

Application of UNFC for Resource Management

19th April 2020 Hotel Mon Repos Geneva, Switzerland 2020

Introduction

Petrad is offering this introductory course to the United Nations Framework Classification for Resources (UNFC) in conjunction with the 2020 UNECE Resource Management Week and the 11th Session of the Expert Group on Resource Management. The course is offered in Geneva runs on Sunday 19th April.

RESOURCE MANAGEMENT WEEK 2020 The Role of Resource Management in attaining the Sustainable Development Goals



20 - 24 APRIL 2020 | PALAIS DES NATIONS | GENEVA

See: https://www.unece.org/index.php?id=52488

The course will be a review of the basics of the UNFC for newcomers to classification and the Expert Group.

Resource inventories is a premise for formulating policies and for Government resource management. It is also the basis on which industry conducts its business and capital is allocated.

The establishment of the UN Sustainable Development Goals and the Paris Accord on Climate Change Mitigation calls for change that will affect these activities. It is clear that none of the Sustainable Development Goals can be reached without energy and raw materials, yet we know from the second law of thermodynamics and other principles that environmental consequences result from deployment of these resources regardless of how it is done. As a consequence, the efficient use of resources becomes increasingly important. The public, private and financial sectors therefore need to focus on the mechanisms that give the efficiencies required to create the future we want. PETRAD offers to contribute to these efforts in many ways, including through this course on the application of the UNFC for Resource Management.

In the 1990's classifications became aligned with the value chains commonly used, particularly in the European petroleum industry. Eventually this was promoted by both the Society of Petroleum Engineers (SPE) and the World Petroleum Congress (now the World Petroleum Council) as their petroleum resource classification in 2000. This has become the Petroleum Resource Management System (PRMS) as we know it today. In minerals, the value chain was expanded by explicitly adding consideration of economic and social conditions to the industrial value chain in an effort that started in Germany and Austria in classifying coal. The United Nations promoted this as its UN Framework Classification. The first version appeared in 1997, the second, expanded to petroleum and minerals in 2004, revised in 2009 and updated in 2019 as a result of adding other activities such as injection and storage, renewable energy, anthropogenic resources and water. In the same period, the mineral industry developed its reporting codes to include considerations of recoverability, economic, social and industrial readiness aimed particularly for stock exchange reporting. We know them as classifications made on the basis of the CRIRSCO template.

In this course, we focus on the application of the UNFC as updated in 2019. It is a classification of "what we get" as opposed to a classification of "what we found" where it all started in the early 1900. By choosing a project-based approach, it has been possible to expand the application of the classification as mentioned above.

Classification inventories of sources and the products to be derived from them is an excellent template for resource management.

Objective

Application of the UNFC is still a young professional activity and the call for training has been rising quickly.

The objectives of this course are:

- 1. Provide an understanding of the basic structure of the UNFC
- 2. To familiarize participants with the four principal areas of application, namely:
 - a. Policy formulation
 - b. Government resource management
 - c. Industry business process management
 - d. Capital allocation and financial reporting

Target Audience

The target group for this course are geoscientists, engineers, economists, lawyers, analysts and communications/investor-relation experts interested in the objectives mentioned above.

Pedagogical Approach

PETRAD believes that the best pedagogical learning approach is a combination of presentations, discussions, problem-based learning and team-based learning. In this brief course, the sessions will consist of sessions comprising two lectures, each of 20 minutes followed by 20 minutes of discussion. Participants are encouraged to familiarise themselves with the UNFC before arriving at the course, and to submit topics that they are particularly interested in including in the discussion sections to the organisers on or before the **20th of March 2020**.

UNFC references are found here:

- <u>http://www.unece.org/energy/se/reserves.html</u>
- UNFC Update 2019

Program Schedule

08:30 Registration

09:00 Welcome and introduction (Per Blystad)

- Classification background (Sigurd Heiberg)
- UNFC explained (Per Blystad)
- Discussion

10:10 - 10:30 Coffee break

- Case study Mineral Resources
- Quality assurance, aggregation, accounting and disclosure (Sigurd Heiberg)
- Discussion

- Relationship between UNFC and classifications bridged to it (Per Blystad)
- Applications in Policy formulation (Sigurd Heiberg)
- Discussion

12:30 - 13:30 Lunch

- Case study Petroleum Resources
- Applications in corporate business process management, financial reporting and capital allocations (Sigurd Heiberg)
- Discussion
- Applications in Government Resources management (Per Blystad)
- Application to renewable energy, geothermal energy, CCS, anthropogenic resources (Per Blystad)

14:50 - 15:10 Coffee Break

• Discussion and summing up (Sigurd Heiberg)

16:00 End of course

Venue

Hotel Mon Repos, 131 Rue de Lausanne, 1202 Genève, Switzerland.

Find the way to hotel: (https://mon-repos-hotel.hotels-geneva.org/en/#map)

Application details

Course fee:

NOK 4 500,- inclusive of coffee breaks and lunch.

Applications should be received by PETRAD at <u>training@petrad.no</u> before the **20th of March 2020**

Contact details

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Lecturers



Sigurd Heiberg

Project Director

Sigurd holds a BSc from the University of California and a SM degree in Geotechnology from the Massachusetts Institute of Technology. He has received formal management training at IMD, Switzerland on international management and High Performance Boards. Sigurd has spent most of his working life in Government and industry working on petroleum resources management and strategy, both as Deputy director of resource management responsible for development and production at the Norwegian Petroleum Directorate, as Petroleum exploration advisor to the Minister of Water, Energy and Minerals of Tanzania and as a member of Statoil's Corporate strategy team. He chaired the Oil and gas reserves committee of the Society of Petroleum Engineers when the SPE Resource classification that later became the SPE-PRMS was developed and what now is the UNECE Expert group on resource management (EGRM) when the UNFC-2009 classification was developed. He has also chaired the Bureau of the UNECE Intergovernmental Committee on Sustainable Energy and currently chairs the EGRM Working Group on commercial applications of the UNFC. Sigurd has engaged in education by helping to form and build PETRAD. He has been a lecturer at the MIT Sloan Executive Education and at the University of Stavanger. He has been guest editor with MIT Professor Donald Roy Lessard of "Innovation in oil and gas through partnering", Elsevier's Volume 3 of Energy Strategy Reviews. He rejoined PETRAD as a Project Director in 2017.



Per Blystad

Per holds a Cand. Real (PhD) in geology from University of Bergen. After a few years working in a cross-disciplinary project connected to a huge hydro-electric development project in the south-western mountain area in Norway, the Ulla-Førre Investigations, he joined the Norwegian Petroleum Directorate (NPD) for more than 30 years working on petroleum resource management and project management. His working experience includes exploration and licensing, annual reporting to government from companies in relation to the revised annual national budget, resource assessments and methodology development of yet-to-find potential of petroleum on the Norwegian continental shelf. For six years Per coordinated the international project in NPD aiming at assisting countries in Asia and Africa to develop national petroleum resource management systems and capacities. After this Per was seconded as project coordinator in CCOP for two years in a project on Resource Evaluation and Planning. Per has been engaged in developing NPD's petroleum resource classification system. In 2001 he joined the UNECE Expert group on resource classification (EGRC). He was member of the Bureau and chaired the Petroleum group until 2004. He later chaired the EGRC Mapping Task Force prior to and necessary for developing the UNFC-2009 classification. He is member of the EGRM and the EGRM Communications group.