80. The Expert Group agreed that an educational session on UNFC-2009 should be organized on the first day of the sixth session.

81. The draft version of the second in the series of animated presentations “Why Resource Classification is Needed” was presented. It was noted with appreciation by the Expert Group. It was agreed that the animated presentation should be posted to the ECE website as soon as it is finalized. Consideration should also be given to translating the voice over in languages other than English and to use both female and male speakers.

82. Members of the Expert Group were encouraged to identify events at which a presentation on UNFC-2009 could usefully be delivered and also to volunteer to deliver such presentations.

83. The Chair, on behalf of the Expert Group, expressed appreciation to the Communications Sub-Committee for its on-going efforts.

84. Events held in 2013 and 2014 to promote and/or test UNFC-2009 were then discussed, including:

(a) IAEA, CYTED, ECLAC and ECE UNFC-2009 Workshop, Santiago, Chile, 9–12 July 2013

85. A Workshop on UNFC-2009 Applications in Uranium and Thorium Resources: Focus on Comprehensive Extraction was held in Santiago, Chile, 9–12 July 2013. The event was jointly organized by IAEA, CYTED, the United Nations Economic Commission for Latin America and the Caribbean (ECLAC) and ECE. The local organizers were the Ministry of Mining of Chile and the Chilean Nuclear Engineers Association. Approximately 60 participants attended. The programme and presentations delivered at the workshop are available on the ECE website.³

(b) Workshop on “Sustainable Mining and the UNFC – Challenges and Opportunities in India”, New Delhi, India, 29–30 October 2013

86. The event, which was organized by the Government of India’s Ministry of Mines and Ministry of Coal in collaboration with ECE and the Federation of Indian Mineral Industries (FIMI), with the support of the World Bank, was attended by over 200 experts. The programme and presentations delivered at the workshop are available on the ECE website.⁴

³ <http://www.unece.org/index.php?id=33152>

⁴ <http://www.unece.org/index.php?id=33845>

(c) Workshop on UNFC-2009 and Application to Renewable Energy Resources, Washington, United States, 24–25 April 2014

87. The event was organized by ECE, hosted by the World Bank, and sponsored by BP, DuPont, Shell and Total. The first draft of the generic renewable energy commodity-specific specifications were presented at the workshop and useful feedback was received which has now been incorporated. The programme and presentations delivered at the workshop are available on the ECE website.⁵

88. Projects and planned events in 2014 and 2015 to promote and/or test UNFC-2009 were then discussed, including:

(a) Regional workshop for African countries on "Application of UNFC-2009 to Uranium Projects", Johannesburg, South Africa, 10–14 November 2014. This event is being organized by IAEA and ECE;

(b) Workshop on "Application of UNFC-2009 to Petroleum and Mineral Resources", Bangkok, Thailand, 26–28 November 2014. This event is being organized by CCOP, the Department of Mineral Resources of Thailand and the Department of Mineral Fuels of Thailand;

(c) UNFC-2009 Workshop, New Delhi, India, January 2015. This event is being organized by the Association of Petroleum Geologists of India.

89. The Chair noted the unofficial working document on Expert Group on Resource Classification Stakeholders (EGRC-5/2014/INF.4) that was prepared by the secretariat as per the Programme of Work for the Expert Group on Resource Classification for 2013–2014. It was agreed that a list of stakeholders who either participate actively in meetings of the Expert Group or who have expressed an interest in doing so be prepared for the fifth session. The document presents a draft list of stakeholders who either participate or have participated in meetings of the Expert Group or related meetings, including workshops and seminars, or who have expressed an interest in doing so. It was noted that this list is not comprehensive; the Expert Group was requested to advise the secretariat of any omissions or required amendments.

XXIII. Update on financial reporting (agenda item 20)

90. An update on financial reporting was provided, including amendments to the Canadian National Instrument (NI) 51-101 and the Canadian Oil and Gas Evaluation Handbook (COGEH) guidelines for "Resources Other Than Reserves".

91. The Expert Group requested the Bureau to continue to monitor developments related to financial reporting and to update the sixth session accordingly.

XXIV. Self-evaluation of the United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources 2009 (agenda item 21)

Documentation: ECE/ENERGY/GE.3/2014/7

92. The Expert Group noted the self-evaluation of UNFC-2009 undertaken by the secretariat for the biennium 2012–2013 (ECE/ENERGY/GE.3/2014/7).

⁵ <http://www.unece.org/index.php?id=34799>

93. The Expert Group requested the secretariat to undertake similar evaluations periodically. The Expert Group further requested the Bureau, Technical Advisory Group and the Communications Sub-Committee to work with the secretariat to implement the action plan contained in the self-evaluation for 2012–2013.

94. The Expert Group agreed to explore the most effective means of resourcing activities going forward and tasked the Bureau to develop a resource strategy for presentation to the sixth session. It is expected that the considerations will cover a range of alternatives that could include extrabudgetary funding, secondments, and outsourcing, among others, including in various combinations.

XXV. Work plan for 2014–2015 (agenda item 22)

95. Noting that its Work Plan for 2013–2014 was approved by the Executive Committee of ECE at its sixty-fifth meeting, 4 December 2013, the Expert Group agreed that no changes were needed to the work plan for 2013–2014 and recommended that a draft Work Plan for 2015–2016 be prepared for the sixth session.

XXVI. Adoption of conclusions and recommendations (agenda item 23)

Documentation: EGRC-5/2014/INF.3 – Unofficial room document: Draft Conclusions and Recommendations for the Expert Group on Resource Classification Fifth Session *as at 14 April 2014*

96. The conclusions and recommendations were adopted and are included under the relevant agenda items.

XXVII. Other business (agenda item 24)

(a) Document approval procedure

97. The Expert Group recommended in the future that document approvals should conform to the following procedure:

(i) Preparation of a draft document by “working group”. During preparation, the Technical Advisory Group should be involved in periodic review/consultation;

(ii) The draft should be subject to a public comment period. Comments should be considered for possible inclusion and the draft modified as appropriate. Reasons for not acting on specific comments should be documented;

(iii) The final draft should be presented to the Expert Group at its annual session. The Expert Group should request that the draft be submitted to the Technical Advisory Group for an appropriate level of review and for recommendation to the Bureau;

(iv) Once agreed by the Bureau, any significant changes from the final draft will be sent to the Expert Group for agreement;

(v) The agreed draft will be sent to the Committee on Sustainable Energy for endorsement.

(b) Written procedure

98. The Expert Group agreed that, in order to expedite submission of documentation for endorsement by the Committee on Sustainable Energy it can work by written procedure

subject to a minimum comment period of 21 days. No feedback is taken to be tacit approval.

(c) *Dates for the sixth session*

99. The sixth session of the Expert Group on Resource Classification is provisionally scheduled to be held in Geneva, 28 April – 1 May 2015. Once the dates are confirmed they will be communicated to the Expert Group electronically.

100. Following discussion and careful review and in the light of the feedback received during the self-evaluation of UNFC-2009 by the secretariat, the Expert Group agreed that its sixth session needs to be held over four days, including an educational session on UNFC-2009, but with the option for the total number of days to be reduced subject to the agenda items required.

XXVIII. Report of the meeting (agenda item 25)

101. The report of the meeting was adopted subject to any necessary editing and formatting. The report will be posted to the ECE website.
